

Resiliency of Microenterprises amidst Pandemic in Davao Del Sur Philippines

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Abstract: COVID-19 has created an unprecedented crisis for microenterprises and challenged each single enterprise to reconsider its business operations and to adapt to the new unexpected circumstances. The foremost objective of this study was to determine the business resiliency of micro enterprises in Davao del Sur Philippines during Covid-19 pandemic. A descriptive-correlational design was employed with 100 purposively chosen microenterprises. Data were analyzed using frequency, relative frequency distribution and Pearson Product Moment correlation. Data revealed that majority of microenterprises were operating for not less than three (3) years, employing 1-3 workers and earning more than Php 20,000.00 monthly. Moreover, the most influencing factor of resiliency in microenterprises amidst pandemic is entrepreneurial characteristics. Furthermore, entrepreneurial characteristics, utilization of technology, government support and crisis management showed significant relationship towards business resiliency among microenterprises.

Keyword: Business resiliency, COVID-19 pandemic, Microenterprises

I. Introduction

At more than six months after the COVID-19 pandemic hit the world many businesses across the globe are being forced to close their operations, while others are struggling to continue operating their business due to constraint in markets and supply chains (Eurostat, 2020; ILO, 2020; OECD, 2020). As the dynamics of the pandemic continue and therefore the current crisis is prolonged quite more than expected, physical distancing measures remain necessary. Other factors influencing resiliency is to be reinforced to help micro-enterprises cope better and in a sustainable aspect with the disruption caused by the pandemic.

In reaction to the spread of the pandemic, the Filipino government declared a state of calamity on 16 March 2020 and enforced the enhanced community quarantine (ECQ) beyond across the whole of Luzon Island (Proclamation No. 929, s. 2020). With businesses shut down – except for those that provide food, healthcare, banking or business process outsourcing services, or export-oriented industries – many micro-businesses were put in dire straits. Moreover, since microenterprises are financially fragile, smaller in size and resources, they are more vulnerable to the environmental crisis than their counterparts, i.e. large enterprises (Asgary et al., 2020; Bartik et al., 2020; Eggers, 2020; Prasad et al., 2015; Samantha, 2018; Williams & Schaefer, 2013).

Enterprises all over Davao del Sur Philippines are experiencing workforce and operations disruption at an unprecedented scale and speed. Companies, particularly micro-enterprises, need continuous support for establishing prevention strategies to better deal with the effects of the pandemic. Hence, the study aims to explore the factors influencing resiliency of micro enterprises in the province in dealing with this pandemic and which among these factors mostly influence resiliency.

II. Objectives of the study

This study was conducted to explore the resiliency of micro enterprises in Davao del Sur Philippines that can be considered to effectively deal with the disruption caused by the pandemic.

Specifically this study aimed to:

2.1 Determine the business profile of micro entrepreneurs.

2.2 Determine the level of factors influencing resiliency in terms of:

- a. Entrepreneurial Characteristics
- b. Utilization of Technology
- c. Government Support
- d. Crisis Management

2.3 Determine the business resiliency of microenterprises amidst pandemic.

2.4 Determine the relationship among entrepreneurial characteristics, utilization of technology, government support, crisis management and business resiliency of microenterprises amidst pandemic.

III. Review of Related Literature

Crisis is a threatening remark on a company's perseverance and performance (Boin, 2009; Comfort, 2002; Gruber, Sutcliffe, Shepherd, Williams; Zhao, 2017). Correspondingly, COVID-19 which is currently taking place, has transformed into an existing threat and denouncement to the commercial sector, affecting not only forceful regions but all entrepreneurs worldwide. Currently scientists, academic researchers and all social observers are working hard to be able to provide elucidation in order to pass the crisis with commendable anticipation so that the impact can be controlled. One of these efforts is to find out what can be done by business owners in facing the current crisis and have it as a guide in dealing with crisis in the future time (Kuckertz et al., 2020). It also can be a guideline dealing with similar crisis in the future. It becomes very momentous for us to know what factors actually affect business resilience especially for micro business sector. These can be used as an illustration to draw conclusion which is beneficial in developing business resilience as presentiment in confronting a crisis.

3.1 Entrepreneurial Characteristic

During a pandemic, these entrepreneurial characteristics become one of the most important advantages for entrepreneurs to overcome the problems they experience in order to keep working and survive. Entrepreneurial toughness is highly dependent on entrepreneurial spirit that is reflected in individual characteristics. The durability of an individual's character will be a deciding factor in an entrepreneur's success. (Fisher, Maritz, & Lobo, 2016; Wong, Cheung, & Venuvinod, 2005; (Kozubikova, Belas, Bilan, 2015; Barazandeh, Parvizian, Alizadeh & Khosravi, 2015). Individual traits will be the most important investment in entrepreneurial competence that someone can make in improving and keeping a firm in any situation (Sánchez, 2012; Ahmed, Kar & Ahmed, 2018).

According to Kasali (2010), one of the unique sources owned by a micro scale company is the personality value of an entrepreneur which immanent attached in a person who is the leader of a company. Generally, the value of running a business is the value of entrepreneurship. Echdar (2013), explained that entrepreneurs a creative and innovative ability that is applied as a basis and resources to find opportunities for success.

The effectiveness of entrepreneurial traits performed in business highly reckon upon on the situation and conditions experienced by entrepreneurs in their business operations. It is essential responsiveness of entrepreneurs to remain survive within these constraints during the spread of COVID-19 which led to lockdown and physical distancing.

3.2 Utilization of Technology

One of technology utilization in business is the employ of digital marketing as a way to market products or services using mobile devices. Digital marketing is one of the precise and adequate ways to reach more consumers in a timely, personal, and relevant manner because all processes carried out can be measured and targeted according to the target audience. Basically, the use of technology in business is one of ways to manage good relationships with consumer that is profitable and to accommodate customer comfort (Kim, Pae, Han, & Srivastava, 2010).

During crisis followed by lockdown policies, social distancing and personal distancing as it is now is requiring entrepreneurs to expeditiously adapt with this condition. The restricted situation influences critical changes in consumer behavior trends in shopping where they were used to make purchases traditionally or offline now, they turn to do online shopping. Those things certainly alter to challenge and opportunity that must be addressed properly. Because of the quick and personal service, social media commerce has shown to be a great medium for increasing client awareness and happiness (Yang & Kankanhalli, 2014).

When it comes to markets, it's typical to believe that they're static, which is a sensible assumption considering how slowly they improve. If the COVID-19 pandemic has taught us anything, it's that markets are dynamic (Jaworski, Kohli, & Sahay, 2000) and can suddenly shift course. Furthermore, a market is more than just a business; it is a network of actors (businesses, customers, and government agencies) who follow a set of rules. Because of their ability to produce value, these systems are also referred to as dynamic ecosystems (Vargo & Lusch, 2011). The COVID-19 outbreak offers a once-in-a-lifetime chance to study how markets arise and disappear over time. It'll also be interesting to see if the demise of one market solution is followed by the rise of a new one (e.g., combustion engines for electric or physical teaching for online teaching).

3.3 Government Support

The outbreak of COVID 19 shocked all parties and greatly implicated politics and economy of the world nowadays. The most concerned with this was the government who owned the interest in protecting the national economy in general and society in particular. Most of the policy initiatives taken by the government were to foster economic during crisis of COVID-19. The policy targeted the resilience of company, the existing industrial sector and broader economic interests. Those economic rescue measures aimed at ensuring the stability of working conditions and productivity, as well as the continuance of economic activities, which is critical for the people's security (Kuckertz et al., 2020).

The presence of state in overcoming crises is indispensable. It has become one of research trends during this pandemic period besides matter of contention of crisis management in the business world that addressed the issue of business resilience (Doern, Williams, & Vorley, 2019). Research mainstream of policy making tends to see what policies are made by the government in effort to maintain the survival of business world during crisis (Alesch, Arendt, & Holly, 2009) as well as an in-depth analysis of what obstruction existed (Runyan, 2006).

3.4 Business Resiliency

In recent years, the idea of resilience has developed as a significant and desirable attribute for manufacturing companies. The vulnerability/capacity of a corporation to survive and adapt, manage crises, resist, decline, and respond to opportunities is characterized as resilience (Valikangas, 2010).

Typically, microenterprises on the whole are unprepared to deal with impulsive interruptions. If these enterprises are significantly harmed by the uncertainty, they must build resiliency in order to re-establish themselves. Developing such potential can assist MSMEs in surviving calamities (Prasad et al., 2015). Micro businesses with better resilient capacities can not only bear and absorb the effects of environmental disruptions, but also respond more effectively to disruptions and adapt even under difficult circumstances (Lengnick-Hall & Beck, 2005).

Nevertheless, it is quite fair that enterprises around the globe are experiencing the compelling impact of COVID-19 outbreak on their businesses. We argue that major victims of COVID-19 outbreak are the micro, small & medium-sized enterprises (MSMEs) because MSMEs, in contrast to large enterprises, usually do not possess sufficient resources, specifically financial and managerial, and are not well equipped for such disruptions likely to go protracted than expected (Bartik et al., 2020; Prasad et al., 2015). Additionally, these firms are highly reliant on their routine business transactions and a small number of customers (Williams & Schaefer, 2013).

IV. Method

This study employed descriptive-correlational research design and was conducted in Davao del Sur Philippines, particularly the food manufacturing micro enterprises. This sector was chosen considering that Microenterprise is one highly affected from the outbreak of COVID-19. Purposive sampling technique was used in getting the respondents, with limitation on microenterprise, which had been operating for over 3 years even before the pandemic. Moreover, results were analyzed using relative frequency distribution, mean, and Pearson-Product Moment correlation.

Since the survey was conducted during pandemic time, minimum health standards such as wearing of face mask, face shield and physical distancing were observed during the gathering of data.

V. Results

The analyses and interpretations of the findings were based on the statistical treatments undertaken in this study. The discussions of the topics are comprehensively presented in the following headings: Business Profile of the Respondents in terms of Number of years in Business, Number of Employees and Monthly income; Micro Enterprises Resiliency Amidst Pandemic in terms of Entrepreneurial Characteristics, Utilization of Technology, Government Support and Crisis Management; Resiliency of Micro Enterprises amidst pandemic; and the relationship among entrepreneurial characteristics, utilization of technology, government support, crisis management and business resiliency. Tables are presented to support the discussion.

5.1 Demographic Profile of the Respondents

Number of Years in Business

To measure the respondents’ business profile in terms of number of years in business, the frequency and relative frequency distribution were used. The results are presented in Table 1.1.

Table 1.1 Business Profile of the Respondents in terms of Number of years in Business, May 2021.

	Frequency	Relative Frequency (%)
Less than 3 years	45	45.0
4-8 years	30	30.0
9-13 years	22	22.0
14 years and above	3	3.0
Total	100	100.0

Demographically, Table 1.1 presents the years in business profile of microenterprises in Davao del Sur. This illustrates the composition of microenterprises in Davao del Sur were dominated in the range of not less than three (3) years in business with (45.0%).

In addition, majority of food manufacturing micro enterprises are refreshment or Snack houses and bakeshops followed by carinderia or turo-turo exists for not less than three (3) years in business up to the present situation where covid-19 exist. Since before covid-19 outbreak base on a short interview from these food manufacturing microenterprises they engaged in this particular type of business since they believed that food is a basic need people buy food all the time and fortunately they continued to exist even amidst pandemic.

Data further imply that before the hit of covid-19 outbreak many enterprises were starting their business and have been operating for not less than three (3) years already. These micro businesses are weak and reliant on their daily earnings. As a result, they are financially insecure, have fewer resources, and are more exposed to environmental crises than their counterparts, according to (Eggers, 2020).

Number of Employees

To measure the respondents’ business profile in terms of number of employees, the frequency and relative frequency distribution were used. The results are presented in Table 1.2.

Table 1.2 Business Profile of the Respondents in terms of number of employees, May 2021.

	Frequency	Relative Frequency (%)
3 and below	81	81.0
4-6	15	15.0
7-9	4	4.0
Total	100	100.0

Table 1.2 shows the business profile in terms of their number of employees. As presented in the table, majority of the respondents were dominated in the range of three (3) and below number of employees with (81.0%). Furthermore, the data revealed that the microenterprises which continue operating their business amidst pandemic they have smallest number of employees. It is expected that these microenterprises consider the new normal setting of physical distancing. In fact, Shinozaki (2021) had pointed out in his article that business and number of employees conditions differ by firm size, but microenterprises are evolving under a new normal that requires a more contactless society.

In addition, most of micro enterprises who have three (3) and below number of employees are dried fish retailer stalls, carinderia or turo-turo and refreshments/snacks houses. Base on the short interview during the conduct of the study those microenterprises food manufacturing aforementioned above that they can operate their business even in a small number of employees. Aside from abiding the physical distancing protocols they also abide the no dine-in policy which brought them to a necessity to lay off some employees since it added to their expenses. Since the protocols were imposed it gave a major negative impact unto them when it comes to daily income because dine-in consumers are one of their key sources of revenue.

Lakshman et al., (2021) supported the result of the study and said microenterprises began laying off employees at a relatively early stage to survive especially in manufacturing and services. The larger number of employees, the more funds needed for expenses to be paid for employees. Microenterprises reduced their employees working hours. Work-from-home was not a preferred option for many MSMEs in maintaining physical distancing. Micro enterprises had much more difficulty in introducing this arrangement.

Monthly Income

To establish the respondents’ demographic profile in terms of monthly income, the frequency and relative frequency distribution were used. The results are presented in Table 1.3.

Table 1.3. Demographic Profile of the Respondents in terms of Monthly Income, May 2021.

	Frequency	Relative Frequency (%)
5,000 and below	31	31.0
5,001-10,000	7	7.0
10,001-15,000	4	4.0
15,001-20,000	17	17.0
20,001 and above	41	41.0
Total	100	100.0

Table 1.3 shows the business profile in terms of monthly business income. As presented in the table, data imply that majority of the micro enterprises had an income in the range of 20,001 and above with of 81.0%. This further means that microenterprises income earners are motivated to pursue business operations despite the disruptions of COVID-19 pandemic.

In addition, most of food manufacturing microenterprises earning a monthly income of 20,001 and above are meatshops and bakeshops. Based on the observation and short interview during the conduct of the study microenterprises are one of the affected of the outbreak of covid-19. But they continue operating their businesses amidst pandemic particularly the meatshops since food is one of the basic needs.

According to Proclamation No. 929, s. 2020, the Philippine government proclaimed a state of calamity in March 2020 and implemented extended community quarantine (ECQ) beyond the border, closing all businesses except those that provide food and other essentials. Since meat shop microenterprises provide food for the people they have been able to operate their businesses till now. They are confronted with new normal circumstances, which provide challenges in terms of how to advertise their product and how to remain robust in the face of a pandemic while adhering to health-care regulations. Moreover based on their statement that they believed that “crisis brought by covid-19 is just a temporary challenges that need to be face for survival and a businessman must possess a fighting spirit to overcome” (

ang crisis usa lamang ka hagit sa kinabuhi sa mga negosyante ug sa tanan apan kinahanglan ni atubangon kay unsa na lng ang ka-onon? Ug ang usa ka negosyante dapat nay kaikag na mopadayon bisan pag lisod para lng makalingkawas).

5.2 Level of Factors Influencing Resiliency of Microenterprises Amidst Pandemic in terms of Entrepreneurial Characteristics.

Entrepreneurial Characteristics

To establish the respondents’ level of factors influencing resiliency in terms of entrepreneurial characteristics, mean score was used. The results are presented in Table 2.1.

Table 2.1. Level of Factors Influencing Resilience in terms of Entrepreneurial Characteristics, May 2021.

Factors	Mean	Description
1. The micro enterprise puts extra effort in maintaining business amidst pandemic.	4.76	Very High
2. Tries to always pay attention to customer willingness and expectations in business including understanding consumers during crisis.	4.84	Very High
3. Innovation and Creativity. Maintains the existence of business innovation and Creativity to meet customer expectations even during crisis.	4.17	High
4. Sustainability. In dealing with crisis are reflected in the willingness to continue to stay survive in running the business.	4.60	Very High
5. Desire. Future goals maintained for success amidst pandemic.	4.50	Very High
6. Strive. Tireless struggles with no surrender during crisis.	4.11	High
7. Endeavour. Always work hard to stay exist even crisis	4.44	Very High
8. Customers Innovation. Always oriented to fulfill customer’s needs, desire and expectations amidst pandemic.	4.15	High
Overall	4.45	Very High

Table shows the level of factors influencing resilience in terms of entrepreneurial characteristics of micro enterprises in Davao del Sur. It shows that respondents obtained a description of very high for the following statements, “The micro enterprise puts extra effort in maintaining business amidst pandemic,” with a mean of 4.76; “Tries to always pay attention to customer willingness and expectations in business with a mean of 4.84; “Sustainability; In dealing with crisis are reflected in the willingness to continue to stay survive in running the business with a mean of 4.60; “Desire. Future goals maintained for success amidst pandemic with a mean of 4.50 and lastly “Endeavour. Always work hard to stay exist even crisis,” a mean of 4.44.

As a whole, the microenterprises obtained an overall mean of 4.45, which means that generally the level of factors influencing resiliency of microenterprises amidst pandemic in terms of entrepreneurial characteristics is described as very high. This means that the respondents strongly favor the statement in all cases. They strongly agree that to possess entrepreneurial characteristics help them to overcome crisis brought by the covid-19 pandemic.

The result imply, most of the types of food manufacturing micro enterprises that are strongly favor the personal resilience which is manifested in entrepreneurial characteristics possessed by micro business sector becomes very important factor in managing a business amidst pandemic specifically the micro enterprises are the meat shop vendors

and carideria or turo-turo. Based on the result of the study they were able to operate their business transactions amidst pandemic while putting an extra effort in maintaining business considering the new normal settings and health standard protocols. In dealing with crisis they were still willing to operate their business and the goals are maintained with no surrendering desire as well considering the needs and expectations of their customers amidst pandemic. They exert more effort to open as early rather than before the disruptions of covid-19 since curfew were imposed by the government and they were obliged to close earlier.

Moreover, based on the short interview during the conduct of the study that micro enterprises are eager to search for the best offer to their customers. Since, as they believed that as long as they live they will survive in this crisis. Just like the turo-turo vendors they were providing new varieties of viands to target customers. Also with the imposition of no-dine policy, they have adapted and adjusted. They have new set of strategies being offered such us, shorts orders, food packages like family meals, solo meals or group meals for take-away or tale out.

Further, just like the meat shop vendors since when ASF was one of the challenges of meat shop vendors before, which incorporated with the crisis brought by covid-19 the prices of meat increased and this was an indication that may their customers cannot afford since everyone is very affected of this pandemic which leads to crisis. However meatshops are looking forward to the needs of their customers and creating new strategies which suits to the market. Specifically, they offer a pre canvas from their target customers before they display it in the market so that there will be no too much excess of supply which they consider as stress and possibly will be a loss to their business. Because in this pandemic it was not good to their business to have a surplus of supply of their products aside from prices are high they consider also the level of demand in the market. On the other hand meat shops came up with a strategy that since the prices are higher than before they offer extra effort for free delivery services to their customers in maintaining business amidst pandemic. And by means of that they were be able to slowly survive up to the present having the spirit of entrepreneurial characteristics which drove them to maintained goals for success amidst pandemic.

Additionally, these results explain the facts on the field that in pandemic condition that changes the normal business management, personal resilience which is manifested in entrepreneurial attitude possessed by a businessman becomes very important factor in managing a business.

This is in line with the theory from (Kasali, 2010) which stated that a businessman who has strong personality will be able to overcome the problems he faces with a mature entrepreneurial spirit.

Moreover, maintaining communication with your entrepreneurial ecosystem is critical. According to research maintaining a positive entrepreneurship ecosystem culture, which includes entrepreneurial mindsets, supports better levels of creativity and innovation(Liguori, Bendickson, Solomon, & McDowell, 2019; Martins & Terblanche, 2003). Finally, at the start of this pandemic, a book was produced that provided guidelines for managing the risks connected with microbusiness decisions. It was claimed that becoming a successful entrepreneur requires taking risks –the question has always been which risks to take and when to take them (Pittz & Liguori, 2020).

Utilization of Technology

To establish the respondents' level of factors influencing resiliency in terms of utilization of technology, mean score was used. The results are presented in Table 2.2.

Table 2.2. Level of Factors Influencing Resilience in terms of Utilization of technology, May 2021.

Indicator	Mean	Description
The micro enterprise highly utilized social media marketing during crisis than in normal situations.	3.57	High
Enhances the features and content of the product during crisis.	4.15	High
Observes that consumers are more intensive in using online purchasing during crisis than during normal condition.	3.09	Moderate
Overall	3.60	High

Table 2.2 shows the level of factors influencing resilience of micro enterprises amidst pandemic in terms of utilization of technology in Davao del Sur. It shows that respondents obtained a description of moderate for the statement, "Observes that consumers are more intensive in using online purchasing during crisis than during normal condition" with a mean of 3.09, which means that the respondent is neither undecided nor agree to the statement which means that the respondents resiliency is moderate. As a whole, it shows that the respondents obtained an overall mean of 3.60, which means that generally the level of factors influencing resiliency of micro enterprises amidst pandemic in terms of utilization of technology is described as high. This means that the respondents favor the statement in majority of all cases.

Additionally, most of food manufacturing microenterprises that are resilient in utilizing technology in maintaining business operations through online services are refreshment or snacks vendors. Based on the findings of the study and short interview from refreshment or snack vendors since physical distancing, no dine-in policy and curfew were imposed the micro enterprises are trying to survive amidst pandemic while embracing the new normal settings of business operations. Since microenterprises need to adopt the unexpected changes the refreshment or snack vendors indulge to online services to their customers utilizing the technology or social media marketing than normal situations. The micro enterprises strategize their product and services to their customers by means of having online orders with free delivery services, posting weekly updates for promos and freebies of their products and services, using Tiktok application for customer's competition featuring their products for advertisement purposes, using Facebook live for raffle draw who purchase their products so that many of their customers would tend to buy to avail the free raffle draw with different prizes and posting in social media for the products that are available and new to the eyes of their customers. By means of this utilization of technology in this modern world with disruptions of pandemic refreshment or snack vendors and other micro enterprises who also utilize technology slowly survive amidst crisis. In this pandemic some of their customers also were intensive in using online purchasing during pandemic than during normal condition.

On the other hand, there were other micro enterprises which did not use social media marketing and online transactions amidst pandemic as they operate their business. Those micro enterprises are the carinderia or turo-turo and dried fish retailer stalls. According to the Microenterprises that they do not know how to use social media since they were old and they were not that techno savvy and it added also to their expenses when it comes to load for data usage or Wi-Fi. Additionally it was a time consuming to their side to exert time to edit captions, pictures for an update on a certain page or channel what particular social media they're indulge instead of spending time on that they said they focus on how they can improve their products and how they will meet customers' expectations.

This expanded the idea of Khan (2020) according to the report restaurants, fast food vendors, bakeries, food manufacturing businesses, shopping malls, grocery stores, and other related industries should focus on providing online ordering services with home deliveries to reduce business losses and maintain social distance to the greatest extent possible. This is an opportunity that related businesses can take advantage of. Local establishments can also order food for COVID-19-fighting health and community workers to help them stay afloat throughout the on-going crisis. If there's one thing that microbusiness owners can get excited about, it's the fact that the technology has democratized the marketplace and provided a slew of new avenues to communicate with consumers. Online business channels offer once-in-a-lifetime opportunity to re-energize the search for product-market suits and innovative business models that can survive and prosper in a world touched by COVID-19. According to (Kim, Pae, Han, and Srivastava, 2010), digital marketing is one of the precise and adequate ways to reach more consumers in a timely, personal, and relevant manner because all processes carried out can be measured and targeted according to the target audience. Basically, the use of technology in business is one of ways to manage good relationships with consumer that is profitable and to accommodate customer comfort. Furthermore, micro businesses adapted their operations not only in response to these constraints, but also as consumers reduced their spending (Farrell et al., 2020) and moved some of it online (Farrell et al., 2020). However, according to Latief and Nianty (2020), utilization of technology has proven to have no effect on crisis. The use of virtual business such as the use of social media marketing and online shopping is indeed dominantly appear during this pandemic. Actually it has been adopted by MSMEs long before the pandemic outbreak thus it is not a new thing even though the intensity has increased. It is considered as habitual and normal inverse that commonly used before the disruptions of COVID-19.

Government Support

To establish the respondents’ level of factors influencing resiliency in terms of government support, mean score was used. The results are presented in Table 2.3.

Table 2.3. Level of Factors Influencing Resilience in terms of Government Support, May 2021.

Indicator	Mean	Description
During crisis period, the micro enterprises from government receive great supports to business.	2.32	Low
Receive assistance consisting of deferral of credit payments and deferral of tax payments which greatly helped cash flow management during crisis.	3.18	Moderate
Regulations and policies issued by the government in handling covid-19 pandemic are still within reasonable limits and are acceptable to the business world.	3.61	Moderate
Overall	3.04	Moderate

Table 2.3 shows the level of factors influencing resilience of micro enterprises amidst pandemic in terms of government support in Davao del Sur. It shows that respondents obtained a mean of 2.32 for the statement, “During crisis period, the micro enterprises from government receive great supports to business,” which is described as low. The results also show that because micro businesses do not receive financial assistance from the government, they have to rely on other types of assistance from the government, such as deferral of rental, credit, and tax payments, as well as setting policies and putting action plans in place that contain limitations (i.e. country lockdowns, temporary closure of physical operations of businesses) to prevent the spread of disease. These limitations have ramifications for businesses' long-term operations, including the curtailment of commercial activity.

Additionally, most of food manufacturing micro enterprises are affected of this so called covid-19 pandemic. Specifically the focus of the study are food manufacturing micro enterprises like meatshops, bakeshops, refreshment or snack house, dried fish retailer stalls and carinderia or tuo-turo. Based on the findings of the study, most of the microenterprises were affected by the policies and protocols imposed by the government since it changes the normal operations and transactions of their business. Commonly those regulations and policies are the wearing of face mask, face shield, one meter physical distancing, curfew, no dine-in policy and many to mention. However the government was just considering the common good of the people. Hence, based on the findings of the study and short interview with some microenterprises, the policies and regulations issued by the government in handling COVID-19 pandemic were still within reasonable limits and are acceptable to the business world but some of microenterprises were greatly affected by these regulations and consider those protocols were too much which bring them to crisis.

On the other hand there are some food manufacturing microenterprises received government assistance consisting of deferral of credit payments, deferral of stall rental for one month and deferral of tax payments which greatly helped them with cash flow management during crisis. Those microenterprises which benefited by the government assistance are the meatshops, carinderia or tuo-turo, refreshment or snack houses and dried fish retailer stalls. Moreover, according to the carinderia or tuo-turo microenterprises that the deferral of rental payments helped them a lot to cope up with business losses. And at the same time some of meat shop vendors and refreshment and snack vendors were thankful for the deferral of credit payments and tax which helped them to survive amidst pandemic.

According to [Bartik et al. \(2020\)](#) micro enterprises have also experience government support in the form of relaxation of credit as a legal protection for small and medium entrepreneurs to propose payment delays, debt rescheduling and suspension of tax payments becomes an basis that at least relieve them in managing cash flow Support from government is needed by micro enterprises, especially in overcoming financial problems and working capital.

Further, this result of the study substantiates the study of Liguori (2019) which pointed out that in order to keep their businesses afloat, microbusiness owners should invest enough time to evaluating the viability of government rescue initiatives but finding new clients and new growth prospects is the best risk reduction strategy and reinvigoration.

Crisis Management

To establish the respondents’ level of factors influencing resiliency in terms of crisis management, mean score was used. The results are presented in Table 2.4.

Table 2.4 Level of Factors Influencing Resilience in terms of Management, May 2021. **Crisis**

Indicator	Mean	Description
In facing the crisis, we have made careful planning which was adjusted to internal and external factors.	4.06	High
In facing crisis we have taken into account the revision of supply arrangement and demand patterns as we are trying to adjust to these changes.	3.79	High
In dealing with crisis we have determined the most important anticipatory steps in managing the effective and efficient use of resources.	3.79	High
Overall	3.88	High

Table 2.4 shows the level of factors influencing resilience of micro enterprises amidst pandemic in terms of crisis management in Davao del Sur. Generally, the microenterprises obtained an overall mean of 3.88, which means that the level of factors influencing resiliency of micro enterprises amidst pandemic in terms of crisis management is described as high. This means that that the respondents favor the statement in majority of all cases.

In addition, most of food manufacturing micro enterprises were affected by the hit of covid-19 which leads them to crisis. However, there are some micro enterprises which are good in crisis management such as bakeshops and meatshops. Based on the findings of the study and short interview from bakeshop micro enterprises that in facing the crisis according to them they have made a careful planning and they adjusted from internal and external factors of their business. Just like the revision of their supply to the market and changing the anticipation of demand patterns by their customers. Since they consider that they were not just entrepreneurs who were affected by the crisis but also their customers so they take into account to adjust the level of supply and demand in the market and came up with the adjustment of prices and number of manufactured products every day particularly, bakeshop micro enterprises.

Moreover, in dealing with crisis meat shop vendors have determined the anticipatory in managing resources in effective and efficient way. As they operate their business everyday they consider that maybe today or tomorrow crisis will be triggered and they must be prepare what would be there steps in facing another crisis.

The study's findings backed up the findings of several authors (Gittell et al., 2006; Prasad et al., 2015), In order to deal with a similar calamity in the future, microenterprises must put resources into developing a solid crisis management strategy. The most crucial anticipatory steps in managing effective and efficient planning must have been determined when dealing with a crisis. Also, Horneffer et al., (2020) according to a study done by the Harvard Global Health Institute on corporate involvement in global health, Fortune 500 businesses are less involved in global health than they are in environmental issues. This demonstrates that the majority of businesses around the world are unprepared to deal with a pandemic-related health disaster. Natural disasters have wreaked havoc on national and global economies on numerous occasions. As a result, preplanning and readiness are critical in the event of future pandemics or other natural catastrophes.

5.3 Summary on the Level of Factors Influencing Resilience of Micro Enterprises in Davao del Sur

Table 2.5 shows the summary on the level of factors influencing resiliency of micro enterprises amidst pandemic in terms of entrepreneurial characteristics, utilization of technology, government support and crisis management in Davao del Sur. Summarizing all the numerical figures in the table, the overall it obtained a high level of factors influencing resilience in terms of entrepreneurial characteristics, utilization of technology, government support and crisis management. This means that the factors influencing resiliency help them to pursue the operation of their business transactions amidst pandemic.

Table 2.5. Summary on the Level of Factors Influencing Resilience of Micro Enterprises in Davao del Sur, May 2021.

	Mean	Description
Entrepreneurial Characteristics	4.45	Very High
Utilization of Technology	3.60	High
Government Support	3.04	Moderate
Crisis Management	3.88	High
Overall	3.74	High

Moreover, the findings of the study presents that among the following factors influencing resiliency of micro enterprises amidst pandemic entrepreneurial characteristics has the very high mean of 4.45. This means that among the factors influencing resiliency entrepreneurial characteristics greatly influence resilience of microenterprises amidst pandemic in Davao del Sur.

In addition, based on the result of the study that to possess entrepreneurial characteristics amidst pandemic helped microenterprises to survive. This is an indication that in business world having a strong entrepreneurial spirit is important in facing uncertainties never surrendering characteristics to survive in running a business. These results explain that in pandemic condition that changes the normal business settings, personal resilience which is manifested in entrepreneurial characteristics possessed by a businessman becomes very important factor in managing a business.

5.4 Level Business Resilience of Micro Enterprises Amidst Pandemic

To establish the respondents’ resiliency amidst pandemic, mean score was employed.

The results are presented in Table 3.

Table 3. Level of Business Resilience of Micro enterprises Amidst Pandemic May, 2021.

Indicator	Mean	Description
During crisis we still run our business as usual.	4.57	Very High
The revenue we received did not change, significant changes and still fair when the crisis occurred.	2.66	Moderate
We will continue to run our business because crisis is a thing not to be avoided but it is a challenge that should be faced.	4.19	High
Overall	3.81	High

Table 3 establishes the resilience of micro enterprises amidst pandemic in Davao del Sur. As a whole, the micro enterprises obtained an overall mean of 3.81, which means that generally the resilience of micro enterprises amidst pandemic means that the respondents favor the statement in majority of all cases. Respondents agree that building business resilience has long been regarded as a critical business choice that aids in combating the interruptions caused by the COVID-19 outbreak.

Additionally, based on the result of the study and a short interview that there were food manufacturing micro enterprises which are resilient during the hit of the outbreak covid-19, those micro enterprises are meatshops and carinderia or turo-turo. These micro enterprises during crisis they were still able to operate their business as usual by means of maintaining their business goals basically to earn profit. According to carinderia or turo-turo and meatshops they find that crisis brought by pandemic was so hard, but to give up was not their option since their business life depends on their daily income. They believed that crisis is something that cannot be avoided but need to be faced head on and a challenge for them to be more resilient to survive from the crisis. The same time, by means of their technique and strategies, their businesses survive amidst pandemic by embracing challenging situations and adjust to the new normal setting that the world offered.

The result of the study supported that according to the study of the various authors ([Lengnick-Hall & Beck, 2005](#)) Microbusinesses with strong resilience skills can not only endure and absorb the consequences of environmental disruptions, but also respond more quickly to disruptions and make changes even under difficult circumstances. Building such resiliency, according to Prasad et al. (2015), can help tiny companies withstand disasters and pandemics.

Moreover, being resilient has long been thought of as a strategic management decision that helps in times of adversity. As a result, micro businesses that plan to battle COVID-19 have a better chance of avoiding big losses, surviving, and maintaining their operations. As seen by the survey responses collected from participating businesses, there is a lack of preparedness to face such a disaster. Over 83 percent of businesses said they aren't prepared for a catastrophe and don't have a plan in place to deal with it. As a result, greater understanding of the importance of resiliency in dealing with such threats is required. Although external factors are out of one's control, taking the necessary steps and planning ahead of time can help to minimize and limit losses. Business resiliency aids not only enterprises and employees, but the entire economy in navigating the current crisis. As a result, MSMEs should consider developing a plan ahead of time to avoid big losses caused by a similar crisis before it is too late. Furthermore, as with any other significant catastrophe, businesses may be able to learn from the catastrophe and use what they've learned to future planning and preparation for similar unanticipated tragedies in the future (Shakil, Munim, Tasnia, & Sarowar, 2020).

Further, Valikangas (2010) stated that in recent years, the idea of resilience has developed as a significant and desirable attribute for manufacturing companies. A company's ability to endure and adapt (vulnerability/capacity) manages crises, resist, decline, and respond to opportunities is characterized as resilience.

5.5 Relationship among Entrepreneurial Characteristics, Utilization of Technology, Utilization of Technology, Government Support, Crisis Management and Business Resilience

The data regarding to the proposed null hypothesis which states that there is no significant relationship among entrepreneurial characteristics, utilization of technology, government support, crisis management and business resilience was treated by statistical tool a Pearson product – moment correlation. The result is presented in Table 4.

Presented in Table 4 is the test of relationship of resiliency of micro enterprises amidst pandemic when analyzed according to entrepreneurial characteristics, technology utilization, government support, crisis management and business resiliency.

Table 4. Relationship among Entrepreneurial Characteristics, Utilization of Technology, Utilization of Technology, Government Support, Crisis Management and Business Resilience, May 2021.

	r-value	Degree of Relationship	p-value	Decision
Entrepreneurial Characteristics	0.326	Weak positive	0.001	Reject Ho
Utilization of Technology	0.714	Strong Positive	7.10E-17	Reject Ho
Government Support	0.698	Strong Positive	7.15E-16	Reject Ho
Crisis Management	0.705	Strong Positive	2.70E-16	Reject Ho

Shown in the table based on the results, entrepreneurial characteristics and business resilience obtained r-value of 0.326 which interpreted as weak positive linear relationship. It also obtained a p-value of 0.001 which is lower than 0.05 level of significance, thus, rejecting the null hypothesis (Ho). This means that there is a significant relationship between the two variables, entrepreneurial characteristics and business resiliency. Business resilience is strongly influenced by the entrepreneurial spirit possessed by business actors, With a strong entrepreneurial spirit, an entrepreneur will be able to encounter various situations and struggle to survive confronting challenges afore.

Results of this study become a clear mirror for both practitioners as well as researchers and academicians that it is very important to develop and foster a spirit of entrepreneurship which is proven to be very useful because the soul will not only become a shield in uncertain conditions such as the current pandemic conditions, The entrepreneurial spirit will also be very influential in the development and management of businesses in every situation and condition indeed (Bahasoan, 2020).

Moreover, the character is the foundation of tenacity that will lead to an entrepreneur's success (Barazandeh, Parvizian, Alizadeh, & Khosravi, 2015; Fisher, Maritz, & Lobo, 2016; Ludmila Kozubikova, Jaroslav Belas, Yuriy Bilan, 2015; & Wong, Cheung, & Venuvinod, 2005).

In addition, according to the various authors (Ahmed, Kar, and Ahmed, 2018; Sánchez, 2012) that individual traits will be the core capital of entrepreneurial adequacy, which is critical for someone to establish resiliency and keep their business running in any condition.

Similarly, utilization of technology and business resilience obtained r-value of 0.714 which interpreted as strong positive linear relationship. It also obtained a p-value of 7.10E-17 which is lower than 0.05 level of significance, thus, reject the null hypothesis (Ho). Result indicated that there is a significant relationship between the utilization of technology and business resilience.

According to Yang & Kankanhalli (2014), the restricted situation influences critical changes in consumer behavior trends in shopping where they were used to make purchases traditionally or offline now, they turn to do online shopping. Those things certainly alter to challenge and opportunity that must be addressed properly. The adoption of social media commerce has shown to be a beneficial medium for increasing client awareness and happiness. In times of crisis, the use of virtual marketing has a substantial impact on the company's overall financial health.

These findings of the study affirm the ratification of Khan (2020), that to cut down on company losses and preserve as much social distance as possible, microenterprises may focus to specialize in online ordering and home delivery. Microenterprises operators they must maintain their fingers on the market's pulse as it shifts. Evaluating (or creating) social media profiles and tracking traffic (by clicks and impressions) will frequently reveal that something is wrong, as evidenced by shifting online communications. It's only natural for search trends to shift away from topics that customers are no longer interested in. Resilience in the face of a pandemic and the use of technology are both important factors in overcoming the disruptions caused by the Covid-19 outbreak.

Moreover, government support and business resilience obtained r-value of 0.698 which interpreted as strong positive linear relationship. It also obtained a p-value of 7.15E-16 which is lower than 0.05 level of significance, thus, reject the null hypothesis (Ho). Result indicated that there is a significant relationship between the government support and business resilience. The result implies that resiliency amidst pandemic were perceived by microenterprises as significant to their business operation. As Microenterprises are also dependent on the policies and supports from the government as they rely on it.

The outbreak of COVID 19 shocked all parties and greatly implicated politics and economy of the world nowadays. The most concerned with this was the government who owned the interest in protecting the national economy in general and society in particular. Most of the policy initiatives taken by the government were to foster economic during crisis of COVID-19. The policy targeted the resilience of enterprises, the existing industrial sector and broader economic interests. Those economic rescue measures aimed at ensuring the stability of working conditions and productivity, as well as the continuance of economic activities, which is critical for the people's security (Kuckertz et al. 2020).

In addition, government support during crisis will greatly affect the operational activities of MSME, moreover the spread of COVID- 19 which creates variety of restrictions will greatly impact the operations of the business which mostly depend on direct marketing. Thus, government protocols that accommodate space such as tax relief, funding and other donor will greatly affect business crisis management and business resiliency, as revealed by (Kuckertz et al. 2020), the need for systematic efforts in the form of policies will help entrepreneurs to survive their business during crisis.

Also, various authors stated that support from government is needed by MSMEs, especially in overcoming financial problems and working capital. Government support in the form of relaxation of credit as a legal protection for small and medium entrepreneurs to propose payment delays, debt rescheduling and suspension of tax payments become a basis that at least relieve them in managing cash flow. As a result, it has been proposed that local microbusinesses, governments, and society establish adequate risk control and response measures to reduce COVID's detrimental environmental impact (Lokhandwala & Gautam, 2020; Mahmood et al., 2020; Shakil, Munim, Tasnia, & Sarowar, 2020).

Furthermore, crisis management and business resilience obtained r-value of 0.705 which interpreted as strong positive linear relationship. It also obtained a p-value of 2.70E-16 which is lower than 0.05 level of significance, thus, reject the null hypothesis (Ho). Result indicated that there is a significant relationship between the crisis management and business resilience. In this quantitative findings provide sufficient evidence to reject the null hypothesis. It indicates that there is a significant relationship in resiliency amidst pandemic when analyzed according to crisis management. This means that resilience effect crisis management and in the face of future pandemics or other natural calamities, resilience is important. Microenterprises must devote resources to the creation of a robust crisis management strategy in the event of a similar disaster in the future. Resiliency determined the most significant preparatory measures in managing successful and efficient preparation while coping with disasters (Gittell et al., 2006; Prasad et al., 2015).

According to Kuckertz et al. (2020), one of these efforts is to find out what can be done by business owners in facing the current crisis and have it as a guide in dealing with crisis in the future time to be more resilient to the uncertainties.

VI. Conclusion

Base on the findings of the study, the researcher presented the following conclusions:

- 6.1 Most of the respondents of the study are dominated by not less than three years food manufacturing microenterprises with 3 and below number of employees and mostly estimated monthly income of 20,001 and above.
- 6.2 Among the level of factors influencing resilience of micro enterprises amidst pandemic entrepreneurial characteristics has great influence.
- 6.3 Business resiliency of micro enterprises is considered a strategic management decision that helped microenterprises fight against the disruptions of the outbreak of covid-19. Micro enterprises are resilient in terms of facing crisis as a challenge that need to be faced by possessing entrepreneurial characteristics.

6.4 Entrepreneurial characteristics, utilization of technology, government support and crisis management have a direct effect to business resilience, thus, significant relationship exists.

VII. Recommendations

From the results of the study and on conclusions being drawn, the researcher made the following recommendations which are reflected in the resiliency of micro enterprises amidst pandemic.

- 7.1 Among the factors influencing resiliency amidst pandemic entrepreneurial characteristics has great influence, therefore if one attempts to engage in business during pandemic then he must possess entrepreneurial;
- 7.2 For future entrepreneurs planning to engage into micro business must develop utilization of technology this perspective is even more critical in times of severe change, because established new business models will emerge, as well as new opportunities.
- 7.3 Micro enterprises must adopt an opportunity-seeking mindset amidst uncertainties it is important for owners to strengthen their resiliency muscles. For micro enterprises and other businesses who undergone the same crisis and did not survive during the disruptions amidst pandemic it is recommend to have business resiliency.
- 7.4 Microenterprises must build genuine relationship with their customer base, establish links within the community, increase their very own skillsets, and reinvent their business models to emerge stronger than ever before.
- 7.5 Micro entrepreneurs must build crisis management amidst business uncertainties and to stay afloat and recover from the crisis, the situation must be continuously monitored and new markets or products/services must be offered. Particularly, micro enterprises to counteract the outbreak's harmful effects and survive the crisis, creative thinking is required. Improve strategies by embedding lessons learned can minimize the risk of the next crisis.
- 7.6 Microenterprises should call for the government to invest more in boosting microbusiness support basically for financial assistance which are greatly needed for the survival for other Microenterprises affected by the disruptions by pandemic which generally Microenterprises are dependent from their daily income.
- 7.7 Lastly, as the researcher of this study recommends that micro enterprises and/or entrepreneurs must acquire strong entrepreneurial spirit that includes faith. Faith believing that they are truly nothing without the help of God. Those in times of downfalls, sufferings, and in crisis, entrepreneurs must believe that in God nothing is impossible. To possess entrepreneurial characteristic with faith it gives hope, courage and strength to face crisis brought by the disruptions of covid-19 pandemic.

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