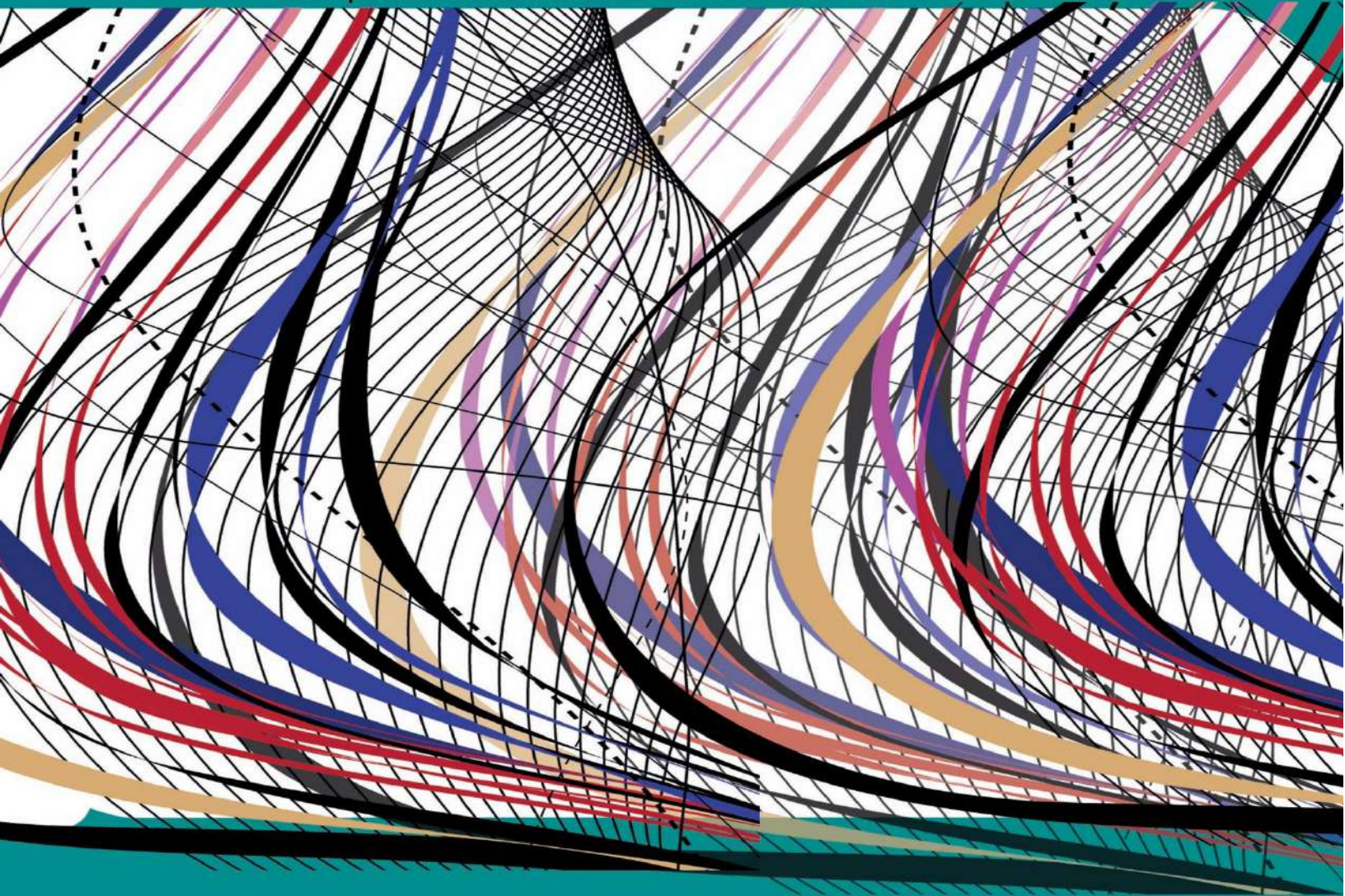


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# FOREWORD

I am pleased to put into the hands of readers Volume-7; Issue-1: Jan, 2021 of “**International Journal of Advanced Engineering, Management and Science (IJAEMS)** (ISSN: 2454-1311)”, an international journal which publishes peer reviewed quality research papers on a wide variety of topics related to Science, Technology, Management and Humanities. Looking to the keen interest shown by the authors and readers, the editorial board has decided to release print issue also, but this decision the journal issue will be available in various library also in print and online version. This will motivate authors for quick publication of their research papers. Even with these changes our objective remains the same, that is, to encourage young researchers and academicians to think innovatively and share their research findings with others for the betterment of mankind. This journal has DOI (Digital Object Identifier) also, this will improve citation of research papers.

I thank all the authors of the research papers for contributing their scholarly articles. Despite many challenges, the entire editorial board has worked tirelessly and helped me to bring out this issue of the journal well in time. They all deserve my heartfelt thanks.

Finally, I hope the readers will make good use of this valuable research material and continue to contribute their research finding for publication in this journal. Constructive comments and suggestions from our readers are welcome for further improvement of the quality and usefulness of the journal.

With warm regards.

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# Effects of COVID-19 Epidemic on China's Service Trade and Counter measures

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**Abstract**— The spread of COVID-19 had a serious impact on China's foreign trade, and the population-intensive service sector was hit hard during this period. Due to the heterogeneity of service industries, the import and export of different service industries were significantly different before and after the epidemic, and the service import was much more significantly affected. Based on the survey data of service trade enterprises, it was found that the epidemic has different impacts on different periods, regions, industries and types of enterprises. The epidemic had a greater impact on eastern regions, traditional service industries and small and medium-sized private service enterprises. During the epidemic period, service enterprises were mainly faced with the pressure of capital, international market development and order transfer, and therefore put forward the political appeal of "strong publicity, increase of expenditure and decrease of cost". In view of the development characteristics of service trade and the main problems during the outbreak of the epidemic, the countermeasures and Suggestions are put forward, which can provide reference for alleviating the impact of the epidemic on service trade and promoting the transformation and upgrading of China's foreign trade.

**Keywords**— COVID-19 Outbreak; Service Trade; The survey data; Heterogeneous effect; Transformation and Upgrading.

The trade restrictions and the ban on shipping and embargo triggered by the COVID-19 epidemic have directly damaged the international free trade system and produced destructive effects on trade. Even in the absence of the epidemic, global trade has entered a period of sluggish growth in 2019. The latest trade rain index released by the WTO in November 2020 showed that trade rebounded strongly in the third quarter of 2020, but with suppressed demand depletion and completion of inventory

replenishment, growth in the fourth quarter may slow down. The epidemic has already made the sluggish global trade worse and is likely to cause the first negative growth in global trade in a decade. As an important part of foreign trade, service trade has a characteristic of dense population. The COVID-19 epidemic that broke out during the Spring Festival has had a great impact on service trade. And due to the large heterogeneity of the service industry, the impact of the epidemic on different service industries is



very different. This article use the questionnaire from Ministry of Commerce of China, then focuses on the characteristics of China's service trade development before and after COVID-19 epidemic. We attempt to form a comprehensive and in-depth analysis of the impact of the new crown pneumonia epidemic on service trade. Finally, to alleviate the epidemic impact on service trade, we proposes policy recommendations based on the main pressures and policy demands of service companies.

## I. DEVELOPMENT CHARACTERISTICS OF SERVICE TRADE BEFORE AND AFTER THE EPIDEMIC

### 1.1 Imports of services were severely impacted, while exports only declined slightly

The COVID-19 Epidemic began to spread in various provinces in China in mid and late of January. In January 23rd, Wuhan began to seal the city, 25 provinces in 30 provinces launched the first level response, and gradually

took control measures. In February, many service industries have been unable to operate normally. Compared with the statistical data of China's service import and export from January to October, China's service import and export from January to October in 2019 amounted to 612.45 billion US dollars (**Table 1**), and China's service import and export from January to October in 2020 amounted to 500.47 billion US dollars, a year-on-year decrease of 18.3%. It is worth noting that the decline in trade in services is mainly due to the decline in imports. From January to October 2020, the import of services was US \$312.35 billion, a year-on-year decrease of 25%, and the export decreased slightly from US \$1961.3 billion to US \$1881.2 billion, a year-on-year decrease of 4.1%. Thus, under the novel coronavirus pneumonia epidemic situation, our service trade exports still showed strong resilience, the epidemic mainly reduced domestic service demand, causing service import to drop sharply.

Table 1 Comparison of trade in services between January and October 2020 and January and October 2019

Industry	Total (billions of dollars)			Export (billions of dollars)			Import (billions of dollars)		
	2019	2020	Change	2019	2020	Change	2019	2020	Change
Travel	2402.1	1253.1	-47.8%	282.8	143.6	-49.2%	2119.4	1109.5	-47.7%
Transport	1233	1202.9	-2.4%	373.4	432.9	15.9%	859.6	770	-10.4%
Business	957.9	953.3	-0.5%	558.4	555.6	-0.5%	399.5	397.7	-0.4%
Telecommunications	498.1	578.1	16.1%	278.5	310.9	11.6%	219.5	267.2	21.7%
Intellectual property	341.5	370.5	8.5%	55.1	69.2	25.5%	286.4	301.4	5.2%
Construction	187.9	161.9	-13.8%	112.6	95.6	-15.1%	75.3	66.3	-11.9%
Processing Service	132.8	112	-15.7%	130.5	108	-17.3%	2.2	4	77.0%
Insurance	121.7	142.2	16.9%	35.5	41.4	16.7%	86.2	100.8	16.9%
Maintenance	112.8	88.2	-21.9%	84.6	62.4	-26.2%	28.2	25.7	-8.9%
Financial Services	49.7	59.5	19.7%	30.2	33.5	11.0%	19.5	26	33.1%
Government service	47.3	51.7	9.4%	12.8	20.2	57.5%	34.5	31.5	-8.5%
Entertainment	40.7	31.3	-23.1%	7.9	8	0.4%	32.8	23.4	-28.7%
<b>Service</b>	<b>6124.5</b>	<b>5004.7</b>	<b>-18.3%</b>	<b>1961.3</b>	<b>1881.2</b>	<b>-4.1%</b>	<b>4163.2</b>	<b>3123.5</b>	<b>-25.0%</b>

Source: The author has compiled calculations based on data from the China Administration of Foreign Exchange. The data for 2019 and 2020 in the table are the total data from January to October.

### **1.2 Under the mode of overseas consumption and the flow of natural person, the export of service industry decreased significantly**

In order to control the spread of the epidemic, China has adopted traffic and personnel flow control measures, and foreign countries have also taken many measures, such as grounding international routes and restricting the entry of people. China's main service trade partners, such as the United States, the European Union, Japan and other countries and regions, have taken various degrees of entry restrictions, including reducing or grounding flights, strengthening the entry examination of Chinese tourists, restricting the signing of visa and travel permits, including that barriers to overseas consumption and the flow of natural persons have increased and costs have risen. As a result, the number of people studying abroad, traveling and taking business trips has decreased significantly, and service exports have been seriously affected. Comparing the data of service export from January to October in 2019 and 2020, it shows that among the 12 service industries, only the export of travel, construction, processing, maintenance and repair, other business services decreased year-on-year, especially the travel industry. The export volume from January to October in 2020 was US \$14.36 billion, a decrease of 49.2% on a year-on-year basis.

### **1.3 Emerging service industries are less affected by the epidemic, mainly reflected on the decline in imports**

The competitiveness of China's emerging service industries is weak, and most of them are in trade deficit. On the one hand, the spread of the epidemic has hindered the global supply chain and limited the global service provision. On the other hand, the "home economy" caused by the epidemic has reduced the demand for services, resulting in a decline in the import of emerging service industries, such as other business services, the use of intellectual property rights, insurance and pension, maintenance and repair, government services, personal, cultural and entertainment services, compared with the same period, decreased in varying degrees. The personal, cultural and entertainment industries showed the most obvious decline, with the import volume of US \$2.34 billion from January to October 2020, a year-on-year

decrease of 28.7%. However, as most of the emerging service industries are knowledge intensive industries and most of their orders are long-term orders, many businesses can be completed online and the continuous fermentation of the international epidemic makes the emerging service industries such as telecommunications and pension face new development opportunities. Therefore, in the long run, the export of some emerging service industries has hardly been affected.

## **II. IMPACT OF EPIDEMIC SITUATION ON SERVICE TRADE ENTERPRISES**

China's service trade enterprises are mainly formed by small and medium-sized private enterprises and foreign-funded enterprises, and their ability to cope with the crisis is relatively weak. The epidemic has led to the decline of people's willingness to travel and the closure of enterprises, therefore the survival of service trade enterprises is facing great pressure.

### **2.1 The short-term and long-term effects of the epidemic on service trade enterprises are different**

The impact intermediary of the epidemic on service trade is demand and supply. The epidemic broke out in China first. In the short term, the measures adopted by China, such as personnel isolation and restrictions on cross regional mobility, on the one hand directly reduce the demand for services, and on the other hand, they will affect the production factors such as labor, capital and technology required by enterprises, thus indirectly affecting the supply of services. According to the survey data of service trade enterprises, the enterprises expect the annual service export to drop by 22.39% and the import to drop by 20.38% (Table 2). It can be seen that if the epidemic only breaks out in China, with the control of the epidemic, the impact of service trade enterprises will continue to decline. However, the spread of the epidemic in the international scope will further affect China's service trade by affecting foreign demand and supply. At present, the epidemic situation in China's major service trade partners such as the United States, the European Union, Japan and South Korea is relatively serious, and they are also the hubs of the global value chain. The changes in

demand and supply caused by the epidemic situation in these countries will directly affect China's service trade, which is caused by the epidemic. The change of global value chain division mode and flow restriction will further increase the impact of the epidemic on China's service trade.

*Table 2 Expected Impact of COVID-19 on import and export of service trade enterprises*

Industry	Export	Import
Transport	23.14%	20.20%
Travel	26.43%	26.00%
Construction	20.56%	16.67%
Financial Services	19.17%	19.00%
Telecommunications	21.04%	18.28%
Intellectual property	29.38%	29.17%
Entertainment	19.33%	19.84%
Maintenance	22.50%	18.33%
Processing Service	20.65%	17.97%
Business	21.69%	18.34%
<b>Service</b>	<b>22.39%</b>	<b>20.38%</b>

## 2.2 The impact of the epidemic on service trade companies in the eastern region is even more serious

The tertiary industry in the eastern region has the highest proportion, and the trade in services is even more advanced. As the most severely affected industry in the epidemic, the development of the epidemic has caused a serious impact on service trade companies in the eastern region. In addition to the impact on imports and exports, under the background of delays in resuming work, the major labor import provinces in the eastern region are facing labor shortages and difficulties in starting work, and business operations are seriously affected. According to survey data of service trade enterprises, 38.7% of enterprises in Shandong Province expect annual operating income to fall by more than 50%, while 9.3% in Guangdong Province and 8.8% in Hubei Province believe that annual operating income will fall by more than 50%. In Beijing, Jiangsu, Shaanxi, Zhejiang and other provinces,

4%-5% of enterprises believe that the annual operating income will fall by more than 50%.

In terms of import and export, more than 38% of Shandong companies expect a decline of more than 50% in the four aspects above. About 4%-10% of companies in Guangdong, Hubei, Beijing, and Jiangsu expect a decline of more than 50%. In some provinces in the region, only 1-2 companies are expected to have a decline of more than 50%, accounting for less than 2%. It can be seen that the service trade in the eastern region has developed rapidly. The development of the epidemic has led to insufficient market demand and hindered overseas business expansion. This has caused a greater impact. Shandong, Guangdong, Hubei, Beijing and other provinces with more severe epidemics are in more stringent control which will further increase the impact on service companies.

## 2.3 The epidemic has a greater impact on private service trade companies

Chinese service trade companies are mainly private-owned. The impact of the epidemic on private companies is manifold, including a series of pressures from rent, reduction of orders, inadequate performance of contracts, hindered logistics, and resumption of work and production. The main problems faced by state-owned enterprises are reduced orders and poor transportation, so the impact is significantly less than that of private enterprises. According to the survey data, 20.27% of private enterprises expect their exports of services to fall by more than 50%, while state-owned enterprises are only 16.46%; 16.59% of private enterprises expect their imports to fall by more than 50%, and that of state-owned enterprises is 12.90%; in addition, the impact on corporate operating income is also significantly higher than that of state-owned enterprises. It can be seen that private service trading companies are the market players most in need of attention under the impact of the epidemic. Most of these companies are small and medium-sized enterprises with fragile anti-risk capabilities. They have faced multiple challenges in the context of economic weakness in 2019 and Sino-US trade frictions. The outbreak of the epidemic has brought more uncertainties, such as rent, resumption of work and production. The obstacles surpassed that of state-owned enterprises, and the superposition of pressures from various aspects led to their operating difficulties.

## 2.4 The impact of the epidemic on different service industries is heterogeneous

Most of the traditional service trade enterprises with advantages in China are labor-intensive enterprises, such as tourism, transportation, construction, etc., which are usually unable to complete business online. The outbreak of the epidemic occurred during the Spring Festival, and these industries that should have been popular in consumption bear the brunt of it. According to the survey data, the export of enterprises in transportation, travel and construction industries is expected to decline by 30.14%, 27.86% and 23.53% respectively, and the import is expected to decline by 22.68%, 36.67% and 19.69% respectively. In addition, 28.57% of the travel industry and 26.09% of the transportation industry can only operate within one month. Compared with other industries, the overall attitude of enterprises in transportation and travel industries is also relatively pessimistic, especially in the travel industry. No enterprises are optimistic, and half of them are pessimistic and half of them are "hard to say"; about 30% of the enterprises in transportation industry are cautiously optimistic, 34% are pessimistic, and the rest are "hard to say".

In contrast, modern service trade enterprises are more knowledge intensive, such as telecommunications, business services, finance, consulting and so on. Orders in these industries usually contain business for more than a few months, and can carry out business online, so they are relatively less affected by the epidemic. Taking telecommunications, computer and information services industries as an example, "home economics" and technology epidemic prevention have boosted the development of online businesses, e-commerce platforms and Internet plus. This has laid a solid foundation for the relevant service trade enterprises to respond calmly to the impact of the epidemic, seize the potential of market demand and release the opportunities of the economic rebound window. More than 1/5 of the enterprise accounts for more than 6 months. Industry-related enterprises also showed a relatively optimistic attitude, 39.63% of the telecom enterprises were optimistic about the impact of the epidemic.

## III. MAIN PRESSURES AND POLICY DEMANDS FACED BY SERVICE TRADE COMPANIES

### 3.1 Main pressures faced by service trade enterprises

Due to the impact of the epidemic, many enterprises are under pressure in production and operation. It mainly includes pressure of capital, pressure of developing international market, pressure of order cancellation or transfer and so on.

#### 3.1.1 Financial pressure

The service industry is densely populated and faces financial pressures such as high rents and employee salaries. According to survey data of service trade companies, funding pressure mainly comes from four aspects: employee wages, five social insurances and one housing fund, rent and property, loans and interest, and payment of accounts payable. Among them, about 37% reflect the high pressure on employee salaries and five social insurances and one housing fund, about 21% of accounts payable, about 21% of property expenses such as rent, and about 16% of loan repayment and interest. For the catering industry, for example, according to the calculations of China Summer Daily, Haidilao, China's largest catering company, has lost 1.1 billion since its suspension of business on January 26, with an average daily loss of 80 million. Among the losses, staff salaries and store rents are as high as 700 million. As far as the catering industry is concerned, even if work resumes, many cities will not allow dine-in food and can only rely on packaging and takeout, but the turnover is only about 20% of normal periods. According to the "Survey Report on the Training and Education Industry Status During the Epidemic Period" of the Training and Education Professional Committee of the China Private Education Association, more than 90% of the institutions have some or serious difficulties in their operations, and 83% of the online institutions surveyed predict their revenue in the first half of the year will be reduced. Regarding the reasons for the operating difficulties of off-campus training institutions, most institutions believe that the most critical factors are reduced revenue, venue rental pressure and excessive labor costs.

#### 3.1.2 Pressure from companies to explore

### international markets

The development of service trade depends more on international market demand. The weak international market demand and the superposition of the epidemic have led to a decline in business demand in foreign service markets. After the outbreak of the epidemic, many countries have adopted control measures, such as the cancellation and adjustment of routes, and immigration control in the United States, personnel exchanges and cooperation restrictions and other measures have further reduced the efficiency of service personnel's entry and exit, and international market development is hindered.

Through the analysis of the main factors affecting the import and export of service trade companies in the survey data in 2020, it can be found that the epidemic mainly affects companies through the export impact of corporate promotion, market development, business order transfer, execution efficiency, and epidemic prevention costs caused by the epidemic. Since many services of service companies can be completed online, the impact of service import and export caused by delayed resumption of work, transportation costs and restrictions ( **Figure 1** ) on personnel entry and exit is relatively small.

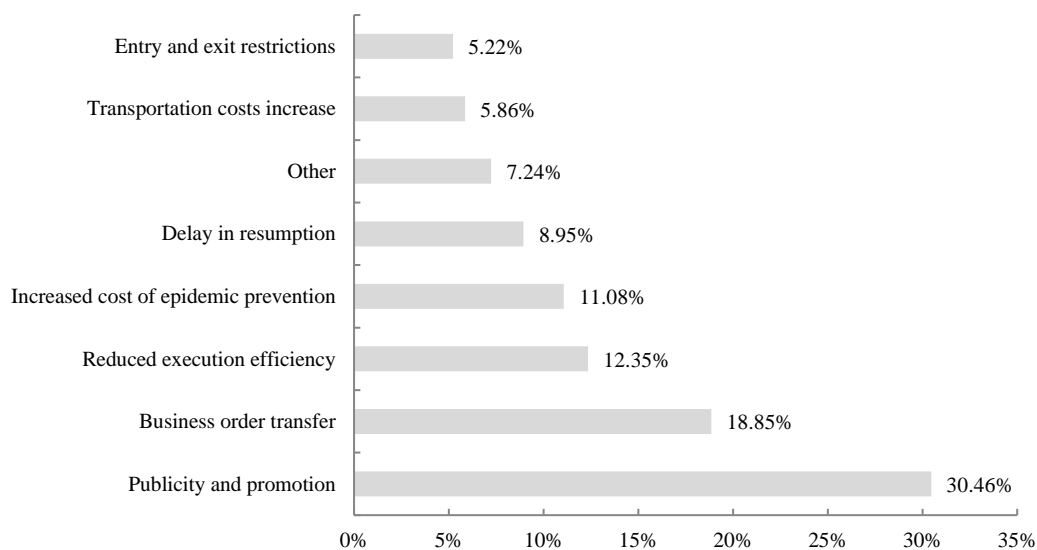


Fig.1: The Main Factors of the COVID-19 Affecting the Service Import and Export of Enterprises in 2020

### 3.1.3 Order cancellation or transfer pressure

In the short term, the epidemic has affected the decline in global order demand, and orders that have already signed contracts may also be cancelled due to delayed production or delivery. Many multinational service providers have announced the suspension of their business or stores in China. For example, Disney closed its Shanghai park during the Spring Festival, IKEA temporarily closed all 30 branches in China; McDonald's closed all branches in Hubei Province; Starbucks closed more than half of the 4292 stores in China. There are still other multinational service companies that have indicated that they will adjust their investment or production plans in China based on the development of the epidemic <sup>[1]</sup>. It can

also be found from the survey data that the transfer of business orders is also the main pressure faced by service companies. 23.8% of telecommunications companies (14.7% for other business services and 20.7% for the processing industry) believe that the transfer of business orders is the second largest source of pressure during the epidemic.

### 3.2 Policy demands of service trade enterprises

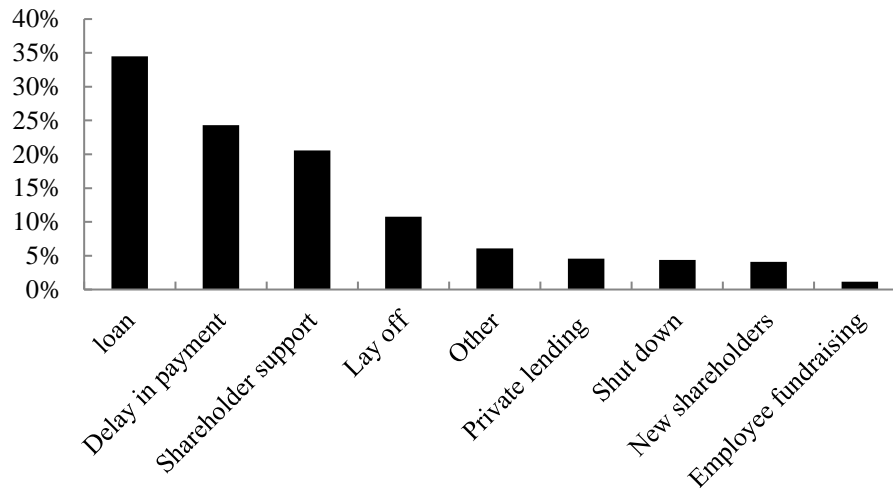
#### 3.2.1 Service enterprises have responded to the financial pressure through bank loans and deferred payment

Faced with huge financial pressure, companies have taken different measures to deal with the shortage of funds under the epidemic. The survey results show that the highest proportion of companies using bank loans to deal



with the shortage of funds is 34.49% (**Figure 2**) ; the second is delayed payment (24.33%) and shareholder funding (20.59%), and 10.78% of service companies have reduced their salaries through downsizing. the way. Fewer companies choose other ways to deal with funding problems, such as private lending, suspension of production and business, introduction of new shareholders

and employee fundraising. It can be seen that increasing bank's loans and financing to service trade enterprises can effectively alleviate the financial problems of enterprises. In addition, because some enterprises take measures to reduce staff and wages, local governments should also pay attention to the employment and salary issues of service enterprises.



*Fig.2: Important Measures Taken by Service Trade Enterprises to Cope with Capital Pressure*

### 3.2.2 Service companies put forward policy demands on "strong publicity, increased expenditure, and cost reduction"

Service trade companies have put forward policy demands such as promotion and market development support, epidemic prevention support, cost subsidies, tax reduction/exemption, and financial support. Among them, in terms of "strong publicity" (**Figure 3**) , 37.54% of enterprises hoped that the government would provide support for promotion and market development; in terms of "increased expenditure", 27.63% of enterprises offered

support for epidemic prevention and 6.88% of enterprises offered financial support; In terms of "this", 17% of the companies proposed cost subsidies, and 9.07% of the companies proposed reduction/reduction of taxes. It can be seen that while local governments and banks provide support to enterprises in terms of finance, taxation, and anti-epidemic guarantees after the resumption of work and production, they should also strengthen the promotion of service trade companies' overseas markets and help them develop international markets.

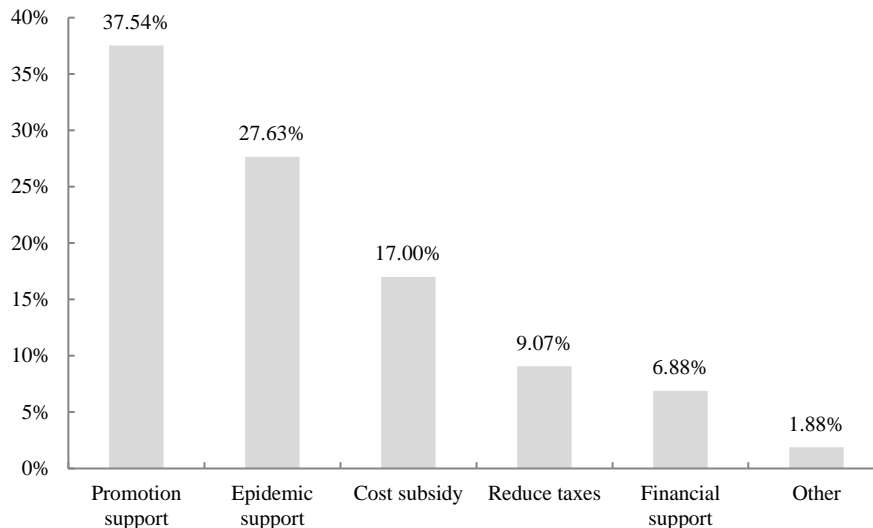


Fig.3: Policy Demands of Service Trade Enterprises

#### IV. COUNTERMEASURES FOR THE DEVELOPMENT OF SERVICE TRADE ENTERPRISES UNDER THE EPIDEMIC CRISIS

The service industry has obvious heterogeneity, and the impact of the outbreak of the COVID-19 epidemic on different periods, different regions, different service industries, and different types of enterprises is quite different. Therefore, it is particularly important to conduct an in-depth analysis of the differential impact of service trade caused by the epidemic, and to propose specific countermeasures and suggestions to help service companies develop in accordance with the policy demands of service trade companies. In view of this, the government and enterprises should strengthen coordination and cooperation to ease the impact of the epidemic on service trade and promote the transformation and upgrading of China's foreign trade.

##### 4.1 Implementing differentiated promotion policies for different periods

In the short term, China needs to implement targeted and accurate fiscal policies to resume domestic production of service enterprises as soon as possible, fully release the service demand of enterprises and residents, and cope with the decline of external demand by promoting domestic demand. At the same time, it should quickly form the

capacity of continuing service for exports of major epidemic countries, actively explore new growth points of service trade, and reduce the impact of export demand decrease of enterprises due to the second outbreak in the target country after returning to work and production. In the long run, we should promote regional trade facilitation and ease the pressure of trade demand and supply. By accelerating the regional trade agreements with South Korea, Japan and ASEAN countries, the consumption and production network in East Asia can be improved, so as to alleviate the impact of the decline in service demand or supply caused by the epidemic in the EU and the United States.

##### 4.2 Implementing stepped support for different regions

The development of the epidemic situation and the level of service development in different regions are different, and the impact of the epidemic on service companies varies. Although some areas are not the key areas of the epidemic, the prevention and control are also strict, causing unnecessary impact on the production and operation of enterprises. This requires all local government to implement the requirements of "precisely resuming work and production in different regions and tiers" according to local conditions. According to the extent of the impact of the epidemic in the areas where service trade

companies are located, local authority should implement the central and provincial policies in taxation, finance, finance, social security, and job stabilization. Various supporting policies, such as reducing the “five insurances and one housing fund” in a stepwise manner for different regions, implementing tax reduction and exemption policies, and appropriately extending the implementation time of policies in the hardest-hit areas all help to alleviate. For areas where service companies are more affected, large office buildings and shopping malls are encouraged to reduce corporate rents in the short term, and local governments can provide appropriate financial subsidies to owners<sup>[2]</sup>. Effectively reducing the burden of service companies and operating costs can help service companies overcome funding problems, restore normal operations, and boost development confidence.

#### **4.3 Focusing on resuming work in key industries such as transportation and upstream and downstream industries**

The transportation industry is a strong support for smoothing the economic cycle and meeting people's livelihood needs, but companies in this industry are relatively pessimistic about the impact of the epidemic. It is recommended that local governments increase financial support for the transportation and express delivery industries, and adopt different tax and fee reduction policies according to the different means of transportation and the degree of impact<sup>[3]</sup>; simplify the approval process of the transportation industry, such as establishing an online system, applying online for resumption of work in advance, relevant departments to give the results of the resumption of work within the specified time, and accurately to guide transportation companies to resume work and production.

#### **4.4 Paying attention to support for small and medium private service enterprises**

Since service companies are mainly small and medium-sized private enterprises, the government can support the development of such service organizations and enterprises through policy or financial support, such as simplifying administrative procedures, improving service efficiency, reducing service enterprise costs, and promoting enterprises to devote more energy to research

and development. For small and medium-sized private enterprises that are greatly affected by the epidemic, policies such as postponing the payment of social security fees, reducing corporate rents, reducing taxes and fees, and discounting loan interest can help them solve their difficulties. In addition, they can encourage service companies with good development prospects but temporarily trapped financial institutions to seek support from local banks by increasing medium and long-term loans for small and medium-sized enterprises, and reduce or exempt or reduce related handling fees for loans caused by the epidemic. As knowledge-intensive services increasingly occupy the mainstream position, relevant service companies can be given financial support to achieve structural adjustment, transformation and upgrading of service trade, and reduce the impact of the epidemic on service trade.

#### **4.5 Encouraging traditional service companies to strengthen model innovation and business mode innovation**

The huge impact of the epidemic on service trade can better reflect the shortcomings of enterprises. Because the service industry has the synchronization of production and consumption, service companies should be more sensitive to market demand and respond to the impact of the epidemic through mode innovation. The government can encourage traditional service companies to make use of e-commerce transformation, use the Internet platform, cooperate with e-commerce to carry out online sales, and realize the organic integration of online and offline. For example, tourism services can develop online tourism products, health care and vacation, etc. With the integration of more knowledge elements into services, industries such as catering, real estate, and medical care can transform offline operations into online operations, and improve the contactless distribution system for enterprises to alleviate the impact of the epidemic. Traditional service trade companies should also rethink the problems in the development process under the test of the epidemic, and then change their business methods, provide more distinctive value-added services, and realize the transformation and upgrading from traditional service trade to modern service trade.

#### **4.6 Mitigating the impact of the epidemic through**

### **the development of modern service industries**

Traditional domestic service industries with advantages are mostly labor-intensive companies, and their trade is difficult to complete online. Under the background of the epidemic, restrictions on the movement of people have been greatly affected. In contrast, modern service companies such as finance, consulting, telecommunications, design, education, and entertainment can expand their businesses online and are relatively less affected by the epidemic. For example, the telecommunications industry has strong flexibility and adaptability, and the development of the epidemic also makes it face good development opportunities. The growth of businesses such as real-time tracking of the development of the epidemic, reporting of personal health status, and inquiring whether the transportation is safe, has all contributed to the progress of the telecommunications industry. The telecommunications industry can introduce technologies such as artificial intelligence and cloud computing to strengthen the connection with data, text and images, and promote the development of data and intelligence in the telecommunications industry <sup>[4]</sup>. In response to the growing number of "cloud services" such as online learning, online office, and online entertainment, the telecommunications industry can increase investment in cloud products, improve the quality of "cloud services", and reduce the impact of the epidemic on the import and export of services. Governments at all levels can issue policies to support the development of knowledge-intensive service companies and provide financial support to realize the transformation and upgrading of service trade<sup>[5]</sup>, and hedge the impact of the epidemic on the import and export of traditional service trade.

### **4.7 The government providing effective assistance measures based on the demands of enterprises**

In addition to the pressure of fixed cost expenditure, service enterprises also face the problems of international market development and protection. In terms of cost, most of the service enterprises are population aggregation enterprises. Rent and employees' five insurances and one fund will become the key factors affecting the survival of service enterprises. Therefore, according to the fact that the service enterprises are state-owned enterprises or other

types of enterprises, we can take measures to reduce the rent or encourage the owners to reduce the rent according to the time of the epidemic. When appropriate, we can help the service enterprises tide over the difficulties through financial subsidies. The government can also introduce policies to delay the payment of "five insurances and one fund" for offline service enterprises, and make up with the payment after the enterprises restart to make profits. For the publicity and protection problems faced by enterprises after restart, the government can increase the recruitment support for enterprises by encouraging service enterprises to participate in the exhibition or through the government platform; in the first few months, the government can provide them with masks, disinfectant and other necessary protective equipment.

### **4.8 Active actions of the enterprise itself to cultivate crisis response capabilities**

For individual entrepreneurs and enterprises, the epidemic is a test of internal organization and coordination capabilities, as well as an opportunity for self-reflection and growth. As entrepreneurs and individual enterprises, they should have the ability to anticipate, take and fight risks. The occurrence of the COVID-19 epidemic will force companies to better balance cost saving and risk diversification strategies in future global value chain management. Service companies need to re-plan and rethink about future trading partners, upstream and downstream capacity coordination, import and export logistics and transportation, the number of suppliers and geographic diversification, which will enhance the resilience of the supply chain to deal with new challenges that may be brought about by new external shocks in the future. In addition, service trade companies can use new technologies to develop digital products, promote digital trade, upgrade online businesses, and actively seek new business opportunities for their own development. Only by continuously implementing management and operating model innovations, strengthening the construction of response mechanisms, cultivating crisis response capabilities, and preparing vulnerability assessments and crisis response plans in advance, can service companies find "opportunities" in the "crisis" and grasp development opportunities in difficulties.

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# Effectiveness and Acceptability of Instructional Materials in the Enhancement of Students' Academic Achievement

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**Abstract**— The study examined the effectiveness and acceptability of the instructional materials developed by the faculty of the College of Management and Business Technology (CMBT) of the Nueva Ecija University of Science and Technology (NEUST). The sample consisted of selected instructional materials developed by the said Department. This included the instructional materials being used by the Master of Business Administration and Doctor of Philosophy in Business Administration of the Graduate School. The research employed the descriptive design where eighty-eight respondents were purposively selected. The parameters in the instrument used were the instructional content, procedure, relevance, knowledge and practical applications, clarity, development of higher thinking skills, and alignment with the thrusts and goals and objectives of the University. The following findings were made: the total weighted mean got 3.55 with verbal description of “Very Satisfactory” indicated that the instructional materials developed by CMBT faculty were acceptable, except for the item friendliness of figures which got a “Needs Improvement” rating. Recommendations for the enhancement and continuous development of instructional materials were also made

**Keywords**— instructional materials effectiveness, higher thinking skills, curriculum, syllabus.

## I. INTRODUCTION

Instructional materials are encouraged to be developed especially in State Universities and Colleges (SUCs). Not all books or reference materials in a particular subject can be available in bookstores. In fact, they can be too costly and mostly authored by foreigners devoid of Philippine setting; current practices and trends are foreign in nature. However, the developed instructional materials should be tested for its effectiveness. There are several parameters to be considered in knowing the developed instructional materials acceptable not only to the learners' use, but also on the part of the

educators. Its content, readability, and references are some of the factors to be consideration to make it effective. According to Kenobi Krukru, the use of instructional materials help facilitate and enhance effective teaching and learning. The uses of instructional materials are varied that can support students increase their knowledge and better understanding of the subject content.

Instructional materials provide various ways and strategies to make easy and comfortable the teaching and learning processes because it constitutes tangible contents so even the learners can easily understand and be connected to

the subject. Because of the many advantages it brings, most educators find systematic ways in understanding the individual differences especially the learners in whole teaching processes.

According to Onyedikachi (2011) as cited in the study of Oden (n.d), teaching without tools is impossible to attain the teaching and learning goals and competency. The instructional tools make possible a better understanding on the subject to make students learn from themselves. Furthermore, in the study of Ezekoka (2008), revealed that developed instructional materials served as an important components in the teaching and learning delivery modalities that carries all important messages, data and information from a transmitting source (teachers) to the receiver (learner).

Effective instructional materials are designed to instigate, ignite and bring desirable changes in the students' learning abilities, attitude and behavior in more interesting and meaningful classroom settings.

Onasanwa and Omosewo (2011) discussed instructional materials as a key component that may be used in teaching and learning process that can disseminate information, data, idea and messages that could help learners enhance their academic achievements.

Specifically, instructional tools like developed materials is one of the tools that can help teachers convey knowledge in a very natural way leading to good teaching and learning processes (Koko, 2015).

In the study of Soetan et.al (2010), they particularly stated that graphics, poster, cartoon sketches and drawings, graphs found in developed instructional materials help learners increase their level of understanding and could help them communicate facts and idea clearly. It also helps learners to visualize the concepts learned and its relationship to others.

Generally, developed instructional materials can be classified as primary and secondary aids and outlines used in effective teaching and learning. Hence, it is the ability of the teachers to identify the quality and appropriateness upon utilizing the developed instruction materials. And on students' part, instructional materials may guide them to acquire more information so as to bring the learners much appreciation on the topics under consideration.

To this notion, the researcher aim to determine the effectiveness and the level of acceptability of the instructional materials developed by the CMBT faculty.

## II. OBJECTIVES OF THE STUDY

The study aimed to determine the effectiveness of the developed instructional materials developed by College of Management and Business Technology (CMBT) faculty of NEUST.

The study aimed to answer the following:

1. Describe the parameters used in testing the acceptability of the instructional materials in terms of content, understanding procedure knowledge and application, practical applications in its relevance, clarity of timely information, alignment to the thrust of the University, friendliness of the figures and development of Higher Order Thinking Skills (HOTS).
2. Describe the challenges encountered by the teachers in using the developed instructional materials in teaching and the students' learning process
3. Propose an enhancement plan

## III. RESEARCH METHOD

The researcher used the descriptive research design involving 88 CMBT, MBA, and Ph.D. – Business Administration students were selected using purposive sampling. The questionnaire consisted of Likert scale with verbal description of "Excellent", "Very Satisfactory", "Satisfactory", "Needs Improvement" and "Poor" as choices. The same way that the equivalent description to be "Very Effective", "Effective", "Moderately Effective", "Slightly Effective", and "Not Effective". The instrument was distributed before the end of the semester who used the books or instructional materials.

Range of scores and its verbal interpretation is shown below:

Table 1. Range and Verbal Interpretation Equivalent

Point	Range	Verbal Analogy	Effectiveness Verbal Equivalent
5	4.21-5.00	Excellent	Very Effective
4	3.41-4.20	Very Satisfactory	Effective
3	2.61-3.40	Satisfactory	Moderately effective
2	1.81-2.60	Needs improvement	Slightly effective
1	1.00-1.80	Poor	Not effective

#### IV. RESULTS AND DISCUSSION

1. Descriptions of parameters used in testing the acceptability of the instructional materials in terms of content, understanding procedure, knowledge and application, practical applications and its relevance, clarity of timely information, alignment to the thrusts of the University, friendliness of the figures, and development of higher order thinking skills.

Table 2. Description of the Parameters Used in Instructional Materials

Description	Weighted Mean	Verbal Description
Content	3.74	Very Satisfactory
Understanding procedure, knowledge and application	3.38	Satisfactory
Practical applications in its relevance	3.84	Very Satisfactory
Clarity of timely information,	3.46	Very Satisfactory
Alignment to the thrusts of the University	3.75	Very Satisfactory
Friendliness of the figures	2.49	Needs Improvement
Development of higher order thinking skills	4.17	Very Satisfactory
<b>Overall Weighted Mean</b>	<b>3.55</b>	<b>Very Satisfactory</b>

Table 2 shows the summary and tallied results of the survey got an overall weighted mean of 3.55 with verbal description of “Very Satisfactory”. The development of higher order thinking skills got 4.17 which is considered the highest among others and friendliness of the figures got the lowest weighted of 2.49 and interpreted as “Needs Improvement”.

The results indicate that instructional materials developed by CMBT faculty were acceptable in terms of content, understanding procedure knowledge and application, practical applications, clarity, alignment and development of

higher order thinking skills except for the friendliness of figures. The lowest weighted mean for this description is primarily because the cost of using glossy papers for printing are rather expensive, hence not economical, and becomes expensive on the part of the students. Imposing in print color pictures can entail different technique in the printing press which may require specialized machines. On the Item understanding procedure, knowledge and application got a score of only “Satisfactory” that can indicate that the students found difficulty in comprehending the instructions. This connotes a further improvement once the instructional materials are edited.

2. Challenges encountered (Abelardo, et.al, 2019) from using developed instructional materials in the teaching and learning process.

Teachers and even the learners are challenged in using developed instructional materials perhaps due to the following reasons (1) some of instructional materials may be inadequate in both quality and quantity (2) limited topics based on syllabus requirements (3) some of the instructional materials may have complex activities, and (4) unappealing illustrations and figures.

#### 3. Proposed enhancement plan

The researchers may propose an enhancement plan for the continuous improvement and development of instructional materials, specifically the friendliness of the illustrations and figures found in the instructional materials.

#### V. CONCLUSION AND RECOMMENDATIONS

##### Conclusion

The following conclusions are drawn:

a. The instructional materials developed by the CMBT faculty got the total weighted mean of 3.55 with verbal description of “Very Satisfactory”. The result means that instructional materials were acceptable as a teaching and learning materials.

b. All of the respondents were challenged on the illustrations and figures used in the instructional materials (Subia, 2020).

##### Recommendations

a. Collaboration and brainstorming may help teachers in improving more the instructional materials.

b. The administration may fund the trainings and seminar workshops purposely for instructional materials development and give incentives to authors for motivation and job satisfaction (Bautista & Balaria, 2018).

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# Disposal of Waste Cooking Oil of Restaurants and Eateries: A Potential Hazard to the Environment

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**Abstract**— *The study delved on the disposal practices of restaurants and eateries in Cabanatuan City, Philippines as regard the disposal of cooking oil and grease residues emanating from its operation. It is believed that this practice of flushing cooking oil and other liquid wastes through the city's drainage system can clog the canals. It was further assumed that these establishments neither segregate nor use grease traps for their liquid waste management. Data were gathered thru convenience sampling, non-structured interview, and observation. Findings revealed that these food operators neither are aware on the proper disposal of liquid waste nor knowledgeable on its right disposal. They are not also aware of the harms it may bring to the environment as a consequence of these acts.*

**Keywords**— *clogged canals, cooking oil and grease disposal, waste management, water pollution.*

## I. INTRODUCTION

Stink, dark and polluted are the words you will hear whenever a person or group passes by to the open sewerage near the eateries. Disposal practices of used cooking oil of eateries down to the drainage may harm not only the environment but also the community. Waste cooking oil of eateries can pollute the sewerage system. The restaurants' and eateries' cooking oil and home use differ in the quality of oil and the quantity.

In the Philippines, kitchen sink pipes of residential houses, and even in restaurants and eateries, are directly flushed into the community's open canal. People are unaware that used oil or grease when cooled solidifies can clog drainages, and eventually cause flooding during heavy rains. The Metropolitan Manila Development Authority

discovered that used grease and oil are the main reason why the drainage clogged and causing a flood on Tomas Morato in Quezon City (Fabunan and Zurbano, manilastandard.net, 2015). Accordingly, this was due to build-up of grease coming from the kitchen of some restaurants in the area.

While people are engaged in the practice of dumping their used cooking oil or grease openly in secondary and main canals, this ends up in natural water bodies that can harm the aquatic and marine life. This means environmental degradation.

The researchers of this study find relevance in conducting a survey on the current situation on the waste management practices of restaurants and eateries in order to address this malpractice.



## II. STATEMENT OF THE PROBLEM

The study sought to answer the following:

1. Describe the awareness of restaurants and eateries as regard the proper disposal of used cooking oil and its residues.
2. Describe the disposal practices of these establishments in the disposal of used cooking oil and its residues.
3. Describe the respondents' awareness as to its effects to the environment.

## III. RESEARCH METHODOLOGY

This research study employed the descriptive research design. It employed the ten (10) restaurant and eateries selected and suspected to be disposing off improperly its solid and liquid wastes. Unstructured interview and observation were used the data gathering. The latter technique was utilized to validate the claims of the restaurants and eateries by observing the main canals and its tributaries where their kitchen sink drain was connected. For purposes of clarity, two kinds of oil were used in this study: used cooking oil and the other was the grease residue from plates.

## IV. RESULTS AND DISCUSSION

This section answered the question posed in the statement of the problem.

*Table 1. Awareness of restaurants and eateries as regard the disposal of cooking oil and its residues*

Q1: Are you aware in the disposal of cooking oil and its residues?			
Not Aware		Aware	
Frequency	Percentage	Frequency	Percentage
8	80%	2	20%

Note that 80% of them are not aware of the proper disposal of used cooking. Only 20% are aware. Further interview revealed that those who answered they were aware did not disclose how they dispose off the used cooking oil. One respondent claimed that such were re-used for their other frying needs. The other one was hesitant to answer the query for fear their establishment would be reported to government authority.

*Table 2. Disposal practices of restaurants and eateries as regard the disposal of cooking oil and its residues*

Q2: Disposal practices of restaurants and eateries					
Directly into the kitchen sink		Being reused for frying		Put into a bin	
Frequency	Percent age	Frequency	Percent age	Frequency	Percent age
8	80%	10	100%	2	20%

Multiple responses

Eighty percent (80%) of these restaurants and eateries dispose off the used cooking oil and its residues directly into the kitchen sink.

Ten (10) or all of them reuse the oil for their other frying needs, but segregated those specifically for meat and fish use.

Only two (2) of them put the used cooking oil (no longer desirable or fit for frying) in a container, however, she did not elaborate where she places or dispose off the oil container.

It can be deduced from the data their practices in the disposal of liquid waste was far from being ideal, except for the two respondents who segregated the oil. As to how they do next was not disclosed.

*Table 3. Awareness of respondents to the threats it poses to the environment*

Q3:					
Not aware		Somewhat aware		Aware	
Frequency	Percent age	Frequency	Percent age	Frequency	Percent age
8	80%	1	10%	1	10%

Data show that respondents are not aware of the hazards to the environment the practice of throwing used cooking oil and its residues directly into the sewer. Only one (1) somewhat agreed of its threats it might clog the canals, while one (1) was aware, however may not be fully aware of the harms it may do to nature. It further shows that they are ill-informed of the risks this may bring.

## V. CONCLUSION

As to awareness of restaurants and eateries in the disposal of used cooking oil and its residues. Majority of them are not aware on how to dispose off properly the liquid wastes.

As to the current practices as regard the disposal of used cooking oil and its residues. Most of them flushed the used cooking oil and residues straight to the sewer.

As to the awareness as regard the threats it may do to the environment. Most of them are not aware of the consequences it may bring to the habitat and the people in the community.

## VI. RECOMMENDATION

1. For these establishments to follow the Philippine Law re: Republic Act No. 9003 (otherwise known as the Ecological Solid Waste Management Act of 2000) and Republic Act No. 9275 ("Philippine Clean Water Act of 2004").

2. For the Local Government Units (LGU) to ensure that Republic Acts. 9003 & 9275 are properly implemented and strictly followed by the food operators.

3. That periodic visitation be done by LGU and Department of Environment and Natural Resources as to adherence to law of the concerned, and penalize those disobedient to this Act.

4. The LGU may require these establishments an orientation seminar, meeting, or any other means to educate these operators and become part of the requisites prior to issuance of the yearly business permits, and/or revocation of license if the above laws are violated.

5. The LGU Engineering Office may require these operators a detailed sewer plan in conformity with the applicable laws.

6. For food operators to install grease traps in their kitchen lavatories.

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# Impact of Covid-19 on Micro and Small Entrepreneur (MSE) Graduates of the Kapatid Mentor Me Program of the Department of Trade and Industry

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**Abstract**— The outbreak of the coronavirus disease (COVID-19) has severely affected the Micro, Small, and Medium-sized Enterprises (MSMEs). Unfortunately, small businesses are being hit hardest by the fall-out of the pandemic [1] and are being addressed by the Department of Trade Industry (DTI) with several measures and initiatives to mitigate its impact on the Philippine economy. This study was conducted to describe the status and effects of the pandemic to the Micro and Small Entrepreneur graduates of the Kapatid Mentor ME (KMME) Program of DTI in the province of Nueva Ecija, Philippines, as the agency's guide in streamlining the future direction of the program. The descriptive method of research was used with a semi-structured one-page online survey to determine the KMME MSE graduates' profile and the overall impact of COVID-19 pandemic particularly during the declaration of the community quarantine. The data gathered showed that most of the KMME MSE graduates continued their business operations amidst the pandemic. They are responding to the economic fall-out in several ways with optimism, government response and interventions that are significant to ensure MSEs survival. Likewise, they develop resilience through business continuity trainings, productivity improvements, and subsidies.

**Keywords**— Business continuity, COVID-19 impact, Department of Trade and Industry, Entrepreneurs.

## I. INTRODUCTION

The Micro, Small, and Medium Enterprise (MSME) sectors play a critical role as drivers of economic growth [2]. MSME is known as the backbone of Asia Pacific Economic Cooperation (APEC)'s 21 economies and in the Philippines,

was recognized as one of the fastest-growing economies [3]. Last 2018, it is projected that the gross domestic product (GDP) growth rate over the next two years will increase by 6.7% [4].

In 2015, MSMEs represented 99.6% of the total enterprises and provided 63.27% of the country's total employment. That makes the MSMEs a significant sector of the economy [2].

As catalysts of investment and employment generation in the Philippines, the government initiated and policies and development programs to strengthens the thrust on entrepreneurship through trade and investments. As stated Republic Act No. 10644: Go Negosyo Act, "An Act Promoting Job Generation and Inclusive Growth Through the Development of Micro, Small and Medium Enterprises" thus the DTI conduct Technology Transfer, Production and Management Training, and Marketing Assistance for SMEs [5].

However, the micro, small, and medium enterprises (MSMEs) are vastly affected by the Coronavirus disease (COVID-19) outbreak. COVID-19 is an infectious disease-causing global health crisis and economic downturn. DTI is assisting MSMEs to adapt to new business concepts amidst the challenges of the "new normal". This study shall contribute towards the determination of DTI's interventions and future plans on the implementation of its programs and services [6]. It is, thus, crucial to provide them with the necessary interventions in mitigating the pandemic's impact on MSMEs and improve business resiliency to quickly adapt to the disruptions caused by COVID-19 through providing business development support, capacity building, access to finance and market, and promote sustainable value chain [7].

The Kapatid Mentor ME (KMME) is one of the programs launched by DTI and the Philippine Center for Entrepreneurship (PCE) to help the country's micro and small enterprises (MSEs). The said program provides comprehensive training with ten modules designed to prepare Micro and Small Entrepreneurs (MSEs) for their integration in the value chains of medium and large enterprises and scale up their businesses through mentoring on different functional areas of entrepreneurship [4].

In June 2017, the DTI has successfully launched the said program in Nueva Ecija and has completed three batches as of August 2019 with a total of 60 graduates. After all the KMME runs, valuations and assessment valuations are necessary to provide information on how the program is contributing results to meet the objectives of the program deliverables.

As the COVID-19 pandemic was confirmed to spread in Central Luzon including the province of Nueva Ecija with 55 confirmed positive cases as of May 31, 2020, which posed

many challenges to MSMEs in the province, research efforts are targeted to identify the status and condition of the KMME MSE graduates amidst the pandemic, in order to determine the specific assistance necessary for business continuity and recovery. This study will contribute to streamline the future direction of the program in the province, highlighting the profile of the KMME graduates, its challenges during the nationwide community quarantine caused by COVID-19, and its present status.

### **Kapatid Mentor ME Program: Overview**

The Kapatid Mentor ME program (KMME) is a coaching and mentoring program under the partnership between the Philippine Center for Entrepreneurship-Go Negosyo and the Department of Trade & Industry (DTI) as part of its strategy boost economic activity focusing on micro and small enterprises (MSEs) [6]. The program aims to assist small players to scale up their businesses and contribute to economic growth and address issues of unemployment, job mismatch, and migration through coaching and mentoring. Based on a study in the US, only 30% of MSEs survive their first ten years of operation not because of lack of government support but more of mismatched strategies in handling opportunities.

Go Negosyo, as the program's coordinating body will assign a mentor that specializes in a specific topic to a batch of mentees composed of 20 micro-business owners with potential for growth. This will be in close coordination with DTI representatives [4].

## **II. METHODOLOGY**

The descriptive method of research and input-process-output (IPO) model were used in this study. According to Calderon (2012), "descriptive method involves the description, recording, analysis and interpretation of the present nature, composition or processes of phenomena which focuses on prevailing conditions, or how a person, group or thing behaves or functions in the present" [8]. According to the Six Sigma Daily website, "The Input-Output (IPO) Model is a functional graph that identifies the inputs, outputs, and required processing tasks required to transform inputs into outputs"[9]. This method was to determine the necessary actions to improve the KMME program implementation and to assist the KMME graduates.

The 60 KMME graduates were invited to participate in this study by responding to a quick online survey via Google forms. Considering the current community quarantine and health protocols, the researchers conducted the survey by

sending the survey link to KMME group chat messenger per batch as approved by the Executive Committee of the Department of Trade & Industry- Nueva Ecija Provincial Office. Participation in the survey was voluntary. The questions on a semi-structured one-page online survey form were kept as simple as possible to be answered with the below structure:

The first part determined the demographic data and profile of the respondents with questions on age, municipal address, KMME batch, industry, and year of establishment. The respondents were asked about the status of business operation prior to the March 17, 2020, enhanced community quarantine. The second part assessed the overall impact of the COVID-19 pandemic with items related to the status of business operations, cash flow, and challenges on raw materials and workforce requirements. The item on how the business operations were affected by the COVID-19 pandemic was measured using a Likert scale where (a) not

affected, (b) slightly affected, (c) Moderately affected, and (d) Strongly affected. The rehabilitation/loan facility under the Pondo para sa Pag-asenso and Pagbabago (P3) program of DTI was an option on an item no. 6 on how the respondent deals with cash shortages.

The survey and data collection were conducted on June 1-3, 2020 after the Modified Enhanced Community Quarantine was lifted. Descriptive statistical tools such as percentage and frequency distribution, tables, and graphs on Google Forms and Microsoft Excel were used to summarize, describe, and analyze the data gathered.

### III. RESULTS AND DISCUSSION

Due to limitations brought by the pandemic, a total of 60 surveys were obtained but 21 respondents or 35% of the surveys conducted were successful. Table 1. Shows the demographic characteristics of the respondents.

Table 1. Descriptive Analysis for Study Sample

Category	Measure	Scores
Age	Mean	43.10
	Range	31 to 52
Gender	Male	9.00 (42.86%)
	Female	12.00 (57.14%)
KMME Batch	Mode	2 (90.48%)
Industry	Food	9
	Manufacturing	12

As presented in the table above, the age of the respondents ranges from 31 to 52 years old and the age mean is 43.10. Approximately, 57.17 % of the respondents were male and the remaining 42.86 % belongs to male respondents. The

respondents belong to the first three batches of KMME graduates in the province. Likewise, 9 of the respondents are engaged in the food industry while 12 of them belong to the manufacturing industry.



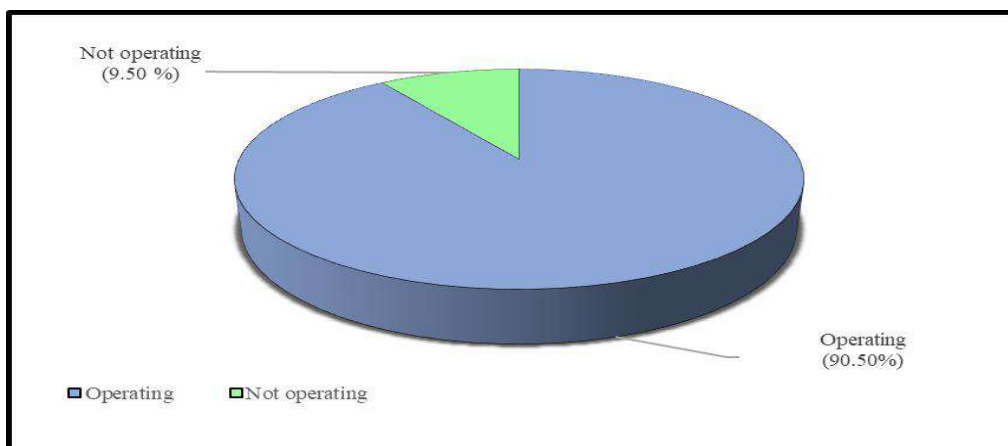


Fig.2: Percentage of Respondents' Business in Operation as of March 15, 2020.

The illustration above has shown the percentage of business of KMME graduates' business which still operates as of March 15, thus 90.50% of respondents answered that their

business operates on the said date while 9.50% answered no. This question is in relation to the imposition of lockdown on areas affected by the pandemic.

Table 2. Assessment of Overall Impact of Covid-19 Pandemic

Frequency	Percentage	Verbal Description
5	23.80 %	Not Affected
4	19.00 %	Slightly Affected
9	42.90 %	Moderately Affected
3	14.30 %	Strongly Affected

The illustration showed the percentage of how the business operations of KMME graduates' businesses were affected by the pandemic, only 14.3% of the respondents were strongly

affected while 42.9% of the respondents were moderately affected. In addition, 19% of the respondents were slightly affected while the remaining 23.8% were not affected at all.

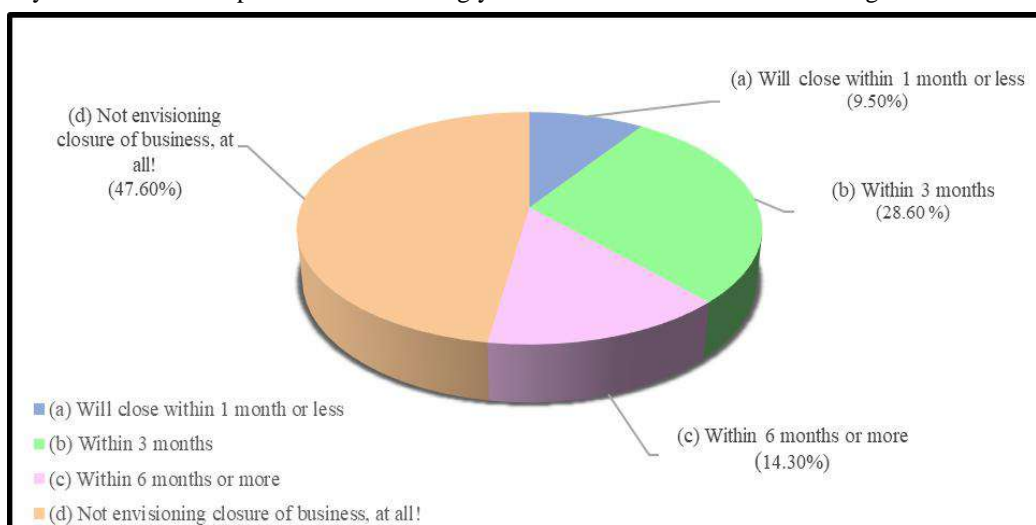


Fig.3: Assessment of Respondents on the Risk of Business Continuity due to Crisis

The illustration above shown the assessment of respondents on the risk of business continuity due to crisis. The majority of the respondents don't envision of business closure or shutdown with 47.60%, while 9.50 % of them predicted that

their business will close within a month or less, 28.80 % forecasted that their business will close with a month or three and 14.30 % thought that their business will last less than six months.

Table 3. Significant Factors of Financial Problems of the Business Encountered by the Respondents During the Covid-19 Outbreak

Cause of Financial Problem	No. of Respondents who encountered the stated problem	% of respondents who encountered the stated problem	Rank
A. Staff Wages and social security changes	12	57%	1
B. Rent	9	43%	4
C. Repayment of Loans	5	24%	5
D. Payment of Bills	11	52%	2
E. Other Expenses	10	48%	3

The table above shows the percentage and the ranking of respondents' most significant contributors to financial problems. According to the data presented, 57% of the respondents said that staff wages and social security changes cause the financial problem to their business. And it

is noticeable that the financial problems ranked higher are related to operating expenses. And only 10% of the respondents mentioned that they have no specific problem with their financial problems.

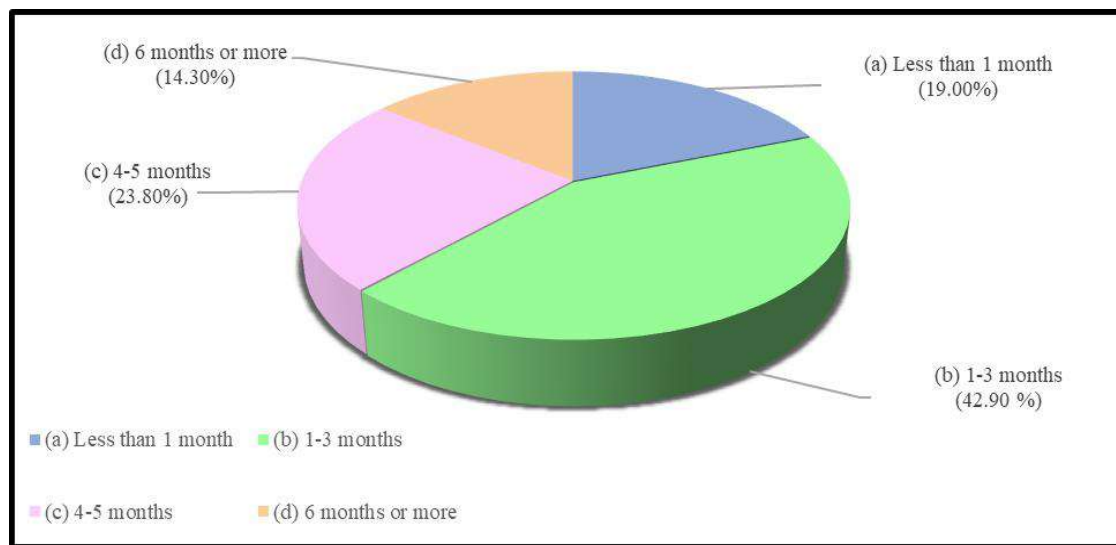


Fig.4: Percentage of Forecasted Span of Cash Flow Liquidity to Sustain Business Operation

The figure above shows the percentage of the forecasted span of cash flow liquidity to sustain its business operations. The majority of the respondents forecasted that their available cash will last for more than three months with

42.90 %, and 19.00 % of them assumed that their cash flow can only sustain business operations within a month or less. And 14.30% of respondents with high hopes that their cash can sustain their operation for more than six months.

Table 4. Financial Alternatives to Deal with Cash Flow Shortage

	No. of Respondents	% of respondents	Rank
A. Loans by Commercial Banks	7	33%	3
B. Loans by P3	12	57%	1
c. Reduction of Operating Cost	9	43%	2
d. Negotiating with Lenders to avoid	6	29%	4

As reflected in Table 4, 57% of the respondents say that they will ask for loans under DTI's P3. Doing so will aid the working capital. While 29% of the respondents say they will negotiate with their lenders. In times of financial woes, business owners need to be creative in times of disruptive

cash cycle. In connection with question number 5, business owners must find a way to prolong their working capital before it depletes. Question number 6 will identify the respondents' alternatives to meet their funding requirements to ensure smooth business operations.

Table 5. Solutions on how to deal with Shortage of Workforce

	No. of Respondents	% of respondents	Rank
(a) Wage increases	2	9.50 %	4
(b) Use of advanced equipment or software to reduce the amount of work,	1	4.80 %	5
(c) Outsourcing of orders	10	47.60 %	2.5
(d) Delay in delivery	11	52.40%	1
(e) No shortage of workers	10	47.60 %	2.5

The illustration above shown the solutions on how to deal with a shortage of workforce. One of the effects of the Pandemic the Business owners is the shortage of workers. In line with this, question 7 showed the possible effects of a labor shortage on their business. 52.4% of the respondents

tells that they will suffer from delivery delays while only 4.8% of the respondents will use advanced equipment or software to address the concern. Surprisingly, 47.6% of the respondents said that they do not have a shortage of workers even in the times of Pandemic.

Table 6. Alternatives Considered by KMME graduates in Dealing with the shortage of raw materials.

	No. of Respondents	% of respondents
(a) Reduction of production	11	52.40 %
(b) Outsourcing orders	10	47.60 %
(c) Increasing the procurement prices	4	19.00 %
(d) Seeking new procurement channels	12	57.10 %
(e) Delaying goods delivery	6	28.60 %
(f) No shortage of raw materials	1	4.80 %

The illustration above has shown the main means of how KMME graduates deal with the shortage of raw materials in their businesses. The respondents were given the chance to

choose up to two options. 11 answered that they had a reduction in their production while 10 answered that they outsourced orders. 4 answered that they had an increase in

the procurement prices while 12 of them sought new procurement channels. Furthermore, 6 of them delayed their

delivery while only 1 respondent answered that he/she did not have any shortage of raw materials.

Table 7. Assessment of the overall problems encountered by the businesses due to the pandemic.

	No. of Respondents	% of respondents
(a) Reduction of orders	14	66.70 %
(b) Inability to deliver existing orders	3	14.30 %
(c) Increased difficulty of financing	6	28.60 %
(d) Existing loans cannot be extended	8	38.10 %
(e) Disruption of logistics	6	28.60 %
(f) Upstream and downstream chain disruptions	2	9.50 %
(g) Insufficient protective equipment (e.g., masks)	7	33.33 %

As shown in the illustration above, all of the KMME graduate's businesses faced various problems because of the pandemic. To be specific, 14 of the respondents had a reduction of orders while 3 were unable to deliver existing orders. In addition, 6 of the respondents had an increase of

difficulty with their finance while 8 of them had existing loans which cannot be extended. Moreover, 8 of them had disruption of logistics while 6 of them had upstream and downstream chain disruptions. Lastly, 7 of them did not have enough protective equipment like masks, face shields, etc.

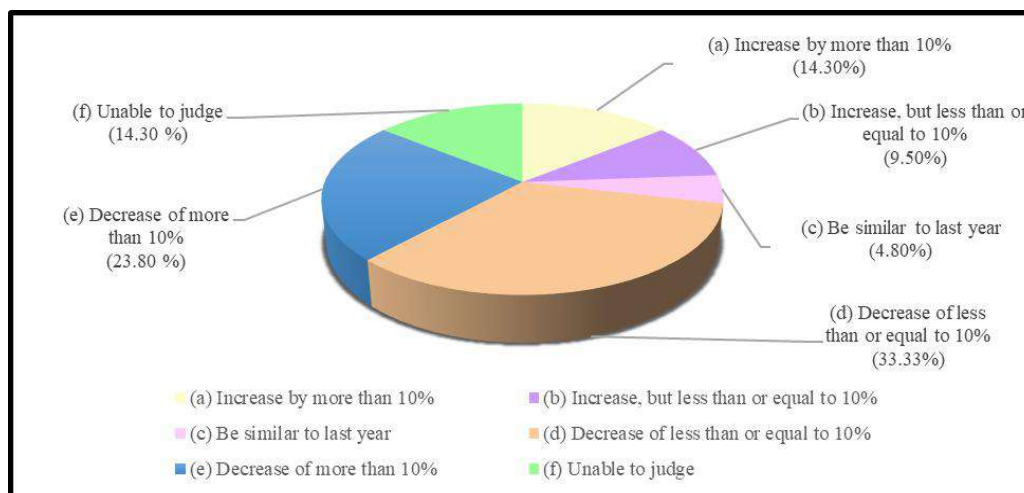


Fig.5: Percentage of Expected changes in company income over the recent year

The illustration above shown the Percentage of Expected changes in company income over the recent year. Almost one-third of the total population stated that the expected income will decrease by 10 %, and 23.80 % agreed that their business revenue will also decrease by more than 10 %. 23.80 % of the population believe that their income will increase despite the pandemic outbreak. However, 4.80 % said their income will be similar to last year' and 14.30% said that they are unable to determine the income changes.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

During the start of Luzon Enhanced Community Quarantine (ECQ) dated March 17, 2020. The majority of the respondents comprising of 90.50% stated that they are operating on the start of the ECQ in Nueva Ecija. 9.5% were already closed during the said period.

Cash Flow is the total amount of money being transferred into and out of a business, especially affecting liquidity. It is

vital for business owners to have the right amount of liquidity to be prepared in emergency [10] to sustain continued business operations. Based on the study conducted the majority of them forecasted that their cash flow can only sustain three months or more of the business operations. However, most of the respondents consider loan financing to provide financial means to the business.

It is highly noted that despite the pandemic 47.6% of the respondents are still positive as they are not envisioning closure of their business while 28.6% of respondents expect the effect of the pandemic will make their business closed within 3 months. Despite the current business obstacles, they are facing, KMME graduates find solutions on how to make their business resilient.

The researchers recommend exploring possibilities to grant reinforced aid to the KMME graduates affected within three months of the pandemic to prevent the closure of their business. Considering the specific needs across different sectors, supportive and relevant policies should be taken into account. To help them overcome the crisis, program implementations should also be more transparent if they are to deliver subsidies directly to private entrepreneurs [11].

The researchers recommend further study and gather more information about the experience of KMME graduates to have beneficial repercussions to improve more the program implementation [12] and public assistance.

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# Development of Textbooks Based on Local Wisdom for Character Building of Elementary Education Students

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**Abstract**— Character is easily understood as characteristic-good values (knowing the value of goodness, wanting to do real good, having a good life, and having a good impact on the environment) which are embedded in oneself and are embodied in behavior. Coherently, character emanates from the results of thinking, heart, exercise, and feeling and intention of a person or group of people. Character is a characteristic of a person or group of people who contain values, abilities, moral capacities, and courage in facing difficulties and challenges. Character is synonymous with morals, so that character is the universal values of human behavior that include all human activities, both in relation to God, with oneself, with fellow humans, and with the environment, which are manifested in thoughts, attitudes, feelings, words, and actions based on religious norms, law, karma, culture, and customs as a form of local wisdom where students are.

Learning activities are a form of transferring subject matter that can change the mindset and behavior of students as outlined in textbooks. The textbook in question has been prepared based on local culture and wisdom, as well as to be implemented in student learning activities. This knowledge transfer pattern is included in a learning activity designed and developed in accordance with individual characteristics and learning objectives. The developed textbooks based on culture and local wisdom give decent results to be used in building student character.

**Keywords**— Textbooks, Culture and Local Wisdom, Student Character.

## I. INTRODUCTION

The Industrial Revolution 4.0 has entered a new chapter. Various industries are starting to touch the virtual world, in the form of human, machine and data connectivity, which is better known as the Internet of Things (IoT). The development of science and technology has changed the face of world civilization. However, it needs to be realized that current and future technological advances are able to change the character of students in a direction that violates the norms and culture that have been maintained.

National character development can be defined as an effort to improve the quality of collective national behavior that is distinctive whether it is reflected in the awareness, understanding, taste, intention and behavior of

the nation and state as a result of thinking, exercising heart, feeling and intention, as well as one's sports or group of people. National character development is a collective-systemic effort of a nation-state to realize the life of the nation and state in accordance with the basis and ideology, constitution, state direction and collective potential in the context of civilized national, regional and global life to form a strong, competitive nation, have noble character, moral, tolerant, mutual cooperation, patriotic, dynamic, cultured, and science-oriented based on Pancasila and imbued with faith and piety to God Almighty.

## II. LITERATURE REVIEW

According to Lickona (1991), character is related to moral concepts (moral knowing), moral attitudes (moral feeling), and moral behavior (moral behavior). Based on these three components, it can be stated that good character is supported by knowledge of goodness, the desire to do good, and do good deeds. Furthermore, it states "Character education develops these virtues through every phase of school life. In our work, we promote what we call a comprehensive approach to character education. Our classroom components include the teacher as model, developing a moral classroom community, positive peer relationships, using discipline as a tool for character development, and building a democratic classroom so the children are involved in helping to make decisions to solve real classroom problems."

Ryan and Bohlin (1999) wrote "Character education, then, with its twin goals of intellectual and moral development, should be implicit in all of the school's undertakings." (a) integrated approach in all subjects, (b) cultural development of educational units, (c) implementation of co-curricular and extracurricular activities, and (d) habituation of behavior in life within the educational unit. Character building through schools is carried out from early childhood education to higher education.

The results of the research by Bernninga, Berkowitz, Kuehn, and Smith (2003) found that there was a positive relationship between three specific indicators of character education and academic achievement. Lickona and Davidson (2005) reported the results of their research that community members as one of the eight strengths of character and service-learning as an effective strategy for increasing goal achievement.

One of the keys to the success of the character development program in educational units is the role model of educators and education personnel. Exemplary is not just an example for students, but also as a moral reinforcer for students in attitude and behavior. Therefore, the implementation of exemplary in the educational unit is a prerequisite in developing the character of students.

Lave and Wenger (1991) and Wenger (1998) describe the importance of social participation and active involvement in learning, suggesting that learning in a community is an important element, in effect promoting community learning for online teaching. The virtual community of students recognizes the importance of students taking an active role, building their understanding and understanding new information even though there is no face-to-face instruction. Garrison and Cleveland-Innes (2005) advocate for a community of learners around the

integration of cognitive, social, and teaching presence towards high-level learning while engaging students in critical reflection and discourse (i.e., critical inquiry): "the reflective and collaborative nature of asynchronous, online learning. text-based approaches are well adapted to deep learning (i.e., cognitive presence).

## III. RESEARCH METHODS

Product development techniques use the Research and Development (R&D) method R&D is a development method for developing and evaluating learning programs, processes, and learning products. Data collection techniques in this study were observation and questionnaire distribution to material experts, media experts, linguists and users.

The research and development procedure uses a model developed by Robert Maribe Branch, based on the educational philosophy of the application of ADDIE must be student center, innovative, authentic and inspiring. The process stages in the ADDIE model are related to one another, therefore the use of this model needs to be done gradually and thoroughly to ensure the creation of an effective learning product. ADDIE is an acronym for Analyze, Design, Develop, Implement, and Evaluate (Branch, 2009). The application of the main steps in research is not only according to the original version but according to the characteristics of the subject.

### Teaching Material Development

The design of textbooks is based on the content of national character building. In terms of terminology, the meaning of character was put forward by Thomas Lickona, who defined character as "A reliable inner disposition to respond to situations in a morally good way." Furthermore, Lickona added, "Character so conceived has three interrelated parts: moral knowing, moral feeling, and moral behavior" (Lickona, 1991: 51). Noble character (good character), in Lickona's view, includes knowledge of goodness (moral knowing), then creates commitment (intention) to goodness (moral feeling), and finally actually doing good (moral behavior). In other words, character refers to a series of knowledge (cognitives), attitudes (attitudes), and motivation (motivations), as well as behavior (behavior) and skills (skills).

In the process of development and formation, a person's character is influenced by two factors, namely environmental factors (nurture) and innate factors (nature). Psychologically, character behavior is a manifestation of one's potential Intelligence Quotient (IQ), Emotional Quotient (EQ), Spiritual Quotient (SQ), and Adverse Quotient (AQ) that a person has. The character

configuration in the context of the totality of psychological and socio-cultural processes can ultimately be grouped into four categories, namely 1) spiritual and emotional development, 2) intellectual development, 3) sports and kinesthetic (physical and kinesthetic). development, and 4) affective and creativity development. These four psycho-social processes are holistically and coherently interrelated and complementary in the context of character building and the manifestation of noble values in a person.

#### IV. RESEARCH RESULT

The results of the development research are in the form of a textbook "Character Building based on Culture and Local Wisdom". The making of this textbook is adjusted to the curriculum and syllabus of elementary schools. In accordance with the discussion on research methods, the development of this textbook uses the ADDIE method (Analyze, Design, Development, Implementation, Evaluation). The stages of developing a Textbook based on research results according to the ADDIE model are as follows:

**Analysis Stages:** Performance analysis is carried out to identify and classify problems that exist in school so far. At the analysis stage, initial preparation or preparation for development is carried out. Textbook needs analysis was carried out by interview and observation. Based on observations, it is known that it is necessary to make a Textbook "Character Building Based on Culture and Local Wisdom" which has been adapted to the curriculum as a source of student learning.

The initial stage is carried out with a needs analysis, namely determining the teaching materials needed by

students to build student character. Thus the textbook "Character Building Based on Culture and Local Wisdom" is felt to increase the independence of students to learn independently in studying the material in the textbook "Character Building Based on Culture and Local Wisdom".

**Design Stages:** The design stage is a series of activities to make an initial draft of a textbook for learning. These stages are: a. Initial Design. At this stage the researcher designs the layout design that will be used. The material manuscript is written in Microsoft Word using A5 paper (14.8 cm x 21 cm). The script is written in Times New Roman font with a text size of 12 and 1.15 cm between lines. b. Compilation of Material. At the material preparation stage, determining the scope of the textbook material to be developed and adjusted to the syllabus of the curriculum.

**Development Stages:** At the development stage, development steps are carried out, namely product manufacture, product feasibility validation and product revision. The appropriateness of the textbooks that have been made can be seen through the results of validation by experts (expert appraisal). Through validation of experts using a questionnaire, data is obtained. The data obtained in the form of qualitative data then converted into quantitative data by adding up the scores. Products that have been validated by media experts and material experts will then be used at the implementation stage or product testing. Validation of material experts was carried out by experts in character and character education subject matter. The research results can be seen in the following table.

Table 1. Average Material Expert Validation Results

No.	Statement	Average
<i>Self Intruction</i>		
1.	Learning objectives are in accordance with the basic competencies in the syllabus.	5
2.	The learning objectives are in accordance with the indicators in the material.	5
3.	The material in the Textbook is in accordance with the required competencies.	4,5
4.	Material packaging helps students understand the lesson.	4,5
5.	The material in the Textbook helps students solve problems in subjects.	4
6.	The material in the Textbook is packaged coherently.	5
7.	The questions in the Textbook are in accordance with the learning material.	5
8.	The material is easy to understand for students.	4
9.	The material makes students learn independently.	4
10.	The material in the Textbook is supported by pictures to complement the material.	5
11.	The material is organized in a systematic order.	5

12.	The language used in the Textbook is easy for students to understand.	4
13.	Exercise questions lead students to study independently.	4
14.	Practice questions are easy to do.	4
<b>Score (x)</b>		<b>63</b>
<i>Self contained</i>		
15.	The compatibility of the material in the Textbook with the syllabus.	4,5
16.	The suitability of the Textbook material with the required competencies.	5
17.	The accuracy of the Textbook material in containing all the competencies needed by students.	4,5
<b>Score (x)</b>		<b>14</b>
<i>Stand alone</i>		
18.	The material in the Textbook can be studied without the help of another Textbook.	4
<b>Score (x)</b>		<b>4</b>
<i>Adaptive</i>		
19.	Textbooks can be used in accordance with developments in technology and information.	4
20.	Textbooks can be used inside or outside the classroom.	4
<b>Score (x)</b>		<b>8</b>
<i>User friendly</i>		
21.	The structure in the Textbook is easy to understand.	4
22.	The pictures in the Textbook show the clarity of the material.	5
<b>Score (x)</b>		<b>9</b>
<b>Amount Average</b>		<b>98</b>

Based on the overall user assessment criteria with a score of (x) 98 getting the predicate "Very Good".

**Implementation Stages:** At this stage of implementation, product trials are conducted to determine the feasibility of textbooks that have been developed and revised by experts. Product trials were carried out online by filling out a user questionnaire. The trial was conducted on 15 students using a device in the form of a laptop or cellphone.

Product trials were carried out in steps: distributing the Textbook "Character Building Based on Culture and Local Wisdom" via Whatsapp in pdf form, conveying the aims and objectives of the researcher, distributing user questionnaires in the form of a google form link via Whatsapp and thanking students for the availability of students in product trials.

Textbook trials were conducted to determine student assessments of the developed learning Textbooks. Aspects

assessed by students include; (1) the media aspect aims to see the ability of the textbook being developed to present effective and efficient learning, (2) the material aspect aims to measure the suitability of the material to the needs of students, (3) the language aspect aims to measure the level of ease of understanding the language used in Textbooks, and (4) aspects of the Textbook learning aim to measure the ability of the Textbooks to be developed in overcoming difficulties experienced by students in classroom learning activities. Data on the results of product trials using a questionnaire consisting of 22 questions. The data will then be analyzed to see students' responses regarding the feasibility of learning textbooks that have been developed before being used in their actual scope. The following are the results of the product trial.

Table 2 Average Product Trial Results

No.	Statement	Average Score
<b>Media</b>		
1.	Textbook cover design is attractive.	5
2.	The writing on the cover provides information about the contents of the Textbook.	4,4
3.	The selection and combination of colors in the textbook passages are interesting.	4,4
4.	The selection and combination of colors do not interfere with the readability of the text in the Textbook.	4,73
5.	Pictures in the Textbook clarify the material being studied.	4,73
6.	The neatness and layout of the writing make it clear for students to read the material	4,53
<b>Theory</b>		
7.	The material in the Textbook is in accordance with the required competencies.	4,27
8.	The material in the Textbook helps students solve the problem of the availability of learning resources.	5
9.	The material in the Textbook helps students in independent learning.	4,73
10.	Independent assignments are given in accordance with the material presented.	4,2
<b>Language</b>		
11.	The language used in the textbook contents is easy to understand.	4,53
12.	The material in the Textbook is delivered in communicative language.	4,67
<b>Textbook Study</b>		
13.	This Textbook helps students in learning.	4,67
14.	This Textbook helps students understand the learning material.	4,6
15.	This Textbook makes it easy to learn according to students' abilities.	4,53
16.	Students can focus more on learning using this Textbook.	4,67
17.	The questions in the Textbook make students better understand the learning material.	4,2
18.	Textbooks can shape students' independence in learning.	4,6
19.	Students use this Textbook as study material.	4,4
20.	Textbooks can be used anywhere and anytime to study.	5
21.	Textbooks can encourage motivation so that students want to read.	4,73
22.	Students feel happy when learning to use this Textbook.	5

Table 3 Product Trial Score

No.	Aspect	Number of Grains	Score (x)	Maximum Score	Average	Percentage (%)
1.	Media	6	26	30	4,3	86,67
2.	Theory	4	17	20	4,25	85
3.	Language	2	9	10	4,5	90
4.	Teaching Textbook	10	47	50	4,7	95
<b>amount</b>		<b>22</b>	<b>99</b>	<b>110</b>	<b>4,44</b>	<b>89,17</b>



Based on the overall user assessment criteria with a score (x) of 99 and the percentage of eligibility to get the predicate "Very Good".

**Evaluation Stages:** In this evaluation stage, it analyzes data that has been assessed by experts and tested by users. The results of the data analysis stated that the textbook of learning "Character Building Based on Culture and Local Wisdom" was feasible to use with an average of the criteria "Good". Based on the results of the study, it was found that the use of teaching materials "Character Building Based on Culture and Local Wisdom" was suitable for building student character by 84.32%

## V. DISCUSSION

The assumptions and scope of this study revolve around the development of transformative learning models and innovations by applying a knowledge center to build student character in basic education units in North Sumatra. The development of student character as the nation's children aims to foster and develop the character of students so that they are able to realize a society that has one Godhead, fair and civilized humanity, has a spirit of Indonesian unity, has a community spirit led by wisdom of wisdom in representative deliberations, as well as social justice for all Indonesian people.

Building character is a process or effort carried out to foster, improve and or shape the character, character, psychiatric nature, morals (character), human beings (society) so that they show good character and behavior based on the values of Pancasila.

Teachers have a big role in providing knowledge. Moreover, teachers are considered as educated figures who are expected to be able to educate the nation's children for the future. But the hope is not only to educate and provide academic material at school. The teacher's role is more than that. Teachers are also expected to instill positive values in students, because teachers are role models for students. So, that's why teachers have a big role in shaping student character.

To support this, it is better if teachers also strengthen their character. Learning activities are held to shape character, build knowledge, attitudes and habits to improve the quality of life of students. On that basis, the importance of developing models and innovations in learning activities that empower all potentials to build student character. Transformative learning models and innovations are directed at encouraging the achievement of specific competencies and behaviors so that each individual is capable of being lifelong learners and realizing a learning society.

Thus it can be presumed that the development of transformative learning models and innovations brings students closer to learning, of course more and more and more complex, they do not only need theoretical knowledge only but really need knowledge on practical aspects in the form of skills or skills that are more competitive and real. With the rapid progress of social knowledge and communication technology, the very high transformation can affect changes in student character development. To instill a positive character in students, this will be a blueprint that will not be forgotten throughout his life. In addition, good character is one of the fundamental attitudes of a person's mindset and behavior to achieve a better life success. So it is appropriate for schools to prepare students with better characters who uphold culture and ethics as a provision for life in the future based on transformative learning models and innovations.

According to Gerlach & Ely (1971), the word media in a broader understanding includes humans, materials, or events that build conditions in which students are able to acquire knowledge, skills, or attitudes. In this understanding, teachers, textbook content, and the school environment include the media. Furthermore, Gerlach & Ely stated three characteristics of learning media, namely: 1) Fixative Property. This characteristic describes the ability of learning media to record, store, preserve, and reconstruct an event or object; 2) Manipulative Characteristics (Manipulative Property). This feature describes a presentation of events that can be accelerated or slowed down from the actual time of the event. For example, the process of butterfly metamorphosis can be accelerated by photographic recording techniques; 3) Distributive Property. This feature shows that the media can allow an object or event to be transported through space, and at the same time the event is presented to a large number of students with a relatively similar experience of the event.

Textbooks as media are an integral part of the learning system as a basis for policy in the selection of development and utilization. The function of the media in teaching activities is no longer a demonstration of the teaching staff but is a carrier of information or learning messages needed by students.

## VI. CONCLUSION

Based on some of the statements above, it can be concluded that a textbook is a concept or pattern based on local wisdom that is implemented in learning activities by following the procedures that have been made so that learning objectives can be achieved, learning activities are

carried out on the basis of syntax, social systems, principles, reactions and support systems.

Textbooks are learning aids that are made based on the competencies that have been determined in the curriculum that must be achieved by students. Teaching textbooks are used to channel or convey messages with local wisdom-based education and learning objectives. Learning media are materials, tools, or methods or techniques used in teaching and learning activities, with the intention that the information process of educational communication between educators and students can take place in an effective and efficient manner.

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# Impact and Coping Mechanism of Restaurant Business Amidst Covid-19 Global Pandemic

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**Abstract**— The study explored the impact of the covid-19 pandemic in the restaurant business in the City of Cabanatuan, Province of Nueva Ecija, Philippines. It also included the coping mechanism they instituted amidst the situation. The sample size consisted of 36 restaurants and eateries. Descriptive research design was used. Results revealed the closure of small restaurants, sales tremendously decreased, loss of income and jobs, loan obligation defaults, and state of mind of its stakeholders. Coping mechanism included the use of massive online advertisements to market the product, selling of ready-to-cook raw materials, shifting and reduced employee work hours, and the use of delivery services. Other problems consisted of unsustained product quality standards, the escalating price of raw materials, and at times unreasonable delivery fees of food couriers.

**Keywords**— COVID-19, coping mechanism, impact, online advertisement, restaurant business.

## I. INTRODUCTION

The restaurant business is one of the worst-hit industries due to Covid-19 not only in the Philippines but the whole world. Many of the restaurants were on the brink of closure, there were some who managed to survive, but in limited operations. As continuously reported and confirmed that COVID-19 cases soared in February and March 2020, a greater share of restaurant operators reported lower sales as compared in the same period of 2019 and the previous years.

On February 28, Roslyn Stone quoted in Restaurant Business, the COO is the one who gave a response in times of crisis like this global pandemic COVID-19. She quoted that this global pandemic had a great impact in spreading the virus in the restaurants and makes it possible for the employees to carry the said virus, that reason that needs for the fast recovery for the restaurant business manpower operation (Maze & Heather, 2020).

On March 15, 2020, the Philippine President Rodrigo Duterte also ordered a lockdown just like the other countries

infected and at high risk of confirmed cases of COVID 19. All restaurants, bars, amusement parks, and even churches were closed to stop the transmission of said virus.

Despite the restaurant business' being rocked by a dramatic decline in sales, the owners/operators still found ways to cope up even to support the day-to-day operational needs and employees' wages. Nearly all employers are aware of the challenges and have established policies to help, but they are finding it hard to execute their diversity, equity, and inclusion strategies (McKinsey & Company, 2020).

Many restaurants business feels suffocated due to COVID-19 resulting to stop business operation, no income, a layoff of workers, while others depended on the government support.

According to Nurin, usual funding from the bank was always in favor only to the large restaurants and nations. The majority of the bank fund providers were given consideration to the large restaurants. Only 5% of small and independent restaurants were receiving fund assistance.

Just like the restaurant business in Cabanatuan City, Nueva Ecija, Philippines, many of them have decided to close the business permanently or temporarily because of the current situation of the Covid 19 pandemic. Other restaurants, however, found ways to be more resilient in their approach to the situation as they could not afford to lose their source of livelihood primarily because they have mortgaged their property to the banks.

One of the restaurant business owners said that "our restaurant is reinforcing relationships and dedication for the products and services that we provided. We promote our business by simply touching our neighbors and giving promos via any online means to overcome challenges especially in this trying time of Covid 19 pandemic", (Shaffer, 2020).

Restaurants, in particular, have faced a massive disruption to their income streams and business models. Many have had to stop allowing sit-down customers, pivoting to offer only takeout or delivery services. There was a widespread closure of the restaurant business, and one of the reasons is a lack of supplier affected by certain food brands and one of the examples is the coca-cola company that decreased their net revenues (Wiener-Bronner, 2020).

On the concerns related to the business operational continuity for all members of the organization, employee protection, and market preservation are the top priorities. Given the fact that the COVID-19 pandemic contains a very tremendous impact on restaurant business operation. And for fast recovery, business operators invest in strategic, operational, and financial resilience, (Bingham and Hariharan, 2020).

The study aims to assess the impact of the pandemic and their coping mechanism. Specifically, this research described: the impact of the Covid-19 pandemic on the restaurant business in Cabanatuan City, Province of Nueva Ecija, Philippines; and the coping mechanism and problems of the food establishments amidst the covid-19 pandemic.

## II. METHODOLOGY

The study was used the descriptive survey research design with 36 restaurant operators considered as the respondents of the study. Purposive sampling was employed due to ongoing movement and quarantine restrictions being imposed by the Philippine government. The study further utilized the unstructured interview in order to elicit the actual condition of the business. Simple descriptive statistics were used for its data analysis.

## III. RESULTS AND DISCUSSION

### 1. Impact of Covid-19 on restaurant business in Cabanatuan City

All or 100 % of the respondents said that the COVID-19 pandemic was affected by the covid-19 pandemic. Many (36%) in the restaurant sector closed except for the major players (64) in the industry that included fast-food chains and known homegrown restaurants. Those that belong to 36% were small eateries or the more popular "carinderias" in the Philippines that sell affordable viands sans the formal setting. Understandably, this is bound to happen because they cater to the office and mall employees where both were downsized in number because of the quarantine policies and limited movement of people in order to stop the transmission of the covid-19 virus.

The same figure (100%) suffered sales losses by as much as 80-90%. This also meant loss of income; hence, hurting the workforce either through job termination, shifting, and fewer work hours available. This was partly the offshoot of transport restriction because of the ongoing lockdown.

Few (23%) have indicated, divulged rather, during the survey they have loan obligation with financing institutions. They further disclosed that their operation has suffered much because of the current situation. Only three (8.33%) complained they have already accumulated amortization defaults.

Other than these, tremendous anxiety, fear, and stress have become prevalent not only to owners/operators of the restaurant business but to their employees as well.

### 2. Coping mechanism of the owners/operators

Because the limitations in gatherings to a certain number of people have considerably affected dine-in restaurants. Since quarantine level was not to be lifted yet until a vaccine is discovered that restaurants are kept hanging on to the point of nowhere. Until such time (which took a month or so) that they began (1) massive online delivery food services to the point where they have to (2) offer ready-to-cook raw materials, (3) pick up or delivery via food couriers, but the latter option is either for a fee or part of their promo. They have also scheduled (4) shifting of employee duties instead of laying them off. All the mentioned marketing strategies can only reach the customers thru the creation of (5) FaceBook pages and other online platforms currently available which were seldom used in the past.

Consequently, these alternative approaches would mean resiliency especially on the part of the restaurant business.



The strategies used may be commendable if just to keep these restaurants afloat and improve their cash flows however, these are without problems as observed by the researchers namely (1) the tendency to raise the price of the products more particularly notable in small-scale eateries which they claimed to be blamed on distorted supply-chain of raw materials because of movement restrictions being imposed by the government, (2) quality control of products being delivered compromised, (3) loss of jobs for the majority of its workers. Note that the researchers could neither attest nor verify the disclosure of informants especially the practice of work shifts they impose on their employees, and (4) exorbitant fees, rather debatable rates charged on delivery services being charged by food couriers.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

Covid-19 pandemic has a great impact not only on the restaurant business but as well to its stakeholders. The coping mechanism instituted by the restaurant sector was varied especially focused on maintaining or cutting their further losses by using multi-media, online food deliveries, and offer ready-to-cook raw materials... just to offset operational losses and support the well-being of its employees.

Problems include loss of jobs and income, spiraling prices of offered products, unattended quality control, and high cost of deliveries.

The researchers recommend the following:

1. For homegrown or local restaurants (other than known fast-food chains that have alternatives currently in place) to diversify their business operation attuned to the needs of the present situation to support and enhance (Vertudes, Musa, Cosilet, Salagubang & Balaria, 2020) the livelihood of their displaced workers.
2. For this sector to continuously uphold the rights of its workers like giving a separation pay or an amount the business can afford.
3. For this sector to be more prudent in its pricing, practice to the fullest the spirit of corporate social responsibility (Mina, et.al.,2019), and check on its quality standards at all times while creating a response plan for its complaints.
4. For this sector to maximize its operational capacities to reach a wider customer base not only

of Filipino businessmen but for every slipper entrepreneur in the world (Mina, et.al, 2020).

5. For other delivery service/s to enter the market to level the playing field and thus, encouraging competition; so that people may have choices of affordable service.
6. For banks and financing institutions that may have extended credit to the restaurant, the sector may further relax the terms
  - a. Condonation of penalty charge on overdue amortizations (other than the guidelines set forth by the Inter-Agency Task Force (IATF);
  - b. Restructure the loan for a longer term that will depend on the operation's cash flows;
  - c. Extend additional capital to offset previous losses, or as the case may be.
7. For this sector to consider nutritious food value, efficient delivery while practicing food safety and hygiene.
8. For this sector to attend to the emotional and mental health of its stakeholders via guidance or counseling, and finally orienting them to the "new normal".

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# An Assessment on the Factors Influencing Consumers' Participation in Social Commerce in Time of Pandemic

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**Abstract**— The study aims at assessing the factors influencing consumer participation in social commerce sites in times of pandemic. Respondents came from a first-class and third-class municipality in the province of Nueva Ecija, Philippines. Descriptive-Correlational research was utilized to describe the common factors that influence the consumers' participation in social commerce sites and correlate whether there is a significant difference between the assessments made. One hundred and five respondents participated in this study. Results revealed that social commerce components, perceived usefulness, reputation, and perceived ease of use are among the factors which significantly influence consumers to engage and participate in social commerce sites. Further, results revealed no significant difference between the assessments made from the first and third-class municipalities.

**Keywords**— Descriptive-Correlational, Pandemic, Social Commerce, Web 3.0.

## I. INTRODUCTION

The dawn of Information Technology (IT) has brought significant impacts in the field of business. Businesses have given opportunities for IT tools and solutions to be utilized and become more effective. With the advancements of new technological innovations, businesses are given a wide range of opportunities to reach greater heights. Information Technology has been considered one of the essential components in a business environment (Albertin and De Moura, 2004). Information Technology provides tangible and intangible benefits to big and small businesses to make them more profitable and meet consumers' growing needs (Doane, 2018). Effective communication, reduction of costs, improved quality of consumer services, increased productivity and efficiency through automated business processes and solutions, improved operations and procedures such as efficient inventory and data management, as well as an improved management

information system, and providing an opportunity for the development of innovative products for new markets are some of the roles of IT in the business sector (Feroz, 2018; Nikoloski, 2014; Kumar, 2014). Information Technology in businesses offers an opportunity for globalization, improved communication, achieved cost-effectiveness, bridge cultural gap, and creation of new jobs (Kumar, 2014). These advantages of IT in the business sector paved the way for continuous advancements and innovations.

The internet plays a vital role in businesses in this modern era. From the development of Web 1.0 in 1989 by Tim Berners-Lee (Berners-Lee, 1998), to the brainstorming done by O'Reilly and Media Live International to understand Web 2.0 (O'Reilly, 2006), up to the introduction of Web 3.0 in 2006 (Spivack, 2011), the internet has evolved and improved to cater the changing needs of consumers and to provide innovations to businesses and other sectors of the society. Today, Web 3.0 focuses on improving data

management, supporting accessibility of mobile internet, stimulating creativity and innovation, encouraging factors of globalization phenomena, enhancing consumers' satisfaction, and organizing collaboration in the social web (Choudhury, 2014). The present era reaps the positive impacts of the developments made to harmonize the different business processes and procedures.

According to Garrigos-Simo (2012), Web 3.0 covers new technologies that are beneficial for firms to gather data before, during, and after interaction with consumers from diverse social networks or via the internet, in general, using techniques such as data warehousing, data mining, and customer relationship management. The collected data are turned into meaningful information vital for providing personalized products, brands, and services by and for different users according to their own needs. This capability of Web 3.0 provides a more effective way of doing business. One of the significant impacts of Web 3.0 is the continuous improvement of Social Networking Sites (SNS). The consumers' engagement in online exchange relationships with web vendors is commonly known as e-commerce (Paylou and Fyngenson, 2006). Today, with the continued improvement to e-commerce and social networking sites through Web 3.0, new business opportunities aroused. The combination of social networking sites and e-commerce resulted in what is commonly known as social commerce. Social commerce is one of the emerging trends in e-commerce (Soleimani, Danaei, Jowkar, and Parhizgar, 2017). It is a subset of e-commerce wherein social commerce contains different kinds of business activities performed in different social media platforms which support social interactions and users' active participation and contribution to assist consumers in online buying and selling of products and services (Hajli et al., 2015; Chen and Shen, 2015; Lam et al., 2019; Stephen and Toubia, 2010). This has been supported by Maia et al. (2018), adding that the increased popularity of social networks has created business opportunities, leading to what is commonly known as social commerce.

Business activities include facilitating buying and selling of products and services and improving the quality of service being offered to different types of consumers (Kim and Park, 2013; Ng, 2013). Web 3.0 enables consumers to create their content (Philips, 2011). That is, social commerce becomes a valuable platform for consumers to share their own experiences about products and services offered to provide information to other consumers (Pitta and Fowler, 2005). Giving consumers' insights and feedback, either negative or positive, about a product or service, has been a useful activity to enhance and improve a social commerce firm's performance. Hence, word-of-mouth or WOM was identified as a unique means to increase consumers' trust in

social commerce (Kim and Park, 2013). Social Commerce has two forms. First, social networking sites offer advertisements and transactions for buying and selling products and services, such as Facebook, Instagram, and Twitter. These platforms allow consumers to browse, compare and review products before placing an order to make a purchase. Comparative advertising contributes to consumer's social media engagement. Such engagement may be converted into actual purchases. Hence different social media platforms, while providing an opportunity to widen social networks, allows a potential consumer to become real buyers of products and services. Second, the traditional e-commerce wherein consumers have to visit the site to see the products and services to know more about them like Lazada, Shopee, and Zalora (Rosa, Dolci, and Lunardi, 2014). Many consumers tend to become "visual buyers," graphics and presentations play an essential role in persuading and convincing consumers. Companies create websites with good graphic design and visually engage infographics to entice people to stay on their website. Social Commerce paves a way to market development, in which indicators and sources are undeniably based on consumer's loyalty. When consumers see prices are reasonable, in line with quality, and reflected with market-based pricing, consumer's loyalty, as well as enthusiasm, is a boost.

Liang and Turban (2011) explain that social commerce has three attributes. This includes the presence of media technologies, community interactions, and commercial activities. On the other hand, Swami (2019) cites the different characteristics of Social Commerce. In social commerce, consumers have the power to buy and try products and services based on the descriptions provided by the seller and based on social reviews by other users; Consumers actively participate in giving feedback for products and services. This characteristic of social commerce enables the seller to closely monitor the product or service to correct possible flaws or problems encountered by consumers as reflected in their feedback. Sharing of information about products and services becomes easier through different social networking sites like Facebook and Twitter. Because of Web 3.0, consumers are now offered products and services similar to their interest and purchased items; Multimedia elements such as pictures, audio, and videos play a vital role in marketing the product or service. Social commerce provides a venue to facilitate these added features, and Multimedia elements such as pictures, audio, and videos play a vital role in marketing the product or service. That is, social commerce provides a venue to facilitate these added features.

Several studies have been undertaken to draw valuable insights into social commerce further. One of which was Friedrich (2016), who performed a systematic review of 61

academic publications to provide a structured and comprehensive list of factors and their potential effects on various adoption-related outcome variables. While several empirical studies have been conducted, the present research aims to contribute to the existing pool of literature to help fill in gaps. Companies are highly interested in identifying essential information relevant to effectively deploy social commerce to increase their sales (Friedrich, 2016; Zhou, Zhang, and Zimmermann, 2013; Stephen and Toubia, 2010). Several companies continuously work on how to figure out the different factors influencing consumers to participate in social commerce (Zhou, Zhang, and Zimmermann, 2013; Zhan et al., 2014; Alfieri-Lucas, 2015). Hence, this study may provide relevant information about the essential factors and the relevant information needed by companies engaging in social commerce.

In the systematic review done by Friedrich (2016), it is essential to conduct a study to examine the importance of the factors that have only been examined in the systematic review and to combine the identified factors and outcomes variables to develop a complete understanding of the consumer's adoption of social commerce. Considering the stated gaps identified, the present study aims to assess the factors influencing consumers' participation in Social Commerce via Web 3.0. This study was conducted in the time of pandemic to further analyze the consumer's participation and engagement from a first-class municipality and a third class municipality in the Province of Nueva Ecija, Philippines.

### 1.1 Statement of the Problems

In general, this study sought to assess the factors influencing consumers' participation in Social Commerce. Specifically, it aimed to answer the following:

1. How may the demographic profile of the respondents be described in terms of:
  - 1.1. Sex;
  - 1.2. Age;
  - 1.3. Civil Status?
2. How may the respondents response be described in terms of the following social commerce aspects:
  - 2.1. Frequently Used Social Networking Sites;
  - 2.2. Average Amount Range of Purchased Products;
  - 2.3. Type of Products Frequently Purchased?
3. How may the consumers' participation in Social Commerce be described in terms of the following

factors:

- 3.1. Information Quality;
  - 3.2. Perceived Ease of Use;
  - 3.3. Perceived Usefulness;
  - 3.4. Product Delivery;
  - 3.5. Reputation;
  - 3.6. Social Commerce Component;
  - 3.7. Trust;
  - 3.8. Transaction Safety?
4. Is there a significant difference between the participation in social commerce and the classification of municipality where they reside?

### 1.2 Scope and Limitations

This study focused on assessing the factors influencing consumers' participation to social commerce in Web 3.0 to understand which factors significantly affect their intention to participate. It covers the factors identified in the study of Maia et al. (2018), which include information quality, perceived ease of use, perceived usefulness, product delivery, reputation, social commerce component, trust, and transaction safety. Two municipalities in the province of Nueva Ecija participated in this study. Municipality A is a first-class municipality, while Municipality B is a third class municipality. Two different municipality classifications were included to see how the respondents from the respective municipalities participated in social commerce to provide a deeper understanding and broader perspective. The target number of samples was 120 respondents. However, due to the pandemic, one hundred five respondents were able to participate in the study. The respondents who participated in this study have experienced using different social commerce websites such as Lazada, Shopee, and Zalora. The results did not provide a generalization of the entire population; instead, it only provides a view of how the respondents assessed the factors influencing consumers' social commerce participation in Web 3.0.

## II. METHODOLOGY

### 2.1 Research Design

A quantitative type of research was used to identify and assess the factors influencing the consumers' involvement in social commerce. Quantitative research is a method of research that relies on measuring the variables involved using numerical systems. Results of measuring variables are treated and analyzed using statistical models and tools. Relationships and associations of variables under investigation can be revealed using statistical treatments



(Alfieri-Lucas, 2015). In this study, a combination of descriptive and correlational research design was utilized to describe and measure the relationship of the variables under investigation. According to Quaranta (2017), a descriptive-correlational research design does not need to establish a causal connection among variables for its main focus to describe and measure their relationship.

## 2.2 Research Locale, Respondents, and Sampling Procedures

This study was conducted in the province of Nueva Ecija, Philippines. Situated in Central Luzon, the province is nationally known as the “*Rice Granary of the Philippines*.” The researchers wanted to assess the factors influencing consumers’ participation in social commerce in the context of an area where agriculture is one of the major industries to see how social commerce can be of a possible potential innovation that can be implemented and contribute to the growth of the economy of the province. The researchers utilized a non-probabilistic sampling method because respondents must have experienced using a social commerce site. A non-probabilistic sample is a sampling technique where the possibility of being selected cannot be calculated (Stephanie, 2015). That is, members of the population need to satisfy specific qualifications before being considered a respondent. Purposive sampling was used since the researchers identified the population members who have experienced using social commerce site. According to Stephanie (2015), purposive sampling is a technique where the researchers know the study and the population. Thus the possible respondents are already identified based on the criteria that need to be satisfied.

## 2.3. The Research Instrument and Procedure of the Study

The research instrument used was based on Maia et al. (2018), but it was modified to suit the current study's needs. After the researchers constructed the instrument, they distributed them to the respondents. Using the Social Networking Site – Facebook, the researchers sent the survey questionnaire to their Facebook friends who have agreed to be part of this study. The respondents must be eighteen years old and above and have experienced searching and buying products and services to a social commerce site. The researchers ensure that the respondents have understood this study's purpose and willingly participated as respondents. They also explained and assured the respondents that the data gathered were collected, organized, treated, and kept for research purposes only and with the utmost confidentiality.

## 2.4 Data Analysis

In analyzing the gathered data for this study, the researchers used a statistical software tool such as SPSS to

organize and treat the data to provide more meaningful information. A rubric was also used as a scoring guide in this study, as presented in Table 1.

Table 1: Scoring Rubric

Range	Verbal Interpretation
3.26 - 4.00	Strongly Agree
2.51 - 3.25	Agree
1.76 - 2.50	Disagree
1.00 – 1.75	Strongly Disagree

## III. RESULTS AND DISCUSSION

### 3.1 The Demographic Profile of the respondents based on Sex, Age, and Civil Status

#### 3.1.1 The percentage distribution based on Sex

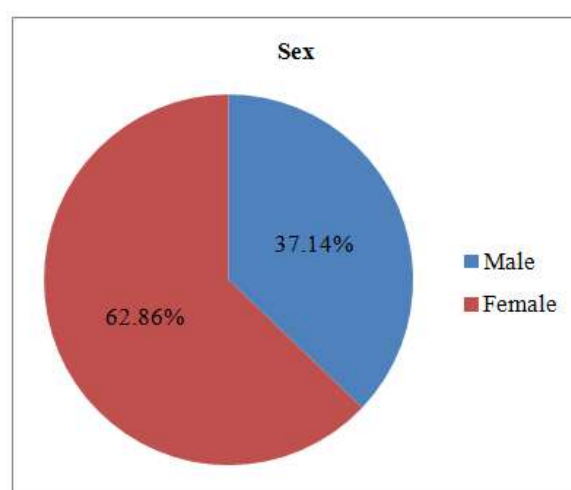


Fig. 1: The frequency distribution according to Sex

Out of one hundred five (105) respondents who participated in this study from the two municipalities in the province of Nueva Ecija, 62.86% were female, and 37.14% were male. Results show a 25.72% difference between the participation of both sexes, revealing that more females were engaged in social commerce than males. Men are more likely to be online, but females shop more. A little over 50% of the internet population was male. However, 58% of e-commerce revenue comes from females (pfcommerce.com, 2012). Based on this study's results, females in both municipalities were more likely to engage in social commerce. Thus generalization may be drawn that regardless of the municipality they came from, females engage more in social commerce.

#### 3.1.2 The percentage distribution based on Age



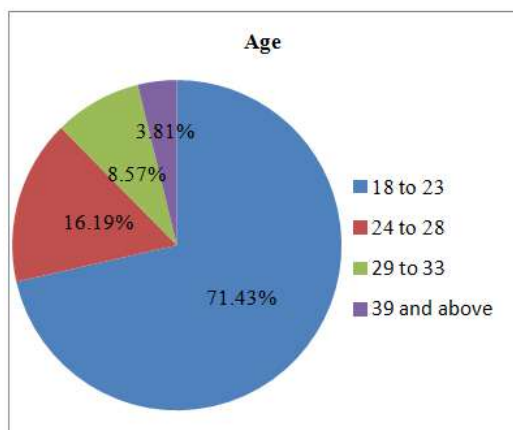


Fig. 2: The frequency distribution according to Age

Figure 2 presents the distribution according to the respondents' age. Results show that 71.43% of the respondents fell on the 18 to 23 age bracket, followed by 16.19% from the 24 to 28 age bracket. An 8.57% and 3.81% came from 29 to 33 and 39 and above age brackets, respectively. Wertz (2019) asserts that Generations X and Z shop 2-3 times more on social channels than the average consumer. Results suggest that consumers in the youngest bracket tend to engage more in social commerce because of their social media exposure, higher engagement to different social networking sites, and the increasing promotion of different businesses to capture the younger generation's interest.

### 3.1.3 The percentage distribution based on Civil Status

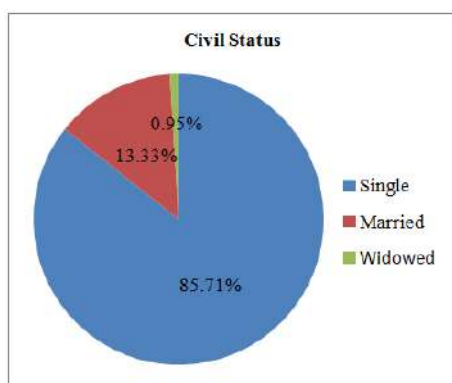


Fig. 3: The frequency distribution according to Civil Status

The percentage distribution according to civil status shows that 85.71% of the respondents were single, 13.33% were married, and 0.95% was widowed. Considering the percentage distribution based on age as shown in Figure 2, the youngest age bracket got the highest percentage; results based on civil status confirmed that the respondents who participated in this study belong to the younger

generation comprised of students and young professionals who are single.

## 3.2 Understanding Respondents in different Social Commerce Aspects

### 3.2.1 Frequently Used Social Networking Sites

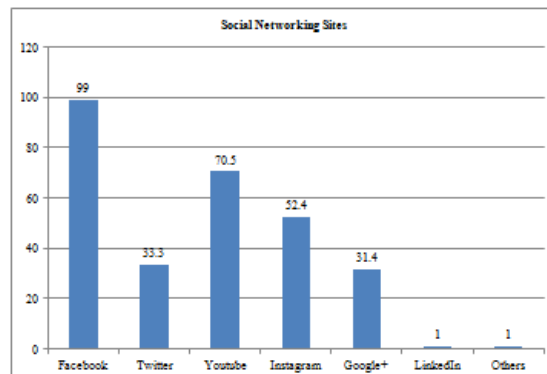


Fig. 4: The frequency distribution according to the frequently used social networking sites

Figure 4 shows the frequently used social networking sites of the respondents from the two municipalities. Facebook got the highest rank, followed by YouTube, Instagram, and Twitter. Results suggest that to increase consumers' engagement to social commerce further, businesses should further improve and increase their online activities in these platforms because consumers are engaging more of their time to these platforms. Ortiz-Ospina (2019) affirms that Facebook is the largest social media platform globally, followed by YouTube and Whatsapp. These social media platforms are used by one-in-three people globally, providing more and more opportunities for business entities for social commerce.

### 3.2.2 Average Amount Spent in Purchasing Items to Social Commerce Sites

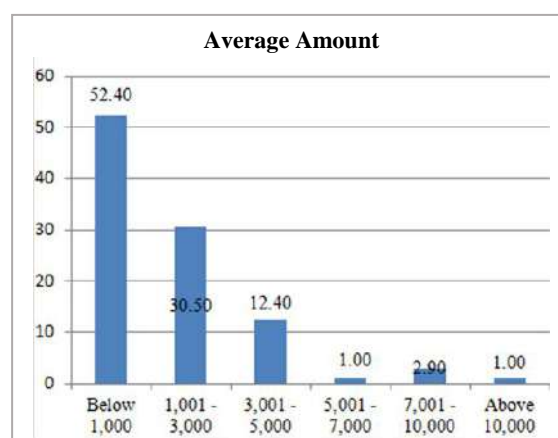


Fig. 5: The frequency distribution according to the average amount spent

52.40% of the respondents spend Php1,000 and below, 30.50% spends Php1,001 to Php3,000, 12.40% spends Php3,001 to Php5,000, 1% spends Php5,001 to Php7,000, 2.90% spends Php7,001 to Php10,000, and 1% spends Php10,000 and above. Most respondents do not spend much on social commerce sites, which agrees with the demographic profile based on age. The respondents who participated in this study mostly were students and young professionals that may have limited financial resources but experienced purchasing in social commerce sites.

### 3.2.3 Type of Products Frequently Purchased to Social Commerce Sites

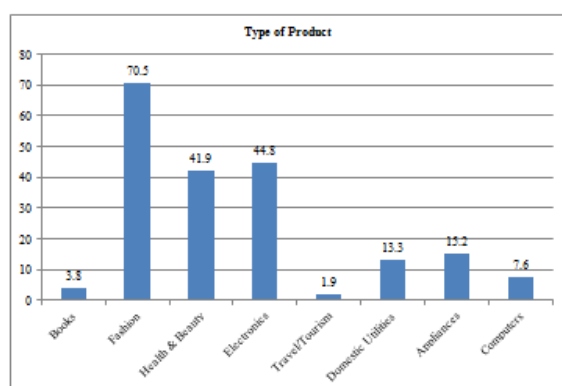


Fig. 6 The frequency distribution of average amount spent in social commerce sites

Figure 6 shows the type of products frequently purchased on social commerce sites. Results show that Fashion (70.5%), Electronics (44.8%), and Health and Beauty (41.9%) are the top three product categories commonly purchased by the respondents. Meanwhile, products and services relating to travel and tourism (1.9%) and books (3.8%) are the least commonly purchased by the respondents. This study's results affirm Sabanoglu (2020), indicating that clothing, shoes, and consumer electronics are the commonly purchased products online.

### 3.3 The Factors in Social Commerce Participation

Table.2: Factors influencing consumer's participation in social commerce

Factors	Mean	Rank
Information Quality	3.04	8
Perceived Ease of Use	3.19	4
Perceived Usefulness	3.36	2
Delivery	3.16	5
Reputation	3.29	3
Social Commerce Components	3.37	1
Trust	3.15	6
Transaction Safety	3.08	7

Table 2 presents the respondents' assessment from the two municipalities on the common factors influencing consumers' participation in social commerce in the time of the pandemic. The factor involving the social commerce sites' components got the highest rank with a mean rating of 3.37. These social commerce components include the ratings, reviews, and recommendations given by different site visitors and consumers about the different products and services. These ratings, reviews, and recommendations contribute to increasing consumers' participation in different social commerce sites. Based on the respondents' assessment, garnering the next highest rank was the site's perceived usefulness with a mean rating of 3.36. Search Engine Optimization (SEO) is a useful tool incorporated in different social commerce sites that adds to its overall usefulness. The site's ability to provide accurate search results and recommend related products to consumers increases the site's usability and effectiveness. Another factor that users consider when engaging in social commerce is the company's reputation. Based on the assessment made, reputation as a factor got a mean rating of 3.29. The name and the brand of the social commerce company are essential factors to increase the consumers' participation.

On the other hand, perceived ease of use with a mean rating of 3.19 is another factor considered by the respondents as an essential contributory factor when participating and engaging in social commerce sites. Social commerce sites must be easily navigated in order to increase consumers' participation. Its user interface (UI) must be user-friendly, and visitors on the site must have a worthwhile user experience (UX) to increase site visitors and consumers' engagement and participation.

Factors relating to Delivery (WM = 3.16), Trust (WM = 3.15), Transaction safety (WM = 3.08), and Information Quality (WM = 3.04) are the four least factors based that contributes to consumers participation and engagement to social commerce based from the assessment made by the respondents. While these factors may have low mean ratings, it is still important to consider these factors to increase consumers' participation and engagement to social commerce sites.

### 3.4 The Difference in Social Commerce Participation of Two Municipalities

Table.3: Difference of Two Municipalities in Social Commerce Participation

<b>Mean</b>	<b>Municipality A</b>	3.22
	<b>Municipality B</b>	3.20
<b>t-value</b>		.253
<b>df</b>		103
<b>p-value</b>		.801
<b>Interpretation</b>		<b>No Significant Difference</b>

Table 3 presents the test of difference made by the researchers on the respondents' social commerce participation from the two municipalities. Results revealed no significant difference between their social commerce participation in the time of the pandemic. This indicates that regardless of the municipality they reside (i.e. 1st class and 3rd class municipalities), their intention, engagement, and participation in social commerce sites do not differ. The type of municipality where the respondents reside does not contribute to their active participation in the social commerce site. Hence, it is essential to note that other factors may affect the consumers' participation in social commerce sites, but the type of municipality does not contribute, especially in pandemics.

#### IV. CONCLUSION

This study aimed at assessing the factors influencing the consumers' participation to social commerce in time of pandemic. It was found out that females engage and participate more in social commerce sites compared to males. The younger generation of consumers is more active in engaging with different social commerce sites due to their higher exposure to different sites and more technologies. Further, results revealed that those who were single actively use social commerce sites and that an affordable amount was spent ranging from 1,000 pesos and below. In terms of the factors influencing the consumers' participation, it was found out that social commerce components, perceived usefulness, reputation, and perceived ease of use were among the factors that contribute to consumers' higher engagement. In testing the difference between the participation of consumers considering the municipality where they reside, whether first class or third class municipality, it was found out that there is no significant difference in their participation indicating that regardless of the municipality of the place where consumers' reside, their engagement and participation to social commerce sites were not affected.

#### V. RECOMMENDATIONS

Based on the conclusions drawn, the following are some of the recommendations of this study:

1. The study may be conducted in a much larger locale involving different types of respondents from different walks of life to draw new insights;
2. New entrepreneurs may use the results of this study to understand their prospective customers;
3. Micro, Small, and Medium Enterprises may look into how respondents of this study participate in social commerce, considering the factors involved in drawing new insights to improve their business.

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# The Acceptability of System in Assessing the Student's Attendance using Image Processing

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**Abstract**— Student's attendance is vital in any academic institution as students are the primary stakeholders. There are different means of checking attendance, one of these is automated checking through scanning student's id card using image processing. In Bohol Island State University Clarin, there is a system that assesses the student's attendance. It is a system that automatically counts the number of students who entered in the premises. This system uses image processing to monitor the attendance by scanning the student id card through a live camera. The system automatically identified the faces of the student with their corresponding id numbers. Thus, the purpose of this study is to assess the acceptability level of the system in assessing the attendance. The researcher conducted a survey regarding the system's acceptability on the 200 students that were composed of 100 females and 100 males. It was calculated based on the number responses that the overall weighted mean of the system's acceptability in terms of perceived ease of use and perceived usefulness was 4.1. While the overall standard deviation is 0.58 which means the respondents, who rated the system has a unanimous perception of Very Acceptable. With these results, the researcher concluded that the system is easy to use and useful to the institution since it can monitor accurately the number of logs.

**Keywords**— Image Processing, Student's Attendance, stakeholders.

## I. INTRODUCTION

Assessing and understanding the acceptance of the system plays an important role. It should be considered as an issue because the results of it will determine the importance and usefulness of the system to the institution. Thus, purpose of this study is to assess the acceptability level of the system in assessing the student's attendance. It will determine if how effective and useful the system in assessing the student's attendance.

At present, BISU Clarin Library uses the traditional manual and paper-based library services especially in the process of student's attendance logging. The students will log on the attendance sheet prepared by staff before entering inside the

premises. The students will provide their student's information. Meanwhile, the staffs will individually count and provides a tally based on the reports of the day. Thus, they found it hassle, unreliable and time-consuming process. With these problems, there is a proposed system that solves the current problem. It is a system that assesses the monitoring of the student's attendance automatically. This system is a new way of record management that achieves efficiency and accuracy on student attendance logging. It uses image processing to monitor the number of students that will enter inside the premises. The system automatically counts and identified the number of students through scanning their student's id in a live camera. To ensure the usefulness and effectiveness of the system in assessing the attendance.



Therefore, it is important to measure the acceptability of the system.

### 1.0 Technology Acceptance Model (TAM)

The researcher used Technology and Acceptability Model (TAM) which is an information system theory that models how user come to accept and use a technology. The model suggests that when a user presented with a new technology, several factors influenced the decision about how and when they will used it, notably these are: Perceived Usefulness and Perceived Ease of Use as defined by Fred Davis [5]. Perceived usefulness is the “degree to which a person believes that using a system would enhance their job performance”(i.e., by reducing the time to accomplish a task or providing timely information). While, Perceived ease of use is “the degree to which a person believes that using a system would be free from effort”. [6] Attitude towards use and behavioral intention to use are the two other construct of TAM. Attitude towards use is the user’s evaluation of the desirability of employing a particular information systems application. Behavioral intention to use is a measure of the likelihood a person will employ the application. Meanwhile, the actual usage is the TAM’s dependent. [7]

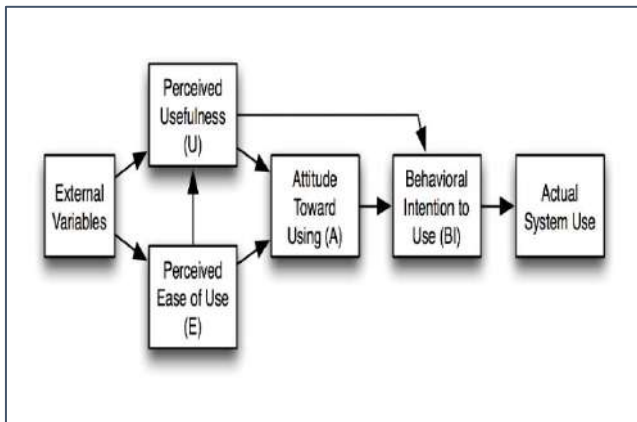


Fig.1: Technology Acceptance Model (TAM)

Based on this figure, it describes that the behavioral intention on system usage is determined by individual’s attitude in using the system and perceived usefulness. The behavioral intention is a determinant and a predictor of performing actual behavior. Thus, the individual attitude is highly influence of the system’s perceived ease of use and perceived usefulness. [6]

Assessing the acceptability of the system is an important step towards a better understanding on the user’s intention in using the system. Technology Acceptance Model (TAM) has

been confirmed as a valid model based on the previous researches. [3] This model represents the theoretical framework to explain and predict the attitude towards the usage of the system. Tobing, et. al state that perceived ease of use and perceived usefulness are the two important factors in determining the use of information system as these factors will affect the attitude and intention in using the system. [14]

Moreover, Lee (2006) stated that perceived usefulness and perceived ease of use are the important variables affecting acceptance of the e-learning system. It was showed on the results found in Lee (2006) that showed that perceived ease of use significantly and positively affects perceived usefulness. [10] In the study of Abdullah et. al (2016) in investigating the factors influenced the most commonly used external variables such as Self-Efficacy, Subjective Norm, Enjoyment, Computer Anxiety and Experience of TAM on students’ Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) in using e-portfolios. It was showed that both perceived ease of use and perceived usefulness affects the behavioral intention on using the e-portfolios system. [1]

Lederer (2000) investigated TAM for work-related tasks with the World Wide Web as the application. The study sought to determine the acceptance of Web technology by users. The results show that the investigation supports TAM. It confirms that use of Web sites depends on the usefulness and ease of use of the site. It also helps the users to understand the predictors of usefulness and ease of use for the Web. [9] Masrom Maslin (2007) on his study on investigating TAM for work-related tasks with e-learning. The author uses TAM as the basis for hypothesizing the effects of such variables on the use of e-learning as the application. The result shows that the student acceptance of e-learning technology has supported TAM. Results showed that perceived usefulness is more important in determining intention to use than attitude toward using. In agreement with what TAM postulates, perceived usefulness was found to have a significant influence on students’ intention to use the technology, that is, it is in accordance with Davis (1989) who found attitude toward using was at best a partial mediator of the effect of perceived usefulness on intention to use, and that it added little causal explanatory power. [11, 7]

### 2.0 Assessing the student attendance (AST) system using image processing

AST is a system that assess the student’s attendance automatically. It uses image processing to detect the faces on the students. Before entering inside the premises, the students must scan their id in the front of the camera that is

connected to the system. Then the camera will detect the face of the student in the id. After detecting the student id number, it sends an information to the SQL database for the verification whether the student is enrolled or not. Then, it will send a notification through sound. A separate sound for detected or not detected.

The development of the system is legally based on RA 9470 states that “All public records must be kept with archival value. The state shall give utmost priority for the safeguard, protection and preservation of its public documents and records”. [12] Subsequent to this act, it supports the adaptation of keeping and preserving of all the public records such as the record of logs. [8]

The System Development Life Cycle (SDLC) was used in the development of the system. SDLC is a process of creating an information system and the models used in developing the system. It aims to be standardized that defines the entire task required in developing and maintain the software [4].

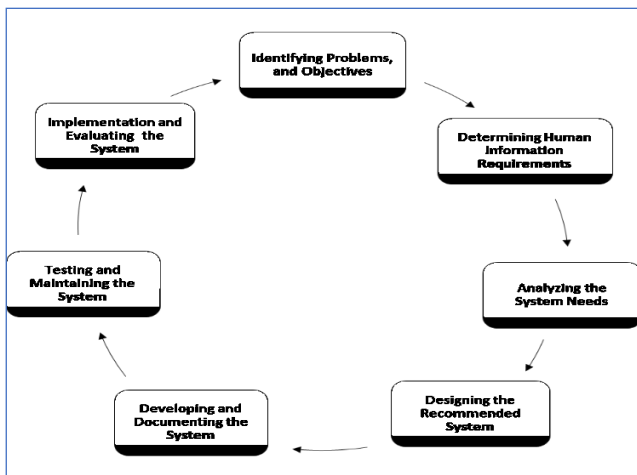


Fig.2: System Development Life Cycle

## II. OBJECTIVE OF THE STUDY

The main objective of this study is to determine the acceptability of the System in Assessing the Student's Attendance Using Image Processing. This objective was used to look for the opportunities to expand the quality of service as well as the speed of the services in order to achieve the mandates of the institution.

Specifically, this ought to answer the following question:

1. What is the level of the system's acceptability in terms of:
  - 1.1 Perceived ease of use; and
  - 1.2 Perceived usefulness?

## III. METHODOLOGY

The research design used in this study was descriptive survey method. This method gathers and analyses numerical data to describe the perceptions of the students regarding the system's acceptability. Descriptive survey method is devoted to the gathering of information about prevailing conditions or situations for the purpose of description and interpretation. [2, 13] This type of research method is not simply amassing and tabulating facts but includes proper analyses, interpretation, comparisons, identification of trends and relationship. [2]

The respondents of the study were comprised of 200 students of Bohol Island State University – Clarin campus. The number of respondents were based on random sampling consisting of 100 female students and 100 male students. Before conducting the surveys, the researcher conducted an evaluations and implementation regarding with the system's specification.

In determining the level of acceptability of the system, the researcher uses the TAM's theory by Fred Davis. It is a model that suggest when a user presented with a new technology, several factors influenced the decision about how and when they will used it, notably these are: Perceived Usefulness and Perceived Ease of Use. [5]

The questionnaire contains two parts: Part 1 will deal with system's acceptability in terms of perceived ease of use while part 2 deals with perceived usefulness with the Likert-scale namely: Perfectly Acceptable (5), Very Acceptable (4), Acceptable (3), Slightly Acceptable (2) and Not Acceptable (1).

## IV. RESULTS AND DISCUSSIONS

In terms of measuring the system's acceptability, the researcher conducted a survey to the respondents. The respondents are comprising of 200 selected students. The following table shows the level of acceptability of the system in terms of perceived ease of use and perceived usefulness.

Table 1 Acceptability of the System in terms of Perceived Usefulness

Item	Questions	SD	Mean	DR
1	In the system, it would enable me to accomplish the task more quickly and easier	0.56	3.9	VA
2	The system generates complete and exact reports	0.62	4.2	VA
3	The system calculates the number of logs automatically	0.67	4.4	PA
4	Monitors the number of logs accurately.	0.57	4.1	VA
5	Using the system, it would enable me to view the logs by date.	0.63	4.4	PA
6	The system is precise and accurate	0.57	4.0	VA
Composite Mean:		4.1	VA	
Overall SD :		0.60		

The table above represents the system's acceptability level in terms of perceived usefulness. Perceived usefulness refers to the degree in which the persons believe that using the system would enhance their job performance. [6] Based on the data gathered, it was found out that the level of the acceptability in terms of perceived ease of use was 4.1 in which it has a descriptive rating of Very Acceptable. The items 3 and 5 has a descriptive rating of Perfectly Acceptable which means the system can calculates the logs automatically and can enable the user to view the logs by date. While the items 1 and 6 has a descriptive rating of Very Acceptable which conveys the system accomplish the task quickly and easier and the system is precise and accurate. Moreover, the items 2 and 4 which is the system generates exact reports and the monitors the logs accurately. The overall standard deviation of the system's acceptability in terms of Perceived Usefulness is of 0.60 which means that the respondents unanimously rated the system as Very Acceptable.

Table 2 Acceptability of the System in terms of Perceived Ease of Use

Item	Questions	SD	Mean	DR
1	The system is easy to use.	0.56	4.0	VA
2	It is easy for me to learn and manipulate the system.	0.50	4.3	PA
3	My interaction with the system is clear and understandable.	0.57	4.4	PA
4	The system is flexible to interact with.	0.61	4.1	VA
5	The system reduces/eliminates paper works and the risk of making errors while tracking the attendance of logs	0.63	4.6	PA
6	The system is user-friendly	0.50	3.41	VA
Composite Mean:		4.1	VA	
Overall SD :		0.56		

This table shows the result of calculated weighted mean and standard deviation based on the responses of the respondents in terms of perceived ease of use. Perceived ease of use refers to the degree to which the respondents believe that using the system would make their task easier. [6] It was shown on the table that the weighted mean in perceive ease of use was 4.1 which has a descriptive rating of very acceptable. The item 1 has a descriptive rating of 4.0 in which implies that the system is easy to use. The item 2 refers to the question in which the system is easy to learn and manipulate got a descriptive rating of Perfectly Acceptable and a standard deviation rating of 0.50. The result also showed that the system is clear and understandable (Item 2, mean 4.3 & 0.50 SD) and the system reduces/eliminates the paper works (Item 5, mean 4.6 & SD 0.63). Furthermore, items 3 and 5 got a descriptive rating of Perfectly Acceptable. The overall standard deviation of the system's acceptability in terms of Perceived Ease of Use is of 0.60 which means that the respondents consistently rated the system as Very Acceptable

Table 3 Consolidation of the Level of Acceptability of the System

Item	System's Acceptability	SD	Mean	DR
1	Perceived Usefulness	0.60	4.1	VA
2	Perceived Ease of Use	0.56	4.1	VA
Composite Mean: 4.1		VA		
Overall SD: 0.58				

The table above shows the overall result of the acceptability of the system. It was calculated based on the number responses that the overall weighted mean of the system's acceptability in terms of perceived ease of use and perceived usefulness was 4.1 which has a descriptive rating of Very Acceptable which conveys the system is useful to the institution and easy to use. While the overall standard deviation is 0.58 which means the respondents, who rated the system has a unanimous perception of Very Acceptable.

## V. CONCLUSION

Based on the survey results, it has supported TAM. The results shown based on the number of responses that the weighted mean is 4.1 in which it has a descriptive rating of Very Acceptable in terms of perceived usefulness. While in terms of perceived ease of use, the weighted mean in perceive ease of use is 4.1 which has a descriptive rating of very acceptable. On the overall acceptability level of the system, the overall weighted mean of the system's acceptability in terms of perceived ease of use and perceived usefulness was 4.1 which has a descriptive rating of Very Acceptable. These results implied that the system is easy to use and useful to the institution.

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# Organizational Management Cases in Hospitality Businesses in Nueva Ecija: A COVID19 Experiences

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**Abstract**— The study determined the impact of COVID-19 pandemic in hospitality business management organization in Nueva Ecija. The main respondents of the study are 150 respondents from the hospitality business in Nueva Ecija. A mixed-method research design was utilized to have to support the objective of the study with the used of purposive sampling technique. The results of the study revealed that 100% of the hospitality businesses and management organization in Nueva Ecija were decided to stop their operation for the meantime upon looking for the alternative ways in supporting the basic needs of their employees and to sustain operations. Almost 97% were affected and face challenges in managing operation because COVID -19 had great impact they experienced anxiety, stress, financial difficulties and job loss. It is recommended for the hospitality business industry to continuously providing quality services and extra care not only for the employees but also those that they can extend their help to all individuals.

**Keywords**— COVID-19, Hospitality Business, Impact, Management Organization.

## I. INTRODUCTION

Organizational management is the key aspects that binds the employees, staffs, operators and other members of the organization together and gives them a wisdom and sense of loyalty and appreciation. It is very essential to manage the employees well in an organization for them to feel that they are important and belong to the group they have. The employees and staffs even the manager and owner must work together in a close coordination with each and every one and always try their very best to achieve the organizational goals, mission and vision.

Organization management especially in hospitality businesses enables the optimum use of resources through meticulous planning and control at the work place so that all employees are well aware and inform of their designated roles, tasks and sense of responsibility for the common good that also gives them a sense of security and oneness organization.

The hospitality business is one of the businesses that is much affected in the country's current situation due to the global pandemic of COVID-19. This devastating COVID-19 virus outrageous the economic progress in the whole world.

In the Philippines, the President Rodrigo Duterte ordered to locked all the businesses operation especially in hospitality sectors like bars, restaurants, amusement park, etc. that aimed to help not to spread viruses.

According to Burton & O'Neill (n.d), the global COVID-19 pandemic has challenged companies to manage their enterprises in the newfound ways. In short term, they are facing enormous scope changes to their business plans, how to adopt and continues to make progress on their original goals. Moreover, organization needs to ensure their business strategies incorporate crisis management disaster recovery and risk management in order to adapt and get back to track to true business effort.

The COVID-19 pandemic has brought in many realities. The ever-evolving hospitality world has received the biggest setback in revenue generation and costs remain high. With travel at its record low, hotels need to remain agile, and they need to be at the forefront to manage different customer groups with a speed that has never been exercised before, (Kapur, 2020).

Almost all of the people around the world stopped their daily activities outside like travelling to other places and countries, going out to mall for shopping, going out to hotel, restaurant and resort for unwind and leisure activities over fears of spreading of COVID-19 and the hospitality sectors was bracing for the severe downturn.

According to Gossling et al., (2020), travel bans, border closures, events cancellation, quarantine requirements and fear of spread, have placed extreme challenges on hospitality industry.



But due to many factors, more reasons, problems and challenges arises in management of one’s organization that truly businesses really affected and experiences economic crisis resulting to income losses, job opportunities and financial difficulties in all aspects.

McCarthy (2020) said that, hospitality industry had never seen the situation like the current pandemic. It is important for the industry to acknowledge that there are no “experts” on this kind of pandemic or situation. Just a group of industry, they are trying their best to figure out how to best navigate a very difficult and very unpredictable situation. He added, as Group Director, he does see a few opportunities to leverage wellness positioning as a way to aid in the recovery.

In this notion the researcher, aims to find out the challenges facing and experiencing by the management organization this current situation of COVID-19 pandemic in hospitality businesses in Nueva Ecija.

Objectives of the Study

The main objective of the study was to determine the impact of Covid-19 pandemic to the hospitality business and management organization in Nueva Ecija.

Generally, the study sought to answer the following:

- 1. To ascertain the impact of COVID-19 pandemic in hospitality business and its management organization.
- 2. To determine the challenges encountered by hospitality business and its management amidst COVID-19 experienced.
- 3. To identify how the how the hospitality business deal in the current situation on how to manage organization.

Research Problem

This study answered the following:

- 1. How may the profile of the hospitality business and management organization in Nueva Ecija amidst COVID-19 pandemic be described in terms products and services, availability of supply, number of employees/staffs, work arrangement, number of operating times, number of employees working hours and mode of salary?
- 2. How may the hospitality business in Nueva Ecija manage cases and experiences amidst COVID-19 pandemic?
- 3. What is the impact of COVID-19 pandemic in hospitality business and management organization?
- 4. How may the hospitality business management organization deal in the current situation of COVID-19 pandemic?

II. RESEARCH METHODS

This research used a mixed method research design- qualitative and quantitative in able to meet the objectives of the study. The respondents of the study were the selected hospitality business operators and their respective employees/staffs using purposive sampling technique. The survey and interview guide questionnaire were administered

to gather the data needed. And the data gathered was analyzed with the used of statistical tools for quantitative part and logical analysis for qualitative part.

III. RESULTS AND DISCUSSION

2.1.1. Profile of the hospitality business and management organization in Nueva Ecija amidst COVID-19 pandemic be described in terms products and services, availability of supply, number of employees/staffs, work arrangement, number of operating times, number of employees working hours and mode of salary

Table 1, shows the profile hospitality business and management organization in Nueva Ecija in 150 respondents, found that 135 (90%) of the respondents have no products to produce and no service operation during COVID-19 pandemic were declared locked down, thus all 150 (100%) of them said that have no available supply received from the supplier. They had more than 20 employees/staffs and majority 143 (95%) with working arrangements or alternate schedule of duty with 4 to 5 hours operating time. And 100% of them were changed the mode of payment into daily basis.

Business Profile	Frequency	Percentage (%)
Product and Services	135	90
Availability of Supply	150	
No. of Employees and Staffs	143	
No. of Employees’ working hours	More than 20	More than 20
No. of Operating time	143	95
Mode of Payment	150	100

2.1.2. Hospitality business in Nueva Ecija manage cases and experiences amidst COVID-19 pandemic

The results revealed that majority 145 (97%) of the respondents manage cases and experiences amidst COVID-19 pandemic was used alternative working arrangement as to maintain and sustain the needs of the employees and business organization like online selling by means of creating FB page to market the product and services that the hospitality businesses in Nueva Ecija will provide. To main the number of employees as to sustain and provide their family needs, they still operated even in less minimum operating time. And to sustain the daily needs of their family the business operator/owner/manager decided to give the employees’ salary in daily basis based on the scheduled of duty. One of the operators’ interviews shown below:

“ As the owner of this kind of business-hotel and restaurant, our income are down due to stoppage of operation, but I cannot imagine that some of my employees

*are suffering and much affected because of COVID-19, I find ways in all means even just to help them for their own families basic needs, a heartbreaking situations as you can see them that no other means to support their daily needs, so I decided to still operating in online, delivery and pick up basis, just to help them”.*

### 2.1.3. Impact of COVID-19 pandemic in hospitality business and management organization

One of the most affected in the COVID-19 is the locked down of all business operations especially in hospitality business and a very traumatic impact on our way of life. All 100% of the respondents said that COVID-19 pandemic affects their income with no services and product operation due to no one will go out even to buy some of their basic needs especially foods. Another thing loss of jobs and financial difficulties in all aspects of life, It is a life changing situation to all and the whole world. Majority of employees in hospitality business in Nueva Ecija especially low earners really affects their lives and experienced stress, anxiety, down physical and mental health condition and felt helpless in this tying time of global pandemic (COVID-19).

### 2.1.4. Hospitality business management organization deal in the current situation of COVID-19 pandemic

Hospitality businesses are known for giving extra and excellent assistance to those who admit under their care. They have been giving top-of-the-line services that gives theirs customers, guests, employees and staffs a high level of appreciation and thanks to the care they receive. During this trying time of the global pandemic (COVID-19), the hospitality businesses in Nueva Ecija did not stop in delivering its service, thus, out of altruism to see each of the individuals they encounter will definitely be an addition to the list of those who they enlightened the situation.

## IV. CONCLUSION

Based on the findings of the study, the following conclusions are attained.

2.2.1. The hospitality business stopped the operation especially when declared locked down, yet had no supply at all. Thus, more than 20 of their employees were affected the reason why the hospitality business needs to operate even in short time basis for continuous operation in providing basic family needs.

2.2.2. The hospitality business management organization in Nueva Ecija managed cases and experiences in COVID -19 pandemic by means of providing alternative ways as to help them their employee/staffs by providing and supporting the basic needs of the family. They use alternative working arrangements and plans for the benefits of all.

2.2.3. The global pandemic COVID 19 had a vast impact to hospitality business not only in Nueva Ecija but also worldwide in all aspects of human lives.

2.2.4. The hospitality business in Nueva Ecija never stops helping their employees in any means they can provide and also never stops sending help for others.

## RECOMMENDATIONS

Based on the conclusions of the study, the researcher come up to the following recommendations:

1. The hospitality industry always think the very best in providing quality services that brings extra cares to all their employees, staffs, and customers as to maintain a good relationship and managing business organization.
2. The hospitality business management organization may include health recovery in physically and mentally bases as to easily and fast recover in COVID-19 cases and experiences especially in Psychological Mental health issues.
3. The management organization in hospitality businesses always being ready in their plan of action in providing good and quality services with extra care for all customers, employees and staffs. And always follow the minimum standard protocols to prevent the spreading of COVID-19 virus. Always include mental and health program in coping mechanism for all members of the organization.

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# Savings Praxis of the Owners of micro, small and Medium Enterprises in San Antonio, Nueva Ecija: A Basis for Developing a Savings Plan

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**Abstract—** *This study was conducted to describe the savings praxis of the Micro, Small and Medium Enterprises (MSMEs) owners in San Antonio, Nueva Ecija, to be a basis for developing a savings plan. It determined whether the owners are properly managing their financial resources while still having the means to establish savings. The study utilized a descriptive research method with 148 respondents who were actively operating in the research locale. Respondents had been identified using convenience sampling. The main instruments of the study were the structured questionnaire and the unstructured interview guide. Generally, most businesses in San Antonio were considered micro businesses. The majority of the owners who responded to the survey were female, married, had one to four family members, and depended solely on the business' income. High prices of essential commodities and the fact that they used their earnings in education were the main reason why they saved only a small percentage of their income. Most of the respondents already had experience saving in banks since they knew the benefits of saving money. Upon choosing their preferred form of savings, most businesses recognized the bank's reputation, which was very important because they highly considered their money's security, which most of them kept for emergency use. The researcher recommended promoting educational campaigns to increase awareness and enhance enthusiasm for savings for the business owners and most Filipinos.*

**Keywords—** *saving, savings habit, banking, personal finance.*

## I. INTRODUCTION

According to a survey conducted by Bangko Sentral and Pilipinas in 2017, 86 per cent of Philippine households do not have bank accounts for a number of reasons, including not having enough money to deposit and lack of trust in banks. According to statistics, only two out of every 10 households have deposited their savings in banks on the basis of BSP's 2014 Consumer Finance Survey. This is consistent with the findings of the 2014 BSP National Base Survey on Financial Inclusion. The survey found that out of 43.2 per cent of adults currently saving money from banks or cooperatives, 32.7 per cent put their money into banks.

Accordingly, the findings show that only 14.1 per cent of adults save in banks (Guerrero, 2017). This condition of the majority of the Filipinos is quite alarming, since it simply means that, in the event of an emergency, they do not have the money to use, which could contribute to an unexpected debt. Your financial life can be limited by not having personal savings.

Research shows that financial emergencies have more impact on households than their wealthier counterparts and that their recovery from the financial crisis is longer (Cramer and Newville, 2009). An individual does not know what is going to happen in the future, so money should be saved in

order to pay for unforeseen circumstances or emergencies. Unexpected events can become financial burdens without savings. This is why savings help an individual or a family to become financially secure. Money can also be saved to purchase expensive items that are too expensive to buy on a monthly basis. Developing a habit of saving money can act as a vehicle to help a person achieve his or her goals. Habit consistency improved over time during program participation and savings patterns reduced the burden of financially stressful conditions (Loibl, et.al, 2011).

Banks have been identified as the largest depository institution in the Philippines, followed by multipurpose or credit cooperatives, paluwagan and savings and loan associations. Banking institutions kept 83.1 per cent of the deposit accounts together. On the other hand, only about 70 per cent of these accounts received interest, suggesting that 30 per cent of households still opted to retain their deposit accounts even though their balance was still below the amount required to earn interest. It's a personal preference to have a bank account, not a necessity. However, there are times when you will not be able to evade the need to open a bank account. This reality must be realized by many Filipinos in order to increase their enthusiasm for saving a certain percentage of their income.

One of the sources of income for the municipality of San Antonio comes from trading. The main objective of any business organization is to make a profit and the owner is the direct beneficiary of the profits of the business. As a result, a business owner is one of the largest target depositors of financial institutions because they have a well-established source of income to put on their bank account and to be used for some time in the future, such as retirement and other financial purposes. However, most business owners are currently not confident that they will retire because they do not have enough money to support their day-to-day needs if they stop their business operations.

Thus, the researcher of this study aims to identify the savings praxis of the owners Micro, Small and Medium Enterprises (MSMEs) in San Antonio, Nueva Ecija. The objective of the study is to illustrate whether the owners are properly managing their financial resources while still having the means to establish savings.

## II. OBJECTIVES OF THE STUDY

This study is conducted to identify the savings praxis of the owners Micro, Small and Medium Enterprises (MSMEs) in San Antonio, Nueva Ecija. The study aims to illustrate whether the owners are properly managing their financial

resources while still having the means to establish savings. Specifically, it endeavored to answer the following questions:

1. Profile of the owner in terms of:
  - 1.1 Sex;
  - 1.2 Civil Status;
  - 1.3 Family Size;
  - 1.4 Educational Attainment; and
  - 1.5 Other Income Sources.
2. Profile of the business in terms of:
  - 2.1 Size of Business;
  - 2.2 Average Net Income per Month;
  - 2.3 Type of Ownership;
  - 2.4 Nature of Operation; and
  - 2.5 Years of Operation.
3. To identify the level of awareness of business owners on savings;
4. To identify the factors influencing their savings activities;
5. To determine which forms of savings are preferred;
6. To identify the challenges of saving encountered; and,
7. To find out if there is any benefit to the business from savings in their operations.

## III. METHODOLOGY

The researcher used a descriptive research method that describes and interprets the data and characteristics of what is being studied. According to Edestav and Linder (2008), the descriptive approach answers questions, what, who, where, when and how. Descriptive research is often used when there is already a great deal of knowledge about the subject, and this knowledge can then be used to categorize the information into models. In addition, this type of study focuses on the investigation of a few aspects of a larger subject (Davidson & Patel, 1994). The respondents were 148 owners of small and medium-sized enterprises in San Antonio, Nueva Ecija, who operated actively during the study. The researcher used convenience sampling for the study because of the large population and the busy nature of the businesses which were operating in the research locale. This study used an unstructured interview as a form of data collection. As cited by Wildemuth (2017), Minichiello et al. (1990) defined unstructured interviews as interviews in which neither the question nor the answer categories are predetermined; instead, they rely on the social interaction between the researcher and the informant. Apart from that, the questionnaire is also a form of data collection instrument



used in this study. The researcher formulated questionnaires based on readings from books, the internet and random interviews with bank employees with sufficient knowledge of the savings practices of different depositors. Finally, the frequency, ranking, percentage and weighted mean were

used to calculate and evaluate the data collected in this study. Respondents' response to factors affecting their savings activities can be assessed and interpreted using the Likert Scale five-point as shown below:

*Table 1. Rating Scale and Verbal Interpretation of the Factors Influencing Respondents' Savings Activities*

Degree	Rating Scale	Verbal Interpretation	
5	4.50 - 5.00	very important	The respondents consider the factor influencing their savings activities very important.
4	3.50 - 4.49	fairly important	The respondents consider the factor influencing their savings activities fairly important.
3	2.50 - 3.49	important	The respondents consider the factor influencing their savings activities important.
2	1.50 - 2.49	somewhat important	The respondents consider the factor influencing their savings activities somewhat important.
1	1.00 - 1.49	not important	The respondents consider the factor influencing their savings activities not important.

#### IV. RESULTS AND DISCUSSION

This section provides the presentation of data relevant to the purpose of the study. Corresponding assessment and interpretation of the data presented were explored using the above-mentioned statistical tools.

##### 1. Profile of the Owners

This part of the study described the profile of the owners of the MSMEs in terms of sex, civil status, number of the member of family, highest educational attainment and other sources of income.

*Table 2. Profile of the Owners*

	F	%
<b>Sex</b>		
Male	48	32%
Female	100	68%
<b>Total</b>	<b>148</b>	<b>100%</b>
<b>Civil Status</b>		
Single	33	22%
Married	87	59%
Living with Partner	10	7%
Widowed	12	8%
Separated	6	4%
<b>Total</b>	<b>148</b>	<b>100%</b>
<b>Size of Family</b>		
1 to 4	77	52%
5 to 8	58	39%
9 to 12	7	5%

More than 13	6	4%
<b>Total</b>	<b>148</b>	<b>100%</b>
<b>Highest Educational Attainment</b>		
Elementary	28	19%
Secondary	41	28%
Vocational	18	12%
College	52	35%
Post-Graduate	9	6%
<b>Total</b>	<b>148</b>	<b>100%</b>
<b>Other Source of Income</b>		
None	79	53%
Agricultural Activities	23	16%
Salary of Other Family Members	13	9%
Tricycle or Jeepney Driving	6	4%
Remittance	6	4%
Money Lending	5	3%
Salary/Employment	3	2%
Canteen/Catering	2	1%
Pension	2	1%
Dress-making	2	1%
Others (Sari-Sari Store, Trucking, Direct Selling, etc.)	7	4%
<b>Total</b>	<b>148</b>	<b>100%</b>

- 1.1 *Sex.* It can be gleaned from the table above that 68 per cent of the total number of respondents were female. More women have opted to start their own businesses. According to Alvarez and Meyer (1998), as mentioned by Werhane, et. al. (2007), founding their own businesses enables women to use, satisfy, and maintain high levels of skill, as perhaps they could not when working for a corporation. Furthermore, Boden (1996), also mentioned by Werhane, et. al. (2007) states that women also cite layoffs, the ability to make one's own decisions, and the need for more flexible working hours to accommodate family demands as reasons for starting their own businesses. Having young children was a strong positive influence on women's self-selection of entrepreneurship.
- 1.2 *Civil Status.* As shown on table, majority or 59 per cent of the total number of respondents were married. As the head of the family, a business is a good source of income to sustain the needs. For married couples, a stable source of income is very important to support their family's day-to-day expenses. Mothers often face many challenges in the traditional workplace, including a lack of family-friendly policies, pay inequity, and a "second shift" in household duties. Entrepreneurship is seen as an attractive option for mothers, as it is perceived to provide greater flexibility to achieve a work-life balance (Krause and Fetsh, 2016).
- 1.3 *Size of Family.* As indicated on table, 52 per cent who were having 1 to 4 family members. More than half of the respondents have a small family size. According to Rehman et al. (2010) as cited by Kiran and Dhawan (2015), most of the existing studies take the view that the size of the family affects the individual's savings and consumption expenses, but in the opposite direction. With an increase in the size of the household, income is diverted away from savings and, as a result, the individual's saving income ratio is reduced. However, due to the presence of a relatively large number of economically active members, there is a possibility that the average savings of large families will be higher than those of low-level family members.
- 1.4 *Highest Educational Attainment.* From the data given above, 35 per cent attained college which means they have knowledge to run a business. According to the Philippine Statistics Association, the unemployment rate was estimated at 5.6 per cent in July 2017. A college graduate may consider that the best way to improve his job situation is to "take matters into his own hands." One way to build an effective lifesaver is

to "hire himself" by starting a business of his own. One may never have planned to become a business owner, but there can be a lot of rewards for doing so, from tax advantages to flexibility and a chance to be a boss. Many displaced middle-aged workers, tired of leaving their career prospects in the hands of others, have successfully set up their own businesses. This strategy also worked quite successfully for many Generation X members, who were themselves faced with a cool reception in the working world (Snyder, 2013).

- 1.5 *Other Sources of Income.* The above illustration revealed that a significant percentage of respondents, or 53 per cent, depended solely on one source of income which is the business established in San Antonio.

## 2. Profile of the Business

This part described the profile of the business in terms of size of business (based on asset size), average net income per month, type of ownership, years of operation, and nature of operation.

Table 3. Profile of the Business

	F	Percentage
<b>Size of Business(Based on Asset Size)</b>		
Micro Enterprise (Up to P3,000,000)	110	74%
Small Enterprise (P3,000,000 to P15,000,000)	27	18%
Medium Enterprise (P15,000,001 to P100,000,000)	11	7%
<b>Total</b>	<b>148</b>	<b>100%</b>
<b>Average Monthly Income</b>		
P10,000 and below	37	25%
P10,001 to 50,000	78	53%
P50,001 and above	33	22%
<b>Total</b>	<b>148</b>	<b>100%</b>
<b>Type of Ownership</b>		
Single Proprietorship	127	86%
Partnership	21	14%
<b>Total</b>	<b>148</b>	<b>100%</b>
<b>Years of Operation</b>		
Less than 1 Year	9	6%
1 to 5 years	41	28%
6 to 10 years	31	21%
More than 10 years	67	45%
<b>Total</b>	<b>148</b>	<b>100%</b>

Nature of Operation		
Merchandising	88	59%
Manufacturing	25	17%
Service	35	24%
<b>Total</b>	<b>148</b>	<b>100%</b>

2.1 *Size of Business (Based on Asset Size)*. As shown on table 3, most of the respondents or 73 per cent had assets of not more than P3,000,000. Micro-business is an effective instrument for social and economic development. It helps to create employment for a number of people within their own social system. This is more beneficial for women in rural areas as it enables them to add to family income while taking care of their own home and livestock tasks. Micro-entrepreneurs strengthen women's empowerment and eliminate gender inequalities (Sharma, et al., 2012).

2.2 *Average Monthly Income*. The report indicated that the majority or 53 per cent had average monthly income that ranges from P10,001 to P50,000. According to Snodgrass & Winkler (2004), as cited by Agyapong (2010), in order to generate enough income to help minimize the incidence of high-level poverty in most developing economies, international funding bodies and economic growth analysts have suggested to policymakers in developing economies to make greater efforts at promoting private sector development with MSMEs being at the forefront.

2.3 *Type of Ownership*. From the data given above, 86 per cent were sole proprietors. Most of the business is managed by one person since it is the simplest business to manage. One common characteristic of single proprietorship business is its small size and limited amount of investment (Datta, 2017).

2.4 *Years of Operation*. It can be seen from the statistics that the majority or 45 per cent were operating for more than 10 years already. Despite this result, more than half of the country's micro, small and medium enterprises (MSMEs) in the country had to stop their operations due to the COVID-19 pandemic, the Department of Trade and Industry (DTI) reported (Mercado, 2020).

2.5 *Nature of Operation*. From the table, it can be gleaned that 59 per cent were involved in merchandising. Only a small percentage of the respondents engaged in manufacturing despite the fact that the Philippine manufacturing industry remains the most important sector for long-term productive employment, value-

added generation, and innovation. It has the highest multiplier effect on the economy compared to other industries (Batungbacal, 2011).

### 3. The Level of Awareness of the Business Owners on Savings

This area of the study identified the level of awareness of savings among business owners. The level of awareness and benefits of savings could have an impact on saving practices.

Table 4. Distribution of the Respondents According to Level of Awareness of the Business Owners on Savings

Question	Response				Total	
	Yes		No			
	F	%	F	%	F	%
Do you have any experience on saving in a bank?	129	87%	19	13%	148	100%
Do you have any knowledge about the benefits of saving money?	141	95%	7	5%	148	100%

This part of the questionnaire is consisted of two questions. First, "Do you have any experience on saving in a bank?" As a result of the study, the majority or 87 per cent answered yes, which means that they already had experience saving in a bank. According to a survey conducted by Bangko Sentral ng Pilipinas in 2017, most or 86 per cent of Philippine households do not have bank accounts for a variety of reasons, including not having enough money to deposit and lack of trust in banks. According to the figures, only two out of every ten households have deposited their savings in banks based on BSP's 2014 Consumer Finance Survey.

The second question is "Do you have any knowledge about the benefits of saving money?" A significant percentage of the respondents or 85 per cent agreed that they have knowledge about the benefits of saving money.

### 4. Factors Influencing the Respondents' Savings Activities

This section determined the factors influencing the savings activities of the business owners in San Antonio, Nueva Ecija. The respondents rated the following factors according to the level of importance to them which might

affect their decisions when opening a deposit account in a bank.

*Table 5. Distribution of the Respondents According to the Factors Influencing Them Open a Bank Account*

Factors	Weighted Mean	Verbal Interpretation
Marketing Promotion	3.22	Important
Good customer service	4.60	Very important
Branch Location	4.26	Fairly important
Security or Financial Benefits	4.39	Fairly important
Banking Hour	3.79	Fairly important
Reputation of the Bank	4.65	Very important
Maintaining Balance	3.41	Important
Interest Rate of Deposit	3.42	Important
Convenience	4.39	Fairly important
Investment	3.53	Fairly important
People Influences	2.35	Somewhat important
Good Products Offered	3.60	Fairly important
Average Weighted Mean	3.80	Fairly important

Table 5 presented the distribution of respondents on the basis of the factors that influence them to open a bank account. "Bank Reputation" had the highest weighted mean of 4.65, interpreted as "very important." According to Atti and Trotta (2016), the reputation of a bank is a valuable intangible asset where communication strategies are particularly important for building and preserving the reputation of a bank. It strengthens the relationship of the bank with stakeholders and enhances the trust between them.

On the other hand, gaining the lowest weighted mean of 2.35 and interpreted as "somewhat important" is "People's influence."

The average weighted mean of all responses to the twelve factors is 3.80 with a verbal interpretation of "fairly

important." According to Almosawi, as cited by Chigamba and Fatoki (2011), the recommendations of friends and relatives are relevant when opening a bank account, despite the fact that young people prefer to act independently. On the other hand, Gerrard and Cunningham, as mentioned by Chigamba and Fatoki (2011), state that the influence of third parties is of little importance in the selection of commercial banks by customers.

### 5. The Forms of Savings Do Business Owners Prefer

This segment determined the forms of savings do business owners in San Antonio, Nueva Ecija prefer.

*Table 6. Distribution of Respondents According to Their Allocation of Income*

Item	F	Rank
Food	86	1
Daily Expenses	22	2
Additional Capital for Business	15	3
Education	12	4
Savings	10	5
Shelter	3	6
Clothing	0	7
<b>Total</b>	<b>148</b>	

Table 6 showed the distribution of respondents according to their allocation of income. From the data given above, food is considered to be a top priority for business owners on the distribution of their income. According to Maslow's hierarchy of needs, food is considered to be one of the basic human needs (McLeod, 2018).

*Table 7. Distribution of Respondents According to Their Savings Practice*

Question	Response				Total	
	Yes		No			
	F	%	F	%	F	%
Do you always save a certain percentage of your earning?	98	66%	50	33%	148	100%

For this question, the result of the study had shown that 66 per cent of the respondents answered "yes" which means

they always save a certain percentage of their earning. Most of the respondents believe that saving serves as a vehicle to achieve their financial goals such as buying a home, travelling or for retirement plan. Majority of people must save in order to accomplish their goals (Tyson, 2018).

On the other hand, it was noteworthy to give attention to the response of the 33 per cent who responded "no" which means they do not always save a certain percentage of their earning. Lack of money to save is one of the most common reasons of the business owners for not saving. According to Remo (2012), about 4 of 10 Filipino households do not have any cash on hand to be used in case of emergency, while 6 of 10 households have very little cash to spare. These results may be traced partly to insufficiency of income.

*Table 8. Distribution of Respondents According to the Percentage of Income Allotted to Savings*

Percentage of Income Allotted to Savings	F	%
Less than 10%	81	55%
11% to 20%	21	14%
21% to 30%	18	12%
More than 30%	28	19%
<b>Total</b>	<b>148</b>	<b>100%</b>

From the table above, a huge percentage or 55 per cent of the respondents allotted only less than 10% of their income for savings. The results of the study indicated that most of the respondents gave the least priority to savings. One of the notable Filipino attitudes towards money is that they simply do not plan their personal finances. It is also rare to meet people who have a retirement plan of their own. Most Filipinos spontaneously spend their hard-earned money (Tan, 2017).

*Table 9. Distribution of Respondents According to Their Preferred Means of Saving*

Preferred Means of Saving	F	Rank
Banks	81	1
Keeping the Money at Home	47	2
"Paluwagan"	22	3
Lending to Someone with Interest	16	4
Keeping the Money with Trusted Relative or Friend	12	5

It can be gleaned from the data above that the most preferred means of saving respondents were through banking. The majority viewed "banks" first when it comes to saving, because they agreed that savings accounts provide a safe and secure place to keep money away for the future.

The second preferred means of saving business owners was "Keeping Money at Home." For some, it is an inconvenience to get to a bank to make deposits. It may be easier for these people to simply save their money at home instead of driving a number of miles to a bank.

The third preferred method of saving the respondents was through "paluwagan". Although the paluwagan does not add anything to a person's own savings, the discipline and camaraderie of the group, not to mention the shame of the person (and the family) skipping the payment, are compelling factors that strengthen one's ability to save money (Hasan and Onyx, 2008).

"Lending to someone with an interest" was the fourth preferred means of saving the respondents. Some business owners tend to engage in informal lending because they believe that their money will earn more interest in this way than depositing their profits in a bank. Personal relations, flexibility, rapidity and low transaction costs are the main strengths of informal finance (Gan and Nartea, 2017).

Finally, "Keeping money with a trusted relative or a friend" was the least preferred means of saving the respondents. Most of the respondents argued that there is no faster way to strain a friendship or family relationship than by putting money into the mix.

Most of the respondents who opened the savings deposit considered the security of their money to be the primary reason why they kept their earnings in a bank. In addition, they will avoid unnecessary expenditure through banking.

*Table 10. Distribution of Respondents According to Their Selection of Bank*

Type of Bank	F	%
Commercial Bank	64	43%
Rural Bank	84	57%
<b>Total</b>	<b>148</b>	<b>100%</b>

Table 10 revealed that most of the respondents or 57 per cent opted rural banks. The location of the bank played a vital role when the respondents considered their selection in terms of the type of bank because all the banking institutions located in San Antonio were rural banks. One of the



important factors to consider when searching for a bank is the convenient location (Gitman, et. al., 2014).

*Table 11. Distribution of Respondents According to Their Existing Deposit Accounts*

Type of Deposit Accounts	F	Rank
Regular Savings Deposit	107	1
Checking Account	22	2
None	18	3
Time Deposit	10	4

Regular savings deposit ranked 1 of all types of deposit accounts shown in table 11. Most of the respondents have a regular savings deposit account that was considered to be the most basic type of bank account, allowing the depositor to deposit money, keep funds safe, and withdraw funds as needed. There was a small percentage of respondents who were still unbanked subsequent to the BangkoSentral ng Pilipinas (BSP) quadrennial Consumer Finance Survey (CFS). According to the survey, 86 per cent of Filipino households do not have bank accounts, and the majority who are unbanked are self-employed, or work for private households, other households, or other informal households (Chipongian, 2017).

*Table 12. Distribution of Respondents According to the Occurrence of Saving*

Occurrence	F	%
Daily	68	46%
Weekly	22	15%
Monthly	19	13%
Quarterly	4	3%
Irregular	34	23%
<b>Total</b>	<b>148</b>	<b>100%</b>

As can be seen in table 12, a significant percentage or 46% of the respondents were saving daily. Most of the business owners are encouraged to save on a daily basis because of the convenience that the banks offered. According to Circular No. 940 of the BangkoSentral ng Pilipinas (2017), a bank may solicit and accept deposits outside of its premises through its employees.

## 6. Challenges of Saving

This section identified the challenges faced by owners of small and medium-sized enterprises in trying to save their earnings either in the bank or through an informal scheme.

*Table 13. Distribution of Respondents According to Their Difficulty to Save Money*

Question	Response				Total	
	Yes		No			
	F	%	F	%	F	%
Do you face any difficulty saving money?	43	29%	105	71%	148	100%

For this question, the majority of respondents, or 71 per cent, said they did not have a hard time saving.

People have difficulty saving money because they don't know how to limit their spending. Easy access to consumer debt (through credit cards and auto loans) creates huge barriers to saving more and spending less (Tyson and Griswold, 2015).

The two primary reasons for the respondents who had difficulty saving were the high prices of basic commodities and the fact that they used their earnings in education.

High prices of basic commodities make savings more complex. According to the Inflation Report for the first quarter of 2020 published by BangkoSentral ng Pilipinas, analysts expect inflation to ease but remain within the target range, with inflation risks tilted to the downside due mainly to subdued demand in the midst of the COVID-19 pandemic. In addition, inflation has also increased in recent years due to the impact of the implementation of the first stage of the TRAIN tax reform package signed by President Duterte in December 2017. (De Vera, 2018).

The next main reason for most respondents in terms of their difficulty in setting aside a certain percentage of their earnings is their investment in education. Many people believe in the importance of it. Education is a right and a key opportunity. It holds the key to a better life for a billion children and adolescents worldwide: a life of less poverty, better health and an increased ability to take their future into their own hands. Education, particularly girls' education, is also one of the most powerful tools for creating economic growth, reducing the likelihood of conflict, increasing resilience and affecting future generations with wide-ranging economic and social benefits (Lake, 2015).

*Table 14. Distribution of Respondent According to the Challenges They Encountered in Banking*

Question	Response				Total	
	Yes		No			
	F	%	F	%	F	%
Do you encounter any challenges in banking?	31	21%	117	79%	148	100%

For this question, 79 per cent of the respondents claimed that they were not experiencing any complexity in banking.

In the current banking system, excellence in customer service is the most important tool for sustainable business growth. Customer complaints form part of the business life of any corporate entity. This is more the case for banks because they are service organizations. As a service organization, customer service and satisfaction should be the primary concern of any bank. The bank believes that providing prompt and efficient service is essential not only to attract new customers, but also to retain existing customers. However, banks minimize customer complaints and grievances through a proper service delivery and review mechanism and ensure prompt resolution of customer complaints and grievances. The review mechanism should help to identify deficiencies in product features and service delivery. Customer dissatisfaction may ruin the name and image of a bank (Uppal, 2010).

*Table 15. Distribution of Respondents According to the Problems They Encountered in Banking*

Problems Encountered at the Bank	F	Rank
Various requirements needed	18	1
Time-consuming	7	2
Bad customer service	6	3
Other concerns	0	4

As shown in the table above, requirements such as identification cards, photos and other documents were the number one challenge for respondents facing banking challenges. With this, the Bangko Sentral ng Pilipinas was continuously taking a step to ease the process. In fact, the BSP supports the use of electronic Know-Your-Customer (e-

KYC) verification process, as this intends to address long-standing constraints. Through online customer registration, selfie submission, and technology-aided face-to-face verification, among others, the financial system has been transformed offering a more seamless customer onboarding and risk profiling process while lowering costs and rationalizing operations (Diokno, 2020).

*Table 16. Distribution of Respondents According to the Means to Address Their Complaints*

Question	Response				Total	
	Yes		No			
	F	%	F	%	F	%
If yes, is there a means to address a complaint?	31	100%	0	0%	148	100%

Based on the table above, all the respondents agreed that there was always a means to address their complaint. Banks provide a variety of channels to receive feedback, comments, suggestions or complaints from customers through verbal (i.e., phone, walk-in) and written comments (i.e., e-mail, SMS, suggestion box). Banks strictly comply with the BSP Regulation on the Protection of Financial Consumers (BSP Circular No. 857) in providing "an enabling environment that protects the interests of financial consumers and institutionalizes the responsibilities of all stakeholders."

## 7. Benefits of Saving

This part recognized the benefits of saving from the point of view of the business owners of the micro, small and medium enterprises in San Antonio, Nueva Ecija.

*Table 17. Distribution of Respondents According to Their Point of View on the Benefits of Saving*

Benefits of Saving		Rank
For emergency use	11	
For additional capital in case of bankruptcy	1	
For retirement	0	
The money in bank increases value		
Total	148	100%

As shown in the table 17, a significant percentage of the respondents save for the emergency use. Savings help families pay for emergency expenses without incurring high-priced debt, and they allow for investments that improve the capabilities, earnings, and life circumstances of families over time and across generations (Cramer and Newville, 2009).

## V. CONCLUSION AND RECOMMENDATIONS

Based on the analysis results, the researcher concluded that most of the Micro, Small, and Medium Enterprises (MSMEs) owners in San Antonio, Nueva Ecija, who participated in this study were female, married, and had a family of one to four members. It can be inferred from this that, since most had dependents, the pressure on savings was high. Also, more than half of the owners responded in the survey graduated from college, which could be indicated that the level of education provided the respondent with a higher level of knowledge on savings that made them appreciate the importance of money.

Generally, most of the businesses that became part of this study were micro-enterprises—most companies in the Philippines start-up as micro-enterprises. Although most of the owners were operating for more than ten years, there were several reasons why the majority remained as micro-enterprises. First, they had small average incomes ranging from P10,001 to P50,000 and might experience difficulty raising capital since most were sole proprietors. Second, most of them do not have other income sources and depended solely on their business. Third, apart from the day-to-day expenses such as essential commodities, they spent their money on their children's education. Lastly, the competition level was high since most business owners have the same type of operation, which was merchandising. There was no competitive advantage between businesses to improve their value to consumers' perceptions. Thus, the business's income to keep in the formal or informal savings scheme was insufficient to expand the businesses to small, medium, or large enterprises.

It can also be stated that most respondents preferred the standard form of savings, which was banking and had experience saving in a bank since they were aware of the benefits of saving money. Moreover, rural banks were accessible in the research locale; it was convenient for business owners to access financial institutions making it easy to open a regular savings account and deposit their earnings daily. The bank's reputation is also crucial to business owners because they considered their money's security as the primary reason for engaging in legal

institutions. Depositors do not engage an entity that they do not trust.

In terms of income allocation, most respondents were likely to prioritize food and other expenses rather than saving. Their income is insufficient to meet their goals due to the continuous increase in goods and services, such as food, education, and other needs.

Most of the Micro, Small and Medium Enterprises in San Antonio keep their money for emergency use. Because of the unexpected and often dangerous situation that these emergencies require immediate action in our lives, most of them tend to keep their funds on regular savings that can be deposited or withdrawn at any time and preferably placed in rural banks in the vicinity of their business area. Therefore, their money will always be readily available for use.

Based from the conclusions, the researcher recommended the following:

1. the Micro, Small and Medium Enterprises owners should be adequately educated about the importance of a good savings praxis to understand that savings help in investment, which tends to secure future financial freedom. The increase in savings habit will help them to prepare for the future;
2. the banks should continuously invest in technologies and training which will increase effective and efficient service delivery so that the depositors like the business owners will not spend the whole day in the bank to access a service;
3. the schools should encourage the teaching of a good savings praxis to instill to the mind and heart of the youth at their early ages about the benefits of savings habits so that when they mature as citizens in the country, there will have an enhanced enthusiasm for savings;
4. the government may maximize the use of social media to promote educational campaigns on proper saving habits and promotional activities to reach most Filipinos who do not have a savings account, especially those who have been saving through informal means (houses, paluwagan, etc.). These campaigns should enumerate the benefits of cultivating a good savings habit as a citizen. The campaigns should also be carried in different Filipino dialects so that the illiterates will understand the campaigns as well; and
5. the future researchers who will conduct the same study should include a broader scope of the area.

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# Incest the victims and their abusers

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**Abstract**—The goal of this study, *Incest The Victims and Their Perpetrators*, was to determine the incidence of victims of incest in Nueva Ecija Home for Girls. Incest is described as a child's sexual exploitation by a parent or other entity that has control over the child. Violence can occur in various degrees of age, locations, and forms. Victims experience mental depression, not only do the results of abuse end up in the latter, but it also has a psychological effect on both victims and families. Incest is characterized as a child's sexual exploitation by a parent or other entity with authority over the child. Stories of violence and sexual assault are frequently seen on television, but few are concerned and aware of the potential support they can give to victims, so victims cannot speak out on their own because they know it and see it as a very humiliating and tragic event.

Careful consideration was given to the profile of both victims and perpetrators in terms of demographic, economic and educational variables. During therapy sessions involving counseling, evaluation and in-depth examination of the case of molested individuals at the Palayan City Girls Home, Nueva Ecija, the researchers would like to examine the impacts of abuse. The researchers would also like to know the causes of this exploitative activity to determine the level of awareness of the community with regards to the abused, especially in women of young age who do not have enough wisdom to defend themselves. Concern of this research focused also on the status of social and psychological support.

The researchers used interview and observation method of gathering information for the cases. The findings of this study shows that sexual exploitation is common and victims belong to low class families. The abused are psychologically disturbed and its impact last for many years.

The study revealed that there were also NGOs and GOs which were ready to help and support the victims. Perpetrators of incest were seldom jailed. The justice system is too slow to respond to the cases of sexual violence. The children with stepfathers and working mom had greater possibilities of having abused children. Incest cuts across all ethnic religious groups in our society. Incest also shows that children in the Philippines were obedient to parents and were willing to sacrifice themselves than to voice out their secrets. Victims have feelings of isolation and mistrust.

**Keywords**—incest, victims, abusers, violence, perpetrators.

## I. INTRODUCTION

Around the world, violence against women occurs in different forms and degrees. Philippines is no exception. Violence not only harms women physically, it also leaves deep psychological impact on both the victims and their

families. Even their communities and the nation as a whole are affected by violence against women.

Incest which is defined as “the sexual abuse of a child by relative or other person in a position of trust and authority over the child” does not discriminate. It can happen in families that are financially-privileged, as well as those of



low socioeconomic status. It can happen to those of all racial and ethnic descent, and to those of all religious traditions. Victims of incest are boys and girls, infants and adolescents. Incest occurs between fathers and daughters, fathers and sons. Perpetrators of incest can be aunts, uncles, cousins, nieces, nephew, step-parents, step-children, grandparents and grandchildren. In addition, incest offenders can be person without a direct blood or legal relationship to the victim such as a parent's lover or live-in nanny, housekeeper, etc. – as this abuse takes place within the confines of the family and the home environment. It is a violation of the child where he or she lives – literally and metaphorically. A child molested by a stranger can run home for help and comfort. A victim of incest cannot.

Incest cases are increasingly reported in the Philippines. Data from the Department of Social Work and Development (DSWD) reveals the prevalence of incest nationwide. From 2001 to 2013, the number reported incest cases reached 5,678 from 1,908 in 1991. For 2013 alone, the DSWD document 2,789 cases of incest out of the 4,789 reported cases of sexual abuse of children. The top five regions with the most number of reported incest cases are the National Capital Region with 1787 cases, followed by Region IV (987 cases), Region III (589 cases), Region VII (345 cases), and Region V (198 cases).

Available data cover only reported case and is mostly quantitative. Little is known about the profile incest victim, their abusers and the circumstances behind incest.

This study was conducted in order to have an in depth understanding of incestuous activity. Specifically, this study tried to:

1. To analyze the victim and abuser's profile in terms of demographic, economics and educational variables.
2. To analyze the psychological impacts of violence, especially on the lives of the victims as they were still undergoing therapy in the Home for Girls.
3. To analyze the social and physical impacts of sexual violence on the lives of the victims.
4. To determine the causes of this exploitative activities.
5. To determine the status of community awareness to sexual abuses especially on women of young age.
6. To determine the status of social and psychological support being provided for victims of sexual violence.
7. To provide directions for policy and programs formulation for minimizing and redressing sexual violence by all concerned social and legal sectors.

## II. METHODOLOGY

The study used the descriptive research in so far as the existing condition of the sample population is concerned. Data were gathered through survey questionnaires. Guided interviews and observations were also employed

The researchers interviewed 6 victims of incest; all are under the custody of the Department of Social Workers and Development, Home for Girls in Palayan City. Its main function is to provide the basic needs such as shelter, food and education of girls and women of young age who are in one way or another became the victim of child and women abuses. They also give physical, social and psychological therapy to the victims.

## III. RESULTS AND DISCUSSION

### 3.1 Demographic Variables ( Victims )

#### 3.1.1 Age

Victims were of 8-17 years of age. Children and mid-teens were the usual victims of sexual violence.

#### 3.1.2 Ethnicity

Three (3) of the six (6) victims were Tagalog, two (2) were Ilocanos and one from Visayas. Two (2) victims were Iglesia ni Cristo and the remaining four (4) were all Roman catholic.

### Demographic Variables (Abusers)

#### 3.1.3 Age

The age of abusers ranged from 40 to 70 years of age. There were also adolescents' abusers.

#### 3.1.4 Ethnicity

Some abusers were Tagalog, some were Ilocanos and others from the Visayas Region. Iglesia ni Cristo and Roman Catholic were the abuser's religion.

### 3.2 Economic Variables (Victims)

#### 3.2.1 Economic Status

Two (2) of the victims were children of farmers and four (4) belonged to wage laboring families

#### 3.2.2 Education

Two (2) victims were educated up to the secondary level. Another two (2) were in the college level and the remaining two (2) were in the elementary level.

#### 3.2.3 Place of Residence

Some victims were living with their parents, some with step or foster parents and some with grandparents and one with friends before the incident. After the incidents they were all brought to Home for Girls in Palayan City. This

institution served as their shelter while they were undergoing psycho-social therapy.

### **Economics Variables (Abusers)**

#### **3.2.4 Economic Status**

Some of the abusers were farmers and some were laborers. Other abusers were jobless.

#### **3.2.5 Education**

Most of the abusers attained a secondary education. No one earned a college diploma or even stepped in the college level.

### **3.3 About the Incident**

#### **3.3.1 Identity of Perpetrator**

These shocking interviews have revealed the identity of the perpetrator to be the father, grandfather, brother and stepfather. Most of the victims had known the perpetrators from their early childhood and have trusted them implicitly and seen no reason to doubt their behaviors. Some abusers were introduced to the victims after their mother marriages and learned to regard and trust them according to the legal relationship that has existed.

#### **3.3.2 Time**

Most exploitative incident or relationships took place more than three (3) to four (4) years ago. Some incidents took place a year ago. It was mostly at day time when the mother was in her work and some at night time.

#### **3.3.3 Venue of Incident**

All the exploitative incidents occurred in the home of the victim and perpetrator.

#### **3.3.4 Duration of Relationship**

Most of the cases were not just a one-time incident but longer-term abuses.

### **3.4 Willing or Forced Partner's in Crime**

While most of the victims were forced to engage in an incest activity. There were two victims who said they were willing victims but they did not understand how it happened.

### **3.5 Silence and Sharing of the Incident**

In the majority of cases the victims had initially kept quiet about the incident due to a number of complex reasons, including mostly because of fear of social stigma, and shame and fear of the perpetrator. Some of them did not share the incident with anybody because they were threatened into silence. Some of them also mentioned guilt as a reason for keeping silent; as they believed that they were also part of the relationship.

When they finally chose to share the incident most of them reported sharing it with their mothers while others kept

quiet for weeks, months and years and finally shared it with person outside their home. They shared it with neighbors, counselors and to social workers.

### **3.6 Impacts of Incest**

#### **3.6.1 Psychological Impacts**

In the case of incest, more than any form of sexual violence, the victim feels a lot of guilt of having participated, willingly or forcibly, in a sexual relationship with a blood or close relative. The victim or even the willing victim reluctantly harbors a lot of very negative feelings about themselves. Some of these feelings were reported by the respondents as being under stressed most of the time and feeling scared. A number of them felt guilty and blamed them for the incestuous relationship and also suffered sleep disturbances. The majority of them also hated themselves, had frequent mood swings and felt angry. Others also expressed wanting to crust often and not wanting to talk to anybody and being upset very easily. They were plagued by feelings of helplessness and did not respect themselves and even wanted to commit suicide. Some also mentioned they do not want to get marry or even have a normal emotional relationship with anybody. Some also said they could not do anything positive in their lives and would amount to nothing.

#### **3.6.2 Physical Impacts**

Physically the incident had negatively affected the respondents to the extent that most of them hated their bodies and even tried to hurt themselves and some tried to dress unattractively all the time.

#### **3.6.3 Social Impacts**

Due to the incidents the victims also felt socially disadvantaged and complexed. Majority of them felt that their family members blamed them as well as avoided them. Some of them hated going for the social functions, while others didn't even feel like talking to others. They were also plagued by feelings of being treated as social outcast, of others talking about them and blaming them for the incident. They also felt they would not be able to get married. A number of them were forced to leave their home or the community after the incident came out in the open.

### **3.7 Feelings towards Perpetrator**

The negative feelings expressed towards the perpetrator were revulsion, numbness, anger, disgust, pain wanting to kill. These were all definitely feelings.

### **3.8 Response of Family and Community**

Majority of the victims said that the community were angry with the perpetrator and shared their disapproval

with the incident but most of their families were unproductive to them. Their families were angry with them and blamed them for the incident.

### 3.9 Reaction of Friends

The responses of the victims' friends were similar to the response of the community. They also showed anger to with the perpetrator. But there was also one victim who did not know what her friends thought of her.

### 3.10 Law Enforcement

Reporting personally to law agencies was found to be low as can be expected in crimes of this nature. Somebody told the law enforcement of what happened other than the victim herself.

### 3.11 Social Support

There were NGOs and GOs who were ready to give help to the victims of these cases.

## IV. CONCLUSIONS

4.1 Sexual exploitation of young girls and women is a chilling but now a common occurrence in the Philippine society. Most of the victims were barely out of their childhood.

4.2 Most victims were seen to belong to low-class families.

4.3 All victims of sexual violence were psychologically disturbed and lived under a lot of tension and stress. The negative impacts of sexual violence lasted for many years.

4.4. The cases only revealed that not at all times the family remained the strongest institution to provide help like most of us believed. Luckily there were NGOs and GOs which were ready to help and support victims of these cases.

4.5 In cases of incest action was taken by the family against the perpetrator however this action was not necessarily legal action.

4.6 Perpetrators of incest were seldom jailed.

4.7 The criminal justice system was slow to respond to cases of sexual violence.

4.8 The government system is yet to acknowledge the psychological needs of victims of sexual violence as an issue.

4.9 Violence against women in the form of incest undermines the function of the family. Particularly the family's role in providing shelter, protection and nurturing its members was threatened by violence inside the home.

4.10 Working mothers have a greater possibility of having abused children.

4.11 Children with stepfathers were more prone to exploitative activity such as incest.

4.12 Sexually molested women lost interest in education thus leading to economic lost to society in the long run.

4.13 Incest cut across all ethnic and religious groups in our society.

4.14 Incest showed that children of our society were obedient to parents and would avoid scandal in any way they could even to sacrifice themselves.

4.15 In our culture which placed great importance on female virginity (Equating it with purity, virtue and honor) the trauma of an abused girl is aggravated by a sense of worthlessness.

4.16 Female incest victims felt abandoned by their mothers and emotionally abandoned by both parents, and they developed negative images about themselves and their mothers. They also had interpersonal problems of feeling isolated and mistrust men.

4.17 What the victims felt to their perpetrator were feelings that no normal human being could live with every day of their lives. Given the young age of the victims could only be assumed that the normal and healthy overall chance for growth of these children had been negated by this one incident.

## V. RECOMMENDATION

### 5.1 Strategy for Awareness Creation

This study clearly highlighted the need to create awareness about this form of violence against women. If parents, guardians and potential victims knew what the danger signs were many of them would not fall prey to incest.

The strategy for awareness creation would have to constitute of messages and programs suited to people at all levels and from all walks of life. Both traditional and mass media will have to be utilized to address audiences such as youth, especially young girls who are most victimized. Parents, guardians, teachers, politicians and policy makers also need to be sensitive gender discriminations and gender violence. This study strongly recommends an awareness program in school and campuses. There is a clear need for messages to be in different dialects and languages in order to reach a larger audience.

### 5.2 Advocacy For Victims Support

Besides creating awareness about this form of violence at the national level, it would be extremely important to sensitize and advocate at the policy level to provide support services for victims. Similarly, advocacy is

required to address gaps in the law as well as to effectively enforce existing laws. Advocacy is also required to lobby with human rights groups and politicians to include this issue on their agenda. Advocacy will be required in the police force to enable more sensitive handling of cases.

### 5.3 More Effective Law Enforcement

The process of law enforcement needs to be improved is obvious. The Findings of this Study points towards the need to expand the services of the police in different districts of the country.

### 5.4 Establishing Support Services

The creation of more NGOs and GOs is needed to cater the different needs of the victims which they do not found in their respective families. Local government funds should be tapped to create support services.

### 5.5 Mobilizing Communities and Networking to prevent Violence

The study indicates the need to create sentinel systems to empower members of the community to prevent and deal with such cases of violence within the community. In this case again the community has proved to be an effective intermediary institution to deal with cases of violence against girls. To make these sentinel systems more effective a networking mechanism should be created. The network would be useful in expediting justice and in providing broader social support and acceptance to victims.

### 5.6 Empowerment of Women and Girls

A longer-term strategy is essential for the overall empowerment of girls and women. The need to develop self-esteem and confidence as well as economic independence forms the very basis of preventing the victimization of girls and women. Making education compulsory up to the high school level would allow girls to make choices about their lives. This ability to make choices would ultimately empower them and prevent their victimization. Thus, it is recommended that the government pursue the policy of free and compulsory education for all. It is also recommended that all development programs regardless of the sector they are operating in must compulsorily be required to conduct training on self-esteem, building leadership, human and legal rights training for women and girls as well as training on awareness building on the issue of violence against women and girls.

### 5.7 Entry-Level Programs and Partnerships

As it is not possible for total outsiders to enter any community and directly address such sensitive issue it is recommended that entry-level programs be initiated to

build rapport and trust with local communities. The other strategy recommended is to establish partnership with groups already working in different communities.

### 5.9 Gender Sensitization

Messages to create a more equal society must also be delivered to mass media. School curricula should also address this crosscutting dimension of discrimination and address it from both the male and female points of view to initiate positive change.

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