

WOMAN ENTREPRENEURSHIP IN MSME IN INDONESIA FROM THIO PERSPECTIVE

TETI HARYATI^{1*}, RIZAL SYARIEF², YUDHA HERYAWAN ASNAWI³ and SITI AMANAH⁴

^{1,2,3,4} School of Business, IPB University, Bogor, Indonesia.

*Corresponding Author Email: teti.haryati@gmail.com

Abstract

Micro, small and medium enterprises (MSMEs) are one of the popular business practices among Indonesian people. MSMEs are one of the country's economy's driving forces and one of Indonesia's most significant economic sectors. The role of MSMEs is to provide a means of equalizing the economic level of the familiar people because of the existence of MSMEs in various places or regions that reach rural and urban areas, which function to help improve the economic quality of rural and urban communities. MSME actors must understand essential aspects related to MSMEs in Indonesia. This research was conducted based on four stages, namely the first stage, a preliminary study was carried out through a literature review related to the theme of women's entrepreneurship which included characteristics, challenges, and obstacles, as well as problems faced by women entrepreneurs in running their businesses. Women entrepreneurs still carry out all activities, so in the future, there is a need for specialization so that they can be more focused on expanding their business. For human ware and info ware, these two things are the backbone of the business that has been running.

1. Introduction

Micro, small and medium enterprises (MSMEs) are one of the popular business practices among Indonesian people. MSMEs are one of the country's economy's driving forces and one of Indonesia's most significant economic sectors. The role of MSMEs is to provide a means of equalizing the economic level of the ordinary people because of the existence of MSMEs in various places or various regions that reach rural and urban areas which function to help improve the economic quality of rural and urban communities. MSME actors must understand essential aspects related to MSMEs in Indonesia.

Based on a survey by Bank Indonesia, digitization boosted MSME businesses by up to 20 percent of total MSMEs in Indonesia during the Covid 19 pandemic. Then in 2021, around 17.25 million MSMEs have been onboarding into the digital ecosystem, and the next target in 2024 is around 30 million MSMEs (Kemenkop UKM, 2021). In 2022 the ministry of cooperatives and SMEs will focus its agenda on transformative recovery, which can be explained, among others, that around 70 percent of the priorities target MSME and cooperative actors, young people, and women. Around 20 million MSMEs are already connected to the digital ecosystem. In 2022, around 70 percent will likely experience business recovery (Kemenkop UKM, 2022).

The percentage of women and men in Indonesia is relatively balanced, with 49.42 percent of women and 50.58 percent of men. If seen based on the classification of generations of Indonesia's population in 2020, the population of productive age or working age (15-64 years) reaches 70.72 percent, the majority is dominated by generation Z at 27.94 percent, and millennials as much as 25.87 percent of Indonesia's total population. Meanwhile, around 17,263,282 people entered the Z generation post, and around 34,717,318 people entered the Z Generation filled by women (BPS, 2020).

The difference in understanding how to manage a business between women and men can be overcome. It can be seen that the contribution of women to MSMEs in Indonesia has continued to increase in number, reaching 12.7 million people in 2017, and there was another increase of 14.3 million people in 2018 (Katadata, 2018). The Ministry of Cooperatives and SMEs (2019) noted that in 2019, specifically in micro business units managed by women, it reached 14 million units, while in 2020 it increased to 30.6 million units (IFC, 2020). Meanwhile, in 2021 around 64.5 percent of MSMEs are managed by women (BPS, 2021), and women dominate around 60 percent of business actors on the micro-scale. Women's businesses can be developed. Based on these data, the potential for women's economic strength needs to be encouraged, especially in the micro business sector, which is a lot of women's work.

2. Literature Review

The definition of entrepreneurship based on experts can be interpreted differently depending on the context being studied. Some experts in this regard define entrepreneurship as a process of facing life's challenges and getting a job with various risks faced. Entrepreneurship is also defined as the result of disciplined efforts in a systematic process of applying creativity and innovation to market needs and opportunities (Thomas and Zimmerer, 2008). Meanwhile, from the business context, based on the view of business people, an entrepreneur is the creation of a new business carried out by someone by risking and realizing uncertainty. The goal is to increase profits and growth by identifying opportunities (Zimmerer, 1993). Another definition is also presented concerning entrepreneurship and business risk, namely that an entrepreneur can organize, manage, and assume the risks that will occur in a business or business. Entrepreneurs are individuals who understand and know the financial, material, and resource risks of a new business concept that will be created based on opportunities within the company" (Burgess, 1993). The statement is that an entrepreneur can create creatively to build something that has a value from its practicality regardless of whether there are opportunities from resources or a lack of existing resources (Jeffrey A 1994). Vision and desire or desire, a commitment to leading others in carrying out that vision, and the need to take calculated risks are necessary for entrepreneurs (Slatter, 2018).

The trend of entrepreneurship among women raises diverse perspectives in society. Issues related to gender often heat up in discussions on women's entrepreneurship. Several discussions related to gender in women's entrepreneurship often raise pros and cons and end in disagreement. Gender issues are often associated with the issue of women's dual roles as wives, mothers, and entrepreneurs. The understanding of gender is the difference between men and

women. The difference is built based on social and cultural. Gender is always related to roles, behaviors, and characteristics considered appropriate for men and women. Gender activities are always associated with women, who are considered a disadvantaged group compared to men in decision-making processes and important positions in politics, government, and the family (Azisah et al. 2016). Gender has the characteristics and behavior expected of men and women based on society's values, culture, and norms at a particular time. Gender roles relate to what men and women should and should and should not do based on society's values, culture, and norms at a particular time. The gender realm is a space for men and women to play their roles in both realms of success in a business, of course, is influenced by the strategies used in the entrepreneurial process. Strategy can be defined as defining the framework of a company's business activities and providing guidelines for coordinating activities so that the company can adapt and influence an ever-changing environment. Strategy can explain the environment desired by the company and what type of organization will be run (Mazeed, Saritha and Devi, 2022).

Entrepreneurial characteristics and strategies are, of course, a package that needs to be seen. The following are several studies that support the concept of women's entrepreneurial strategy, including the finding that entrepreneurs must be able to record and pay attention to detail at the start of a business, create policies, and operate strategies that will grow the business. Women entrepreneurs often interpret success as economic growth, in this case, financial. Confidence plays a substantial role in providing motivation and confidence to women entrepreneurs (Awadzi, 2019). The success of women entrepreneurs offers a competitive advantage to the business market (Jaim, 2021). Successful women entrepreneurs know the market, take calculated risks, understand product pricing, and take full advantage of profit growth opportunities.

Women entrepreneurs experience business success when they develop and launch new products, create aggressive business models, employ highly trained employees, and use good Information (Calza, et al., 2021). Strategic success factors and entrepreneurial growth can proliferate. Other findings reveal that entrepreneurship can positively influence women's lives and empower them by developing their growth (Hug, 2019). To succeed, women entrepreneurs must see and emphasize what is not in their business and identify problem areas to find appropriate innovations. Women entrepreneurs must be open to communicating internally and externally to create a strong network, and networking is one of the opportunities to make a business successful (Young Entrepreneur Council, 2018).

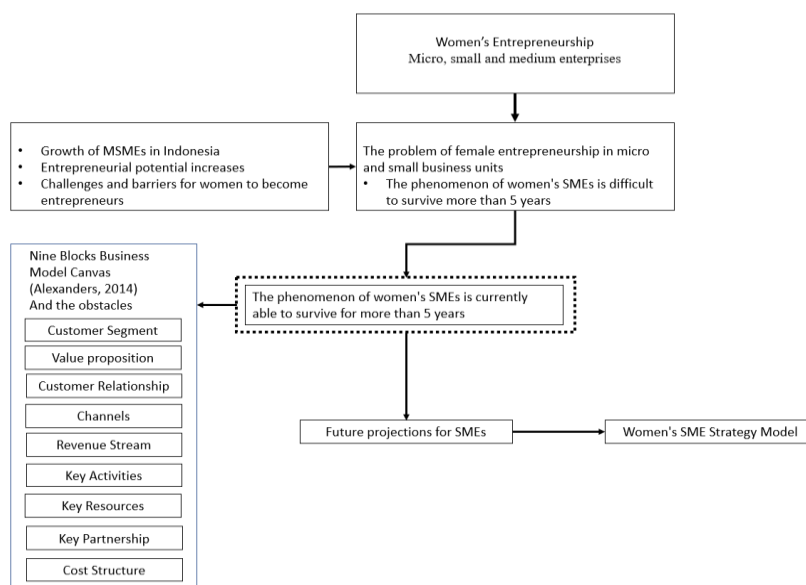
Furthermore, to achieve successful entrepreneurship, women entrepreneurs must know what strategies to use to start a business, what techniques are needed to grow the business, and how to overcome the challenges that arise during its operation (Gemconsortium.org, 2022). Four strategies can be used to start a business: Information, implementation, learning, and communication. The information must be obtained before making a decision. Meanwhile, the implementation strategy should detail plans to guide decision-making. Learning is a process in which entrepreneurs look at past scenarios and examine past decision-making techniques with

the hope of learning from past experiences. Communication is communicating decisions with all necessary parties (Teti, 2017).

Business models have an essential role in helping entrepreneurs succeed. A good business model is a key to starting a successful business, and a good business model can help to get financing from outside parties (Slatter, 2018). The business model guides entrepreneurs to help make decisions and reduce risk. Of course, the business model must go through the following stages to be used by the company. The explanation of the business model will be described in a separate sub-chapter in the business model and business model canvas as a strategy and tool for mapping elements in the business that will be executed or developed. Formulating the projected model for the sustainability of the ideal female entrepreneur business in the future is a benchmark in formulating a sustainable female entrepreneur business model that can be sustainable in the digital era.

The following is a conceptual framework for further research, which can be seen in the following figure.

Figure 1. Conceptual Framework



3. Methodology

This study uses a qualitative method which is interpreted as a research method in describing phenomena based on the perspectives of key informants in discovering various realities and developing a holistic understanding of phenomena in specific contexts (Hilal & Alabi, 2013). There are five qualitative approaches (Creswell, 2007): narrative, biographical, grounded

theory, case studies, ethnographic, and phenomenological. Based on these five theories, a phenomenological approach is used to answer the objectives of this study, namely the phenomenon of women entrepreneurship related to challenges and obstacles, nine elements of business in women entrepreneurs (Hariyani, Herawati, and Broto, 2022), which can ultimately formulate strategies for developing women entrepreneurs in managing their businesses so that they can survive more of five years.

The sampling procedure was used to identify ten respondents in this study, namely sampling criteria. Criterion sampling only involves people who meet a predetermined set of criteria (Patton, 2001). The population in this study consisted of all Bejubel members totaling approximately 300 people consisting of two business groups, namely culinary and fashion. All Bejubel members are women entrepreneurs on the scale of the home industry, micro and small business units.

This research was conducted based on four stages, namely the first stage, a preliminary study was carried out through a literature review related to the theme of women's entrepreneurship which included characteristics, challenges, and obstacles, as well as problems faced by women entrepreneurs in running their businesses. The literature used includes previous articles or journals. Recent issues in women's entrepreneurship and looking at previous research recommendations from studies that have been conducted have the potential to create further research gaps. The description of the problems that have been found from previous research can be used as a reference for research problems which can then become the basis for formulating research questions, determining research objectives, as well as conceptual models built based on literature reviews that are considered relevant.

The second stage is collecting data in the field, in this case, women entrepreneurs who meet predetermined criteria. Information can be obtained and processed through in-depth interviews with the stages described. Research instruments can be validated first and optimize all tools to help facilitate data collection and analysis up to the reporting stage.

The third stage, the process of producing an overview of the nine business elements and challenges, and obstacles to businesses managed by women, is assisted by using an analysis component which is also equipped with THIO (Technology, Human, Information, and Organization) to be able to find out the extent of the problems experienced by women entrepreneurs in running their business.

The fourth stage is the process of producing ideal conditions for women entrepreneurs in the future. The data is taken based on the views of the experts who have been determined, and a list of semi-structured questions becomes instrumentation in this process through FGD. The following process is to analyze the data through descriptive analysis to produce projections of the ideal conditions for women entrepreneurs in running their businesses to be sustainable (can last more than five years).

4. Discussion

The importance of the role of technology is widely proven in achieving progress both at the country level and at the industrial level. Technology has also been applied in various industries, which of course, in improving micro, small and medium enterprises also plays a crucial role. The current low growth and development of MSMEs result from the absence of a map of the level of industrial technology capabilities relevant to market needs. This map is essential for fostering micro-enterprises run by women entrepreneurs so they can continue to grow and develop in a more precise direction. Mapping the level of the technical capability of micro-businesses run by these women entrepreneurs uses the techno-metric method from UNESCAP (United Nation Economics and Social Commission for the Asia Pacific), where technology as the basis for increasing the competence of the company is the key to the company's success in being able to compete in the long term. The success of business development in the future requires a plan as a strategy that will be carried out by the company in the future and, of course, with the help of technology. Technology is generally a combination of physical equipment and knowledge for business development. Technology is seen as the result of interaction in the dynamic transformation process of the four essential components of development, namely Techno-ware (T), Human-ware (H), Info-ware (I), and Orga-ware (O), which is abbreviated as THIO. Techno-ware is physical capital used for various kinds of work (main and supporting activities) managed by various organizations, both the private and public sectors.

Human-ware makes a person do various things in his work and shows what can be done using the provided techno-ware in applying personal qualifications and experience. Info-ware is a source of information related to technical understanding of the processes and functions of production equipment and information storage facilities. Orga-ware is the coordination of task tools in actual practice carried out by the organization.

Table 1: Operationalization Variable

Variable	Definition	Indicator
Teknoware	Technoware is an embodiment of facilities or equipment in the production process.	Equipment used in the production process
Humanware	Humanware is an embodiment in human resources as implementing activities or acting as movers/operators.	Skill
Infoware	Infoware is an embodiment of the operational process or procedure in the activity.	Information
Orgaware	Orgaware is an embodiment in the process of managing a company/company managerial	Organization

The Technology Contribution Coefficient (TCC) value is the techno-metric method's final result, which is then translated into an assessment scheme to determine the level classification. Based on the results of research from various fields that have been carried out using Technometrics models as a method of measuring the level of technology components, it is known that the techno-metric method can be applied at various levels of industrial scale (small industry, medium industry, and extensive industry) both goods and services, and can be used to see industrial competitiveness. However, the level of technology contribution applied to the middle

to lower scale needs more attention because it is proven that this type of micro-enterprise is beneficial for the community's welfare.

The technology components in question are Techno-ware, Human-ware, Info-ware, and Orga-ware. Combined contributions can also be referred to as technology contributions. The Technology Contribution Coefficient (TCC) is formulated as the following multiplicative function:

$$TCC = T\beta_t * H\beta_h * I\beta_i * O\beta_o \dots \dots \dots (1)$$

Where: T, H, I, O = contribution of Techno-ware, Human-ware, Info-ware, and Orga-ware,
t, h, i, o = intensity of T, H, I, O contribution to TCC.

The level of sophistication for micro-enterprises run by women entrepreneurs is generally still limited, as seen from the lowest score for the Techno-ware component obtained in the production process, which still needs to be improved in technology for both culinary and fashion products. The production process is still done manually even though the packaging for culinary uses a vacuum and hygienic packaging. The Human-ware component still needs to be improved because workers only carry out beautification and do minor maintenance on facilities. In this micro business, both fashion and culinary, women entrepreneurs play a prominent role in running their businesses from production to product marketing. Info-ware showed a slightly higher score where the information obtained through social media, communities, and partners from women entrepreneurs was very good for fashion and culinary products. Orga-ware because this type of business is classified as micro, which is still relatively simple, but the organizational management is excellent. However, the system of division of tasks still needs to be visible, so women entrepreneurs can focus on something other than developing it. The degree of sophistication of the technological components for fashion and culinary businesses can be seen in table 2.

Table 2: Degree for THIO

Techno ware	Human ware	Info ware	Orga ware	Score
Physical equipment	the ability to use physical facilities	Information on understanding the use of equipment	Small company, self-directed, small capital, little human resources	1 2 3
Equipment Production	Production capability	Basic understanding of effective use of facilities	Small companies that have been able to produce well	1 2 3
Technology Adaptation	Adaptability	Ability to adapt information that enables knowledge of designing and operating facilities	The company can compete by maintaining product quality and product variety on an ongoing basis	1 2
Digitalization of Technology	Ability to create content and market online	Market and consumer research information	The company can identify products according to consumer demand and new markets	1 2

Based on the results of interviews conducted with experts, the results are shown in the following table.

Table 3: Result of THIO

	Criteria	Criterion value	Score
Techno-ware	Physical facilities	Somewhat fulfilling	3
	Production technology	Slightly fulfilling	2
	digitization	Slightly fulfilling	2
	Total Score		7
	Sti		2.33333
Human-ware	Worker	Somewhat fulfilling	4
	Owner	more fulfilling	7
	Total Score		11
	Shi		5.5
Info-ware	Market information	somewhat fulfilling	4
	Community network	good	6
	Business development	not enough	3
	Total Score	somewhat fulfilling	13
	Sii	good	4.33333
Orga-ware	Profit	a little	2
	Capacity usage	not enough	3
	Forward orientation	not enough	2
	Total Score		7
	Soi		2.33333

Next, the component contribution is calculated for each technology component (techno-ware, human-ware, info-ware and orga-ware) as shown in the following table.

Table 4: Component Contribution THIO

Technology	UL	LL	Ste of the art	Contribution
Techno-ware	1	3	0.42	0.24
Human-ware	1	5	0.5	0.33
Info-ware	1	4	0.55	0.26
Orga-ware	1	3	0.32	0.26

The value and weight of obtained the value of T = techno-ware, H = human-ware, I = info-ware, and O = orga-ware so that T = 0.13; H = 0.29; I = 0.39; O = 0.20

Then the TCC calculation is carried out as follows:

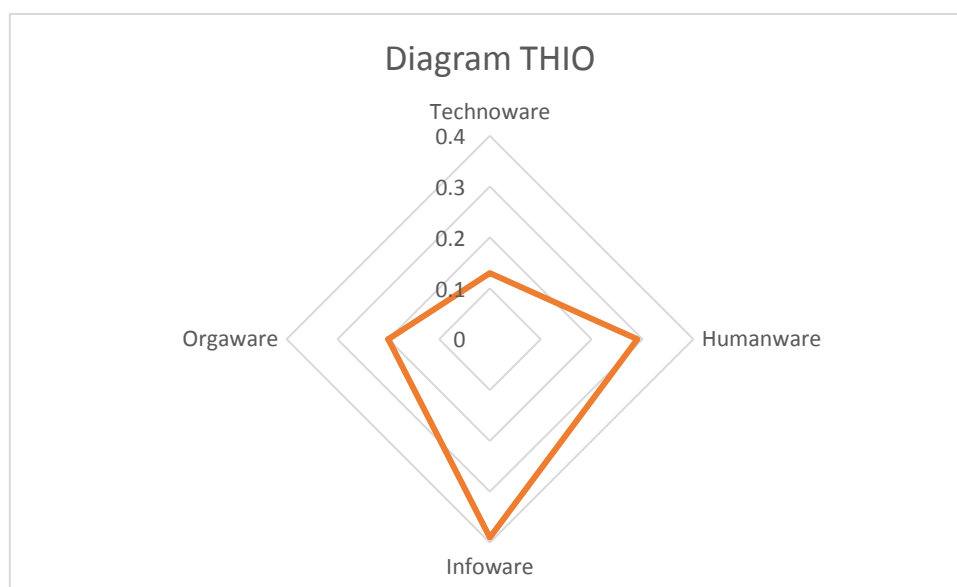
Table 5: TCC Calculation

Technology	Contribution	Intensity	TCC
Techno-ware	0.24	0.13	0.272038755
Human-ware	0.33	0.29	
Info-ware	0.26	0.39	
Orga-ware	0.26	0.2	

Based on the results of the TCC calculation, the contribution coefficient value of women entrepreneurs' fashion and culinary micro businesses is currently low, which is 0.272. From

this value, it can also be seen that the smallest number is technology, which shows that the current micro-business of fashion and culinary products is still low in technological adaptation. Because this type of business is still classified as micro, technological adaptation needs to improve. Nevertheless, on the other hand, in the future, it is necessary to pay attention to the technology side so that the business run by women entrepreneurs will develop faster and of course be able to enter new markets. Another thing that is still low is organization; from an organizational perspective, this micro-enterprise does not yet have a clear division of tasks. Women entrepreneurs still carry out all activities, so in the future, there is a need for specialization so that they can be more focused on expanding their business. For Human ware and Info ware, these two things are the backbone of the business that has been running so far. As shown in the following THIO diagram.

Figure 2: Diagram THIO



5. Conclusion

To accelerate the digitization of MSMEs in Indonesia, the government seeks to collaborate with various parties, especially business start-ups that already exist. This effort is at the same time to encourage and provide access to MSMEs to develop their business so that they can be sustainable. Through digitalization, financial inclusiveness can encourage increased productivity and a sustainable economy, especially in MSMEs owned by women and young people.

Based on the results of the THIO analysis carried out, it can be concluded that in a business run by female entrepreneurs, when it turns out that the key to success comes from infoware and human ware, for that in the future, it is necessary to make an effort to improve techno ware and orga ware. Thus, women entrepreneurs need to keep up with changes in existing technology, can learn on their own, or attend workshops to improve skills in the field of technology so that

they can help sustain their businesses. In addition, employees also need attention, so woman entrepreneurs need to understand how to develop their business organization better so that business continuity can be well maintained.

Reference

- ❖ Awadzi C. 2019. African American female entrepreneurs: What keeps them successful?. *Journal of Business Diversity*. 19(1): 10.
- ❖ Azisah et. al. 2016. *Konstektualisasi Gender Islam dan Budaya*. Seri Kemitraan Universitas Masyarakat (KUM) UIN Alauddin Makassar. ISBN: 978-602-328-199-2
- ❖ BKPM, 2022, [bkpm.go.id](https://www.bkpm.go.id), MSMEs Receive Strong Support from Government, <https://www.bkpm.go.id/en/publication/detail/news/msmes-receive-strong-support-from-government> (accessed Aug. 19, 2022)
- ❖ BPS, 2020 *Badan Pusat Statistik, Hasil Sensus Penduduk 2020.* BPS, Jan. 21, 2021. [Online]. Available: <https://www.bps.go.id>
- ❖ Burgess DS. 1993. *Small Business Management Fundamentals* 6 th ed. New york (US): Mcgraw hill Inc.
- ❖ Calza, M. Ferretti, E. Panetti, and A. Parmentola, 2021. Moving drug discoveries beyond the valley of death: the role of innovation ecosystems, *European Journal of Innovation Management*, vol. 24, no. 4, pp. 1184–1209, 2021, doi: 10.1108/EJIM-11-2019-0342.
- ❖ Creswell. 2007. *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. Thousand Oaks (US): Sage Publications.
- ❖ Gemconsortium.org, *Global Entrepreneurship Monitor Research Highlights Significant Increase in Growth-oriented Women Entrepreneurs Worldwide,*” GEM Global Entrepreneurship Monitor, 2022. <https://www.gemconsortium.org/reports/womens-entrepreneurship> (accessed Aug. 19, 2022).
- ❖ Hariyani, N., Herawati, N, R., Broto, A.H.K, *Enterpreneurial Management Analysis of Micro Small and Medium Enterprises in the era of Covid-19 Pandemic with a qualitative phenomenology Approach*. *Seybold Report*, 2022, vol 17(10), (762-769). DOI 10.5281/zenodo.7225152
- ❖ Hilal, A., & Alabri, S. S. (2013). Using NVIVO for Data Analysis in Qualitative Research. *International Interdisciplinary Journal of Education*, 2, 181-186. <https://doi.org/10.12816/0002914>
- ❖ Hug A. 2019. How do women entrepreneurs Strategize growth? An investigation using the social feminist theory lens. *Journal of Small Business Management*. 58(2): 259-287.
- ❖ IFC. 2020. *Indeks Global Destination Cities* . Mastercard International,.
- ❖ Jaim, J., 2021. Women’s entrepreneurship in developing countries from a family perspective: Past and future, *Global Business and Organizational Excellence*, vol. 41, no. 1, pp. 31–45, 2021, doi: 10.1002/joe.22142.
- ❖ Jeffrey AT. 1994. *New Venture Creation: Entrepreneurship for the 21st century*. Burr Ridge (US):Irwin.
- ❖ Katadata. 2018. *Kontribusi Perempuan dalam UMKM Turut Dongkrak PDB*. Jakarta (ID): Tim Publikasi Katadata.
- ❖ Kemenkop UKM, 2021. *Merajut Kolaborasi Untuk Pendampingan UMKM Naik Kelas*. Laporan Dampak Impact Report. www.ukmindonesia.id.
- ❖ Kemenkop UKM, 2022. *Upaya Pemerintah Untuk Memajukan UMKM Indonesia*. Upaya Pemerintah Memajukan UMKM Indonesia | BKPM
- ❖ Mazeed, S.A., Saritha,P, and Devi,U. 2022, *CSR Practices of Social Entrepreneurship Organizations for Sustainable Development in India*, *The Seybold Report*, V.17(4), 20-30. DOI 10.5281/zenodo.6553605

- ❖ Patton, M. Q. (2001). *Qualitative research and evaluation and methods* (3rd ed.). Beverly Hills, CA: Sage.
- ❖ Slatter ES. 2018. 7 skills women need to start a business. [internet]. <https://sheownsit.com/7-skills-women-need-to-start-a-business/>.
- ❖ Teti KY. 2017. *The Different Approaches Firms Use To Set Strategy*. Cambridge (US): Harvard Business Review.
- ❖ Thomas, W and Zimmerer NM. 2008. *Kewirausahaan dan Manajemen Usaha Kecil*. Jakarta (ID): Selemba empat.
- ❖ Young Entrepreneur Council. 2018. *Identifying The Way: Six Entrepreneurial Approaches That Build Success*. Boston (US): Young Entrepreneur Council.
- ❖ Zimmerer NM. 1993. *Effective Small Business Management*. New York (US): Macmillan Publishing Company.