
Determinants on the Survival of Small and Medium Enterprises: An Exploratory Analysis

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Abstract

Despite the irreplaceable economic contribution of Small and Medium Enterprises, many SMEs are forcibly driven to bankruptcy due to a plethora of business risks that are exacerbated by various externalities like the COVID-19 pandemic. This study utilizes Cluster and Exploratory Factor Analysis to identify specific factors of SME survival. Random sampling was adopted to select respondents from registered SMEs in the City of Mati, Province of Davao Oriental. The study made use of a quality-reviewed research instrument which synthesized 120 financial and non-financial variables of SME survival from extensive internationally published literature. Cronbach's Alpha was 97.5%, Kaiser-Meyer-Olkin Index reveal that there is sampling adequacy, and Bartlett's Test on Sphericity reveals the appropriateness of the dataset for factor analysis. Out of 120 variables considered, only 32 variables successfully loaded into the six factors of SME survival. Most notably and contrary to many existing literature, access to financing and government regulations are not significant to SME survival. The study also has various practical implications to resource optimization, governance and public policy, capturing target markets, human resources, and research and technology. The study provides more than 10 recommendations to SME owners, policy makers and government agencies, and existing and future researchers.

Keywords: *SMEs, COVID-19 Pandemic, Exploratory Factor Analysis, Government Regulations*

Introduction

In the initial years of operation, Small and Medium Enterprises (SMEs) find it difficult to compete in the economy and inevitably face the threat of bankruptcy. While SMEs employ numerous survival techniques like advertising and adopting competitive prices, the risk of business failure remains as compelling as ever. Multiple researchers noted an array of problems contribute to the vulnerability of SMEs (Nguyen, 2018; Shangase & Chinyamurindi, 2018; Arshad, Zain, Arshad, & Kamil, 2017; Sallem, Nasir, Nori, & Kassim, 2017; Raneses, 2016). Such business risk is further exacerbated due to the role that SMEs play in countries around the world. SMEs significantly contribute to local and national economies, thus are regarded as the

backbone of economies (Mikolajczak & Pawlak, 2017). Not only does it lead to a loss of personal economic resources, but it also leads to greater social harms such as unemployment, disruption of innovation, and adverse market sentiment. Ergo, the vulnerability of SMEs to business failure poses a pervasive risk of personal and socio-economic injury that cannot be neglected nor understated, especially in the context of a pandemic. After all, SME bankruptcy is not an imagined problem – it is tangible, pressing, and real.

Research Objectives

The study seeks to develop constructs of survival of SMEs in the City of Mati in the Province of Davao Oriental. Specifically, this study seeks to:

1. Identify dimensions on the survival of small and medium enterprises; and
2. Develop a framework based on the identified dimensions.

Review of Related Literature

Internal and External Factors: Many of the reviewed literature dichotomized the factors of survival of SMEs as either internal or external factors. Nguyen (2018) explains that internal factors are inside-effecting factors that directly affect business performance. This means that internal factors are controllable, either by the manager or the business owner. Au contraire, external factors are non-controllable by business owners and are influenced by greater market-economic and socio-political forces. While the 2018 study of Nguyen argue that external factors affect the success of SMEs more than that of internal factors, both kinds of factors will be considered in this SME study. Common to several of the reviewed literature on internal factors highlighted capital resource and financial management as influential to the success of SMEs. On the other hand, market demand and the economic environment were repeatedly identified as crucial external factors that affect the survival of SMEs.

Access to Financial Resources: Capital resource focuses on the ability of SMEs to gain direct or immediate access to economic resources. Arshad et al. (2017) notes that financing for SMEs is crucial in developing new products, increasing staff, and expanding its operation. In the Philippines, financial difficulties rank second in the internal difficulties faced by SMEs according to the presentation of Raneses (2016). Even in European states like Cyprus and Greece, access to finance is marked as a major issue, with over a quarter of SMEs reporting this as the most pressing issue (Devnani et al., 2016). These trends are logical and easy to rationalize because most business owners of SMEs do not have pools of economic resources to invest into their businesses. Furthermore, maintaining a good credit standing from banks offer the opportunity for flexible response in times of financial crunch (Krištofik et al., 2015). However, the lack of business experience and the absence of disposable assets that may be used as collateral significantly lowers the credit standing of SME owners. Taken altogether, these citations

demonstrate the historical fact that the insufficiency of internally and externally generated capital affects the survivability of SMEs.

Financial Management: Financial management is also a well-studied variable that multiply literature have correlated to the survivability of SMEs. Arshad et al. (2017, p.57) briefly and simply defined financial management as the “management of finances of a business in order to achieve the financial objectives of the business”. While financial management is an overly broad concept, covering most if not all aspects of business operations, it is often understood in terms of cash, receivable, inventory, and debt management practices. Křištofík et al. (2015) noted however that this requires knowledge that is appropriate to the size and nature of the enterprise being managed. This means that a balanced or maturity-matching cash and debt management policy for an SME may not necessarily be applicable to another SME that should use a more conservative policy, the same way that a liberal credit policy for an SME may not be applicable to a financially restrained SME that is better off with a shorter collection policy. Hence, contextual and effective financial management is crucial in the survival of SMEs. Arshad et al. (2017, p.57) echoes the same argument, stating that good financial management practices are critical elements to the success of any SMEs. Muller et al. (2016, p.4) also shares the same sentiment arguing the converse that the lack of financial management skills as potentially contributory to failed business ventures in the context of Canadian corporate bankruptcies discussed in Amit and Thornhill’s 2003 study.

Market Demand: No business, large or small, can survive without its customers and clients. Muller et al. (2016, p.4) argued that demand deficiency is one of the reasons why enterprises end up in bankruptcy. This is because when the demand for products and services decreases, the generated profits also effectively decrease. Even for developed economies, finding and retaining customers remain as a significant issue for SMEs and other business organizations. Devnani et al. (2016) presented that the European Union reported greater difficulties in finding customers in 2015 relative to earlier years. SMEs across the world have been developing and implementing multiple survival techniques to capture their target market and grow their market share. Many SMEs capitalize on branding and marketing to respond to such market demand fluctuations. Fam et al. (2018) validated this survival technique, arguing that brand awareness and reinforcement is one of the essential qualities of content marketing that effectively capture and retain customers. However, it is inevitable that customer demand fluctuates based on their needs and wants, as well as the level of disposable income available to them. Ergo, SMEs are actively challenged to implement appropriate survival techniques that aim to gaining and retaining customers.

Economic Environment: A myriad of studies that have been reviewed thoroughly discussed how macro-economic environment affects SMEs. Muller et al. (2016, p.4) also noted that adverse market conditions may lead to closure of enterprises. Nguyen (2018) also reasoned that the market size, the physical distance between suppliers and buyers, and government support affect SME survival. Křištofík et al. (2015) further discussed that inflation as well as fiscal, monetary,

and even exchange rate policies affect the performance of SMEs in their respective industries. These citations echo the reality that the market forces within varying macro-economic environments affect how firms and industries adjust to geopolitical conflicts, respond to trends in consumer behavior, and the maneuver through the ever-changing regulatory landscape governing the SME sector. Most notably, Muller et al. (2016, p.4) pointed out that even older enterprises are likely to face bankruptcy due to rigidity and its inability to adapt to changing environments. Much recently, the COVID-19 pandemic also affected several businesses across numerous industries. The imposition of lockdowns and quarantine protocols have not only increased operational costs, but it has also stunted the growth potential of several industries that rely on customer service and immigration of tourists. This highlights that age, knowhow, and experience are not enough to keep SMEs afloat, especially when they remain passive and unresponsive to the current call of the times.

Theoretical Framework

Theory of Wealth Maximization: This study is primarily grounded on the theory of wealth maximization. Brigham and Houston (2012) discussed that the primordial task of those charged with governance is the maximization of wealth. This means that business organizations, need to take full advantage of their limited resources to generate long-term profits. SME owner-managers need to utilize the organization's resources effectively and efficiently to generate profits in the short term and maximize their personal wealth in the long term. Like any other organization, SMEs have scarce economic resources that are difficult to find and replace. Thus, owner-managers are burdened to optimize these limited resources and reap the most benefit at the least possible cost. In conclusion, the theory of wealth maximization argues that for SMEs to survive, it needs to use its limited capital effectively and efficiently, generate a steady and gradually increasing stream of income, and accumulate long-term wealth. This SME study will also consider the impact of wealth distribution policies such as dividend distribution policies and employee remuneration strategies, and whether these wealth distribution policies implemented can significantly influence the survival of SMEs.

Agency Theory: This SME study is also grounded on the agency theory. The Institute of Chartered Accountants (2005) explains that the agency theory is an economic theory of accountability. It specifically proposes that managers function as the agents of business organizations and, thus, are accountable to its business success or failure. This means that managers are burden-pushed to go beyond their personal biases and act in the best interest of the business. This is because managers are viewed as extensions of the identities and value-systems of the business owners they represent. Typically, business owners and their managers have varying and often conflicting interests, beliefs, and priorities. In these situations, the agency theory's concern is the resolution of problems arising from non-alignment of goals, values, and priorities within these agency relationships (Agency Theory, n.d.). SMEs however have a unique

nuance to them because most SME owners function as owner-managers and perform managerial functions.

Conceptual Framework

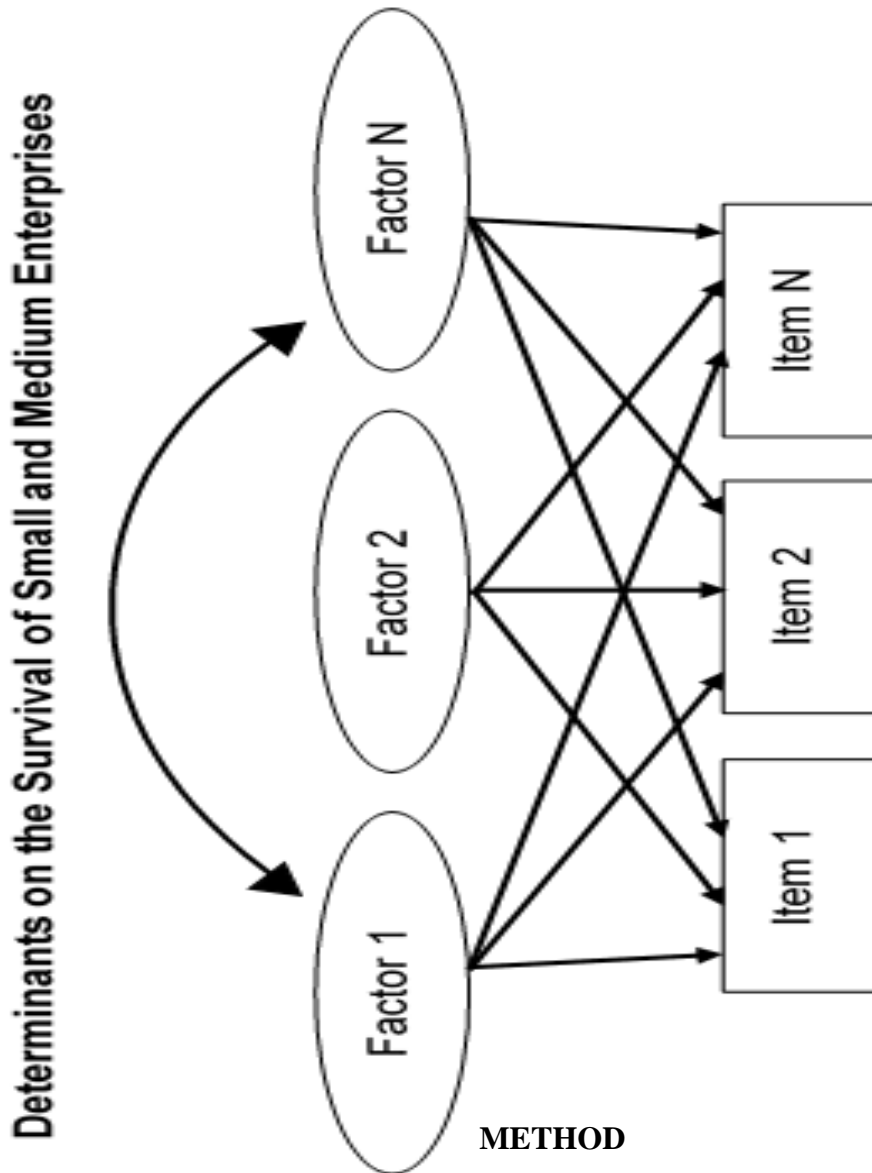


Figure 1. Conceptual Framework of the

Research Design

Figure 1: Determinants of the survival of SMEs

This atypical context has two important implications to the agency theory. First, the risk of goal incongruence between owners and managers is significantly lowered because of the merger of the ownership interests and the performance of managerial functions. Secondly and most

importantly, SME owners become the primary accountable party to the success or failure of their businesses because of the absence of a separate person acting as a manager to the business. Typically, the burden of making sure a business thrives and survives rests on the shoulders of the managers, not on the actual owners of a business. But because of this unique aggregation of functions, the burden of business success is shifted back to the SME owners who most often serve as the managers of their own businesses. This study will be evaluating whether the agency theory still applies to SMEs and how the aggregation of functions between managers and owners impacts the survival factors thematized and observed under this study. The study adapted a descriptive, quantitative and non-experimental design, adopting Cluster Analysis and Exploratory Factor Analysis in understanding SME survival. Thematic analysis was also used in the naming of the constructs.

Research Locale

The study was conducted in the City of Mati. The City of Mati was chosen as the research locale for the study because it is one of the most competitive cities and provinces in the Philippines. The Provincial Government of Davao Oriental (2021) officially announced that Mati ranked 4th in economic dynamism, 3rd in infrastructure, 4th in resiliency, and 3rd most improved LGU among the component cities in Davao Region. These demonstrate the level of economic activity and rising competitiveness of Mati City. Mati is located at the heart of Davao Oriental and is the sole component city in the province. Figure 2 illustrates the geographical location of City of Mati.

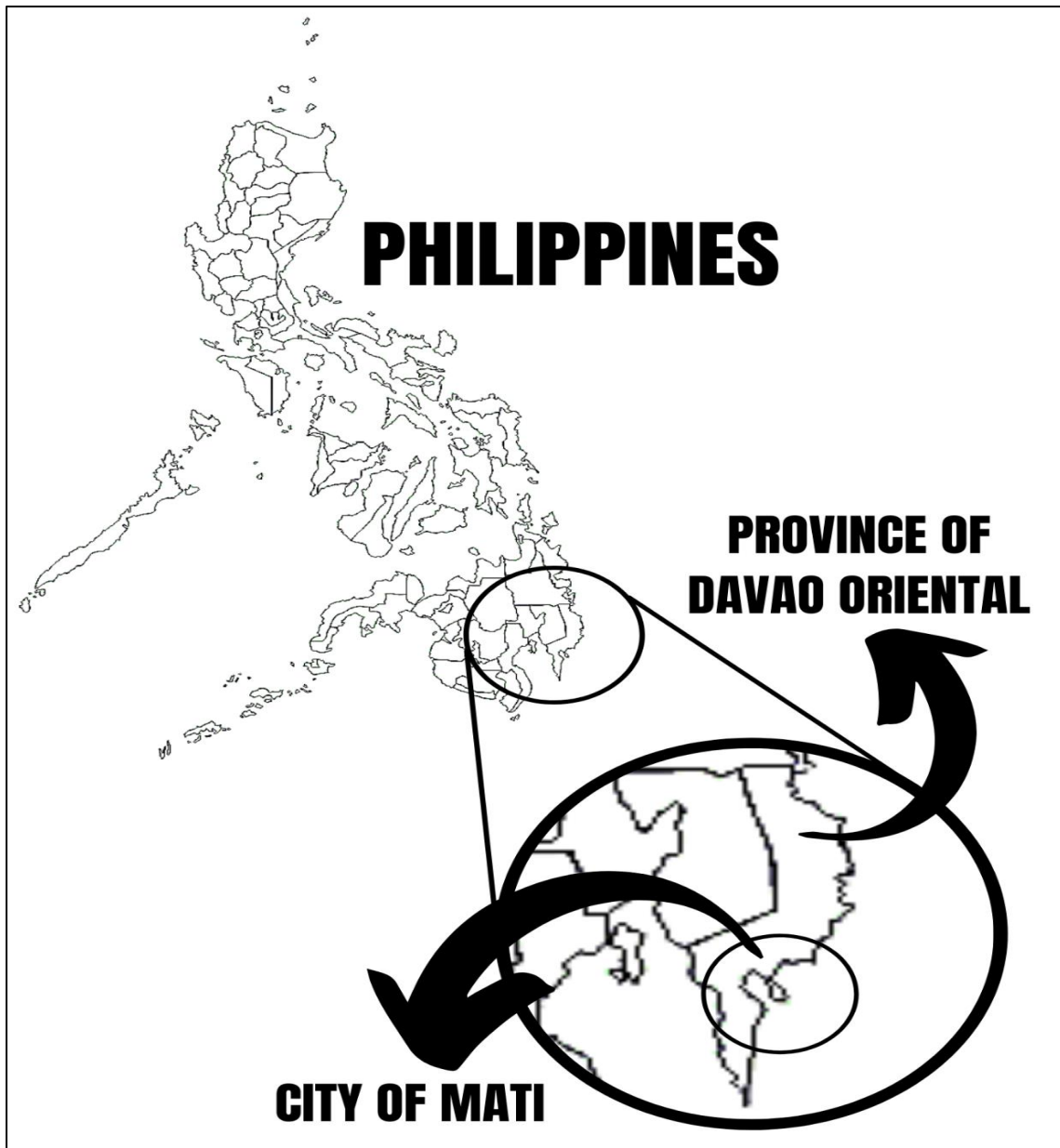


Figure 2. Locational Map of the City of Mati

Population and Sample

Respondents and Sample Size. The respondents of this study were SME owners registered in the Business Permits and Licensing Office of Mati City whose total capitalization is above P3,000,000 but not more than P350,000,000. At the time of the conduct of this study, there were 203 registered SMEs. During the pilot testing, 30 respondents participated while 12 refused or revoked their participation. During the data gathering, 102 new SME owners participated in the research while 45 refused or revoked their participation. Hair et al. (2014) discussed that the minimum number of respondents required for exploratory factor analysis depends on the factor

loading and studies with a 0.6 factor loading require 100 respondents for significance. The random sampling technique was adopted during the pilot study and data gathering stage.

Exclusion and Withdrawal Criteria. This study excluded SME owners whose businesses were not registered with the Business Permits and Licensing Office, as well as those whose principal office is outside Mati City. Furthermore, registered businesses whose total capitalization is P3,000,000 and below, as well as those exceeding P350,000,000 were also excluded from the study. Business owners who were included in this study were given the right to freely withdraw from participation, without any penalty or adverse consequences.

Research Instrument

This study utilized a self-developed survey questionnaire for its data gathering. The instrument consolidated and adopted 120 item statements that were argued to be factors of SME survival in various local and international literature, including items from the research of Dr. Cleofe Arib on the factors contributing to business challenges faced by family-owned corporations. The instrument underwent two separate validation tests to verify its reliability and internal consistency. First, a panel of four independent industry experts qualitatively reviewed the instrument, receiving minimal revisions. Second, the questionnaire was also quantitatively validated using Cronbach’s Alpha during the pilot testing in the research locale. Statistical analysis during the pilot testing show that the Cronbach’s Alpha is 97.50% which indicates that the instrument is dependable and internally consistent. Table 1 below summarizes the results of the Cronbach’s Alpha.

Table 1: Cronbach’s Alpha Results

Reliability Statistics		Case Processing Summary			
		<i>Valid</i>	<i>Excluded</i>	<i>Total</i>	
<i>Cronbach's Alpha</i>	97.50%	<i>Population</i>	12	18	30
<i>Number of Items</i>	119	<i>%</i>	40	60	100

In identifying the latent constructs through the survey questionnaire, a Likert scale was utilized scaled from one to five reflecting the degree of contribution that variables give to the survival of SMEs based on the experience of the business owner. Table 2 below summarizes the Likert Scale adopted for the study.

Table 2: Likert Scale on SME Survival

Parameter Limits	Descriptive Equivalent	Narrative Description
4.20 – 5.00	Always Observed	Variable is always observed.
3.40 – 4.19	Often Observed	Variable is often observed.
2.60 – 3.39	Sometimes Observed	Variable is sometimes observed.
1.80 – 2.59	Seldom Observed	Variable is seldom observed.
1.00 – 1.79	Never Observed	Variable is never observed.

Statistical Tools

Cronbach's Alpha. The Cronbach's Alpha is used to determine the consistency and reliability of the item statements consolidated into the research instrument.

Cluster Analysis. Cluster analysis was used to group together the variables or item statements based on their statistical behaviors and characteristics. Without cluster analysis, the data set would have been homogenous, and no factor of survival would have been generated.

Tests of Sampling Adequacy and Sphericity. The Kaiser-Meyer-Olkin (KMO) index was utilized to measure the sampling adequacy while the Bartlett's Test on Sphericity was used to measure the appropriateness of the dataset for factor analysis.

Factor Rotation Method. For exploratory factor analysis, the study used the Principal Component Factor Analysis as the extraction method, utilizing an orthogonal rotation (or VARIMAX) method with Kaiser Normalization to identify the determinants on the survival of SMEs. Factor extraction determined the latent constructs of SME survival and factor rotation developed a simple structure that allows for the separation of common and unique factors based on their degree of congruence.

Results

Dimensions on the Survival of SMEs

Measures of Sampling Adequacy and Sphericity. Cluster analysis was used to categorize the item statements that behave in a statistically analogous manner. This resulted in the identification of two clusters, with the second cluster having two sub-clusters. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity were used to ascertain whether the sample size is adequate and meritorious, as well as evaluate whether the dataset is appropriate for factor analysis. For the sample size to be adequate, the KMO Index must have a minimum value of 0.600. For the dataset to be considered appropriate for exploratory analysis, the p value must be less than 0.500. Each cluster and/or subcluster underwent separate and independent tests on sampling adequacy and sphericity. Table 3 summarizes the KMO Index and Bartlett's Test results for Cluster 1 while Table 4 and 5 summarizes the KMO Index and Bartlett's Test results for Cluster 2.1 and Cluster 2.2, respectively.

Table 3: KMO and Bartlett's Test Result for Cluster 1

Test	Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.847
Bartlett's Test of Sphericity	Approx. Chi-Square
	Degree of Freedom
	Significance
	381.963
	28
	0

Table 4: KMO and Bartlett’s Test Result for Cluster 2.1

Test		Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.889
Bartlett’s Test of Sphericity	Approx. Chi-Square	659.76
	Degree of Freedom	66
	Significance	0

Table 5: KMO and Bartlett’s Test Result for Cluster 2.2

Test		Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.91
Bartlett’s Test of Sphericity	Approx. Chi-Square	1253.556
	Degree of Freedom	91
	Significance	0

Rotated Component Matrix. After the evaluation of sampling adequacy and the fitness of data for exploratory factor analysis, the researcher conducted the rotated component matrix for each cluster or subcluster. Out of 120 variables considered, the principal component analysis extraction and VARIMAX rotation methods converged in three iterations and resulted in 32 items successfully loading into dimensions of SME survival. Only those with factor loadings above 0.600 were considered to have successfully loaded into the dimensions of SME survival. Table 6 summarizes the rotated component matrix for Cluster 1 while Table 7 and 8 summarizes the rotated component matrices for Cluster 2.1 and Cluster 2.2, respectively.

Table 6: Rotated Component Matrix for Cluster 1

Item Number and Variable		Component	
		1	2
11	Level of consumption of households/families		0.883
12	Owner’s awareness of the weaknesses of the business		0.878
18	Ethnic background of the owner/s	0.804	
19	Customer service	0.737	
20	Current ratio	0.782	
22	Reliance of employees to manager/s	0.699	
23	Commitment of successor/s to the business	0.729	

Table 7: Rotated Component Matrix for Cluster 2.1

Item Number and Variable	Component	
	1	2
40 Owner's awareness of the strengths of the business		0.653
42 Leadership style of the owner/s		0.625
45 Number of competitors in the industry		0.85
46 Proper record keeping of the business for internal purposes		0.844
52 Market conditions	0.676	
55 Establishment and maintenance of competitive advantages	0.791	
56 Selling goods and/or rendering services on credit	0.72	
52 Ratio of total debt to the total assets	0.733	
87 Successor/s of owner/s are technically skilled	0.719	
97 Inventory management practices	0.693	
99 Owner/s value and practice the division of responsibilities	0.687	

Table 8: Rotated Component Matrix for Cluster 2.2

Item Number and Variable	Component	
	1	2
70 Paying employees based on industry standards		0.734
71 Openness of owner/s to change		0.785
73 Skills of employees		0.737
74 Ratio of sales/revenues to the total assets		0.818
75 Availability of natural resources related to the business		0.801
78 Accounting knowledge of the owner/s	0.663	
79 Cost of labor or production	0.608	
93 Early introduction of successor/s into the business	0.881	
94 Customer loyalty	0.803	
95 Planning skills of manager/s	0.831	
96 Innovation in the business	0.649	
98 Level of economic activity	0.735	
111 Owner periodically harvests profits from the business	0.713	
113 Employee performance evaluation	0.772	

Extracted Factors of SME Survival. The extraction and rotation methods resulted into a total of six dimensions of SME survival. Two dimensions were generated under cluster 1, two constructs were generated under cluster 2.1, and two more factors were generated under cluster 2.2. Thematic analysis was used to name the factors based on the variables that successfully

loaded under each factor. Thematic analysis was also used to name the subclusters and clusters, based on the item statements that successfully loaded under each cluster or subcluster.

For Cluster 1, Table 9 and 10 summarizes the variables loading into Factor 1 and Factor 2, respectively. For Cluster 2.1, Table 11 and 12 summarizes the variables loading into Factor 3 and Factor 4, respectively. For Cluster 2.2, Table 13 and 14 summarizes the variables loading into Factor 5 and Factor 6, respectively.

For Cluster 1, the common theme between the items successfully loading is the distinctiveness of one SME owner relative to other SME owners. This distinctiveness is rooted in bearing a contextual knowledge on internal and external constraints, as well as the underlying business preferences of an SME owner. Thus, the first cluster was named as ***Business Intelligence of Owners***.

Under Cluster 1, there are five items that successfully loaded into the first factor of SME survival. The common denominator between the items is the influence of the owner's outlook towards the way any entrepreneur should manage a business. Thus, the first dimension of SME survival was named as the ***Owner's Predisposition to Operating Businesses***.

Table 9: Factor 1 Latent Roots and Factor Loading

	Item Number and Successfully Loading Variable	Factor Loading
1	Ethnic background of the owner/s	0.804
2	Customer service	0.737
3	Current Ratio	0.782
4	Reliance of employees to manager/s	0.699
5	Commitment of successor/s to the business	0.729

Moreover, two items successfully loaded into the second factor of SME survival under Cluster 1. The common theme between the items is the owner's awareness of internal and external limitations of operating the SME in any chosen industry. Thus, the second dimension was named as ***Owner's Consciousness of Internal and External Bottlenecks***.

Table 10: Factor 2 Latent Roots and Factor Loading

	Item Number and Successfully Loading Variable	Factor Loading
1	Level of consumption of households/families	0.883
2	Owner's awareness of the weaknesses of the business	0.878

For Cluster 2, the common theme between the items successfully loading is the promptness and appropriateness of managerial practices employed by SME owners, relative to their competitors. Thus, the cluster was named as ***Responsiveness of Managerial Practices***.

For Cluster 2.1, the common theme between the items successfully loading is the leadership practices adapted by SME owners relative to their competitors. Thus, the cluster 2.1 was named as ***Competitive Leadership Practices***.

Seven items successfully loaded into the third dimension of SME survival under Cluster 2.1. The common theme between the items is the varying market positioning techniques adapted by SME owners to survive. Thus, the third dimension was named as ***Market Positioning of the Business***.

Table 11: Factor 3 Latent Roots and Factor Loading

	Item Number and Successfully Loading Variable	Factor Loading
1	Market conditions	0.676
2	Establishment and maintenance of competitive advantages	0.791
3	Selling goods and/or rendering services on credit	0.72
4	Ratio of total debt to the total assets	0.733
5	Successor/s of owner/s are technically skilled	0.719
6	Inventory management practices	0.693
7	Owner/s value and practice the division of responsibilities	0.687

Moreover, four items successfully loaded into the fourth dimension under Cluster 2.1 based. The common theme between the items is the aptness of leadership styles adapted by SME owners. Thus, the fourth dimension was named as ***Suitability of Owner's Leadership Style***.

Table 12: Factor 4 Latent Roots and Factor Loading

	Item Number and Successfully Loading Variable	Factor Loading
1	Owner's awareness of the strengths of the business	0.653
2	Leadership style of the owner/s	0.625
3	Number of competitors in the industry	0.85
4	Proper record keeping of the business for internal purposes	0.844

For Cluster 2.2, the common theme between the successfully loading items is the cost and operational management of all departments and personnel involved in the SME. Thus, the cluster was named as ***Value Chain Management***.

Nine items successfully loaded into the fifth dimension under Cluster 2.2. The common theme between the items successfully loading is the act of operating at the lowest cost and minimizing future marginal costs. Thus, the fifth dimension of SME survival was named as *Cost Efficiency*.

Table 13: Factor 5 Latent Roots and Factor Loading

Item Number and Successfully Loading Variable		Factor Loading
1	Accounting knowledge of the owner/s	0.663
2	Cost of labor or production	0.608
3	Early introduction of successor/s into the business	0.881
4	Customer loyalty	0.803
5	Planning skills of manager/s	0.831
6	Innovation in the business	0.649
7	Level of economic activity	0.735
8	Owner periodically harvests profits from the business	0.713
9	Employee performance evaluation	0.772

Finally, five items successfully loaded into the sixth dimension under the Cluster 2.2. The common theme between the items is the ability of an SME to achieve its organizational goals. Thus, the sixth dimension of survival was named as *Operational Effectiveness*.

Table 14: Factor 6 Latent Roots and Factor Loading

Item Number and Successfully Loading Variable		Factor Loading
1	Paying employees based on industry standards	0.734
2	Openness of owner/s to change	0.785
3	Skills of employees	0.737
4	Ratio of sales/revenues to the total assets	0.818
5	Availability of natural resources related to the business	0.801

Constructed Framework on the Survival of SMEs

Synthesizing the results of the study, a constructed framework on the survival of SMEs, illustrated in Figure 3 below, was developed to illustrate the multivariate relationships between the latent roots, developed constructs, and the observable variable.

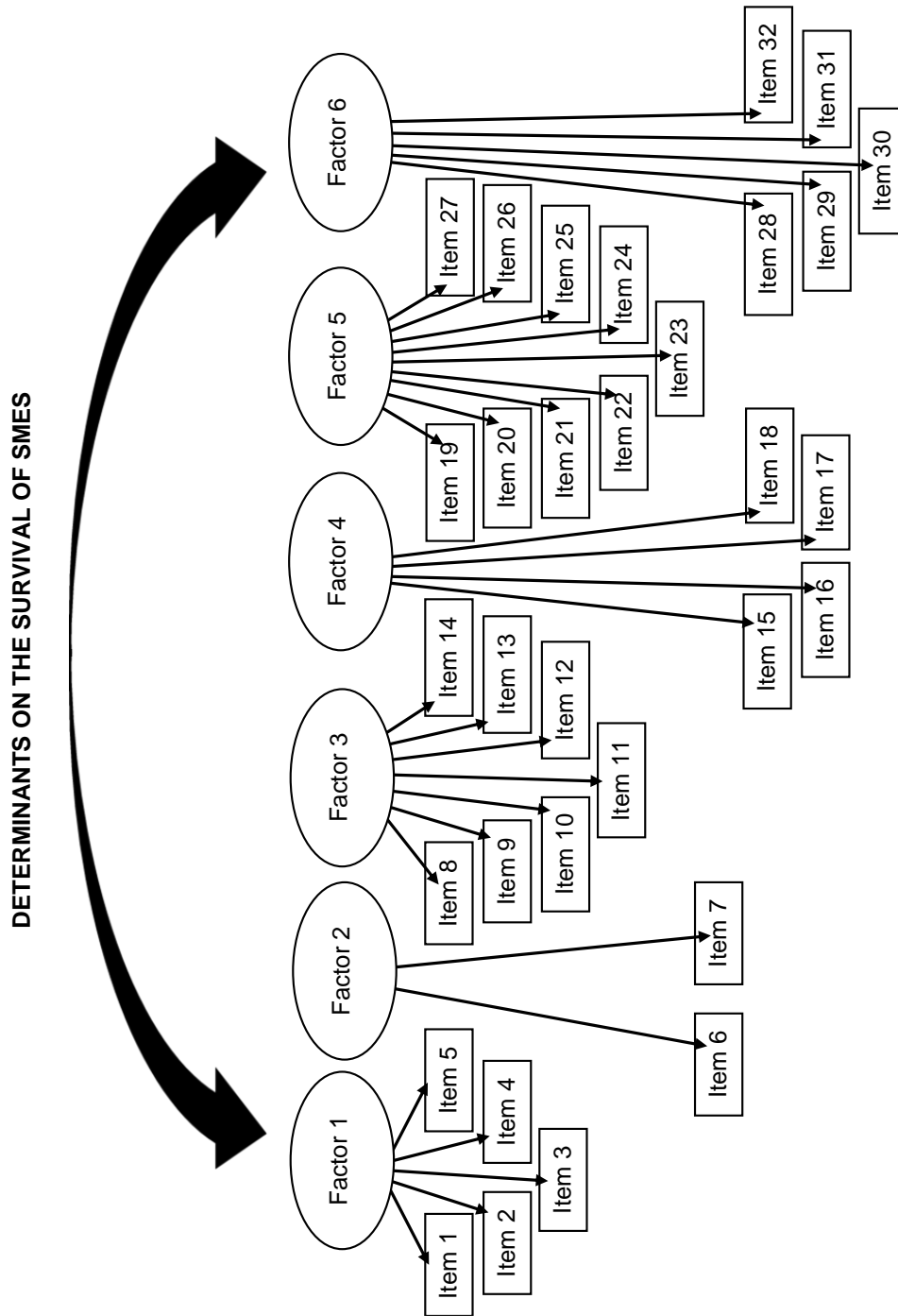


Figure 3. Constructed Framework of the Study

Discussion

Practical Implications to the Theoretical Framework

Resource Optimization.

Access to financing did not successfully load into any dimensions extracted in this study. While many international researchers argued that access to financing is a significant dimension or factor to SME survival, this research refutes such argument. Surprising as it may seem, the rationalization of why access to finance is not a significant variable to the survival of SMEs is straightforward.

First, while it is one thing to have access to finance, it is a completely different thing to know how to use it. This reflects the reality that even if SMEs have access to financing, if such funds are not efficiently used and optimized, the SMEs will still be exposed to the risk of bankruptcy. Conversely, even if SMEs do not have as much economic resources as other businesses, if it can properly and efficiently manage those funds, the SME will less likely be exposed to bankruptcy risks. This simply means that utilization of resources is even more important than just mere access to it.

Second, the reason access to financing did not successfully load may be attributable to the contextualization of this study to the SMEs in Mati, Davao Oriental. It is, then, important to emphasize that national frameworks and policies may not be applicable or effective in addressing the problems faced by SMEs in niche areas and communities. Thus, studies done on a national scale must be contextualized to ensure that the programs to be implemented in the national level are responsive to the regional and local needs of people. This also ties back to why the contextualization of academic studies is important because facilitates the evaluation of the applicability of research findings to specific contexts.

Thirdly, this may reveal that access to financing may be an issue for micro businesses and larger businesses, but not for SMEs. Citizens who establish micro businesses do so to generate income and cash given their lack of such. On the other hand, larger businesses need more capital because the costs of operations are larger than that of SMEs.

Governance and Public Policy

Numerous variables relating to government operations did not successfully load as a latent root of any of the factors of survival. These items include statutory monetary, fiscal, and exchange rate policies, government aid and public procurement, statutory regulation, and government support.

It is worth noting that any government aid, support, or regulation may have no material effect if the scarce resources of SMEs is not effectively and efficiently utilized. Even if an SME has gains access to government-funded SME loans and trainings, and even with the best regulatory conditions like tax holidays and restrictions on foreign competition, without proper market

positioning for example, these programs would still be wasted, and SMEs may still fail in the end. Government support can only go as far as supplement the actions of SME owners.

Capturing Target Markets

It is also worth noting that the size of the company and even the size of the market, as well as product or service diversification, upselling, brand awareness, providing the highest quality, delivering the product in an abbreviated period, and marketing strategies, as well as supplier quality management, are not significant variables that affect the survival of SMEs.

First, regardless of the size of the business, having the right leadership practices and being able to maintain competitive advantages are enough to capture one's identified target market.

Secondly, SMEs do not necessarily have to compete in a large industry for it to be successful. Even if the industry is not that big, with cost efficiency, operational effectiveness, and the right predisposition to business, SMEs can capture and even dominate niche markets that are often either unexplored or are still emerging industries. As an extension, this is also probably why exportation of goods and services, and the physical distance between the SME and its consumers, also did not load successfully as latent roots. Being able to operate even in a small locality is wise enough for SMEs given their financial capacities.

While customer loyalty did successfully load as a latent root to one of the factors of SME survival, achieving and maintaining this do not necessarily have to be done through marketing, upselling, and diversification of products and product or service. This is because these activities are cost drivers that may significantly increase the cost of production. Much more, these activities may also decrease the overall profitability of an SME. Having too many products may make it harder for restaurants to prepare for a business day due to the voluminous activities to be undertaken. Having too many promo packages may end up cannibalizing revenues of more lucrative product lines.

Moreover, brand awareness can also be inefficient cost-wise and in the worst case, too restrictive for owners, managers, and employees. This is worth noting that rigidity and lack of flexibility is the worst weakness that an SME can propagate, given that industries and client behavior change over time. Thus, a flexible business model that goes beyond branding lip service has a greater impact on SME survival.

Finally, products do not have to be of the highest quality so that SMEs can be successful. In fact, the rule of medium quality is emphasized in Philippine law on sales and other jurisdictions overseas. For as long as the product serves the purpose to which it is intended for, going beyond the medium quality is no longer required. Having to pick the best suppliers can drive up costs. In fact, appraisal of quality increases the cost of labor and production, and thus adversely affect the survivability of SMEs.

Human Resources

Existing literature also argued for several human resource variables as factors of SME survival, however, it is revealed that many variables are not significant enough to impact SME survival. These items include recruitment and selection policies, having recognition programs for employees and employee involvement in management, and workers' productivity.

To start off, recruitment and selection policies do not necessarily result to the acceptance and promotion of skilled personnel. Recruitment policies are limited to the academic background and existing work experience of a potential employee, which may not be as relevant to the SME hiring him or her. Furthermore, selection and promotion processes subconsciously consider length of service that current employees have, whether such length of service is equivalent to advanced skills that are necessary and appropriate to SMEs. This reveals that having an excellent academic background and prior working experience, as well as one's length of service does not equate to being a skilled employee in the context of SMEs.

Furthermore, having recognition programs for talented and skilled employees is not a significant variable to SME survival. First, these recognition programs are already on top of the compensation given to workers. This study found that paying employees based on industry standards is a significant variable to consider, reflecting that just compensation is enough reason for employees to stay. The common misconception is to utilize these recognition programs to retain talented or skilled employees. SME owners should not use these programs as a substitute for equitable compensation. With fair compensation, employees are bound to stay because their organizational value is accurately reflected in their payroll. Second, these recognition programs also increase the cost of labor and production, especially given that employees are already paid based on industry standards. In fact, this study has found out that employee evaluation programs are more significant to SME survival because these performance appraisals function as a stern reminder to employees who are not functioning as paid. While this may appear to be a negative form of reinforcement, objective evaluation of employee performance is also a positive opportunity to gain experience, grow, and improve. In exchange for compensation, employees are contractually expected to deliver outputs. If any employee is unable to function accordingly, such employee must be subjected to disciplinary action. Especially if just compensation is already being given, functioning below par is a sign of unprofessionalism that warrants a reprimand, a suspension, or worse a replacement. Employees do not even have to be involved in managerial roles, since they can rely on the planning skills of their managers since they simply must deliver outputs. Just compensation is necessary for employee retention and performance appraisals must be in place to safeguard performance.

Finally, worker productivity is not necessarily a significant variable to the survival of SMEs, and it is sternly insisted that this be understood in the context of the factors of SME survival that were generated in this study. Employees are again paid to deliver specific outputs. For as long as these outputs are delivered within the applicable time frame and are delivered at the least possible cost,

worker productivity must not be enforced five days a week, 24/7. Even if an employer pays for a person to be at work eight hours a day, five days a week, if such employee can accomplish his or her tasks within a shorter period, that employee should not be forced to be “productive” the entire week. The common misconception among employers is that they are paying their employees to work all the time, but the reality is, employers are paying their employees to deliver specific outputs. If such outputs are delivered in a shorter period, such employees must not be punished with more work and must not be forced to remain productive every single minute of their workday. This also indirectly validates flexible working schedules especially during the COVID pandemic. Employees do not have to always be at work for as long as they deliver their outputs effectively and efficiently. Because efficiency reflects employee skills, efficient employees must not be abused otherwise, employee turnover is expected to occur, and no recognition program will give them the reason to stay. SME owners need to recalibrate their thinking – employees can work at home and can clock in at any time for as long as their deliver expected outputs within the stipulated period with the least possible cost.

Research and Technology

Several researchers have also extensively argued for variables relating to the level of investment in research and technology. However, this study reveals that many variables relating to such are not significant enough to impact SME survival. These items include accounting information systems which Arshad and colleagues argued in 2017, and research in areas of innovation and passion in e-commerce which Fam and colleagues argued in 2018, and information technology and ICT usage which various researchers argued for including Aich and colleagues in 2018, Kassim and colleagues in 2017, and Nguyen in 2018.

It is worth noting that while technology has the potential to simplify work and engaging in online sales has been growing during the pandemic, these have equivalent costs that most SMEs cannot invest in. This study reveals that for as long as manual processes can produce the same outputs at the least possible cost, investment in accounting software among others may not be appropriate for SMEs. The same goes for investing in research and development. While there are potential gains in research, the cost may be too burdensome for SMEs and any benefit derived from such may only be accessible in the long term.

Conclusions

There are six determinants on the survival of SMEs which fall under two clusters, with one cluster having two sub-clusters.

Out of 120 variables considered, only 32 successfully loaded as latent roots of SME survival. Table 15 summarizes the roots under the six factors of SME survival.

Table 15: Summary of Latent Roots of the Factors of SME Survival

No.	Latent Roots	Determinant
1	Ethnic background of the owner/s	Owner's Predisposition to Operating Businesses
2	Customer service	
3	Ratio of the assets that can be used/sold within one year to liabilities that would be paid within one year	
4	Reliance of employees to manager/s	
5	Commitment of successor/s to the business	
6	Level of consumption of households/families	Owner's Consciousness of Internal and External Bottlenecks
7	Owner's awareness of the weaknesses of the business	
8	Market conditions	Market Positioning of the Business
9	Establishment and maintenance of competitive advantages	
10	Selling goods and/or rendering services on credit	
11	Ratio of total debt to the total assets	
12	Successor/s of owner/s are technically skilled	
13	Inventory management practices	
14	Owner/s value and practice the division of responsibilities	Suitability of Owner's Leadership Style
15	Owner's awareness of the strengths of the business	
16	Leadership style of the owner/s	
17	Proper record keeping of the business for internal purposes	
18	Number of competitors in the industry	Cost Efficiency
19	Accounting knowledge of the owner/s	
20	Cost of labor or production	
21	Successor/s of the business are introduced early to the business	
22	Customer loyalty	
23	Planning skills of manager/s	
24	Innovation in the business	
25	Level of economic activity	
26	Owner periodically harvests profits from the business	
27	Employee performance evaluation	Operational Effectiveness
28	Paying employees based on industry standards	
29	Openness of owner/s to change	
30	Ratio of sales/revenues to the total assets	
31	Skills of employees	
32	Availability of natural resources related to the business	

Recommendations

1. To the SME owner-managers:

- a. Existing scarce resources must be wisely spent in active pursuit and consideration of the six survival factors determined in this study. The latent roots under each survival factor must be understood in relation to other latent roots to develop consistent business policies and strategies.
- b. Invest in business intelligence by identifying the internal weaknesses of your SME, understanding the level of consumption of your consumers, and developing innovative strategies that build on the strengths of your business. Internal record keeping can be accomplished without spending too much on IT equipment, excessively spending on new research, and investing in an advance accounting information system.
- c. There are more effective ways to capture your target market than just spending on marketing campaigns and upselling. Inexpensive customer service activities and selling on credit have been identified as latent roots to SME survival, together with customer loyalty, which are more value adding than any lip service that branding can offer. The goal is marrying market positioning and cost efficiency.
- d. Focus on establishing and maintaining competitive advantages instead of immediately upscaling the SME through exporting goods and services, diversifying product lines, conforming to expensive quality standards, or acquiring non-performing assets. Remember that the size of SMEs and the industry size does not significantly affect the SME survivability. Going big is not always wise especially since these escalate business risks. Instead, focus on operational effectiveness by monitoring the total asset turnover and implementing activities to improve asset utilization.
- e. Regularly monitor the costs of labor or production of your SME business, and implement strategies to recover such direct costs, break even, and earn some disposable income. Save some capital for seasonal costs and other uncontrollable events such as COVID restrictions, surge in the cost of fuel, and the impact of other externalities.
- f. Instead of relying too much on government support, regularly analyze the relevant industries to your SME, considering consumption and economic activity levels, number of competitors, and availability of natural resources since these external factors significantly affect SME survival.
- g. Manage your liquidity and debt risks wisely by monitoring your current and debt ratio. Borrow only when necessary (e.g., to pay off a currently maturing debt or to purchase a machine that can lower production costs). Keep in mind that access to financing does not assure SME survival. This means that just because you have the capacity to borrow money does not mean that you necessarily should.
- h. Standards for hiring must focus on the skills of employees as opposed to their academic background or prior working experience. Standards of promotion, on the other hand, must focus on the reliability and planning skills of would-be managers as opposed to their management knowhow and length of service. Successors of the business must be introduced early into the

business so they can gain the necessary technical skills and slowly grow to be more committed to the business.

- i. The salaries, wages, and benefits of your employees must be based on applicable industry standards (e.g., minimum wages; compensation for overtime and work hazard; provision of medical and other allowances, salary upgrading for workers with government-issued licenses and other relevant certifications) to ensure retention of skilled employees.
- j. Alternative working arrangements such as work-from-home status and flexible schedules may be implemented for as long as the employees can perform their duties and responsibilities within specified timelines and at the least possible cost. Periodic performance evaluations must also be in place to ensure that employees are functioning as needed and that responsibilities remain clearly defined and appropriately segregated.
- k. SME owners must move beyond age, gender, experience, academic background, and personal connections, and instead be flexible and open to change. Utilizing your accounting knowledge and ethnic background allows you to develop reasonable business decisions that are specifically effective to the market or industry you are operating in.

2. To policy makers and government agencies:

- a. The direction of policy making on SME development should not just focus on enabling access to financing through state-funded loans, subsidies, and grants. Instead, it should focus more on capacity building initiatives that equips owners, managers, and employees with technical, planning, and practical skills.
- b. Even though government support, policies, and regulations do not have a significant impact on SME survivability, government agencies must continue to work for the improvement of economic indicators, regulatory frameworks, and sociopolitical environments that may still affect SMEs in the long term.
- c. Government agencies like NEDA, DTI, and LGUs must continue to invest in research on SME development and survival, so that public policies and government processes become more responsive to the nuanced realities and needs of SMEs.

3. To existing and future researchers:

- a. Contextualizing this study in other towns, provinces, and regions is critical in the identification of latent roots and factors of SME survival that are specifically applicable to one locality juxtapose to other localities.
- b. Performing confirmatory factor analysis and increasing the number of respondents can directly validate whether the same item statements load into the determinants on SME survival that were derived in this study.
- c. Utilizing the same research instrument and conducting an exploratory study on the survival of micro and/or large enterprises can also indirectly confirm the results of this study.

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- d. Performing focus group discussions and updating the reviewed related literature can further enhance the research instrument used in this study through the consideration of more variables such as degree of operating leverage and the specific industry where SMEs operate.
 - e. Future researchers can also pursue related studies that aims to develop a rounder and more holistic understanding of the development, survival, and growth of SMEs. These related studies may include:
 - a. Conducting a quantitative study on the financial capacity and investment incentives of SMEs, their owners and managers, as well as the financial performance of SMEs.
 - b. Documenting the fiscal impact of the COVID-19 pandemic to SMEs and evaluating the effectivity of COVID-recovery plans enacted, published, and implemented by government agencies and other stakeholders
 - c. Conducting a socioeconomic and demographic study on the industry distribution, market capture, and transaction cycles of SMEs
 - d. Preparing disaster resiliency plans, setting several indicators of success, and evaluating the implementation and effectivity of these resiliency projects

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