

Entrepreneurial Competencies and Business Performance of Millennial Entrepreneurs

By

Quezon, Marissa S

Faculty, College of Business Management & Accountancy, Carlos Hilado Memorial State University, Philippines

Email: marissa.quezon@chmsc.edu.ph

Vergara, Shaene Iydelle O

Administrative Aide VI, National Food Authority, Philippines.

Email: vergarashaene@gmail.com

Abstract

The study aims to determine the millennial entrepreneurs' level of entrepreneurial competency in innovative and marketing, strategic, personal, and learning and analytical competencies, and the business performance in terms of percentage increase in annual sales, profit, and assets in a three-year trend. The research design of the study is descriptive-correlational. The participants are composed of 153 Department of Trade & Industry (DTI)-registered millennial entrepreneurs aging between 20-40 years old whose businesses are operating for at least last three years. The sampling technique used was convenience sampling. A researcher-made questionnaire was used which composed four parts. The overall entrepreneurial competencies indicated a total grand mean rating of 3.88, which is interpreted as highly competent. For the level of business performance, a gradual decrease is noted in service, merchandising, and manufacturing industries. The same trend is seen for the asset-size classification. Although the data present an increment increase on the line of business and asset size classifications, the trend falls on the lowest bracket. The results further show that there is no significant difference between entrepreneurial competencies and the participant's profile (p -values $> .05$) as well as between entrepreneurial competencies and the participant's business profile (p -value > 0.05). There is a positive but weak relationship between entrepreneurial competencies and business performance. The results further show that there is no significant difference between entrepreneurial competencies and the participant's profile as well as between entrepreneurial competencies and the participant's business profile. There is a positive but weak relationship between entrepreneurial competencies and business performance. In conclusion, DTI registered millennial entrepreneurs are highly competent in each indicator of entrepreneurial competences, increment increase can be noted on the lowest bracket of business performance. A workshop and seminar sessions with millennial business owners is suggested to address the weaker factors of entrepreneurial competencies to improve business performance.

Keywords: Bacolod City Philippines, business performance, entrepreneurial competencies, micro small and medium enterprise.

1. Introduction

Some millennials are driven to go into entrepreneurship to start and build their business. To do this, it is important that they possess certain competencies that are necessary to manage

and eventually improve their business. Over time, their competencies improve and impacts the performance of their enterprises in the areas of sales, customer reach, market presence, and many more. As more and more of them venture into business, they contribute to the economic progress.

Small Medium Enterprises (SME) showed that entrepreneurial competencies of a business owner have a strong predictor of business success [1]. The research findings also show that business owners are proficient enough to minimize the damaging impact of the business environment if they are willing to equip themselves with the appropriate business competencies. Further, the link between entrepreneurial competencies and business success is more prominent in aggressive and dynamic environments compared to more benign and stable environments. Another study showed that social structure is a positive advantage to a successful venture through networking and social awareness [2].

A progressive global competition and the distinct competencies of the millennial entrepreneurs lead to entrepreneurial motivation, orientation, opportunity, and discovery which result to the business venture's success [3].

The millennial generation of entrepreneurs is presented with outstanding opportunities through faster adaptation to the economic pace and market evolution compared to other generations of entrepreneurs [2]. Furthermore, a study on Generation Y SMEs in Malaysia shows that social competencies of adaptability, perception, and expressiveness has a positive relationship to business performance.

Millennial entrepreneurs' skills, attitudes, knowledge, and perspectives are different from previous generations [3]. Entrepreneurs possess skills and characteristics that allows them to plan, set goals, manage risks, and in the long term, sustain their business [4]. In lieu of these skills and characteristics, this research focused on entrepreneurial competencies of networking/collaboration, innovation and creation, problem-solving and decision making, risk attitude, organizing, planning, computer competency, marketing, self-confidence, and financial management.

The financial & operational performance, sales, customer growth, and profitability are indicators mostly used in determining the venture's performance [5]. Related studies further shows that entrepreneurial competencies have an impact on business performance. To substantiate this claim, innovation, entrepreneurial marketing, extroversion, and openness to experience have positive impact on business performance [6].

The need to conduct this research arises due to numerous studies which emphasized that extant literature focuses considerably on the older generation of entrepreneurs; even among recent empirical studies, the methodologies and research center on entrepreneurs born in the 1950s, 1960s, and 1970s [3]. Furthermore, a call for more studies on the millennial generation of entrepreneurs and the relationship between entrepreneurial competencies and business performance is highlighted for future research [7].

Due to the limited study and preliminary literature review of millennial entrepreneurs, their competencies, and their effect on their business performance, especially in the Philippines, it is of interest to investigate this. The objective of the study is to determine the relationship the competencies millennial business owners possess and the performance of their business venture. With minimal literature reviews about entrepreneurship in the Philippines compared to other countries like India, Malaysia, Singapore, and Indonesia, it

additionally prompted further investigation.

2. Method

This study used a descriptive-correlational type of research design. Descriptive research describes how the observation and survey tools are essential in gathering data for the study. This research design analyzes the data using frequencies, percentages, averages, or other statistical analyses to determine the relationships between or among the variables [8]. In this research design, the researcher's main objective is to gather necessary data through various research instruments like tests, questionnaires, survey forms, observation, and interviews to comprehensively describe the circumstances or phenomena in the study [9].

It is correlational type of research design as it correlated two variables to determine the relationship of the group leading to a deduction.

For the respondents, the participants of this study were the millennial entrepreneurs whose age ranges from 20-40 years old or those born within the years 1980-2000, referred to as the millennial generation. Their businesses are duly registered MSMEs based on the records of the Department of Trade and Industry Negros Occidental Provincial Office, located within the vicinity of Bacolod City, and are operating for at least three years.

The sampling technique used in this study is convenience sampling. This is a non-probability sampling method where the participants of the population meet the criteria set by the researcher in terms of accessibility, geographical proximity, time availability, and willingness to participate in the survey activity [10]. Out of the 205 computed sample size only 153 participants returned the questionnaire despite of repeated follow-up through email. The rampant increase of the Covid-19 virus also led to the utilization of online forms to conduct the survey

The researcher used a researcher-made questionnaire composed of four parts. The indicators for entrepreneurial competencies were based on the book *Entrepreneurial Management* [14]. The identification of the profile variables such as age, sex, educational attainment, and civil status were taken from Agustin-Acierto [14]. The first part determined the participants' profile, such as age, sex, educational attainment, and civil status. Part II of this researcher-made questionnaire included the business profile of the participants, such as line of business, forms of business, number of years in operations, initial capitalization, number of employees, annual revenue, and size of assets. Meanwhile, part III determined the degree of competencies of the participants in terms of networking/collaboration, innovation & creation, marketing, problem-solving & decision making, organizing, planning, risk attitude, self-confidence, computer competency, and financial management. Finally, part IV included items that measured the level of business performance of millennial entrepreneurs.

The level of business performance was measured by an estimated increase in percentage in sales, profit, and assets. The estimated increase covers 2018, 2019, and 2020. The Five-point Likert Scale was used to determine the competency among the mentioned variables.

Table 1. Five-point Likert Scale on Part III. Level of Entrepreneurial Competency

Score	Verbal Interpretation	Description
5	Very highly competent	Having exceptional skills, knowledge & experience
4	Highly competent	Having adequate but not exceptional skills, knowledge & experience
3	Competent	Having enough skills, knowledge & experience
2	Somewhat competent	Having the basic skills, knowledge & experience
1	Not competent at all	Lacks skills, knowledge & experience

Lawshe's Content Validity Ratio (CVR) instrument was used to evaluate the questionnaire by identifying each question if they are “essential,” “useful but not essential,” or “not necessary” and it resulted to a CVR of 0.87.

A reliability test was conducted to 30 entrepreneurs whose businesses are not located or operating in Bacolod City, Negros Occidental. The Cronbach's alpha (α) was 0.98.

Mean ratings were used to determine the millennial entrepreneurs' competencies and business performance was measured in percent change. The significant difference of entrepreneurial competencies and business performance were measured by using Mann Whitney and Kruskal Wallis. Significant relationship between entrepreneurial competencies and business performance was measured using the Spearman Rho coefficient of correlation.

3. Results and Discussion

Profile of the participants

The profile of the participants in terms of age, sex, educational attainment, and civil status is presented in Table 2. Based on the data, 52.3% of the participants belonged to 21-31 years old, and the remaining 47.7% were 32-40 years old. The finding concurs to [11] that 80% of all MSMEs in the Philippines is under 35 years old. Moreover, most of the participants were male, consisting of 51% and the remaining 49% were females. As to the educational background, 56.2% of the participants were degree holders, 33.3% obtained master's degree, and the remaining 10.5% of participants pursued Doctorate/J.D. In terms of civil status, the result showed that 45.8% of the participants were single, and the remaining 54.2% were married.

Table 2. Profile of the Participants

Variable	f	%
<i>Age</i>		
Younger	80	52.3
Older	73	47.7
Total	153	100
<i>Sex</i>		
Male	78	51.0
Female	75	49.0
Total	153	100
<i>Educational Attainment</i>		
Bachelor's Degree	86	56.2
Master's Degree	51	33.3
Doctorate Degree	16	10.5
Total	153	100
<i>Civil Status</i>		
Single	70	45.8
Married	83	54.2
Total	153	100

Profile of the Business

Table 3 presents the profile of the business of the participants. The result showed that merchandising business was the leading sector that the millennial entrepreneurs are engaged in which comprised 52.9%. The next line of business was the service industry with 39.2%, while the manufacturing line garnered 7.8%. Most of the participants engaged in sole proprietorship consisted of 71.2% sole proprietors while 23.5% of the participants were into partnership. Meanwhile, 5.2% of the participants were into corporations. The data gathered also showed that 58.2% of participants were operating for 3-5 years and 37.3% were running the business for 6-10 years, while a small percentage of 4.6 was operating for more than ten years. In addition, the result showed that most of the participants, consisting of 82.4%, did not spend more than 3 million initial capitalizations; conversely, only 17.6% started their businesses with 3,000,001 to 15,000,000 capitalizations. As to the number of employees, 79.7% of the millennial MSME owners got 1-9 employees. This was followed by 18.3% with 10-99 employees. Only 2% of the participants employed 100-199 individuals. The result further showed that 80.4% of the participants earned less than 1 million annual revenues, while only 19.6% earned 1 million to 2.9 million profits yearly. Lastly, 82.4% of millennial business owners got less than 3 million assets; 13.1% ranged from 3,000,001 to 15,000,000; while 4.6% of the participants possessed assets ranged from 15,000,001 to 100,000,000. The result is supported by [11] citing that most businesses exist 15 years and below. Pointing out the same study, the result revealed that most entrepreneurs have less than three workers, while in the line of business it also indicated that merchandising is considerably greater than service and manufacturing lines.

Table 3. *Business Profile of the Participants*

<i>Variable</i>	<i>f</i>	<i>%</i>
<i>Line of business</i>		
Service	60	39.2
Merchandising	81	52.9
Manufacturing	12	7.8
Total	153	100
<i>Forms of business</i>		
Single Proprietorship	109	71.2
Partnership	36	23.5
Corporation	8	5.2
Total	153	100
<i>Number of years in operation</i>		
3-5 years	89	58.2
6-10 years	57	37.3
11 years and above	7	4.6
Total	153	100
<i>Initial Capitalization</i>		
Not more than 3 million	126	82.4
3,000,001-15,000,000	27	17.6
Total	153	100
<i>Number of employees</i>		
1-9 employees	122	79.7
10-99 employees	28	18.3
100-199 employees	3	2.0
Total	153	100
<i>Annual Revenue</i>		
Less than 1 million	123	80.4
1 million to 2.9 million	30	19.6
Total	153	100
<i>Size of Asset</i>		
Not more than 3,000,000	126	82.4
3,000,001-15,000,000	20	13.1
15,000,001-100,000,000	7	4.6
Total	153	100

Entrepreneurial Competencies

The entrepreneurial competencies were measured using the Five-point Likert Scale in Table 1. where interpretation ranges from not competent, somewhat competent, competent, highly competent, and very highly competent. These interpretations were measured in terms of the millennial entrepreneurs' skills, knowledge, and experience.

The overall result of the entrepreneurial competencies indicated a total grand mean rating of 3.88, which is interpreted as highly competent. This implies that, in general, millennial entrepreneurs have adequate skills, knowledge and expertise in networking/collaboration, innovation and creation, marketing, problem-solving and decision making, organizing, planning, risk attitude, self-confidence, computer competency, and financial management.

To precisely measure which competencies or indicator of competencies is ranked as the "lowest," the researcher grouped the ten competencies according to their entrepreneurial characteristics and traits: Innovation and Marketing competencies, Strategic Competencies, Personal competencies, and Learning Analytical competencies. Entrepreneurial competencies are higher-level features encompassing personality traits, skills, and knowledge needed to perform a job successfully. The attributes are categorized into the competency areas as defined by [13]. The classification of [13], which are opportunity competencies, organizing competencies, relationship competencies, commitment competencies, and conceptual competencies, was used as a basis for categorizing the entrepreneurial competencies of this research.

Innovative and Marketing Competencies

Table 4 shows the indicators of the entrepreneurial variables of networking/collaboration, innovation and creation, and marketing competencies. This group was categorized as an innovative and marketing group of competencies.

Networking/Collaboration was overall interpreted as highly competent with a grand mean score of 3.85. The highest indicator for this competency got a mean rating of 3.92, interpreted as highly competent which refers to a business owner's ability to build professional relationships. On the contrary, the entrepreneur's ability to develop strategies in consultation with others incurred the lowest mean score of 3.75, but still interpreted as highly competent. The results imply that millennial entrepreneurs are skilled in strategy development, open for mentoring and consultation, expert in building professional networks, and take advantage of external resources for venture development. As recounted networking/collaboration is a skill of an entrepreneur to create, build, and maintain professional relationships among its supply chain, clients, and employees, which is necessary for business success [14]. A related study show that networking/collaboration has a crucial part in MSME's performance [15].

The competency mentioned above also prompts an increased innovation rate that leads to continuous growth [16].

Conversely, each indicator for innovation and creation competency was also interpreted as highly competent with an overall mean score of 3.88. The highest mean score was 4.03, referring to the entrepreneur's potential to improve the product or service and make it better than what others offer. On the other hand, the lowest mean score went to the business owner's capacity to seek opportunities for the business from relevant information which garnered a mean score of 3.75. This finding may infer that millennial entrepreneurs are extremely proficient in seeking opportunities and product and service innovation, leading to competitive advantage in tight market competition [3]. Which reveal that innovation and

creation competency compromised entrepreneurial activities of spotting opportunities, seeking new opportunities, and developing current opportunities. It is further affirmed that product innovation and continuous improvement affect the business performance of MSMEs positively [17].

Lastly, all indicators for marketing competency were interpreted as highly competent. The highest mean score was 4.18 referring to the establishment of a good client/customer relationship. The lowest mean of 3.75 regarding the ability of the entrepreneur to give specific direction to efficiently deliver the necessary services to customers and clients was also interpreted as highly competent. This implies that millennial entrepreneurs are highly competent in executing product and service promotion strategies, establishing customer relationships, and delivering excellent services to clients. To support the findings of this study, reference [4] referred to entrepreneurs as "Marketing Man" to describe the entrepreneur's ability to gather and organize available resources to take advantage of business opportunities. Further, various studies conducted by reference [18], [19], and [20] stated that marketing allows young entrepreneurs to situate themselves and their businesses successfully in customer preferences, to be competitive, and to satisfy consumer demands profitably. Various marketing strategies, such as relationship marketing, expedition marketing, one-to-one marketing, real-time marketing, and digital marketing, are common to achieve a competitive edge in the market. The most common marketing strategy used by Generation Y and Generation X is digital marketing since they are a new class of young influential social media savvy entrepreneurs. Digital Marketing is categorized into online marketing, social networking, and mobile marketing. Most young business owners use this platform to promote their businesses since digital marketing does not allocate significant financial resources. Therefore, it represents an indispensable component of the entrepreneurs' market orientation.

Table 4. *Innovative and marketing competencies*

<i>Indicators</i>	<i>Mean</i>	<i>SD</i>	<i>Interpretation</i>
Networking/Collaboration	3.85	0.87	Highly Competent
1. I build professional relationships.	3.92	0.85	Highly Competent
2. I develop strategies in consultation with others to make things happen the way I perceived it to be.	3.75	0.90	Highly Competent
3. I understand that access to external resources helps to achieve my venture's goals.	3.90	0.87	Highly Competent
Innovation and Creation	3.88	0.87	Highly Competent
1. I seek opportunities for my business from relevant information.	3.75	0.89	Highly Competent
2. I improve my products/services based on the needs of the customers.	3.88	0.86	Highly Competent
3. I improve my product or service to make it better from what others offer.	4.03	0.87	Highly Competent
Marketing	4.00	0.84	Highly Competent
1. I execute strategies that promote my products/services.	3.94	0.83	Highly Competent
2. I establish a good client/customer relationship.	4.18	0.80	Highly Competent
3. I am able to give specific directions to efficiently deliver the necessary services to customers and clients.	3.88	0.87	Highly Competent

Strategic Competencies

Table 5 shows a strategic competency group composed of problem-solving competency, organizing competency, and planning competency. Problem-solving and decision-making competency was interpreted as highly competent with a grand mean rating of 3.88. The entrepreneur's ability to assume responsibilities for business-related actions and decisions incurred the highest mean rating of 4.13 interpreted as highly competent. Conversely, the lowest mean score was 3.66, interpreted as highly competent, refers to the entrepreneur's capacity to generate, evaluate, and implement solutions to complex problems. The findings

imply that millennial entrepreneurs have exceptional expertise on factors of problem-solving ability, resolving business concerns, and assuming responsibility for actions and decisions. The critical thinking ability of an entrepreneur to generate, evaluate, and implement sound and timely solutions to the venture's obstacle is essential not only to resolve the business's issue but also to come up with alternative solutions to adopt a proactive strategy [4]. However, it is argued that problem-solving and decision-making skills are not innate abilities but developing competency that requires experience, education, and mentorship [21]. This explains that problem-solving and decision-making are skills that need trial and error, in which the entrepreneur will be able to learn from their understanding.

The overall mean score for the organizing competency was 3.91 interpreted as highly competent; furthermore, each indicator was also highly competent. The ability of the entrepreneurs to effectively allocate time and resources got the highest mean score of 3.97, while the business owner's capacity to work methodologically got the lowest score of 3.83. This means that millennial entrepreneurs effectively allocate time and resources, are skilled in task prioritization, and are disciplined in working methodologically. To substantiate the result, organizing is directly related to business sustainability [22]; stakeholder involvement and human resources are also contributory factors to the venture's sustainability in the market [23]. The planning competency garnered a grand mean score of 3.90 likewise interpreted as highly competent. The highest mean among the indicators was the capacity of the entrepreneur to visualize the business's direction with a mean score of 4.05 interpreted as highly competent. The lowest among the indicators was the ability of the entrepreneur to conceptualize the foundation of the business plan, with a mean score of 3.76 interpreted as well as highly competent. Both indicators were interpreted as highly competent, which signifies that millennial entrepreneurs can visualize the business direction, are skilled in conceptualizing the business plan foundation, and possess expertise in budget planning. To substantiate this statement, a related study expounds that strategic planning accompanied by technological opportunities directly affects the venture's competitive aggressiveness [24].

Table 5. *Strategic competencies*

<i>Indicators</i>	<i>Mean</i>	<i>SD</i>	<i>Interpretation</i>
Problem-solving & decision makings	3.88	0.86	Highly Competent
1. I generate, evaluate, and implement solutions to difficult problems.	3.66	0.81	Highly Competent
2. I resolve issues that arise from unavoidable situations.	3.86	0.90	Highly Competent
3. I assume responsibilities for the actions and decisions I made.	4.13	0.87	Highly Competent
Organizing	3.91	0.87	Highly Competent
1. I plan and prioritize work to ensure time is managed effectively.	3.93	0.83	Highly Competent
2. I work methodologically.	3.83	0.88	Highly Competent
3. I effectively allocate time and resources.	3.97	0.90	Highly Competent
Planning	3.90	0.84	Highly Competent
1. I visualize the direction of my business.	4.05	0.84	Highly Competent
2. I conceptualize the foundation of my business plan.	3.76	0.89	Highly Competent
3. I set the targets of my business to formulate a budget plan.	3.91	0.81	Highly Competent

Personal Competencies

The personal competencies group is composed of risk-attitude competency and self-confidence competency.

As shown in Table 6, risk-attitude competency accumulated a grand mean rating of 3.72, interpreted as highly competent. Among its indicators, the highest mean score of 3.82 is interpreted as highly competent, indicating the entrepreneur's ability to address uncertainties to mitigate threats and maximize business opportunities. Inversely, the indicator with the

lowest mean score of 3.65, interpreted as highly competent, refers to a business owner's capacity to assess risk, estimate cost, and determine potential profit and loss. All indicators of this competency were interpreted as highly competent. This finding implies that millennial business owners are able and possess adequate skills to address the business uncertainties, assess the venture's risk, and anticipate future problems. Risk attitude is the ability of the entrepreneur to be proactive in dealing with venture-related concerns, and they must be able to anticipate future problems that might arise, creating already a flexible roadmap of alternative solutions [3]. Higher risk-taking contributes to entrepreneurial intentions driven by a proactive personality and a confident attitude, thus resulting in venture contribution [25].

All indicators for self-confidence were also interpreted as highly competent with a grand mean score of 3.89. The highest among the three indicators obtained a mean score of 3.95 relative to the business owner's competitive advantage and skills for venture sustainability. The lowest among the indicators acquired a mean score of 3.84, refers to the ability of the business owner to handle business-related uncertainties with ease. Therefore, this conveys that millennial entrepreneurs have adequate skills, education, and training to sustain the business in the market, possess the expertise to face the venture's complications with less discomfort, and take advantage of resources to develop the business venture further.

It was revealed that entrepreneurs got a higher degree of self-confidence compared to non-entrepreneurs. Therefore, factors like self-confidence are essential to the success/failure of the venture since further research shows that entrepreneurs who are determined to reach the business's goals can achieve more opportunities that lead to business opportunities and promotions. In addition, self-confidence positively influences entrepreneurial competency and significantly affects micro-enterprise performance [26].

Table 6. *Personal competencies*

<i>Indicators</i>	<i>Mean</i>	<i>SD</i>	<i>Interpretation</i>
Risk Attitude	3.72	0.86	Highly Competent
1.1 anticipate future problems that may arise in the business venture.	3.68	0.82	Highly Competent
2.1 assess risk, estimate costs, and determine the potential for profit and loss before executing business actions.	3.65	0.82	Highly Competent
Self-confidence	3.89	0.81	Highly Competent
1.1 have a competitive advantage as a business owner because I have the skills needed to sustain my venture.	3.95	0.83	Highly Competent
2.1 am not easily rattled by problems and uncertainties with regard to my business.	3.84	0.78	Highly Competent
3.1 trust my capabilities and resources to develop new things for my business venture.	3.88	0.82	Highly Competent

Learning and Analytical Competencies

The last classification of entrepreneurial competency is the learning and analytical category, which includes the computer and financial management competencies.

As shown in Table 7, computer competency acquired a grand mean of 4.16. This mean is considered highly competent, and it is inferred that millennial entrepreneurs possess sufficient skills to create and maintain business records through efficient computer file management. To support these findings, the millennials were born to a generation of rapid technology development, globalization, and liberalization of minority groups. Thus, the generation is tagged as digital natives for their ability to feel entirely at home in the digital world [4]. This is further substantiated by various research that the millennial generation embraces digital

and information technology and uses it for innovation and application leverage like blockchain and even artificial intelligence [4].

With all indicators interpreted as highly competent, financial management competent attained a grand mean of 3.65. Among the indicators, the highest mean score was the entrepreneur's capacity to manage the enterprise's funds and assets, with a mean score of 3.73 and further interpreted as is highly competent. Conversely, the business owner's ability to assess the business's financing needs bagged the lowest mean score of 3.60, also interpreted as highly competent. This shows that millennial entrepreneurs are well educated and trained in cash management, managing the venture's funds, assets, and financing needs. The ability to be fully knowledgeable of the basics of finances, budgeting, and cash flows is considered a requisite in conducting a business [26]. Moreover, financial management competency also includes the business owner's potential to determine the financing risk and identify fund sources for the venture [4].

Table 7. *Learning and analytical competencies*

Indicators	Mean	SD	Interpretation
Computer Competency	4.16	0.99	Highly Competent
1. I create and maintain business records through efficient computer filemanagement.	4.16	0.99	Highly Competent
Financial Management	3.65	0.87	Highly Competent
1. I manage the funds and assets of my business enterprise.	3.73	0.89	Highly Competent
2. I know how to assess the financing needs of my business enterprise.	3.60	0.80	Highly Competent
3. I know cash management.	3.61	0.91	Highly Competent

Summary of Entrepreneurial Competencies

Table 8 shows the interpretation of entrepreneurial variables related to the level of competencies. The raw data is presented through the entrepreneurial variables, its grand mean, and grand standard deviation. The interpretation of the following presented data is based on Table 2. Interpretation of Mean Ratings in terms of level of entrepreneurial competencies. The result of all the entrepreneurial competency variables indicated a mean rating that falls between 3.50-4.49, which is interpreted as highly competent. This implies that the millennial entrepreneurs have adequate skills, knowledge, and experience in the respective competencies.

Table 8. *Summary of entrepreneurial competencies*

Competencies	Mean	SD	Interpretation
Computer Competency	4.16	0.99	Highly Competent
Marketing	4.00	0.84	Highly Competent
Organizing	3.91	0.87	Highly Competent
Planning	3.90	0.84	Highly Competent
Self-confidence	3.89	0.81	Highly Competent
Problem-solving and decision making	3.88	0.86	Highly Competent
Innovation and Creation	3.88	0.87	Highly Competent
Networking/Collaboration	3.85	0.87	Highly Competent
Risk Attitude	3.72	0.86	Highly Competent
Financial Management	3.65	0.87	Highly Competent

Business Performance

The level of business performance was measured by an estimated increase in percentage form in terms of annual sales, profit, and assets for 2018, 2019, and 2020 which are indicated in Table 11, Table 12, and Table 13. The tables further show that the estimated increase was presented by the nature of the MSME business and the size of assets.

In general, the presented data shows a consistent decrease on the brackets of percentage in service, merchandising and manufacturing industries and the classification of asset size. However, while some industries like tourism and airline are financially pressured, some ventures are primarily start-ups, and small businesses still thrive during this pandemic. This is true especially for internet-based businesses, online entertainment, food delivery, online shopping, online education, and solutions for remote work.

To start with, various factors stimulate the increase and decrease of annual sales. To support this statement, a study conducted by [28] shows that communication and customer relationship factors positively influence the sales performance of MSME. Moreover, social media also enables entrepreneurs to reach the venture's targets because the platform facilitates easy and cheap product promotion. In addition, logistics performance has a positive impact on customer satisfaction, while customer satisfaction increases the venture's sales [28]. Furthermore, the limited existing literature indicates that historical pandemics have greatly been associated with consequent low returns on sales and business reduction and the venture's asset size.

Presented in Table 9 is the MSME business performance in terms of percent increase in sales.

There is a gradual increase from the 3-year trend for the lowest bracket of 0- 20% increase for the service, merchandising, and manufacturing industry. Conversely, the trend was consistently decreasing for the remaining brackets. In terms of asset size, the lowest bracket for each categories implies 0% increase for 2018 and 2019 but increased in numbers in 2020.

Table 9: Business performance in terms of percent increase in sales

Line of business	% Increase	2018		2019		2020	
		f	%	f	%	f	%
Service	0-20	0	0	0	0	30	50
	21-41	32	53.33	34	56.67	16	26.67
	42-62	17	28.33	17	28.33	11	18.33
	68-83	9	15	8	13.33	3	5
	>83	2	3.33	1	1.67	0	0
Merchandising	0-20	0	0	0	0	50	61.73
	21-41	55	67.90	56	69.14	22	27.16
	42-62	10	12.35	10	12.35	5	6.17
	68-83	8	9.88	9	11.11	4	4.94
	>83	8	9.88	6	7.41	0	0
Manufacturing	0-20	0	0	0	0	6	50
	21-41	5	41.67	6	50	3	25
	42-62	4	33.33	3	25	2	16.67
	68-83	2	16.67	2	16.67	1	8.33
	>83	1	8.33	1	8.33	0	0
Size of assets							
Not more than 3 million	0-20	0	0	0	0	99	78.57
	21-41	51	40.48	51	40.48	15	11.90
	42-62	32	25.40	35	27.78	9	7.14
	68-83	28	22.22	30	23.81	3	2.38
	>83	15	11.90	10	7.94	0	0
3,000,000-15,000,000	0-20	0	0	0	0	13	65
	21-41	5	25	8	40	4	20
	42-62	8	40	7	35	3	15
	68-83	4	20	3	15	0	0
	>83	3	15	2	10	0	0
15,000,001-100,000,000	0-20	0	0	0	0%	3	42.86
	21-41	3	42.86	4	57.14	2	28.57
	42-62	2	28.57	1	14.29	1	14.29
	68-83	1	14.29	1	14.29	1	14.29
	>83	1	14.29	1	14.29	0	0

For the profit variable, Table 10 presents the data gathered on the line of the business venture as well as its asset size.

Initially, the lowest bracket showed no increase for the service and manufacturing industry in 2018. However, in 2019 and 2020, it gradually increases together with the merchandising industry. Small increment increases were noted for the remaining brackets in each industry.

The gathered data further shows a progressive decreasing trend for the asset size classification. The results also note an increase for each bracket on 2020 compared to 2018 and 2019.

Table 10: Business performance in terms of percent increase in profit

Line of business	% Increase	2018		2019		2020	
		f	%	f	%	f	%
Service	0-10	0	0	7	11.67	43	71.67
	11-21	10	16.67	10	16.67	7	11.67
	22-32	23	38.33	20	33.33	6	10
	33-43	17	28.33	16	26.67	3	5
	>43	10	16.67	7	11.67	1	1.67
Merchandising	0-10	7	8.64	45	55.56	75	92.59
	11-21	11	13.58	10	12.35	3	3.70
	22-32	18	22.22	12	14.81	2	2.47
	33-43	20	24.69	8	9.88	1	1.23
	>43	25	30.86	6	7.41	0	0
Manufacturing	0-10	0	0	6	50	10	83.33
	11-21	4	33.33	3	25	1	8.33
	22-32	5	41.67	2	16.67	1	8.33
	33-43	1	8.33	1	8.33	0	0
	>43	2	16.67	0	0	0	0
Size of assets							
Not more than 3 million	0-10	9	7.14	13	10.32	101	80.16
	11-21	32	25.40	35	27.78	12	9.52
	22-32	40	31.76	40	31.75	10	7.94
	33-43	33	26.19	32	25.40	3	2.38
	>43	12	9.52	6	4.76	0	0
3,000,000-15,000,000	0-10	2	10	9	45	16	80
	11-21	4	20	3	15	1	5
	22-32	7	35	5	25	3	15
	33-43	4	20	2	10	0	0
	>43	3	15	1	5	0	0
15,000,001-100,000,000	0-10	2	28.57	5	71.43	6	85.71
	11-21	2	28.57	1	14.29	1	14.29
	22-32	1	14.29	1	14.29	0	0
	33-43	1	14.29	0	0	0	0
	>43	1	14.29	0	0	0	0

In terms of the level of business performance in terms of assets, Table 11 shows the results related to the service, merchandising, and manufacturing industry, followed by the classification of asset size.

In the service, merchandising, and manufacturing industries, the result shows that there is a consistent increase for the lowest bracket which means that their asset size has increase in 0-20%. Conversely, there is a gradual decrease for the highest bracket of more than 80%.

For the asset size, the gathered data reveals an increasing trend for the lowest bracket of 0-20% for each category. Further, consistent decline can be noted in the highest bracket of more than 80%.

Table 11: *Business performance in terms of percent increase in assets*

Line of business	% Increase	2018		2019		2020	
		f	%	f	%	f	%
Service	0-20	9	15	17	28.33	33	55
	21-40	25	41.67	23	38.33	15	25
	41-60	15	25	11	18.33	9	15
	61-80	9	15	8	13.33	3	5
	>80	2	3.33	1	1.67	0	0
Merchandising	0-20	5	6.1	36	44.44	59	72.84
	21-40	50	61.73	32	39.51	19	23.46
	41-60	10	12.35	7	8.64	2	2.47
	61-80	8	9.88	4	4.94	1	1.23
	>80	8	9.88	2	2.47	0	0
Manufacturing	0-20	0	0	5	41.67	9	75
	21-40	5	41.67	4	33.33	2	16.67
	41-60	4	33.33	2	16.67	1	8.33
	61-80	2	16.67	1	8.33	0	0
	>80	1	8.33	0	0	0	0
Size of assets							
Not more than 3 million	0-20	23	18.25	64	50.79	98	77.78
	21-40	35	27.78	21	16.67	11	8.73
	41-60	28	22.22	17	13.49	8	6.35
	61-80	25	19.84	19	15.08	9	7.14
	>80	15	11.90	5	3.97	0	0
3,000,000-15,000,000	0-20	0	0	7	35	13	65
	21-40	5	25	5	25	4	20
	41-60	8	40	5	25	3	15
	61-80	4	20	2	10	0	0
	>80	3	15	1	5	0	0
15,000,001-100,000,00	0-20	0	0	4	57.14	6	85.71
	21-40	3	42.86	2	28.57	1	14.29
	41-60	2	28.57	1	14.29	0	0
	61-80	1	14.29	0	0	0	0
	>80	1	14.29	0	0	0	0

Difference in the level of entrepreneurial competencies

This section presents the significant difference in the entrepreneurial competencies of the participants when grouped according to age, sex, educational attainment, and civil status.

A p-value with a significant level of 0.05 was used as a standard for interpreting the data. As shown in Table 12, variables such as age, sex, educational attainment, and civil status were all interpreted as not significant. Therefore, the null hypothesis is accepted that there is no significant difference in the level of competencies when the participants are grouped according to their profile. This also means that the participants are at the same level in their competencies when grouped according to the given variables.

To further substantiate the result of the study, the educational attainment variable has no significant difference in the business owners' level of entrepreneurial competencies [11].

Table 12. Difference in the level of entrepreneurial competencies of millennial entrepreneurs

<i>Variable</i>	<i>p-values</i>	<i>Interpretation</i>	<i>Result</i>
<i>Age</i>			
Younger	0.895	Not significant	Failed to reject Ho
Older			
<i>Sex</i>			
Male	0.972	Not significant	Failed to reject Ho
Female			
<i>Educational Attainment</i>			
Bachelor	0.711	Not significant	Failed to reject Ho
Master's Doctorate			
<i>Civil Status</i>			
Single	0.177	Not significant	Failed to reject Ho
Married			

Note: Significant at 0.05

Significant Difference in the level of business performance

Significance different in the business performance of millennial entrepreneurs when grouped according to the line of business, forms of business, number of years in operation, initial capitalization, and number of employees is presented in Table 13. Furthermore, the basis for data interpretation is a p-value with a significant level of 0.05.

As shown in Table 13, the line of business got a p-value of 0.583, interpreted as insignificant. Therefore, the null hypothesis that there is no significant difference in the business performance of millennial entrepreneurs when grouped according to the line of business is accepted. This means that service, merchandising, and manufacturing businesses have all equal bearing.

Forms of business variables incurred a p-value of 0.422. This is interpreted as insignificant. Hence, there is no significant difference in the business performance of millennial entrepreneurs when grouped according to the forms of business. It further implies that regardless of whether the business is owned solely by an entrepreneur, a partnership, or even a corporation, the business performance of millennial entrepreneurs is comparable.

The number of years in operation revealed a p-value of 0.223; this is also considered not significant; hence the null hypothesis is accepted. The data indicates that the business performance of millennial entrepreneurs remains the same even if they are operating for three to five years or more than eleven years.

The initial capitalization indicates a p-value of 0.206. It reveals that regardless of the initial capitalization, the business performance of millennial entrepreneurs remained the same whether their initial capitalization is 3 million and below or more than 3 million pesos.

Further analysis showed that even the number of employees had an equal bearing on the business performance. The p-value of 0.330 is higher than the standard 0.05 significant level, thus the null hypothesis is accepted. This signifies that the business performance for 1-9 employees, 10-99 employees, and 100-199 employees are similar.

Table 13. *Difference in the level of millennial entrepreneurs when grouped according to business profile*

Variable	p-value	Interpretation	Result
<i>Line of business</i>			
Service	0.583	Not significant	Failed to reject Ho
Merchandising			
Manufacturing			
<i>Forms of business</i>			
Single Proprietorship	0.422	Not significant	Failed to reject Ho
Partnership			
Corporation			
<i>Number of years in operation</i>			
1-5 years	0.223	Not significant	Failed to reject Ho
6-10 years			
11 years and above			
<i>Initial Capitalization</i>			
Not more than 3 million	0.206	Not significant	Failed to reject Ho
3,000,001-15,000,000			
<i>Number of employees</i>			
1-9 employees	0.330	Not significant	Failed to reject Ho
10-99 employees			
100-199 employees			

Relationship between entrepreneurial competencies and business performance

Spearman Rho was used to test the relationship between entrepreneurial competencies and business performance for the significance relationship. The means of the increases in sales, profit, and assets for years 2018, 2019, and 2020 were determined and were used to measure its relationship with the entrepreneurial competencies. The results in Table 14 showed a p-value less than the significant level of 0.05, indicating a 0.00% chance that the strength of the relationship, which is $r_s=0.294$, happened by chance if the null hypothesis was true.

There is a positive correlation between the two variables that are statistically significant. Although the relationship is positive, it is considered weak. To substantiate the result, [30] states the competencies that entrepreneurs possess are strong predictors of business success. Moreover, it is noted that entrepreneurial competencies of business commitment and opportunity recognition has an influence on increasing a micro-enterprise's income and assets [31].

Table 14. *Relationship between entrepreneurial competencies of millennial entrepreneurs and business performance*

	Entrepreneurial Competencies
Spearman's rho	1.000
Sig. (2-tailed)	
N	153
Spearman's rho	.294
Sig. (2-tailed)	.000
N	153

Note: Correlation is significant at the 0.05 level (2-tailed).

4. Conclusion and Recommendations

Based on the results of this research study, the following conclusion is drawn.

Generally, the research shows that DTI-registered millennial entrepreneurs are highly competent in each indicator of entrepreneurial competencies in terms of networking/collaboration, innovation and creation, marketing, problem-solving and decision making, organizing, planning, risk attitude, self-confidence, computer competency, and financial management variables. However, some competencies are not as high compared to others in the areas of financial management and risk attitude. By interpretation, this concludes that millennial entrepreneurs have adequate skills, knowledge, and experience in the above-mentioned competencies. In summary, the result exhibited that the highest entrepreneurial competency is computer competency while the lowest is financial management.

For business performance, the level was measured by an estimated percentage increase in terms of annual sales, profit, and assets for 2018, 2019, and 2020. A gradual decrease in the business performance of MSMEs in the service industry, merchandising industry, and manufacturing industry is revealed. The same trend is seen for the asset-size classification. Although the data present an increment increase on the line of business and asset size classifications, the trend falls on the lowest bracket.

The result shows that there is no significant difference between competencies and the millennial entrepreneur's profile. The same result applies to the business performance and the millennial entrepreneurs' business profile. This means that regardless of the millennial entrepreneur's background and business profile has no association to the success/failure of the venture.

This study exhibited a statistically significant relationship between entrepreneurial competencies and business performance, which implies that the entrepreneurial competencies the millennial business owners possess affect the performance of their respective business ventures.

Despite the constraints in data gathering period due to the Covid-19 pandemic, the researcher was able to take advantage of online forms to disseminate the survey questionnaire.

Self-evaluation workshops, crash courses, and continued mentoring program are recommended to combat the millennial entrepreneurs' weaker competencies especially in addressing the anticipated risks such as anticipating future problems brought about by precarious economic situations, determining potential profit or loss before executing a decision, assessing the financial needs of the business, monitoring its cash position and managing the cash efficiently.

References

Ahmad, N. H., Ramayah, T., Wilson, C., & Kummerow, L., Is entrepreneurial competency and business success relationship contingent upon business environment? A study of Malaysian SMEs. *International Journal of Entrepreneurial Behavior & Research*, 2010.

- Sadik, M. Z. B., Wee, M., & Rahim, F. B. A., Does social competency among entrepreneurs' effects their performance? A Generation Y perspective. *Advanced Science Letters*, 24(11), 8511-8513, 2018.
- Liu, J., Zhu, Y., Serapio, M., & Cavusgil, S. T., The new generation of millennial entrepreneurs: A review and call for research. *International Business Review*, 28(5). <https://doi.org/10.1016/j.ibusrev.2019.05.001>, 2019.
- Agustin-Acierto M., *Entrepreneurial Management*, ISBN 978-621- 427-056-9, 2019.
- Barazandeh, M., Parvizian, K., Alizadeh, M. et al., Investigating the effect of entrepreneurial competencies on business performance among early-stage entrepreneurs Global Entrepreneurship Monitor (GEM 2010 survey data). ISBN <https://doi.org/10.1186/s40497-015-0037-4>, 2015.
- Sarwoko, E., & Nurfarida, I. N., Entrepreneurial marketing: Between entrepreneurial personality traits and business performance. *Entrepreneurial Business and Economics Review*, 9(2), 105-118, 2021.
- Wahyuni, N. M., & Sara, I. M., The effect of entrepreneurial orientation variables on business performance in the SME industry context. *Journal of Workplace Learning*, 2020.
- Nassaji, H., Qualitative and descriptive research: Data type versus data analysis. *Language Teaching Research*, 19(2), 129–132. <https://doi.org/10.1177/1362168815572747>, 2015.
- Atmowardoyo, H., Research methods in TEFL studies: Descriptive research, case study, error analysis, and R & D. *Journal of Language Teaching and Research*, 9(1), 197-204, 2018.
- Etikan, I., Musa, S. A., & Alkassim, R. S., Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4, 2016.
- Dagu-ob, R., & Magada M., Business Knowledge and Entrepreneurial skills of business owners. *Management and Entrepreneurship Research Journal*, ISSN 2719-1656 [Print], 2020.
- Asia Pacific Foundation of Canada, 2018 Survey of Entrepreneurs and MSMEs in the Philippines, 2018.
- Man, Thomas W.Y., Theresa, Lau and Chan, K. F., The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*. 17, 123–142, 2002.
- Agustin-Acierto M., “K to 12 basic education curriculum senior high school- applied track subject” *Entrepreneurship*, ISBN 978-971-9654 48-3, 2017.
- Lin, L. Y., Abdul-Rahman, H., & Chen, W., An exploratory study of the effect of entrepreneurship and networking to the innovative performance of construction SMEs. *Malaysian Construction Research Journal*, 21(1), 1–16, 2017.
- Behling, G., & Lenzi, F., Entrepreneurial competencies and strategic behavior: A study of micro-entrepreneurs in an emerging country. *Brazilian Business Review*, 16(3), 255–272 <https://doi.org/10.15728/bbr.2019.16.3.4>, 2019.
- Jin, S. H., & Choi, S. O., The effect of innovation capability on business performance: A focus on it and business service companies. *Sustainability (Switzerland)*, 11(19).

- <https://doi.org/10.3390/su11195246>, 2019.
- Garcia, D., How Generation Z's social media savvy entrepreneurs are giving millennials a run for their money @<https://www.cnbc.com/2018/06/08/how-generation-zs-social-media-savvy-entrepreneurs-are-giving-millennials-a-run-for-their-money.html>, 2018.
- Pinem, R., The role of technology in increasing motivation of millennial women entrepreneurs starting a business in the digital era. *International Journal of Entrepreneurship*, 23(2), 2019.
- Njegomir, V., Digital marketing. *Civitas*, 10(1), 52–71. <https://doi.org/10.5937/civitas2001052n>, 2020.
- Ilonen, S., Heinonen, J., & Stenholm, P., Identifying and understanding entrepreneurial decision-making logics in entrepreneurship education. *International Journal of Entrepreneurial Behaviour and SMEs' performance in the welding industry in Tanzania. Journal of Global Entrepreneurship Research*, 9(1). <https://doi.org/10.1186/s40497-019-0188-9>, 2018.
- Good, J., & Thorpe, A., The nature of organizing: A relational approach to understanding business sustainability. *Organization & Environment*, 33(3), 359–383. <https://doi.org/10.1177/1086026619858858>, 2020.
- Alwadani, R., & Ndubisi, N. O., Sustainable family business: The role of stakeholder involvement, mindful organizing, and contingent human factors. *International Journal of Manpower*, 2019.
- Salloum, C., Digout, J., Salloum, L., Mercier-Suissa, C., & Chahine, P., Family business, strategic planning and corporate entrepreneurship. *International Journal of Entrepreneurship and Innovation Management*, 25(1), 52–71. <https://doi.org/10.1504/IJEIM.2021.113798>, 2021.
- Chipeta, Eleanor & Surujlal, Jhalukpreya, Influence of attitude, risk taking propensity and proactive personality on social entrepreneurship intentions. *Polish Journal of Management Studies*. 15. 27-36. [10.17512/pjms.2017.15.2.03](https://doi.org/10.17512/pjms.2017.15.2.03), 2017.
- Mamun, A. A., Access to credit, education and entrepreneurial competencies: A study among women micro-entrepreneurs in Malaysia. *Vision* 20(3), 159–168. <https://doi.org/10.1177/0972262916651510>, 2016.
- Torres-Coronas T., Becoming a successful entrepreneur through emotional intelligence development. IGI Global DOI: 10.4018/978-1-4666-9577-1.ch009, 2016.
- Sufian, A., See, C., Ahmad, M., & Abdul, N., The impact of social media marketing on sales performance of small online business. *European Journal of Molecular & Clinical Medicine*, 7(3), 922–940, 2020.
- Leuschner, R., & Lambert, D. M., Establishing logistics service strategies that increase sales. *Journal of Business Logistics*, 37(3), 247-270, 2016.
- Tehseen, S., Ahmed, F. U., Qureshi, Z. H., Uddin, M. J., & Ramayah, T., Entrepreneurial competencies and SMEs' growth: The mediating role of network competence. *Asia-Pacific Journal of Business Administration*, 2019.
- Mustapha, W.N.W., Al Mamun, A., Mansori, S. and Balasubramaniam, S., Effect of entrepreneurial competencies on micro-enterprises income and assets in Malaysia. *Asia*

Pacific Journal of Innovation and Entrepreneurship, Vol. 14 No. 3, pp. 249-261.
<https://doi.org/10.1108/APJIE-01-2020-0009>, 2020.