Determinants of Growth of Department of Trade and Industry Assisted Micro and Small Enterprises in Davao Region, Philippines

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Abstract
The study was conducted to identify determinant factors that led to the survival and growth of the DTI assisted micro and small enterprises in Davao Region, Philippines. Particularly, it analyzed entrepreneurs’ and enterprises’ profile, entrepreneurial characteristics, human resource practices, marketing strategies, sources of funds and business growth of these enterprises. Asset growth was used as an indicator to measure firm growth. Data were gathered from micro and small enterprises who are in the business for at least five years. These enterprises were randomly selected within the municipalities and component city of Davao Region, Philippines. To realize the objectives, the study used descriptive and regression research designs. A self-structured and modified survey questionnaire was utilized to collect primary data from micro and small enterprises. Statistical analysis was executed through frequency counts, percentages, means and logistic regression. The micro and small enterprises in Davao Region are dominated by females, aged 41 to 50 years old, married and college degree holders. More than half of these enterprises employed 1 to 5 workers in their firm. Majority of them have existed between five to ten years and mostly engaged in manufacturing or production business. Several characteristics were present most of the time in these entrepreneurs. Human resource practices were usually implemented, and marketing mix strategies were always adopted. They also frequently used internal finance as business revolving funds. Likewise, more than one third of them chose commercial or rural banks for external financing. Business growth of most micro and small enterprises for an average of five years has high growth rate. Amongst the variables used in the study, the need for achievement, locus of control, and external source of finance significantly predicted business growth of micro and small enterprises.

Keywords: Micro and Small Enterprises, Business Growth, Asset Growth, External Source of Finance, Need of Achievement, Locus of Control, Binary Logistic Regression
Introduction

The role of small-scale enterprises in the national economy cannot be underestimated. These enterprises are being given increasing policy attention in recent years particularly in third world countries (Taiwo, Muritala, Ayodeji, Awolaja, and Bako, 2013). In developing countries, micro and small enterprises comprise the largest part of the industrial structure and are among the most important development agents in society.

However, empirical evidence shows that most micro and small enterprises never develop the business beyond a certain scale and only a small minority of them manage to upgrade to the next level of productivity, income, and employment (Berner, Gomez and Knorringa, 2008). These types of establishments seem to be very essential to the economy, but the potential for every business is doubtful (Davidsson and Wiklund, 2006). Usually, they perish on their first years of set-up or have a hard time to continue which limits proprietors’ chance to attain substantial economic yields. According to Storey (1994) and Wiklund and Delmar (2003), many micro and small firms are not interested in pursuing growth. In developed countries, the failure rate of start-ups varies from 70% to 90% despite availability of resources and attempts to guide small enterprises to success (Kaminskaite, 2017). While these small enterprises manage to survive the start-up phase, they eventually face more challenges along the way and close operations.

In the Philippines, the Micro, Small and Medium Enterprises (MSMEs) sector has a significant contribution in employment creation, income generation, and poverty alleviation. According to the Department of Trade and Industry (DTI), Philippines, MSMEs serve as the principal driving force in the development of the Philippine economy in terms of employment creation. This sector contributed a significant number of jobs generated for 2017. Approximately, micro enterprises had a 30.30% share and small establishments had a 25.90% share of the total jobs created (DTI Index, 2017). According to the 2017 list of establishments of the Philippine Statistics Authority, 99.15% of the total enterprises documented are micro and small enterprises.

The Department of Trade and Industry in Davao Region records showed a decreasing trend of business renewal in relation to new business registration. Records on business establishments has a very huge discrepancy between new business registration and business renewal. From years 2012 to 2017, the average increase in new business name registration was 11.84% and 10.35% for renewal. However, there is a huge difference between the new registrants and the business renewals. The table 1 shows the registration for new businesses and the renewal of establishments in Davao Region from 2012 to 2017.

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>New</td>
<td>10,730</td>
<td>11,643</td>
<td>11,304</td>
<td>12,462</td>
<td>13,715</td>
<td>18,281</td>
</tr>
<tr>
<td>Renewal</td>
<td>1,924</td>
<td>1,128</td>
<td>2,049</td>
<td>2,284</td>
<td>2,246</td>
<td>2,283</td>
</tr>
<tr>
<td>Total</td>
<td>12,654</td>
<td>12,771</td>
<td>13,353</td>
<td>14,736</td>
<td>15,961</td>
<td>20,564</td>
</tr>
</tbody>
</table>

Source: DTI, Region XI, Philippines 2019
For a period of six years, the average difference between new business registrants and renewal is around 11,037 establishments with an average frequency of 84.51% (DTI – XI). The exact statistic of enterprises who were not able to continue was 78.72% based on the figure between 2012 and 2017 since DTI renewal is every five years. According to the Department’s planning officer in charge of the registration, this is a mortality rate which indicates that majority of these enterprises are not willing to continue or were not able to survive. The DTI statistics showed that an average of 99% of these belongs to micro and small enterprises. This raises some challenging questions such as “What makes some micro and small enterprises grow while others do not?” and “Is the firm’s growth arbitrary?”

The study of Tamayo and Pediangco (2018) disclosed that an estimated 88% of these types of businesses were individually owned and owners were mainly concerned with making a living for themselves and their families for sustenance. Furthermore, the study also revealed that financial threat is what most micro entrepreneurs in Davao City, Philippines are concerned with and the most common problem they face is not having savings for emergency funds. Another critical factor contributing to the success or failure of micro and small enterprises are marketing practices and strategies of the enterprise. Most of the micro and small establishments in the Davao Region are maintained and managed by one person who simultaneously takes care of all the administrative functions of the business. In some cases, they do not have enough time and finances to conduct research and establish their focus market. Furthermore, identifying customer fads and demands is very essential in establishing a business environment, coupled with the right product for the right customer/client. However, most of the micro and small enterprises in the Davao Region pursue their business operation even without these analyses.

Even with these emerging concerns and difficulties for start-ups, several micro enterprises are added every year. According to Department of Trade and Industry (DTI) Region XI, business registration is increasing every year but with no assurance that the previously registered micro and small enterprises are still existing. Some were able to survive and continue, but most of them had to close their business. It is evident that there is an increase in the number of new business registration, but the survival rate is decreasing for micro and small enterprises.

There are several programs available for MSMEs which the Department of Trade and Industry has been offering for several years. The MSME development programs of the government intend to assist MSMEs nationwide. They include the establishment of the Negosyo Centers and the Kapatid Mentor Me (KMME) program which aim to improve the local business climate as well as enhance the management and labor capacities of MSMEs. However, these programs are reaching only a fraction of the micro and small enterprises nationwide. As such, the survival rate of these enterprises continues to decrease despite these efforts.

Selected enterprises were able to receive guided assistance from Department of Trade and Industry through the Kapatid Mentor Me (KMME) Program, Shared Service Facility (SSF), and One Town One Product (OTOP) Next Gen. These programs have been aiding micro and small enterprises as evidenced by the success stories of the graduates and beneficiary’s region wide and the increase of micro and small enterprises assisted as new businesses (dti.gov.ph).

Entrepreneurs who may need assistance tried to adopt, improve, and enhance some critical factors necessary for them to survive and grow. Other factors may also have contributed to their development.
These enterprises must have been operating for at least five years and have benefited from some of these programs during their economic life. However, DTI-XI said that there is no recent study on the factors and categories that may affect business growth particularly in the micro and small enterprises sector. Given the pivotal role of micro and small enterprises in the economy and the continuous effort by the government to assist their growth and sustainability, the researcher intends to identify other contributory factors that led to the survival and growth of the DTI-assisted micro and small enterprises in the Davao Region particularly the beneficiaries of KMME, SSF, and OTOP Next Gen and, at the same time, instigate awareness to the possible constraints that will hinder their success.

Theoretical Framework
The Theory of the Growth of the Firm: Edith Penrose, 1959. A firm is an assembly of physical and human resources that are both productive and should be a bundle of potential service. It is also a unit of organization in which activities are planned and framed by guidelines so that they will be interrelated and coordinated to affect the enterprise. More than being an administrative unit, the firm is composed of a collection of productive resources whose disposal depends on the administrative decisions of different users. The growth gets limited by the fact that firm does not see opportunities for expansion, is unwilling to act upon them, or is unable to respond to them.

The Resourced-Based View of the Firm. The resource-based view (RBV) is a model that sees resources as key to superior firm performance. If a resource shows value, rarity, imitability, and organization (VRIO) qualities, the resource enables the firm to gain and sustain competitive advantage. RBV is a managerial framework used to determine the strategic resources with the potential to deliver competitive advantage to the firm. These resources can be exploited by the firm to achieve sustainable competitive advantage (Barney and Wright, 2001). The key idea of resourced-based view is that competition between firms arises from their capabilities and resources (Barney, 1991; Wernerfelt, 1984; Ferreira & Fernandez, 2017).

Multidimensional Model of Type One Entrepreneurial Propensity Characteristics (Van, 2016). The type one entrepreneurs are characterized as someone who risked or have an intention to risk their personal savings, reputation, and time as capital to start a business. These types of entrepreneurs have a strong positive affect that relates to inferences, judgements, perceptions, and cognitive processes. They also possess personality traits of conscientiousness and emotional stability wherein it can be reasonably assumed that individual differences in opportunity recognition and exploitation, value creation, and innovation is a function of one’s personality.

Hackman - Oldham job characteristics theory (1980). The theory suggests that a highly motivated employee is associated with three psychological conditions while working. These are meaningfulness of work, responsibility, and knowledge outcome. They proposed that meaningfulness of work, task, job, or labor means that the worker can connect to what he/she does rather than just being able to perform a repeated set of movements. Furthermore, responsibility is an opportunity given to the worker which includes the capability to modify and include the knowledge acquired while doing the job.

Four Ps Marketing Mix Model by Jerome McCarthy (1960). The Marketing Mix is a set of tactical marketing tools that the firm blends to produce the response it wants in the target market. The marketing mix consists of everything the firm can do to influence the demand for its product which are categorized into four groups of variables – the four Ps. (Philip Kotler and Gary Armstrong, Principles of Marketing,
14th edition). This includes price, promotion, product, and place. According to McCarthy, marketers can draw up a good marketing plan and improve results visibly by using the correct combination of these components.

Trade-off Theory by Modigliani and Miller, 1963. This theory is concerned about a firm’s optimal debt ratio which is the trade-off between additional costs associated with borrowing and tax benefits. This theory proposes that balancing of costs and benefits is the main factor in deciding the amount of borrowed funds and owners’ equity to be deployed. The offsetting of benefits against costs of debt in capital structure is addressed fairly by the trade-off theory. However, it may not be feasible for small businesses to achieve the target debt ratio as banks may be reluctant to lend money to enterprises during a financial crisis. Although the trade-off theory seems to be important for small businesses, large transactions costs force small enterprises to adjust to the optimal debt ratio slower than larger firms.

**Conceptual Framework**

**Independent Variables**

Entrepreneurial characteristics were measured in terms of the need for achievement, locus of control, risk-taking propensity, self-confidence, commitment and determination, tolerance of ambiguity and uncertainty, creativity, self-reliance, and ability to adopt. Similarly, human resource practices are determined to have a positive influence on business growth (Barringer et al., 2005; Dobbs & Hamilton, 2007). As for marketing strategies, they were anchored on the marketing mix model of product, price, promotion, and place by Jerome McCarthy and were also determined to have positive impact on business growth (Brush et al, 2009; Davidsson et al., 2010). On the other hand, sources of financing have been consistently defined as an important aspect of business growth (Philippine Senate, 2012). This variable was found to have a correlation to firm growth of micro and small enterprises in developing countries (Bongomin et al., 2017). Furthermore, sources of financing were classified according to internal and external sources.

**Dependent Variable: Business Growth**

Company assets are the most suitable indicator to measure the success and growth of a company. Assets are permanent items in the statement of financial position (balance sheet) because of business performance over the years of business operations. Asset growth can be a combination of several indicators such as increase or decrease in the number of employees, growth in profits, and business expansion. Additionally, Penrose’s theory of business growth focuses particularly on assets and employment (human capital) growth from an industrial firm’s perspective. This measurement category was an adaptation of the research conducted by Emily Long (2016). In her paper, she used categories in measuring asset growth rate for an average period of five years in the following manner: 1–25% increase means low growth rate and above 25% increase means high growth rate.
Methodology
The study employed a descriptive and correlational research design. The researcher ran a correlational analysis amongst the predictors selected for the research that determined the growth of the enterprises. This initially described the characteristics of the owners/entrepreneurs, human resources practices, marketing strategies, and sources of finance of the DTI-assisted micro and small enterprises and their significant influence on the dependent variable business growth. The study gathered quantitative data from the respondents. For independent variables, ordinal data were gathered for the sources of finance. Interval data were gathered for measuring entrepreneurial characteristics of the owner/chairperson, human resources practices and marketing strategies of the micro and small enterprises. Categorical data were collected for the dependent variable, which is business growth. The study utilized primary and secondary data. The primary data were gathered from the respondents who are owner/chairperson of the DTI-assisted micro and small enterprises. The secondary data, such as the list of micro and small enterprises in Davao Region, Philippines were obtained from the Department of Trade and Industry, Region XI. The researcher employed a survey questionnaire as a research instrument validated by experts in the field and through scales reliability tests. The questions generated were self-constructed and adopted a portion from a published study on the academic website. The questionnaire has a cover letter requesting permission to allow the proponent to conduct the survey.

The locale of this study is Davao Region, Philippines particularly the provinces of Davao City, Davao Del Sur, Davao Del Norte, Davao Oriental, Davao de Oro, and Davao Occidental. The respondents of the study are the owners or chairpersons of the DTI–assisted micro and small enterprises. Moreover, they were beneficiaries of KMME, SSF, and OTOP Next Gen programs. Their number of employees are within the range of 1–99 as defined by the parameters for micro and small enterprises set by the Department of Trade and Industry. They have also been operating for at least five years and were recipients of these programs during their economic life.

The secondary data used in the study is limited to the information available and given by the Department of Trade and Industry with a condition on Freedom of Information. As a requirement of Freedom of Information (FOI) Executive Order implementation, the researcher completed the request form and was sent to the Department of Trade and Industry Region XI, Philippines together with a government issued identification card. The study is limited to the responses from the 307 questionnaires collected and retrieved with complete answers. The measurement of the results of the study are limited to the responses of the respondents to the questionnaire made. The distance, time, mode, and cost of
transportation going to the area was also considered. Business locations with a very challenging route were regarded as outliers and excluded from the samples.

Questions on entrepreneurial characteristics were arranged accordingly based on the following components: the need for achievement, locus of control, commitment, and determination, risk-taking propensity, tolerance of ambiguity and uncertainty, self-confidence and creativity, self-reliance, and ability to adapt. These characteristics were identified in works of literature that influenced the growth of small businesses and were assessed to show the level to which it affects the growth of the micro and small enterprises in the Davao Region, Philippines. Human resource practices that evaluated the application by the business of the following practices through interval data. In this section, the respondents specified the degree to which their company applied the following human resources practices that are based on the following five categories: hiring, selection, training and development, performance management, and retirement. The categories and questions were self-administered based on the human resources practices that influence small business growth. Company’s adoption of marketing strategies was measured using interval data. This portion was divided into four parts based on the marketing mix of McCarthy’s four Ps. Questions were based on the research of Ramirez, Amurao and Mercado in 2014 entitled Marketing Strategies of Selected Business Establishments. The researcher designed the questions based on the top 4 outcomes of the study. The respondents signified their level of agreement or disagreement for each statement on entrepreneurial characteristics, human resources practices and adoption of marketing strategies through a five-point Likert scale.

The respondents identified their sources of internal and external financing using an ordinal scale from the alternatives given. The top major sources of internal and external financing were personal money/savings as an enterprise’s revolving funds, commercial or rural banks, financial or lending institutions, loan sharks, and loan from family members and friends.

In this study, the owners or chairpersons of the micro and small enterprises were asked about their total assets by the time they started operating and the average increase for five years in terms of percentage. Based on their perception, they estimated their total asset growth rate based on the two scales of categories. The respondents signified their level of business growth based on the total asset increase. They chose among the categories: low growth rate and high growth rate which was measured using nominal data. For an average of five-year performance of the micro and small enterprises, the respondents indicated their honest perceptions of the average increase of the firm’s total assets. For a low growth, it was a 1 to 25 percent increase and above 25 percent increase is considered a high growth rate.

For the statistical treatment of data, information was collected and presented through descriptive statistical analysis and the formulated hypothesis was tested to determine if the independent variable influenced small business growth of micro and small enterprises. The analysis of the results was interpreted using descriptive statistical measurements such as frequency counts and percentages. To assess the influence of entrepreneurial characteristics, human resources practices, marketing strategies, and sources of finance on business growth of micro and small enterprises the researcher used the binary logistic regression.
Results and Interpretation

Overall, the micro and small enterprises (MSE) in the Davao Region, Philippines are dominated by females, aged between 41 to 50 years old, married, and are college graduates. Seventy percentage of MSEs in Davao are owned/managed by females. Most of the entrepreneurs are between 41 to 50 years old (36.2%), followed by those beyond 50 years of age (33.2%). Moore et al. (2008) states that the ideal age of entrepreneurs lies between late 20s and early 40s. Within this range, a trade-off concerning confidence is usually characterized by youth and wisdom based on years of experience. In Davao Region, Philippines, the results reported otherwise since more than half are 41 years and above. This can be considered as conventional since experience and wisdom sometimes come with age. Most of the entrepreneurs are married with 76.5% of the total respondents. Widows and widowers were carried under the “married” category of marital status. More than half of the respondents are college graduates, with 54.4% of the total, while 23.1% is with no degree, some college. This can be articulated that these business owners are motivated towards improving business performance due to their higher earnings expectations. Smallbone and Wyer (2000) also expressed that small business owners’ educational background and training qualifications affect the firm’s management recourse-based and entrepreneur’s motivation to achieve superior levels of performance.

A large proportion of enterprises employ 1 to 10 employees. The bulk of which are utilizing between 2 to 5 employees. Only a few of these enterprises hired beyond 10 employees. This result is within the boundaries defined by the parameters of being a micro or small enterprise with employees between 1–99 (Department of Trade and Industry XI, Philippines). The results also confirm with statistics on the Davao Region, which showed that majority of the employments are created by micro and small enterprises (DTI-XI, 2017). More than half of the enterprises employ 1 to 10 employees. Many of them employ two, with 18.2% followed by three, four and five with 10.4% each. The results also revealed that businesses within this category employ equivalent manpower according to their business size.

The age of the micro and small enterprises was assessed based on the years in operation from start-up to the period which the survey was conducted. They must have been operating for at least five years and assisted by DTI programs during their economic life. As to the number of years in operation, majority of the micro and small enterprises in the Davao Region have been existing for more than 5 years but less than 10 years. Enterprises within the micro and small category that has operated for more than 20 years are 19.2% of the total, followed by 11-15 years (38 firms or 12.4%), then 16 to 20 years (29 firms or 9.4%). The results suggest that these firms are still at the early stage of existence.

In terms of sectors, the top five industries of MSMEs in 2017 were used to classify the respondents in Davao Region, Philippines; Other Service Activities; Financial and Insurance Activities; Manufacturing; Accommodation and Food Service Activities; Wholesale and Retail, Repair of Motor Vehicles and Motorcycles. These sectors account for 82.54% of the total MSMEs, other industries take in 17.46% of the total in 2017 (DTI-XI, 2017). Based on the results, the manufacturing sector has a large margin compared to the other industries followed by wholesale and retail with 59% and 16.3%. Based on the survey, other services include printing, stencils and typewriter services, internet café and computer services, party shops, salon, spa and massage, dressmaking and tailoring, manpower agency, travel and tours, medication safety consulting, and outsourcing services. Other industries are agriculture (such as coffee), Agri-Resources (such as organic fertilizers and vermicasts), Technical Education and Skills
Development Authority (TESDA) accredited (such as rice mills, training center), music and academic tutorial center, and jewelry shop.

More than half of the respondents are Kapatid Mentor Me (KMME) beneficiaries; this is because KMME is open to all types of industries. DTI-XI revealed that MSMEs could avail all three programs, one at a time. Usually, the common practice was that enterprises underwent the KMME program first, which is a short course on initial and foundation of entrepreneurial mindset and sustaining the enterprise. Micro, Small and Medium Enterprises may avail of these programs one at a time, so there are tendencies that respondents could have availed two or all the three programs offered (DTI-XI). For stratification and random sampling purposes, no respondent was repeatedly included in any of the samples. If the same business name appeared in the random sampling, the latest program availed would be considered and included in the sample. Distribution of micro and small enterprises are as follows: KMME–178; SSF–53; and OTOP–76, for total respondents of 307 micro and small enterprises.

**Entrepreneurial Characteristics**

The results signify that most of the time these characteristics are present among the entrepreneurs. It means that they are already aware of these in the context of doing business. Their roles, growth aspirations, and desires greatly influenced the success and development of a business (Pasanen, 2007; Wasserman, 2008). Studies have shown that many characteristics of entrepreneurs contributed to growth, but no single factor appears to make a dominant contribution. Commitment and determination were recognized and always present on business owners in Davao Region. This means that they are passionate about pursuing an opportunity and committed to overcoming setbacks when faced with challenges (Neneh, 2012). Another characteristic that is always present among the respondents is creativity, self-reliance, and ability to adapt to a changing business environment with a very satisfying mean of 4.54. Their capacities to be open-minded, fast learner, and to develop new competencies and perspectives (Collura and Applegate, 2005) proved to be ideal in growing enterprises. Another essential characteristic that is always present among the business owners is self-confidence. Being confident empowers entrepreneurs to believe in themselves and to achieve their stated goals and objectives. Also, the need for achievement is most of the time present on entrepreneurs in the Davao Region with an average mean of 4.18. The survey shows that they are open to new ideas and innovativeness, they are focused, always strive to achieve targets, and create a state of mind making valuable efforts, fulfillment, and satisfaction. Even though need for achievement is an inherent character of an entrepreneur, it can also be taught and practiced, making it vital for entrepreneurs to have it (Wickham, 2001). Locus of control can be external or internal. The results described that respondents possess more of internal locus of control. Internal locus of control was established to be present most of the time on business owners in Davao Region. People with this characteristic are believed to have a positive influence over their own destinies through personal abilities, skills, and efforts (Henry, Hill and Leitch, 2003).

Tolerance of ambiguity and uncertainty is considered as one of the most critical characteristics in the study and second from the lowest with a mean. Hence, at an average, this characteristic is most of the time present in the respondents. This suggests that entrepreneurs in Davao Region can manage change, stress, and conflict is a trait of tolerance of ambiguity and uncertainty. Challenging situations, most of the time, came from unstable and unpredictable circumstances. That is why Schere (1982) stressed that this trait is a very important attribute for entrepreneurs. Risk-taking propensity is a test on being risk averse as an entrepreneur. This characteristic is still, most of the time, present on the respondents and
must be taken as a sign that most of respondents take calculated risks when deciding to engage in a business venture. This is also consistent with the findings of Neneh (2012) on small businesses that they take the risk in a “very calculated, carefully thought-out manner”, while making sure that chances are in their favor and avoid taking unwarranted risks.

**Human Resources Practices**

Hiring, selection, and allowing employees to learn and providing them opportunities to acquire new skills has been implemented by respondents in the Davao Region, Philippines. Every business entity’s policy in proper staffing, thus, hiring and selection have always been a priority. The hiring based on educational requirement and prior work experience and selection process was followed even on an informal manner. The results revealed that the respondents often implement hiring based on educational qualifications and prior work experience. Conducting a background check on the applicants is deemed implemented on selection most of the time by the respondents in choosing a suitable and qualified employee. They also give opportunities to learn new skills and training to employees. Given that majority of the enterprises belong to the manufacturing sector, training, and continuous learning is deemed a must and an advantage to every growing enterprise. Skills are crucial in improving a firm’s performance. Proper training must be provided to enhance their abilities leading to a higher productivity level. The results revealed that training and development is a priority among the human resources practices. Having these strategies will help organizations attain their goals by aligning the right information and resources (Chenhall and Langfield-Smith, 1998). Assessment of employee performances and feedback, mandatory benefits, incentive on financial assistance, intervention on performance gaps, and having an HR manual are some of the practices implemented by these enterprises.

**Marketing Strategies**

Small firms’ active engagement in product management and markets are particularly essential to achieving growth over an extended period of time (Calantone, Vickery and Drôge, 1995; Smallbone and Wyer1995). For growing enterprises, product development is of top priority among marketing strategies. This is also observed in micro and small enterprises in the Davao Region, Philippines. Catering to customers’ needs, product improvement, packaging, considering feedback and suggestions are some of the strategies that respondents in the Davao Region. It is then followed by establishing good customer relationship, focusing on customers’ needs, considering feedback and suggestions for continuous improvement. This could also mean that micro and small enterprises are attentive to what particular products or services to offer to the customers. As a result, businesses that can develop new products and services in existing markets, join new markets with current products/services, and broaden their customer base, are more likely to experience growth (Kelley and Nakosteen, 2005; Littunen and Tohmo, 2003). Pricing is another important factor one must consider when putting up a business, and these firms considered the appropriate pricing method. The idea is not to price products or services too low or too high. When the price is too low, customers might not buy it thinking that what are being offered are of inferior quality. On the other hand, if it is too high, many may not be able to afford the product or service (Remirez, Amurao and Mercado 2014). Enterprises in the Davao Region based their sales prices on cost plus a certain mark-up while at the same time remaining to be competitive to the other businesses in the same industry. It can be observed from the findings that enterprises closely monitor competitor behaviors and activities so that the mark-up based on cost is one that maximizes net income.
Business location is as crucial as the other factors in the marketing mix. Being accessible to customers and public transportation has always been adopted by micro and small enterprises in the Davao Region. These enterprises ensure that their business location is strategic. The findings reveal that securing an accessible area to customers and public transport is of top priority. This can be attributed to distribution strategies where they can channel their goods and services available to consumers. It was also revealed that being accessible to customers is a prime consideration in choosing a business site and the second is accessibility to public transportation. Since most of the micro and small enterprises are engaged in manufacturing or production, it can also be interpreted that aside from manufacturing, they are also involved in retailing. Likewise, with the length of their business operation, it can be understood that they already have constant and loyal customers. Being located in a local business center, with high profile traffic, can results in higher business efficiencies, which was also noticeable from the findings. The study also suggests that the concentration of firms in a small topographical area does have a positive effect on their level of efficiency.

In terms of promotional strategies, having a good relationship with customers is a top priority of micro and small enterprises (Ramirez et al., 2014). This is consistent with results in micro and small enterprises in the Davao Region, Philippines. This practice can enhance trust and confidence in the products/services delivered. Also, the establishment with a good relationship with customers can develop customer loyalty. With respect to advertisement and promotion, local publications such as newspapers or AM/FM radio ads were the least adapted by these enterprises. This is due to the prevalent expensive rates on radio broadcasts and a layout in the local newspaper. Providing discounts on certain occasions and giving samples to potential customers are practiced to retain and gain more customers. These enterprises also availed trade fairs on malls and supermarkets as a promotional channel. They were encouraged and invited by the Department of Trade and Industry to join and sell their produce. It is clearly observed that these enterprises are using different promotional strategies to market their goods or services. The use of several promotional methods by these firms indicates their knowledge of the importance of good promotion. They know and are familiar with some promotional tools they can utilize to create awareness for their endeavors and marketing offers, which is essential for a business to succeed. Trade fairs in malls and supermarkets were utilized for product promotion by the respondents. On the other hand, the use of local publications for advertising and promotion is the least adopted strategy by the respondents.

Sources of Finance
The source of finance forms a primary resource base of which other factor inputs are acquired, like equipment and raw materials (Barringer and Jones, 2004; Locke, 2004). This section considers that micro and small enterprises have access to finance, both internal and external. As to the internal source of funds, almost all micro and small enterprises owners used their personal money as business’s revolving funds. This information applies to start-ups and ongoing business operations. The results revealed that out of 307 respondents, only 264 or 86% of the total respondents used their personal money or savings as business’s revolving funds. Most of these enterprises used personal money or savings of the business owners to start a business and continued consuming the funds as the business continue to flourish. Consistently, small, and medium firms seemed to have continuously relied on internal sources of financing, from their start-up phase to the ongoing business operations (Alaba, 2012). Some micro and small enterprises in Davao Region justified that they did not use their personal money/savings to cover the start-up operations when they started the business. Instead, they used
personal credit lines from banks such as credit cards or soft loans from financial institutions. This information does not also mean that they do not have money when they started the business. Others, usually the SSF beneficiaries, started operating with the help from the Department of Trade and Industry through other private institutions in their procurement of equipment, machineries, and raw materials.

Most respondents resort to commercial and rural banks for external financing (113 or 36.7%). While others chose to acquire funding from financial or lending institutions (24.1%), some preferred not to rely on external financing means. It is already established that financial capital is necessary to begin and develop a business. Business owners who intend to grow their operations for the next succeeding years understand that funds sourced internally is insufficient to back-up further business expansion. In the Philippines (Alaba, 2012), for ongoing business operations, on all types of firms and with access to financing, the major source of financing is commercial personal loans and credit lines from financial institution, including cards. Consistently, the majority of the micro and small enterprises in the Davao Region (as to the external source of finance) preferred to acquire loans from commercial or rural banks. Given the results of the study, borrowings from commercial or rural banks is identified to be a huge contributor to the growing business. Considering the length of their business operations, growing enterprises operating for more than five years are most qualified and able to provide bank requirements (Singh and Wasdani, 2016). Furthermore, personal loans using credit cards are included in this criteria.

More than one-fourth of the respondents did not rely on external sources of funds. This outcome was arrived based on the findings that almost all or 86 percent of these respondent firms use personal money or savings as revolving funds. This indicates that those who are not dependent on external sources of funds continue using internal funds in business operations. Almost one fourth patronizes financial and other registered lending institutions. These financial channels offer short term loans at a lower interest compared to banks. These financial institutions can also approve loans faster with lesser loan requirements. Apart from registered financial and lending institutions, some enterprises preferred borrowing money from their family and friends. Though only a few of these growing enterprises chose latter method, they availed the option since the repayment of the borrowed amount does not incur interest. Loan sharks are off the hook from these enterprises. This indicates that these growing firms are knowledgeable and capable of looking for more practical external source of funds. They are called loans sharks because of their unjustifiable and exorbitant interest rates.

**Business Growth**

The categories were intended to measure the level of business growth in terms of assets for an average of five years. The results suggest that majority of micro and small enterprises experienced a high growth rate, with an increase of assets exceeding 25 percent from start-up. Starting and operating a business entails a variety of risks that may cause failures. Usually, the subject enterprises perish in their first year of set-up or the initial difficulty continuing for a period. While some enterprises managed to survive the start-up phase, they eventually faced more challenges along the way and eventually closed their operations. Even with the challenges, many of these enterprises were still able to survive, grow, and continue business operations.

Growth is eminent in these enterprises. In a conventional manner, an average time to achieve profitability for a start-up company is from two to three years. Firm-level asset expansions and constructions, as measured by the asset growth rate variable, appear to be connected to momentum
profits (Long, 2016). Though there is no clear evidence on the inferential relationship between profitability and asset growth, it can be inferred from the findings that micro and small businesses continue to develop as assets have increased, on average for five years. Business growth of at most 25 percent increase ranged at 40.40% and 59.50% for more than 25 percent increase.

**Overall Test and Strength of Relationship**

To measure the model's effectiveness, the chi-square test was used by this study on the analysis. This test also provides a comprehensive measurement of predictive accuracy based on the dependent variable (Hair, Black, Babin and Anderson, 2014). The Omnibus Tests of Model Coefficients is used to check that the new model (with independent variables) is an improvement over the baseline model. It uses Chi-square to see if a significant difference between the Log-likelihoods (the -2LL) of the baseline model and the new model. The Model row compares the new model to the baseline.

<table>
<thead>
<tr>
<th>Table 2: Omnibus Tests of Model Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 4</td>
</tr>
<tr>
<td>Step</td>
</tr>
<tr>
<td>Block</td>
</tr>
<tr>
<td>Model</td>
</tr>
</tbody>
</table>

If the new model has a significantly reduced -2LL compared to the baseline, it suggests that the new model explains more of the variance in the outcome and is an improvement. Based on the results, there is a significant reduction in the baseline model (model summary) of -2LL from 414.184 (iteration history) to 380.919 with a Chi-square of 33.263, and with a p-value of 0.000, the new model is significantly better.

<table>
<thead>
<tr>
<th>Table 3: Iteration History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iteration</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

  a. Constant is included in the model.
  b. Initial -2 Log Likelihood: 414.183
  c. Estimation terminated at iteration number 3 because parameter estimates changed by less than .001.

<table>
<thead>
<tr>
<th>Table 4: Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

  a. Estimation terminated at iteration number 4 because parameter estimates changed by less than 0.001.

The Model Summary provides the -2LL and pseudo-R-squared values for the full model. The reduction of -2LL indicates that the new model (with independent variables) is a significantly better fit than the null model (without independent variables). The binary logistic regression employs pseudo-R-squared as
a measure in the identifying of the strength of the relationship between the set of independent variables and the dependent variable. This signifies the variation explained by the model summary. The R squared values explain how the model elucidates many variations in the outcome. Cox and Snell, and Nagelkerke have 0.103 and 0.139 R squared, respectively. Nagelkerke is mostly used for interpretations since its value ranges from 0 to 1 and with high values imply an adequate model fit (Hair et al., 2014). Nagelkerke suggests that the model explains 13.9% of the variation in the outcome. This indicates that the independent variables adopted by the study can explain 13.9 percent of the variation of business growth among micro and small enterprises using asset growth as indicator.

Another statistical measure that measures an overall fit is The Hosmer and Lemeshow test (Hair et al., 2014). The goodness of fit suggests that the model is a good fit. In this case, if the p-value is 0.05 or less, the model is not sufficiently fit. The Hosmer and Lemeshow chi-square test imply a good fitting model with a p value of 0.549.

<table>
<thead>
<tr>
<th>Step</th>
<th>Chi-square</th>
<th>Degrees of Freedom (df)</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>6.888</td>
<td>8</td>
<td>0.549</td>
</tr>
</tbody>
</table>

The classification table shows an indication of how well the model performs in predicting the category membership correctly on the dependent variable. The accuracy for a given category is reflected in the row percentages. The table shows that the model accurately predicted that 79.8% of the respondents increased their assets beyond 25% from start-up. This indicates that the percentage of occurrence of high growth rate was correctly predicted. The model also correctly predicted that 50.0% of the respondents increased their assets between 1 to 25% from start-up, indicating that the percentage of low growth rate was correctly predicted. Overall, the predictors were correct 210 times out of 307 times, for an overall success rate of 67.8%. This success rate is higher than the model with an intercept only with 59.6% of overall accuracy.

<table>
<thead>
<tr>
<th>Observed</th>
<th>Predicted</th>
<th>Percentage Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Business Growth</td>
<td>1-25 percent increase</td>
</tr>
<tr>
<td>Step 4</td>
<td>Business Growth</td>
<td>1-25 percent increase</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Above 25 percent increase</td>
</tr>
<tr>
<td>Overall Percentage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 0</td>
<td>Business Growth</td>
<td>1-25 percent increase</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Above 25 percent increase</td>
</tr>
<tr>
<td>Overall Percentage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Constant is included in the model.
b. The cut value is 0.50
Relationship of Individual Independent Variable and the Dependent Variable

The variables in the equation table were used to address the directionality and magnitude of the coefficients. These statistical tools were utilized to determine the relationship of the independent variables to the dependent variables. It contains the overall contribution of each independent variable to the model.

Table 7: Variables in the Equation

<table>
<thead>
<tr>
<th>Step 4</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for Achievement</td>
<td>-0.740</td>
<td>0.288</td>
<td>6.594</td>
<td>1</td>
<td>0.010</td>
<td>0.477</td>
</tr>
<tr>
<td>Locus of Control</td>
<td>0.593</td>
<td>0.271</td>
<td>4.770</td>
<td>1</td>
<td>0.029</td>
<td>1.809</td>
</tr>
<tr>
<td>Promotion</td>
<td>0.365</td>
<td>0.215</td>
<td>2.872</td>
<td>1</td>
<td>0.090</td>
<td>1.440</td>
</tr>
<tr>
<td>Sources of Funds - external</td>
<td></td>
<td></td>
<td>17.785</td>
<td>4</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>Commercial or Rural Banks</td>
<td>0.738</td>
<td>0.319</td>
<td>5.355</td>
<td>1</td>
<td>0.021</td>
<td>2.092</td>
</tr>
<tr>
<td>Financial/Lending Institutions</td>
<td>-0.325</td>
<td>0.336</td>
<td>0.931</td>
<td>1</td>
<td>0.335</td>
<td>0.723</td>
</tr>
<tr>
<td>Loan Sharks</td>
<td>0.633</td>
<td>0.940</td>
<td>0.454</td>
<td>1</td>
<td>0.501</td>
<td>1.884</td>
</tr>
<tr>
<td>Loans from Family and Friends</td>
<td>-0.800</td>
<td>0.447</td>
<td>3.207</td>
<td>1</td>
<td>0.073</td>
<td>0.449</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.403</td>
<td>1.445</td>
<td>0.078</td>
<td>1</td>
<td>0.780</td>
<td>0.668</td>
</tr>
</tbody>
</table>

a. Variable(s) entered on step 1: Sources of Funds – external.
b. Variable(s) entered on step 2: Promotion.
c. Variable(s) entered on step 3: Need for Achievement.
d. Variable(s) entered on step 4: Locus of Control.

The Wald column is used to determine statistical significance for each of the independent variables. The higher the Wald value, the closer the equivalent p value to 0.05. The highest Wald values in the equation table are 6.594, 4.770, 5.355 and 17.785. Using a conventional 0.05 threshold on the p-value, we can observe that the need for achievement (p-value 0.010), locus of control (p-value 0.029), and external source of funds (p-value 0.021) are significant to the dependent variable. Among the seven entrepreneurial characteristics, only the need for achievement and locus of control were identified to be significant predictors of business growth. Other variables related to human resources practices and marketing strategies do not have a significant contribution to the model.

The exponentiated coefficient (Exp. B) directly reflects the magnitude of the change in the odds value. The exponentiated coefficient of 0.477 denotes a negative relationship; in other words, the odds were decreasing. This indicates that for every one-unit increase in the need for achievement variable, the odds of increasing the asset beyond 25% will decrease by 47.7%. This means that an increase in the need for achievement variable will be more likely for micro and small enterprises to increase their asset between 1 to 25% only. Entrepreneurs with a preference of this character signified a low growth to micro and small enterprises. On the other hand, the exponentiated coefficient of 1.809 denotes a positive relationship, indicating increasing odds. For every one-unit increase in the locus of the control variable, the likelihood that assets grow beyond 25% will increase by 1.809 times. Entrepreneurs with a high preference for this character signified a high growth to micro and small enterprises. The odds ratio of
2.092 on an external source of funds indicates that an enterprise will increase its assets beyond 25% by 2.092 times higher if they borrow funds from commercial or rural banks.

**Analysis and Interpretation of Results: Determinants of Growth of Micro and Small Enterprises**

The binary logistic regression analysis determined three independent variables that are significant to the dependent variable. These are the need for achievement, internal locus of control, and external source of funds. The specific understanding of the results can be further explained by the variables in the equation table in binary logistic regression. The odds of the independent variables are represented by the beta coefficient, which indicates the direction of its effect on business growth. The exponentiated beta coefficient explains the magnitude of influence of the independent variables to business growth.

In terms of external sources of funds, the results indicate that micro and small enterprises with a high preference for acquiring external sources of funds and preferably from commercial or rural banks will more likely increase their assets beyond 25%. This variable was considered to have significantly effect on business growth to which asset growth was used as an indicator. The result is consistent with the study of Bongomin, Ntayi, and Akol (2017) that access to financing whether internal or external, has a significant correlation to the growth of small businesses in growing economies. Similar findings revealed the same results from the study of Carpenter and Peterson (2002) covering all types of industry sectors. The output disclosed that the source and availability of external finance are significant to business growth using total assets as an indicator.

Almost all enterprises are utilizing internally sourced funds. Majority of them raised additional capital through external means of finance. These growing enterprises preferred commercial and rural banks. The relevance of this variable to business growth indicates that such is an important factor in increasing assets. Most of the micro and small enterprises in the Davao Region, Philippines operate for an average of five to ten years. The classification table predicted an accuracy of 82% that they were able to increase their assets beyond 25% from start-up. Notably, external means of acquiring finance were identified to have a positive impact on business growth. Among the external means, borrowings from commercial and rural banks were significant, and a big contributor to growth. Given the continuous reliance of these enterprises on commercial and rural banks, they surpass the bank’s scrutiny of credit requirements and good credit standing.

Commercial banks and rural have been the largest sources of financing for MSMEs (Alaba, 2012), and in more recent years, they have shown increasing interest in MSME Lending. They provide loans of all sizes, subject to the bank’s credit requirement and approval. Notably, the standard loan conditions still apply to all types of loans, and none of these exemptions available for micro-loans apply to MSME loans.

The need for achievement showed to have a significant impact on business growth. The study suggests that this character is present among the owners of micro and small enterprises in the Davao Region with low business growth. This characteristic is essential to entrepreneurs in low growth more than those in the high growth category. It can be interpreted that the need for achievement is already present in entrepreneurs in the high growth category and is, therefore, significantly leading them to survive and grow. The result is consistent with the research of Smith and Miner (1984) signifying the correlation between firm growth and entrepreneurs’ need for achievement. In the study of Roman, Mojmir and...
Pavel (2002) on Thematic Appreciation (TAT) to measure an individual’s level of motivation, people with a strong need for achievement are open to new ideas and are innovative. Enterprises in low growth must foster positively on this characteristic. In a fast-changing business environment, adaptation is a constant process. For growing firms, goal setting is an achievement incentive that shows achievers never give up until they achieve their stated goals and objectives.

Locus of control was identified to be a significant predictor of business growth. Specifically, the results revealed that the proprietors of micro and small enterprises in the Davao Region possess an internal locus of control. Entrepreneurs with a high preference for this character are owners of enterprises enjoying a high growth rate. Similar findings revealed that a high internal locus of control is associated with business growth (Barrick and Mount, 2005; Rauch and Frese, 2007). Business owners of enterprises that have struggled to keep its operation for five years must have experienced many challenges along the way. After experiencing a crisis, these entrepreneurs are more likely to develop a higher internal locus of control and be more resilient in difficult situations by believing in their capabilities and hard work. Entrepreneurs pursuing to expand business operations are believed to positively influence their own destinies through personal abilities, skills, and efforts, a character manifested of having an internal locus of control.

Other entrepreneurial characteristics do not significantly affect the business growth of the micro and small enterprises in the Davao Region. It does not mean that they are not necessary for business operations. In fact, they are essential for an entrepreneur’s success. But, considering the descriptive results in relation to inferential, the non-significance does not mean the non-possession of these characteristics. These characteristics are present across all levels of growth but with no emphasis on its relationship to asset growth. Based on the survey results, the need for achievement and internal locus of control of entrepreneurs’ attributes affect more significantly the increase in the business assets more than any other characteristics in the variable.

The basic premise of human resource practices and 4Ps of the marketing mix is not a significant predictor of business growth, whereas this does not mean not necessary. This simply denotes that the following practices are common to all businesses regardless of the structure. Based on the results, these enterprises frequently implement human resource practices, but inferential results suggest that they are not predictors of asset growth. Every business must implement human resource practices, but the implementation is not equivalent to a direct increase in the business’s assets. 4Ps of the marketing mix is essential to these enterprises, for they always adopt an excellent combination of these components. The application of these strategies does not significantly increase assets. This might be necessary to a firm’s production or sales, but marketing strategies are not predictors of asset growth in this study.

Author’s Biography
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References


