

Exploring Marketing Innovation on MSMEs in Indonesia: A Descriptive Study

MARCELLA ASTRIANI¹, MARIANI¹, ANGELINE CLAIRINE¹, MOHAMMAD ICHSAN¹,
AGUNG SUDJATMOKO²

¹Management Program, BINUS Business School, Bina Nusantara University,
Jakarta, INDONESIA

²Business Management Program, BINUS Business School, Bina Nusantara University,
Jakarta, INDONESIA

Abstract: - This research aims to describe the data by measuring the demographic survey of MSMEs in Indonesia with innovation. This study also explicitly explores the interactions between demographic data elements, especially gender with the most selected and used innovation in COVID-19 pandemic situation. Utilizing cross-sectional survey data from 300 Indonesian MSMEs owners, this study is empirically tested using descriptive analysis. Cross-tabulation is also used to examine demographic data elements, particularly those related to gender and marketing innovation. The descriptive analysis frequency data shows that marketing innovation has a greater impact on the performance of MSMEs during the COVID-19 pandemic than product innovation, process innovation and organizational innovation. Additionally, this study's cross-tabulation of marketing innovation and gender shows that men tend to agree more on items MI2 and MI3 it's because more flexible and convenient in distributing products especially during COVID-19 pandemic crisis and women tend to agree on MI1 it's because women more active in social media than men. The findings show that demography, especially in gender, has an influence on the tendency to use marketing innovation decisions in COVID-19 pandemic situation. Therefore, the results of this study will increase our understanding of MSME performance and innovation. It also creates an understanding for MSMEs owners of gender based MSME enterprises in Indonesia.

Keywords: - cross-tabulation, COVID-19, descriptive analysis, gender, MSMEs, marketing innovation, pandemic, performance.

Received: April 24, 2022. Revised: December 2, 2022. Accepted: December 22, 2022. Published: December 31, 2022

1 Introduction

In Indonesia, MSMEs are the business units with the largest proportion. MSME itself is an abbreviation of Micro, Small, and Medium Enterprises. MSMEs control 99.9% of the business market in Indonesia and generate a gross contribution of 60.51%. The number of MSME units in Indonesia continues to grow year by year. From 2010 to 2019, the growth of MSMEs continued to grow. In 2010, the number of MSMEs in Indonesia was around 52.8 million units, and in 2019 the development of MSMEs reached 65.5 million units, [1].

However, given the amount of data from the Ministry of Cooperatives and Micro, Small, and Medium Enterprises, MSMEs, which accounted for 99.9%, could only contribute 60.51% to GDP. Meanwhile, the number of large Indonesian companies, reaching only 0.01%, could contribute 39.49% to GDP, [2]. The data shows a huge difference between MSMEs and large enterprises by comparing Indonesia's percentage and GDP

contribution. Suppose seen and compared again from the sales of UMKM PP number 7 of 2021 article 35 paragraph 3, [3], which shows that the annual sales of micro-enterprises amount to two billion rupiahs, small enterprises amounting to two billion rupiahs to fifteen billion rupiahs and medium enterprises amounting to fifteen billion rupiahs up to fifty billion rupiahs. Micro enterprises, as seen from sales, can only generate a maximum of 2 billion rupiahs, while small and medium enterprises can generate up to 2 billion rupiahs and more. Therefore, a greater number of sales results will contribute to greater GDP for Indonesia.

However, the number of micro-enterprises is much larger than the number of small and medium enterprises in Indonesia, [4]. Micro enterprises account for 98.67% of the business share in Indonesia. This puts the number of small and medium enterprises far behind the number of micro-enterprises. In addition, small enterprises, which amounted to 1.22%, in percentage had a higher

number than medium enterprises. Still, from the contribution to GDP, it could only contribute 9.60%, and medium enterprises with a smaller portion than small enterprises could contribute 13.70%.

The COVID-19 pandemic has further exacerbated the situation of MSMEs, and this pandemic has caused turmoil in the economy. The economic chaos causes the economic conditions to suffer shocks, making the economy unstable, [2]. The economic turmoil also affects the growth and development of MSMEs in Indonesia, [5]. According to the data by [6] 55.2% of MSMEs experienced a decline in sales, 4.5% of MSMEs did not experience growth, 36.7% of MSMEs did not achieve sales during the pandemic, and only a tiny proportion of MSMEs whose sales increased during the pandemic, namely by 3.6%. From the data, some MSMEs have grown but compared to the data, more MSMEs have experienced a decline in sales compared to MSMEs that have experienced an increase in sales. This is because, during the COVID-19 pandemic, the government had to make a large-scale social restriction policy (PSBB). With this PSBB, there is an 84.20% decrease in income for MSMEs in Indonesia, [7].

A survey by Bank Indonesia indicated that the performance of MSMEs had experienced a sharp decline due to the outbreak of COVID-19, [8]. During the pandemic, the performance of MSMEs deteriorated and MSME credit data during the pandemic showed that MSME growth experienced negative growth of minus 1.18%. The growth recorded in 2021 compared to credit growth before the COVID-19 pandemic was insignificant, only 0.4%, [9]. With this pandemic, it is also difficult to obtain the raw materials used to manufacture goods, and a change in people's behavior when shopping leads to a drop in income, [10].

Previous research from [11] found that in a situation like the COVID-19 crisis, a company or organization can be freed from the COVID-19 crisis by innovating because innovation is a driving factor in achieving success. So, it can be concluded that innovation is one of the critical factors to be considered for MSMEs in COVID-19 pandemic situation. From those data and statement, we want to explore more about the demographic condition and MSMEs innovation practices especially in Indonesia. Therefore, this research aims to describe the data by measuring the demographic survey of MSMEs in Indonesia with innovation. This study also explicitly explores the interactions between demographic data elements, especially gender with the most selected and used innovation in COVID-19 pandemic situation.

2 Literature Review

2.1 COVID-19

Many MSMEs fail and experience no growth due to pre-existing issues such as little or no improvement in market knowledge, lack of technical and business management skills, lack of formal planning and demand forecasting, and limited resources. Therefore, this makes MSMEs very vulnerable to events that occur within the internal and external framework of MSMEs, [12]. The outbreak of COVID-19 has a tremendous impact on global society and the global economy. All activities in the worldwide community are disrupted and altered, including the global economy, which has undergone drastic changes, [13].

COVID-19 has reduced the population's purchasing power, which impacts business income, [14]. Due to the COVID-19 shock, the government has come together to create an emergency response that includes measures to contain the pandemic and economic policies, [15]. In the research [16], it was revealed that government action against COVID-19 was carried out by establishing social restrictions or quarantine regulations where the public was asked to reduce social activities that involved many people. This social restriction has proven effective in reducing the spread of COVID-19. The research by [17] found that the social restrictions caused by COVID-19 have a negative impact on performance. It is because there is a reduction in sales volume that makes small and medium enterprises experience cash flow difficulties that impact business operations, [18]. MSMEs are also one of the sectors hit hardest by the impact of COVID-19 pandemic, [19]. Several studies have been conducted for this COVID-19 variable, for example, in research by [20] that examines the impact of COVID-19 on startups. The study by [21] also uses COVID-19 as a search variable that affects performance.

2.2 Innovation

Innovation is defined as realizing new original ideas throughout the organization to introduce new products to the market through a combination of strategic direction and innovative behavior so that this innovation can create value for customers by implementing new methods, [22]. According to Schumpeter's theory, innovation is divided into five types: introducing new products, new production methods, opening new markets, developing new sources of supply, and new industrial structures, [23]. The innovation theory used to explain growth through change must be initiated and complemented

by the RBV (Resource Base View) theory. The RBV (Resource Based View) theory emphasizes the importance of the company's resources. RBV (Resource Based View) theory is the application of unique capabilities and resources that are valuable, cannot be perfectly imitated, and cannot be replaced by the business that leads to better innovation that improves business performance, [24].

Innovation is crucial for sustainable development and competitiveness and can increase business profits, [25]. Micro, small and medium-sized enterprises (MSMEs) have limited resources, so they must look for more efficient ways, especially concerning COVID-19. MSMEs need to innovate and improve their offerings of goods, products, and services to meet changing market needs. Innovation has become a means that allows an MSME to transform and continue to grow to survive in the market using all available resources in the organization, people, technology, and finance, [26].

Innovation is divided into the application of significantly improved new products (goods or services), process, new marketing methods, and new organizational forms in business practices, workplace organization, and external relations, [27]. Product innovation is defined as a development aimed at improving the quality of a product or service that differs from the previous. Product innovations are classified as new innovations to the market or the company, [28]. Product innovation is also essential for the growth and sustainability of SMEs, [29]. Product innovation has three indicators: increasing the number of products, expanding new markets by developing new products, [30], [31], and launching products in line with market demand, [30], [32].

Process innovation is the introduction of new methods or ways that change how a business operates. Process innovation involves critical engineering, equipment, and software changes that adapt to processes and increase the efficiency of a company's production or service delivery systems, [33]. Process innovation can enable SMEs to cost-effectively improve the life cycle of product development, production, and delivery of goods, [29]. Process innovation has four indicators such as an increase in implementation of the production process, [34], [31], a reduction in variable costs, [34], [35], in the process production uses advanced technology, [30], [31], and uses new processes and methods, [36].

Organizational innovation is the application of significantly new organizational methods in business practices, workplace organizations, or external relations of an institutional unit. These

innovations can lead to significant changes in organizational structures, work environments, and new forms of management, [33]. The indicators of organizational innovation are new business practices, new knowledge management systems, the development of new ways of engaging with research-based customers, [34], [37], distribution of responsibilities and decision-making, [34] and updating the organizational structure, [34], [38]. Marketing innovation uses new marketing methods, changing product design, placement, and promotion, [34]. Marketing innovation focuses on customer needs and involves new markets that aim to increase company sales, [28]. Marketing innovation has several indicators, including new media or techniques (MI1), new sales channels or placements from research (MI2), [34], and using new research-based distribution channels (MI3), [31], [34], [35].

Several studies have examined this dimension of innovation, such as research by [39] examining product and process innovation. The study by [35] addresses the four dimensions of innovation conducted on Lebanese SMEs. This study revealed that marketing innovation, product innovation, process innovation, and organizational innovation have a positive impact on performance. This is also shown by [31] research which reveals the significant contribution of product, process, marketing, and organizational innovation dimensions to performance.

2.3 MSME Performance

The performance of an organization can be defined as the ability of the organization to achieve its objectives by using resources effectively and efficiently, [40]. According to [41] performance is defined as the contribution made by an entity through its actions to the achievement of objectives and the fullest satisfaction of the wants and needs of key stakeholders. Performance is generally measured in financial and non-financial terms. Performance in the form of finance is the growth in sales, enterprise value, and earnings, such as return on investment and assets, stock market index, and liability ratio, [33]. In contrast, performance in non-financial forms is social responsibility, organizational survival, quality services, targeting and outreach, products and services, and member benefits, [42].

Performance is closely linked to a company's competitive advantage, core competencies, and innovation capabilities. This is also in line with the opinion expressed in [43] who revealed that companies with sources of competitive advantages in a changing global market are more likely to

survive and achieve superior performance. To improve a company's performance and survival, innovation is necessary. In the research by [44] it was found that there is a positive and significant relationship between innovation and performance, and the study by [45] also found that innovation makes an excellent contribution to performance.

3 Research Methodology

3.1 Sample and data source

This research is based on a qualitative approach to describe the data of demographic of MSMEs in Indonesia with innovation. We use a descriptive analysis method. The results of the descriptive research are presented in the form of tables or graphs and descriptions of the data results, [46]. The unit of analysis used in this study is the organization, namely MSMEs in Indonesia. With business owners as representatives of an MSME unit. The time horizon is cross-sectional because the data collection is carried out over time, [47]. The population of this study consists of MSMEs in Indonesia, whose total number is not known in certainty.

The method used in this study is a non-probability sampling method in which the exact number of populations in the data collection or the sample is unknown, with a sampling technique using convenience sampling where the sample is obtained from a population willing to provide information, [48]. The number of samples taken using Hair's formula, where the number of each item owned in the study is multiplied by 10, [49]. Research data was collected using a cross-sectional approach for one month by distributing research questionnaires with the help of a third party. The questionnaire is divided into two parts consisting of demographic data, including age, gender, education, province, and type of business, as well as statements on study variables composed of 23 statements to owners of MSMEs in Indonesia. Respondents' responses to the research statements used a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The data obtained from the survey results are divided into demographic data which will be analyzed by descriptive analysis with nominal data and innovation variable data which will be analyzed by descriptive analysis with ordinal data. Statistical analysis was carried out using SPSS (Statistical Product and Service Solution) software and for demographic data a basic statistical analysis was carried out to find the frequency value while the

innovation variable data included product, process, marketing and organizational innovation by looking for the mean, median, mode, standard deviation, variance, skewness, kurtosis, range, minimum, and maximum. In addition to analyzing individual attributes, this study explicitly explores the interaction between demographic data elements, especially gender, and marketing innovation using cross-tabulation data analysis.

4 Results

4.1 Data demography

This study's results descriptively revealed the respondents' characteristics along several dimensions, namely gender, province, age, education, and type of business. In this study, 300 MSME owner respondents were collected from the beginning of July 2022 to the end of July 2022. The characteristics of this study's respondents are presented in Table 1.

Table 1. Indonesian MSME demographic survey data

	Frequency	(%)
Gender		
Woman	185	61.7%
Men	115	38.3%
Province		
West Java	77	25.7%
Special Region of Jakarta	49	16.3%
East Java	40	13.3%
Other	39	13.0%
Central Java	29	09.70%
Banten	25	08.30%
North Sumatra	18	06.00%
Yogyakarta	13	04.30%
South Sulawesi	10	03.30%
Age Group		
17 - 25 Years old	132	44.00%
25 - 33 Years old	97	32.30%
33 - 41 Years old	44	14.7%
Other	27	00.09%
Education		
Senior High School or Vocational High School	143	47.70%
Bachelor (S1)	114	38.00%
Diploma (D1/D2/D3)	29	09.70%
Other	14	5%
Type of business		

Accommodation Provider and Food & Drink Provider	108	36%
Wholesale and Retail	94	31.30%
Activities that have no clear boundaries	42	14.00%
Transportation, Warehousing, and Communication	23	7.70%
Education Services	19	6.3%
Other	14	5%

According to the data, the female survey respondents consisted of 185 respondents, and the male respondents consisted of 115 respondents out of a total of 300 respondents received. From the 300 MSMEs data collected from 19 provinces of Indonesia, West Java has the highest number of respondents with 77 respondents, followed by the Special Capital Region of Jakarta, which has the second highest number of respondents with 49 respondents, and East Java has the third highest number of respondents with 40 respondents, Central Java with 29 respondents, Banten with 25 respondents, North Sumatra with 18 respondents, Yogyakarta with 13 respondents, South Sulawesi with 10 respondents. And because the number of respondents from some of the provinces is low, the author decided to combine the following provinces into "Other" categories, including the province of Bali and South Kalimantan with six respondents, Lampung, West Sumatra, and Riau with five respondents, South Sumatra, Aceh, and East Kalimantan with three respondents, West Papua, North Sulawesi, and Bangka Belitung Island with one respondent.

From the results of the survey, MSME owners are divided into several age groups. The 17-25 age group has the highest number of 132 respondents, the 25-33 age group with a total of 97 respondents, and the 33-41 age group with a total of 44 respondents. Because the number of respondents in some age groups is small and less significant, the authors decided to combine these two age groups into another category which is composed of an age group > 41 years with a total of 21 respondents and from an age group < 17 years with a total of 6 respondents. From the survey results of the education background, MSME business owners at most have an educational background with senior high school or vocational high school education levels, with a total of 143 respondents. They are followed by a bachelor's degree (S1) from 114 respondents and a diploma degree (D1/D2/D3) from 29 respondents. Some of the numbers of respondents are also low and insignificant;

therefore, the authors decided to group these different levels of education into another category consisting of master's degree (S2) with 9 respondents, junior high school with 4 respondents, and primary school with 1 respondent.

From the survey, the business types are divided into 10 categories consisting of business type categories that accommodation provider and food services with 108 respondents, wholesale and retail trade with 94 respondents, activities that have no clear boundaries with 42 respondents, transportation, warehousing, and communication with 23 respondents, educational services with 19 respondents. Because the number of respondents from this type of business is small and less critical, the authors decided to group several of these businesses into "Other" categories composed of agricultural, hunting, and forestry business types with 8 respondents, individual services serving households with 2 respondents, community services, social culture, entertainment, and other individuals with 2 respondents, and construction and financial intermediaries, each with 1 respondent.

4.2 Descriptive Analysis of Variable

Before proceeding with cross-tabulation data analysis, performing a descriptive analysis of the data using SPSS software is essential. Our analysis is presented in Table 1, and Table 2. It is worth mentioning that descriptive analysis of innovation variables includes the product, process, marketing, and organizational innovation.

Table 2. Analysis variable with descriptive statistics

	Mean	Median	Modus	Std. Deviation	Variance	Skewness	Kurtosis	Range	Minimum	Maximum
Product Innovation (PT)	3.307	3.000	3.000	1.094	1.197	-0.293	-0.435	4.000	1.000	5.000
Process Innovation (PS)	3.490	3.000	3.000	0.993	0.987	-0.281	-0.207	4.000	1.000	5.000
Marketing Innovation (MI)	3.763	4.000	5.000	1.243	1.546	-0.720	-0.520	4.000	1.000	5.000
Organizational Innovation (OI)	3.480	4.000	4.000	1.029	1.060	-0.400	-0.221	4.000	1.000	5.000

COVID-19 pandemic to help the performance of MSMEs.

Considering the mean or mean value of the variable value distribution, Marketing innovation has the highest value, which is 3.763, compared to product innovation which has a value of 3.307, process innovation has a value of 3.490, and organizational innovation has a value of 3.480. The median value of marketing innovation and organizational innovation is 4, which is higher than product innovation and process innovation, which have a value of 3. The marketing innovation mode has a value of 5, which is higher than product innovation, process innovation which has a value of 3, and organizational innovation, which has a value of 4.

Followed by another descriptive statistic value, product innovation has a standard deviation of 1.094, a variance of 1.197, a skewness of -0.293, and a kurtosis of -0.435. The process innovation has a standard deviation of 0.993, a variance of 0.987, a skewness of -0.281, and a kurtosis of -0.207.

Marketing innovation has a standard deviation of 1.243, a variance of 1.546, a skewness of -0.720, and a kurtosis of -0.520. Organizational innovation has a standard deviation of 1.029, a variance of 1.060, a skewness of -0.400, and a kurtosis of -0.221. And all the innovation has a range of 4.000, a minimum of 1.000, and a maximum of 5.000. From this data, we can conclude that marketing innovation has the highest score than of innovations, so we choose this innovation for the next cross tabulation analysis.

4.3 Cross Tabulation Analysis

In addition to analyzing individual attributes, this study explicitly explores the interactions between demographic data elements, especially gender, with marketing innovation. From the descriptive analysis frequency data, as shown in Table 3, and Table 4, marketing innovation has more impact during the

Table 3. Cross tabulation of MI1 and gender

			MI1					Total
			1.00	2.00	3.00	4.00	5.00	
Gender	Men	Count	13	7	21	23	51	115
		Expected count	11.1	4.2	19.6	24.2	56.0	115.0
		% Within Gender	11.3%	6.1%	18.3%	20.0%	44.3%	100.0%
		% Within MI1	44.8%	63.6%	41.2%	36.5%	34.9%	38.3%
		% Of Total	5.3%	1.3%	10.0%	13.3%	31.7%	61.7%
	Women	Count	16	4	30	40	95	185
		Expected count	17.9	6.8	31.5	38.9	90.0	185.0
		% Within Gender	8.6%	2.2%	16.2%	21.6%	51.4%	100.0%
		% Within MI1	55.2%	36.4%	58.8%	63.5%	65.1%	61.7%
		% Of Total	5.3%	1.3%	10.0%	13.3%	31.7%	61.7%
Total	Count	29	11	51	63	146	300	
	Expected count	29.0	11.0	51.0	63.0	146.0	300.0	
	% Within Gender	9.7%	3.7%	17.0%	21.0%	48.7%	100.0%	
	% Within MI1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
	% Of Total	9.7%	3.7%	17.0%	21.0%	48.7%	100.0%	

Table 4. Cross tabulation of MI2 and gender

			MI2					Total
			1.00	2.00	3.00	4.00	5.00	
Gender	Men	Count	18	9	17	21	50	115
		Expected count	18.0	6.5	19.6	21.1	49.8	115.0
		% Within Gender	15.7%	7.8%	14.8%	18.3%	43.5%	100.0%
		% Within MI2	38.3%	52.9%	33.3%	38.2%	38.5%	38.3%
		% Of Total	6.0%	3.0%	5.7%	7.0%	16.7%	38.3%
	Women	Count	29	8	34	34	80	185
		Expected count	29.0	10.5	31.5	33.9	80.2	185.0
		% Within Gender	15.7%	4.3%	18.4%	18.4%	43.2%	100.0%
		% Within MI2	61.7%	47.1%	66.7%	61.8%	61.5%	61.7%
		% Of Total	9.7%	2.7%	11.3%	11.3%	26.7%	61.7%
Total	Count	47	17	51	55	130	300	
	Expected count	47.0	17.0	51.0	55.0	130.0	300.0	
	% Within Gender	15.7%	5.7%	17.0%	18.3%	43.3%	100.0%	
	% Within MI2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
	% Of Total	15.7%	5.7%	17.0%	18.3%	43.3%	100.0%	

Table 5. Cross tabulation of MI3 and gender

			MI3					Total
			1.00	2.00	3.00	4.00	5.00	
Gender	Men	Count	13	9	23	26	44	115
		Expected count	13.8	8.8	22.2	29.9	40.3	115.0
		% Within Gender	11.3%	7.8%	20.0%	22.6%	38.3%	100.0%
		% Within MI3	36.1%	39.1%	39.7%	33.3%	41.9%	38.3%
		% Of Total	4.3%	3.0%	7.7%	8.7%	14.7%	38.3%
	Women	Count	23	14	35	52	61	185
		Expected count	22.2	14.2	35.8	48.1	64.8	185.0
		% Within Gender	12.4%	7.6%	18.9%	28.1%	33.0%	100.0%
		% Within MI3	63.9%	60.9%	60.3%	66.7%	58.1%	61.7%
		% Of Total	7.7%	4.7%	11.7%	17.3%	20.3%	61.7%
Total	Count	36	23	58	78	105	300	
	Expected count	36.0	23.0	58.0	78.0	105.0	300.0	

	% Within Gender	12.0%	7.7%	19.3%	26%	35%	100.0%
	% Within MI3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% Of Total	12.0%	7.7%	19.3%	26%	35%	100.0%

4.3.1 Cross Tabulation of Marketing Innovation and Gender

As seen from marketing innovation, the MI1 item deals with the use of social media in marketing which is crosstab to gender. 51.4% of women respondents strongly agreed with item MI1. In contrast, 44.3% of men respondents strongly agreed with item MI1. Our findings are presented in Table 5. When comparing women and men respondents, it can be concluded that this MI1 item received a more excellent positive response from women than men. The marketing innovation shows that the MI2 item deals with sales in marketplaces like Shopee, Gojek, Tokopedia, et cetera, which is crosstab to gender. 43.2% of women respondents strongly agreed with MI2. In contrast, 43.5% of men respondents strongly agreed with MI2. This MI2 item contrasts with the MI1 item, and, when compared to women and men respondents, it can be concluded that MI2 received a more excellent positive response from men than women. However, the percentage difference between each gender was only 0.3%. As seen from MI3 regarding the use of delivery services to distribute products which is crosstab with gender. 33% of women strongly agreed with MI3. On the other hand, 38.3% of the men also answered strongly agreed with MI3. The difference in percentage between men and women in this item is noticeable, with a difference of 5.3%. Of course, this item seems to have the most apparent difference of opinion between men and women. It can be concluded that the MI3 item received a more excellent positive response from men than women.

5 Discussion

5.1 Demographic Analysis

Java island is one of Indonesia's most populated areas, with a total of 151.6 million inhabitants, [50]. This makes the number of MSMEs in Java very high compared to other regions. The survey data shows that the top 3 provinces with the most MSMEs surveyed are in Java, including West Java, the Special Region of Jakarta, and East Java. Many MSMEs are located in Java because Java is the center of economic activity in Indonesia. Much of the development in Indonesia is carried out on Java Island, and the center of government or the capital of Indonesia is also located on Java Island, [51]. From these data, it can be concluded that there is

more women respondent than men respondent. MSME actors in Indonesia comprise of 61.7% women and 38.3% men, resulting in more women becoming entrepreneurs than men, [52]. Another reason MSME actors are women is that women entrepreneurs are more likely to employ women and provide motivational support to other women to start their businesses, [53]. During the G20 event, President Jokowi, the President of Indonesia, also discussed the role of women in developing MSMEs in Indonesia. Furthermore, President Jokowi also strongly supports women in the MSME sector, [52].

According to these data, many Indonesian MSMEs are engaged in accommodation, food and drink providers, and wholesale and retail are the most common and largest type of MSME business. This is evident from [54] data which shows that these two types of businesses have the highest number. Business players prefer to work in the food and beverage industry because food is everyone's need, and the food and beverage industry has a broad target market, [55]. Moreover, wholesalers and retailers are more convenient in their business processes as they do not require changing the product's shape. Another interesting thing here is construction, MSMEs have now entered a broader realm of business types, and although the numbers are not too big, it's a good development for MSMEs because the types of businesses are becoming more diverse and broader. The government also supports this by involving MSMEs in the existing projects so that types of business in MSMEs like construction can grow faster and the economic turnover of MSMEs also accelerates, [56].

From this, we can learn about the demographic condition of MSMEs in Indonesia, especially during the COVID-19 pandemic condition. We also can learn more about provinces that have many MSMEs, the gender background of MSMEs owners, the educational background, the age range of MSMEs owners, and the type of business. As a result, business owners can use this study to make business judgments before they decide to build or develop their business. This study also can help the government to know more about the condition of MSMEs in Indonesia.

5.2 Descriptive Analysis of Variable

From the comparison of the descriptive analysis data on the frequency of mean, median, and mode of each innovation variable, the mean value indicates

that MSMEs in Indonesia agree more that marketing innovation has an impact on MSME performance during the COVID-19 pandemic, as its mean value is 3.763, which is higher than other innovations. Median value data shows that Indonesian MSMEs are more in agreement with marketing innovation and organizational innovation to impact MSME performance during the COVID-19 pandemic because, from the median value sorted, it can be seen that these two innovations have the same number, which is 4. From the mode data, it can be seen that MSMEs in Indonesia strongly agree with marketing innovation to impact MSME performance during the pandemic of COVID-19 because the mode of marketing innovation shows a value of 5. So, it can be concluded from the frequency values of the mean, median, and mode indicate that Indonesian MSMEs are more in agreement with marketing innovation in impacting MSMEs' performance during the COVID-19 pandemic.

Apart from the marketing innovation that got the most votes for the impact on MSMEs in Indonesia during COVID-19, if we look at the average number, product innovation placed second after marketing innovation, which is 3.490. Organizational innovation is in third place, with 3.480 and the last is process innovation with 3.397. It can be concluded that product innovation, organizational innovation, and process innovation also bring an impact on MSME performance in Indonesia, although not as big as marketing innovation. From this, we also conclude that business owners in Indonesia already used innovation for their business especially marketing innovation. Therefore, business owners also can consider using marketing innovation in their businesses, especially business owners in Indonesia because it has more impact on their business when facing the COVID-19 pandemic situation.

5.3 Cross-tabulation Analysis of Marketing Innovation and Gender

From demographic and innovation descriptive analysis, we can understand the state of MSMEs in Indonesia in more detail starting from gender, province, age range, education, and type of business with preferences for the types of innovations implemented by MSMEs in Indonesia. Business owners also can understand which types of innovations are suitable to influence their business performance in the conditions of the COVID-19 pandemic. In order to see in more detail decision-making and innovation preferences, especially marketing innovations with gender demographics, a crosstabulation analysis was carried out.

Item MI1 shows that women are more active and prefer to use social media in their business than men, [57]. This is in line with data, that show Indonesian women tend to be more active in using social media than men. Item MI2 data analysis item results, the difference between women and men is not too large. It can be a positive sign for MSMEs because there is increasing digitalization support in Indonesia, especially on the issue of gender equality, as most MSME owners are women. Through its various work programs, the government continues to strive to increase the knowledge of Indonesian women on information technology and digitalization, [58]. The results of this survey can also show that MSMEs in Indonesia, in terms of digital knowledge and information technology, are no longer concerned with gender, or it can be concluded that gender equality in MSMEs in Indonesia has increased.

However, item MI3 is the item that is mostly dominated by a positive response from men. In business, men relatively choose to use delivery services than women. From this, it can be seen that gender differences affect different choices or preferences for marketing innovations. So that it can be interpreted that gender has an influence on the tendency to make marketing innovation decisions in the COVID-19 pandemic situation.

6 Conclusion

In this study, it was found that the demographics of MSMEs in Indonesia for the average gender is female, the provinces with the highest number of MSMEs surveyed are the province of Java Island, and most types of MSME businesses are accommodation providers and food and beverage providers. This study also conducted a descriptive analysis of the use of four dimensions of innovation that consists of product innovation, process innovation, marketing innovation, and organizational innovation. From the analysis, marketing innovation was found to receive more positive responses, hence to view more clearly the use of marketing innovation in Indonesian MSMEs, cross-tabulation was done.

From the cross-tabulation of marketing innovation and demographic items especially in gender, we find that women tend to agree more with item MI1 (use of social media) because Indonesian women tend to be more active in social media than men. While men tend to agree more with MI2 (use of marketplace) and items MI3 (use of delivery service). Although the difference between men and women is only 0.3% in MI2. It can be a positive

sign for MSMEs because there is increasing digitalization support in Indonesia, especially on the issue of gender equality, as most MSME owners are women. From the overall results, it shows that gender equality in Indonesia is increasing rapidly because increasingly more women are digitally aware and understand the importance of digitalization, and gender differences affect different choices or preferences of marketing innovations.

7 Implications, Limitations, and Suggestions for Further Research

In this study, the implication is that where Indonesian MSME business owners go or have run their business, they can use this study to understand MSME businesses in Indonesia based on the type of business, gender, and province. In addition, MSME business owners can also apply items of marketing innovation (use of social media, e-commerce, and delivery services) that are appropriate based on gender preference.

This study has several limitations, among others, firstly, this research is cross-sectional, where data collection is only done at one point in time, so this study cannot capture all impacts of the pandemic on MSMEs in Indonesia. Second, the data collection method is designed using non-probability sampling, where the data taken does not provide insight into the quality of the representation of a population. Therefore, the results of this study do not reflect the situation of MSMEs in Indonesia. The author suggests that future studies should consider several factors, such as testing the sample data using other methods. The sample data collection in this study may be limited, and the imbalance in the sample size distribution may affect the results. Thus, this study can use a longitudinal study to examine long-term variables so that the results have a high level of validity.

References:

- [1] Databoks, 'Indonesian MSMEs Increased 1.98% in 2019', *Databoks*, 2021. <https://databoks.katadata.co.id/datapublish/2021/08/12/umkm-indonesia-bertambah-198-pada-2019> (accessed Apr. 26, 2022).
- [2] (text in Indonesian) Ministry of Cooperative and Small Medium Enterprise of Republic Indonesia, 'Development of Micro, Small, Medium Enterprises (MSMEs) and Large Enterprises (LE) Data for 2018 - 2019', Indonesia, 2019. [Online]. Available: https://kemenkopukm.go.id/uploads/laporan/1617162002_SANDINGAN_DATA_UMKM_2018-2019.pdf.
- [3] Cabinet Secretariat of the Republic of Indonesia, *Regulation of the Government of the Republic of Indonesia Number 7 Year 2021*, no. 086507. Cabinet Secretariat of the Republic of Indonesia, 2021.
- [4] (text in Indonesian) SMEIndonesia, 'Portrait of Indonesian MSMEs: The Little One Who Plays a Big Role', *Ukmindonesia.Id*, 2018. <https://www.ukmindonesia.id/baca-artikel/62> (accessed Apr. 26, 2022).
- [5] (text in Indonesian) Ministry of Finance of the Republic of Indonesia, 'Auctions and MSMEs: Representation of Innovative and Efficient Collaboration', *Djkn.Kemenkeu.Go.Id*, 2021. <https://www.djkn.kemenkeu.go.id/artikel/baca/14186/Lelang-dan-UMKM-Representasi-Kolaborasi-Inovatif-Serta-Berdaya-Guna.html> (accessed Apr. 26, 2022).
- [6] (text in Indonesian) Databoks, 'Decline in MSME Sales Due to the Covid-19 Pandemic', 2020. [Online]. Available: <https://databoks.katadata.co.id/datapublish/2020/06/10/penurunan-penjualan-umkm-imbas-pandemi-covid-19#%0Ahttps://databoks.katadata.co.id/datapublish/>.
- [7] (text in Indonesian) CNBCIndonesia, '84% of Indonesian MSMEs have experienced a decrease in income', *CNBC Indonesia*, Feb. 04, 2022. <https://www.cnbcindonesia.com/market/202204163937-17-312982/duh-84-umkm-ri-alami-penurunan-pendapatan>.
- [8] Bisnis.com, 'BI Survey: The performance of MSMEs is getting worse', *Bisnis.Com*, Semarang, pp. 1–9, Oct. 09, 2020.
- [9] (text in Indonesian) Databoks, 'MSME Loans Grow Negatively during the Covid-19 Pandemic', *databoks*, 2021. <https://databoks.katadata.co.id/datapublish/2021/07/15/kredit-umkm-tumbuh-negatif-saat-pandemi-covid-19> (accessed May 17, 2022).
- [10] Kompasiana, 'Impact of Emergency PPKM on MSMEs', *Kompasiana*, Jul. 30, 2021.
- [11] B. Ebersberger and A. Kuckertz, 'Hop to it! The impact of organization type on innovation response time to the COVID-19 crisis', *J. Bus. Res.*, vol. 124, pp. 126–135, 2021, doi: 10.1016/j.jbusres.2020.11.051.
- [12] F. Eggers, 'Masters of disasters? Challenges

- and opportunities for SMEs in times of crisis', *J. Bus. Res.*, vol. 116, pp. 199–208, 2020, doi: 10.1016/j.jbusres.2020.05.025.
- [13] L. Turulja and N. Bajgoric, 'Innovation, firms' performance and environmental turbulence: is there a moderator or mediator?', *Eur. J. Innov. Manag.*, vol. 22, no. 1, pp. 213–232, 2018, doi: 10.1108/EJIM-03-2018-0064.
- [14] I. G. A. K. Giantari, N. N. K. Yasa, H. B. Suprasto, and P. L. D. Rahmayanti, 'The role of digital marketing in mediating the effect of the COVID-19 pandemic and the intensity of competition on business performance', *Int. J. Data Netw. Sci.*, vol. 6, no. 1, pp. 217–232, 2021, doi: 10.5267/J.IJDNS.2021.9.006.
- [15] T. Hoshi, D. Kawaguchi, and K. Ueda, 'Zombies, again? The COVID-19 business support programs in Japan', *J. Bank. Financ.*, 2022, doi: 10.1016/j.jbankfin.2022.106421.
- [16] L. Xu, S. Yang, J. Chen, and J. Shi, 'The effect of COVID-19 pandemic on port performance: Evidence from China', *Ocean Coast. Manag.*, vol. 209, no. October 2020, p. 105660, 2021, doi: 10.1016/j.ocecoaman.2021.105660.
- [17] H. Shen, M. Fu, H. Pan, Z. Yu, and Y. Chen, 'The Impact of the COVID-19 Pandemic on Firm Performance', *Emerg. Mark. Financ. Trade*, vol. 56, no. 10, pp. 2213–2230, 2020, doi: 10.1080/1540496X.2020.1785863.
- [18] T. Sun, W. W. Zhang, M. S. Dinca, and M. Raza, 'Determining the impact of Covid-19 on the business norms and performance of SMEs in China', *Econ. Res. Istraz.*, vol. 35, no. 1, pp. 2234–2253, 2021, doi: 10.1080/1331677X.2021.1937261.
- [19] S. Ahmed and S. Sur, 'Change in the uses pattern of digital banking services by Indian rural MSMEs during demonetization and Covid-19 pandemic-related restrictions', *Vilakshan - XIMB J. Manag.*, 2021, doi: 10.1108/xjm-09-2020-0138.
- [20] C. D. Rodrigues and M. E. S. de Noronha, 'What companies can learn from unicorn startups to overcome the COVID-19 crisis', *Innov. Manag. Rev.*, pp. 2515–8961, 2021, doi: 10.1108/inmr-01-2021-0011.
- [21] E. E. Udofia, B. O. Adejare, G. O. Olaore, and E. E. Udofia, 'Supply disruption in the wake of COVID-19 crisis and organisational performance: mediated by organisational productivity and customer satisfaction', *J. Humanit. Appl. Soc. Sci.*, vol. 3, no. 5, pp. 319–338, Nov. 2021, doi: 10.1108/JHASS-08-2020-0138.
- [22] R. Schmuck and M. Benke, 'An overview of innovation strategies and the case of Alibaba', *Procedia Manuf.*, vol. 51, no. 2019, pp. 1259–1266, 2020, doi: 10.1016/j.promfg.2020.10.176.
- [23] J. A. Schumpeter, *The Theory of Economic Development*, 3rd ed. United States of America: Transcation Publisher, 1983.
- [24] B. Jay, 'Firm Resources and Sustained Competitive Advantage', *J. Manage.*, vol. 17, no. 1, pp. 99–120, 1991, doi: 10.1177/014920639101700108.
- [25] S. Sultan and W. I. M. Sultan, 'Women MSMEs in times of crisis: challenges and opportunities', *J. Small Bus. Enterp. Dev.*, vol. 27, no. 7, pp. 1069–1083, 2020, doi: 10.1108/JSBED-06-2020-0226.
- [26] A. Gutiérrez, J. Aguilar, A. Ortega, and E. Montoya, 'Autonomous cycles of data analysis tasks for innovation processes in MSMEs', *Appl. Comput. Informatics*, 2022, doi: 10.1108/ACI-02-2022-0048.
- [27] Organisation for Economic Co-operation and Development, *Oslo Manual: The Measurement Of Scientific and Technological Activities*. Eurostat Publication, 2005.
- [28] B. Fazlıoğlu, B. Dalgıç, and A. B. Yereli, 'The effect of innovation on productivity: evidence from Turkish manufacturing firms', *Ind. Innov.*, vol. 26, no. 4, pp. 439–460, 2018, doi: 10.1080/13662716.2018.1440196.
- [29] M. A. Rasheed, K. Shahzad, and S. Nadeem, 'Transformational leadership and employee voice for product and process innovation in SMEs', *Innov. Manag. Rev.*, vol. 18, no. 1, pp. 69–89, 2020, doi: 10.1108/inmr-01-2020-0007.
- [30] A. K. Gupta, 'Innovation dimensions and firm performance synergy in the emerging market: A perspective from Dynamic Capability Theory & Signaling Theory', *Technol. Soc.*, vol. 64, 2021, doi: 10.1016/j.techsoc.2020.101512.
- [31] D. Kafetzopoulos, E. Psomas, and D. Skalkos, 'Innovation dimensions and business performance under environmental uncertainty', *Eur. J. Innov. Manag.*, vol. 23, no. 5, pp. 856–876, 2019, doi: 10.1108/EJIM-07-2019-0197.
- [32] L. Latifah, D. Setiawan, Y. A. Aryani, and R. Rahmawati, 'Business strategy MSMEs' performance relationship: innovation and

- accounting information system as mediators', *J. Small Bus. Enterp. Dev.*, vol. 28, no. 1, pp. 1–21, 2020, doi: 10.1108/JSBED-04-2019-0116.
- [33] B. K. Mabenge, G. P. K. Ngorora-Madzimure, and C. Makanyeza, 'Dimensions of innovation and their effects on the performance of small and medium enterprises: the moderating role of firm's age and size', *J. Small Bus. Enterp.*, vol. 34, no. 6, pp. 684–708, 2020, doi: 10.1080/08276331.2020.1725727.
- [34] R. P. J. Rajapathirana and Y. Hui, 'Relationship between innovation capability, innovation type, and firm performance', *J. Innov. Knowl.*, vol. 3, no. 1, pp. 44–55, 2017, doi: 10.1016/j.jik.2017.06.002.
- [35] H. El Chaarani, P. D. Vrontis, S. El Nemar, and Z. El Abiad, 'The impact of strategic competitive innovation on the financial performance of SMEs during COVID-19 pandemic period', *Compet. Rev.*, vol. 32, no. 3, pp. 282–301, 2021, doi: 10.1108/CR-02-2021-0024.
- [36] S. M. Chege, D. Wang, and S. L. Suntu, 'Impact of information technology innovation on firm performance in Kenya', *Inf. Technol. Dev.*, pp. 316–345, 2019, doi: 10.1080/02681102.2019.1573717.
- [37] S. Paudel, 'Entrepreneurial leadership and business performance', *South Asian J. Bus. Stud.*, vol. 8, no. 3, pp. 348–369, Oct. 2019, doi: 10.1108/SAJBS-11-2018-0136.
- [38] M. Bodlaj, S. Kadic Maglajlic, and I. Vida, 'Disentangling the impact of different innovation types, financial constraints and geographic diversification on SMEs' export growth', *J. Bus. Res.*, vol. 108, pp. 466–475, 2018, doi: 10.1016/j.jbusres.2018.10.043.
- [39] Shashi, P. Centobelli, R. Cerchione, and R. Singh, 'The impact of leanness and innovativeness on environmental and financial performance: Insights from Indian SMEs', *Int. J. Prod. Econ.*, vol. 212, no. February, pp. 111–124, 2019, doi: 10.1016/j.ijpe.2019.02.011.
- [40] R. Masa'deh, J. Al-Henzab, A. Tarhini, and B. Y. Obeidat, 'The associations among market orientation, technology orientation, entrepreneurial orientation and organizational performance', *Benchmarking*, vol. 25, no. 8, pp. 3117–3142, 2018, doi: 10.1108/BIJ-02-2017-0024.
- [41] A. Panno, 'Performance measurement and management in small companies of the service sector; evidence from a sample of Italian hotels', *Meas. Bus. Excell.*, vol. 24, no. 2, pp. 133–160, 2019, doi: 10.1108/MBE-01-2018-0004.
- [42] L. M. Kyazze, I. Nsereko, and I. Nkote, 'Cooperative practices and non-financial performance of savings and credit cooperative societies', *Int. J. Ethics Syst.*, vol. 36, no. 3, pp. 411–425, 2020, doi: 10.1108/IJOES-06-2020-0087.
- [43] A. Kaleka and N. A. Morgan, 'Which competitive advantage (s)? Competitive advantage-market performance relationships in international markets', *J. Int. Mark.*, vol. 25, no. 4, pp. 25–49, 2017, doi: 10.1509/jim.16.0058.
- [44] F. M. Somohano-Rodríguez, A. Madrid-Guijarro, and J. M. López-Fernández, 'Does Industry 4.0 really matter for SME innovation?', *J. Small Bus. Manag.*, vol. 60, no. 4, pp. 1001–1028, 2020, doi: 10.1080/00472778.2020.1780728.
- [45] A. Exposito and J. A. Sanchis-Llopis, 'Innovation and business performance for Spanish SMEs: New evidence from a multi-dimensional approach', *Int. Small Bus. J. Res. Enterp.*, vol. 36, no. 8, pp. 1–21, 2018, doi: 10.1177/0266242618782596.
- [46] Hair, M. Celsi, A. Money, P. Samouel, and M. Page, *Essentials of business research methods*. 2016.
- [47] R. Kumar, *Research Methodology*, Third edit. Thousand Oaks: Sage Publications Ltd, 2011.
- [48] U. Sekaran and R. Bougie, *Research Methods For Business*, Seventh Ed. West Sussex: John Wiley & Sons Ltd., 2016.
- [49] J. F. Hair, W. C. Black, B. J. Babin, and R. E. Anderson, *Multivariate Data Analysis*, Seventh. Pearson Prentice hall, 2010.
- [50] (text in Indonesian) Kompas.com, '6 Provinces in Java Island', 2022. <https://www.kompas.com/skola/read/2022/07/26/160000669/6-provinsi-di-pulau-jawa?page=all> (accessed Aug. 24, 2022).
- [51] (text in Indonesian) Indonesian Ministry Of Home Affairs, 'Advantages of Java Island', 2010. <http://appejawa.navperencanaan.com/whypro-motion/viewjawa> (accessed Aug. 24, 2022).
- [52] (text in Indonesian) P. Relations, 'President Jokowi: G30 must encourage strengthening the role of MSMEs and women through real action', *Setpres, BPPI*, 2021. <https://setkab.go.id/presiden-jokowi-g20->

harus-dorong-penguatan-peran-umkm-dan-perempuan-melalui-aksi-nyata/ (accessed Sep. 30, 2022).

- [53] (text in Indonesian) K. U. Kulsum, 'G20 Empower working to reduce gender inequality in the digital sector', 2022. <https://kompaspedia.kompas.id/baca/paparan-topik/g20-empower-mendorong-produktivitas-perempuan-pascapandemi> (accessed Sep. 23, 2022).
- [54] D. M. Haryanti, 'Potrait of small indonesian MSMEs that play big roles for indonesian MSMEs', *Ukmindonesia.Id*, 2018. <https://www.ukmindonesia.id/baca-artikel/62>.
- [55] (text in Indonesian) M. F. E. Solagracia, 'Why there is no end to culinary business?', *Okezone.Com*, 2020. <https://economy.okezone.com/read/2020/02/15/320/2168837/kenapa-bisnis-kuliner-tidak-ada-matinya?page=2> (accessed Sep. 15, 2022).
- [56] (text in Indonesian) H. K. Dewi, 'This is a project category that MSMEs can participate in the digital market program', *nasional.kontan.co.id*, pp. 1–9, Aug. 14, 2020.
- [57] (text in Indonesian) Databoks, 'The Majority of Instagram Users in Indonesia are Women', *Databoks*, 2021. <https://databoks.katadata.co.id/datapublish/2021/06/29/perempuan-paling-banyak-gunakan-instagram-di-indonesia> (accessed Sep. 20, 2022).
- [58] T. Tvone, 'G20 Empower strives to reduce gender inequality in the digital sectors', *TVOne News.com*, pp. 1–5, Jul. 26, 2022.

**Creative Commons Attribution License 4.0
(Attribution 4.0 International, CC BY 4.0)**

This article is published under the terms of the Creative Commons Attribution License 4.0

https://creativecommons.org/licenses/by/4.0/deed.en_US