

West Sumatra MSMEs' Strategy in Facing Competition in the 4.0 Industrial Revolution Using SWOT Analysis

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ABSTRACT

The purpose of this study was to analyze the West Sumatera MSMEs strategy in facing competition in the era of the Industrial Revolution 4.0. This study used a qualitative method with a strategic analysis tool that is SWOT analysis to analyze the internal and external factors and what strategies should be applied by MSMEs in facing competition in the era of the Industrial Revolution 4.0. It is expected that MSMEs will be able to take advantage of existing opportunities to increase their sales in the future. Based on this research results, a number of strategic recommendations are expected from MSMEs to be able to compete with other MSMEs by relying on aggressive strategies to take the advantage of internal opportunities, overcome internal barriers and external support questions that are able to maintain and improve product quality and variation, develop target or market segments, increase promotion in order to increase the number of business units.

Keywords: *Strategy, MSMEs, SWOT Analysis, and 4.0 Industrial Revolution.*

1. INTRODUCTION

Indonesia is a country with the fourth-largest population in the world, which reaches 3.54% of the world's population. Of course, this indicates that Indonesia is a large country that is also awarded by God with quality natural resources. but it cannot be denied that it has not been able to be put to good use, as can be seen with Indonesia's stagnant economic growth at 5% and a fairly high inflation-rate of 3%. This condition should be easily overcome by expanding the employment and motivating the community to be entrepreneurs. Improving Micro, Small, and Medium Enterprises (MSMEs) is one of the government's solutions or efforts to increase economic growth as well. The development and potential of MSMEs in Indonesia is inseparable from the banking support in lending to the fund to them. Every year, the loans to MSMEs grow higher than the total bank credit that can be provided. The number of Indonesian MSME entrepreneurs is among the most compared to other countries, especially since 2014. It continues to develop, so that it was estimated that by the end of 2016 the number of MSME entrepreneurs in Indonesia would continue to experience growth. MSMEs have a very vital role in the development and economic growth, not only in developing countries such as Indonesia, but also in developed countries. In Indonesia, the role of MSMEs in addition to playing a role in the development and economic growth, they also have a very important role in overcoming the problem of unemployment. The growth of microenterprise makes it a source of growth in employment and income opportunities. A lot of labor-absorbing means that MSMEs also have a strategic role in the government's efforts to fight against poverty and unemployment as well as to strive for the economic growth. Starting from the morning activities when having breakfast, we look for porridge or pastry snacks that are sold by MSMEs, buy

basic necessities at stalls near the house, leave the children in the nearest playgroup, which is also MSMEs. In the current digital era, there are even some people who don't have a shop and only market their products online and don't yet have a business license. Business practitioners with these characteristics can be found around us, who could be our relatives, neighbours, friends, or ourselves. From the name, MSMEs does have an extension of Micro, Small, and Medium Enterprises (MSMEs), but make no mistake, this little one has a very large and crucial contribution to our economy at macro-level. The Indonesian Ministry of Cooperatives and SMEs reported that in terms of the number of units, MSMEs had a share of around 99.99% (62.9 million units) of the total number of business operators in Indonesia (2017), while large businesses were only 0.01% or around 5400 units. Micro Business absorbed around 107.2 million workers (89.2%), Small Business absorbed around 5.7 million (4.74%), and Medium Enterprises absorbed around 3.73 million (3.11%); while Large Enterprises absorbed around 3.58 million workers. This means that in combination MSMEs absorbed around 97% of the national workforce, while Large Enterprises only absorbed around 3%. In Indonesia, the Regulations governing MSMEs is the Law Number 20 Year 2008, in which the Act of MSMEs are explained as: "Small companies owned and managed by a person or owned by a small group of people with a certain amount of wealth and income." is the Indonesia's MSME structure which is dominated by Micro Enterprises. About 98.7% of our MSMEs are in form of Micro Business, and this structure has not changed from 10 years ago indicating that our Micro Business has not been upgraded into Small or Medium Enterprises (SMEs).

The future of MSMEs can be seen by the extent to which businesspeople can utilize the existing technology. But unfortunately, there are some MSMEs that are still

unfamiliar with digitalization and they are still comfortable with conventional patterns. The main factor of being "technology blinds" causing digitalization constraints is the lack of the role of law enforcement apparatus against the perpetrators of crime in the world of technology/digitalization. For example, until now there are still many social media accounts (digitalization) that offer pseudo products/services which of course not only harm consumers but also impact the MSMEs entrepreneurs in the

same field. The Industrial Revolution Era 4.0 has gone on with the technology as its main player and therefore the introduction of technology for MSMEs entrepreneurs is no longer something that is "Sunnah", but is already "Necessary", so that the future of MSMEs in this country can bring fresh air to the country's economy and even more. In 2030, Indonesia is expected to staying up into the ranks of Top-10 world's global economy.

Table 1.1: The Development of MSMEs Business in 2016 – 2017

Indicator	Unit	2016		2017	
		Amount	Share (%)	Amount	Share (%)
Micro, Small and Medium Enterprises (MSMEs)	Unit	61.651.177	99.99	62.922.617	2.06
Micro Business	Unit	60.863.578	98.71	62.106.900	2.04
Small Business	Unit	731.047	1.19	757.090	3.56
Medium Business	Unit	56.551	0.09	58.627	3.67

Source: The Indonesia Ministry of Cooperatives and SMEs

Based on the data of MSMEs development in Indonesia during 2016 - 2017 from the Ministry of Cooperatives and SMEs, it can be seen that the development of MSMEs from 2016 to 2017 was sometimes increased and sometimes also decreased or fluctuated and tended to experience insignificant increases. This is likely due to the development of digital era at that time, therefore MSMEs are required to be able to compete and have a strategy in dealing with competition in this digital era or the Industrial Revolution era 4.0. Direct promotion at this time has begun to lag behind the existence of information technology advancement. So, we need of the ways or strategies as an of the efforts to win the competition.

Based on the empirical conditions and assumptions above about the MSMEs and theoretical frameworks that support MSME learning, the focus of this study was trying to formulate some strategies in order to shape the attitudes and behaviours of MSMEs in managing them to face the Industrial Revolution Era 4.0

2. RESEARCH METHODOLOGY

The purpose of this research was to identify all the internal and external factors of MSMEs in West Sumatra, then formulate the right strategy in facing competition in the digital era or the Industrial Revolution 4.0. The location of this research was determined intentionally (Dianing, 2017), namely MSMEs that are specifically located in West Sumatra Province. The method of data collection was conducted by field observations and interviews, to determine the internal and external factors of the unit of analysis. To withdraw the samples from the population, we used the Sampling Incidental technique, which is a sampling technique that is accidentally encountered and considered to match the sample criteria that have been determined as data sources or research respondents (Sugiyono, 2016). As many as 35 MSMEs were expected to be able to represent the population as a whole. The research

method used was a quantitative method, that seek to understand and interpret the meaning of an event of the interaction of human behaviour in certain situations according to the researchers' own perspective and aims to understand the objects under in-depth study and develop the concept of sensitivity about the problem on hand, explain the reality relating to the search for theories from the bottom (grounded theory), and develop an understanding of one or more phenomena that are faced (Imam Gunawan, 2016). Strategy analysis techniques used was SWOT analysis in order to measure the strengths, weaknesses, opportunities, and threats, and determine the right strategy in facing the industry competition of 4.0.

The use of SWOT analysis is intended to clarify all the strengths and weaknesses that can be identified to provide development recommendations based on the potential available in the company's internal environment, and analyze the opportunities and threats emanating from the company's external environment. The main purpose of observing the external environment is to see new opportunities for companies to operate profitably. The threat of the external environment is a challenge because of unfavourable trends or developments that will reduce sales and profits. The tool for developing the company's strategic factors above is the SWOT Matrix. This matrix clearly illustrates how the opportunities and threats faced by the company can be adjusted to the strengths and weaknesses faced by the company in order to achieve the expected goals (Fani and Kotijah, 2014).

3. RESULT AND DISCUSSION

Based on the results of direct observations and discussion with all parties, especially representatives of the creative industries or West Sumatra MSME businesses that were sampled in this study, a SWOT analysis matrix could be developed. This analysis is used to measure the strengths (potential internally owned) of MSMEs today, measure the

weaknesses or obstacles that MSMEs often face, measure the opportunities that exist today, and of course the threats

or challenges that MSMEs will face in the creative industries in the digital age (Sudaryanto, 2014).

Table 3.1: Internal Environmental Factors Analysis of West Sumatra MSMEs

Internal Analysis of West Sumatra MSMEs	
<i>Strength</i>	<i>Weakness</i>
Operational flexibility for all changes Speed of innovation in product development Low operational cost structure and easily suppressed Ability to focus on specific sectors	Difficulties regarding product marketing Limited business capital Limited Human Resources (HR) Technology and raw material limitations

Based on Table 1, the analysis of internal environmental factors of MSMEs in West Sumatra are as follows:

Strengths

1. **Operational flexibility for all changes**
Small and medium business are usually managed by small teams whose each of the members has the authority to make decisions. This makes MSMEs more flexible in their daily operations. The speed of this business reaction to all changes (for example: shifts in consumer tastes, product trends, etc.) is quite high, so that this small-scale business is more competitive and able to compete.
2. **Speed of innovation in product development**
In the absence of an organizing and control hierarchy in MSMEs, new products and ideas can be designed, worked on, and launched immediately. Although the brilliant idea comes from the thoughts of employees - not the owners - the closeness between them makes the idea tends to be more easily heard, accepted, and executed.
3. **Low operational cost structure and easily suppressed**
Most small and medium business do not have special workspace in office complex. Some business are run at home with family members as workers. This reduces extra costs (overhead) in its operations. Furthermore, small and medium business also receive support from the government, non-government organizations, and banks in form of tax facilities, donations, and grants. This factor has a big influence on financing in their formation and operation.
4. **Ability to focus on specific sectors**
MSMEs are not required to obtain a large number of sales to reach their Break-Even Point (BEP) capital. This factor enables small and medium business to focus on specific product or market sectors. For example, a home-based handicraft business can focus on working on one type and model of a particular craft and is sufficient to serve the demands of certain

consumers to achieve profit. In contrast to the large-scale handicraft industry which is required to pay building rent and salaries to a large number of employees, it must always be able to sell so many craft containers to cover only the monthly operational costs.

Those are 4 (four) strengths of MSMEs that can be used as a source of motivation and are always maintained by managers of small and medium business.

Weaknesses

1. **Difficulties regarding product marketing**
The results of a cross-country study conducted by James and Akarasanee (1988) in a number of ASEAN countries, concluded that one aspect related to the marketing problems commonly faced by MSMEs entrepreneurs was the competitive pressures, both in domestic market from similar products made by large-scale entrepreneurs and the products sold by importers, and in the export markets.
2. **Limited business capital**
MSMEs in West Sumatra faces two main problems in financial aspects, including capital (both initial-capital and working-capital) and long-term investments that are indispensable for long-term output growth.
3. **Limited Human Resources (HR)**
Limited human resources is also a serious obstacle for MSMEs in West Sumatra, especially in the aspects of entrepreneurship, management, production engineering, product development, quality control, accounting, machinery, organization, data processing, marketing techniques, and market research. All these skills are needed in order to maintain or improve product quality, increase efficiency and productivity in production, expand market share, and penetrate new markets.
4. **Technology and raw material limitations**
Unlike the developed countries, the MSMEs in West Sumatra generally still use the traditional techniques in form of old machines or production tools that are still working manually. This technological backwardness has not only made production levels low and

inefficiency in the production process, but has also produced the low quality of products and weakened the ability for MSMEs in West Sumatra to compete in global market. Technological limitations are caused by many

factors such as limited investment capital to buy new machines, limited information about technological developments, and limited human resources that can operate new machines.

Table 3.2: External Environmental Factors Analysis of West Sumatra MSMEs

External Analysis of West Sumatra MSMEs	
<i>Opportunity</i>	<i>Threat</i>
Growth of internet users	The weakening of the Rupiah against foreign currencies
Development support from the Government to MSMEs	Increasing the capability of MSMEs
The cost of promotion using the internet is more efficient	Progress of internet connections and wireless networks
Adoption of digital technology	ASEAN Economic Community (MEA)

Based on Table 3.2, the analysis of external environmental factors of MSMEs in West Sumatra are as follows:

Opportunities

1. Growth of internet users
The growth of internet users, mobile users, and social media users drives the shift in Indonesian digital consumer shopping behavior towards online shopping and encourages e-commerce growth in Indonesia, so that consumers no longer need to make physical contact with sellers but can already make buying and selling processes.
2. Development support from the Government to MSMEs
The Indonesian Government has various policies that can help the development process of MSMEs, particularly in encouraging the growth of Gross Domestic Product (GDP) and increasing exports.
3. The cost of promotion using the internet is more efficient
Promotional costs traditionally (offline) are more expensive than the costs that must be incurred through digital media.
4. Adoption of digital technology
The survey results showed that the adoption of digital technology has proven to be able to improve the performance of MSMEs, among others are increasing access to new customers in the country, increasing sales, and the access to new markets abroad.

Threats

1. The weakening of the Rupiah against foreign currencies
The weakening of the rupiah against the US Dollar has many impacts on price increases, one of which is the price of fuel. They also believe that this situation will trigger price increase in other commodities. Thus, this will burden the community, especially the MSMEs.
2. Increasing the capability of MSMEs

This can be done by generating the products that are able to compete with foreign products that have been flooding the Indonesia's e-commerce. This is important considering that most MSMEs operate in rural areas with very limited internet access and many of them are not yet digital-literate.

3. Progress of internet connections and wireless networks
Advances in internet connections and wireless networks are used by individuals to enter corporate information systems. A dangerous warning was issued by the Federal Financial Institution Examination Board (FFIEC) for small and medium-sized business that are more vulnerable and have great potential for being the victims of cyber attack. The intended threat is mass data theft by interested parties. Even worse, data in the form of social media accounts, client data, passwords, and other confidential data are traded. In addition to direct methods, data theft is also carried out through third parties, such as vendors, creditors, banks, and suppliers. Therefore, companies must be very careful in collaborating with any party, and ensure that they have a security system that supports the protection of client data.
4. ASEAN Economic Community (MEA)
The application of the ASEAN Economic Community (AEC) has made competition among ASEAN-member countries increasingly open. Besides being an opportunity and challenge for MSMEs that are ready and able to compete, MEA can also be a threat for MSMEs that are not ready to compete in global market." At present, there are no more barriers to the movement of goods and services, capital, or labor. Indeed, the implementation of the AEC can indeed be two opposing sides. On one side, it becomes an opportunity and challenge for SMEs that are ready and able to compete. But on the other side, it becomes a threat to MSMEs that are not ready to compete in global market.

Strategy-Factor Matrix

The strategy-factor matrix is used to analyze the internal environment in an organization or company in the face of market share. Here MSMEs must first classify what factors

are considered important and vice versa. This is done before carrying out the strategies that have been formulated by the organization (Fitriani, 2016). After the internal and external strategic factors of the organization or company are

identified, IFAS (Internal Strategic Factor Analysis Summary) and EFAS (External Strategic Factor Analysis Summary) tables are prepared.

Table 3.3: IFAS (Internal Strategic Factor Analysis Summary)

Internal Factors	Weight	Rating	Score
<i>Strengths :</i>	0.16	4	0.64
Operational flexibility for all changes	0.16	4	0.64
Speed of innovation in product development	0.16	4	0.64
Low operational cost structure and easily suppressed	0.12	3	0.36
Ability to focus on specific sectors			
<i>Weaknesses :</i>			
Difficulties regarding product marketing	0.16	4	0.64
Limited business capital	0.08	2	0.16
Limited Human Resources (HR)	0.08	2	0.16
Technology and raw material limitations	0.08	2	0.16
	1.00		3.40

From the Table 3.3 above, it can be seen that the strength and weakness factors are at a fairly aggressive or strong number which is 3.40. This means that the factors that exist in the strengths and weaknesses are very important.

Table 3.4: EFAS (External Strategic Factor Analysis Summary)

External Factors	Weight	Rating	Score
<i>Opportunities :</i>	0.12	4	0.48
Growth of internet users	0.12	3	0.36
Development support from the Government to MSMEs	0.08	2	0.16
The cost of promotion using the internet is more efficient	0.12	3	0.36
Adoption of digital technology			
<i>Threats:</i>			
The weakening of the Rupiah against foreign currencies	0.16	3	0.48
Increasing the capability of MSMEs	0.16	3	0.48
Progress of internet connections and wireless networks	0.16	3	0.48
ASEAN Economic Community (MEA)	0.08	2	0.16
	1.00		2.96

From the Table 3.4 above, it can be seen that the *Opportunity* and *Threat* factors are at a fairly aggressive or strong number which is 2.96. This means that the factors that exist in the *Opportunity* and *Threat* are very important.

SWOT Matrix

The way to arrange strategic factors in MSMEs is to use the SWOT matrix method. The SWOT matrix will clearly illustrate the opportunities and threats that will be faced in accordance with the strengths and weaknesses of the organization, which can be seen as follows:

Table 3.5: SWOT Matrix

IFAS	<p><i>Strength :</i></p> <p>Operational flexibility for all changes</p> <p>Speed of innovation in product development</p> <p>Low operational cost structure and easily suppressed</p> <p>Ability to focus on specific sectors</p>	<p><i>Weakness :</i></p> <p>Difficulties regarding product marketing</p> <p>Limited business capital</p> <p>Limited Human Resources (HR)</p> <p>Technology and raw material limitations</p>
EFAS	<p><i>SO Strategy :</i></p> <p>Increase media promotion by relying on internet media and information technology</p>	<p><i>ST Strategy :</i></p> <p>Develop broader partnerships</p>
<p><i>Opportunity :</i></p> <p>Growth of internet users</p> <p>Development Support from the Government to MSMEs</p> <p>The cost of promotion using the internet is more efficient</p> <p>Adoption of digital technology</p>	<p><i>WO Strategy :</i></p> <p>Looking for investors to increase business capital</p>	<p><i>WT Strategy :</i></p> <p>Conducting competency training in entrepreneurship</p>
<p><i>Threat:</i></p> <p>The weakening of the Rupiah against foreign currencies</p> <p>Increasing the capability of MSMEs</p> <p>Progress of internet connections and wireless networks</p> <p>ASEAN Economic Community (MEA)</p>		

4. CONCLUSION

Based on the research results that has been generated, conclusions and recommendations can be drawn from several strategies that are considered capable of being a solution in the efforts to face the competition in the era of industrial revolution 4.0 as follows:

1. Developing promotions to further accelerate the partnership process between MSMEs and large business requires special media in an effort to promote the products. Therefore, the internet media is considered to be the most appropriate media to be used for promotion, because at this time all human beings are already very dependent on information technology, even all their activities have diminished in the real world and moved to cyberspace.
2. In the course of a business, sometimes we experience capital shortages. To overcome this, business usually gets additional funds from individual investors and existing financial institutions such as banks. So,

MSMEs must also be able to find investors who can increase business capital, so that the survival of MSMEs can last longer and the training is really necessary to be given to MSMEs in the fields of entrepreneurship, management, administration, along with their knowledge and skills in business development. In addition, MSMEs should be given the opportunity to apply the results of training in the field to practice the theory through the development of pilot partnerships.

5. REFERENCES

[1] S. Yacob, D. Sari, and A. Mulyana, "Do Really Competitive Strategy and Strategic Alliances Affect Retail Business Performance? Evidence from the mini market retail in Jakarta and Bandung city, Indonesia," *Int. J. Econ. Commer. Manag.*, vol. IV, no. 2, pp. 783–796, 2016.

- [2] A. Jagongo, "Venture Capital (VC): The All Important MSMEs Financing Strategy under Neglect in Kenya," vol. 3, no. 21, pp. 234–240, 2012.
- [3] R. Slamet, B. Nainggolan, R. Roessobiyatno, H. Ramdani, A. Hendriyanto, and L. L. Ilma, "Strategi Pengembangan Ukm Digital Dalam Menghadapi Era Pasar Bebas," *J. Manaj. Indones.*, vol. 16, no. 2, p. 136, 2017. .
- [4] N. Nofrizal, "Developing Formulation Strategy Areas Msmes Banana Chips Based on Superior Commodities in Inhil County," *Hum. FALAH J. Ekon. dan Bisnis Islam*, vol. 1, no. 1, 2017.
- [5] D. H. Wibowo, Z. Arifin, and Sunarti, "Analisis Strategi Pemasaran Untuk Meningkatkan Daya Saing UMKM (Studi pada Batik Diajeng Solo)," *J. Adm. Bisnis*, vol. 29, no. 1, pp. 59–66, 2015.
- [6] A. Seputro, "Manajemen Strategi dalam Pemberdayaan Ekonomi bagi Masyarakat Menengah kebawah dalam rangka Menangkal Paham Radikalisme dan Terorisme di Era Revolusi Industri 4.0," *J. Ekbis*, vol. 20, no. 2, p. 1261, 2019.
- [7] A. Amanda, "ANALISIS STRATEGI UMKM JASA MINDFULNESS TRAINING (Studi Pada Bali Usada Health Meditation)," vol. 73, no. 1, pp. 40–49, 2019
- [8] M. Prog, S. Ilmu, E. Fe, and U. Andalas, "DI SUMATERA BARAT Oleh Sri Maryati PENDAHULUAN Usaha Mikro Kecil Menengah (UMKM) merupakan salah satu komponen pelaku usaha yang mempunyai sumbangan cukup besar dalam menciptakan lapangan pekerjaan di Indonesia (BPS Indonesia, 2010). Oleh sebab itu k," vol. 3, no. 1, 2014.
- [9] Ministry of Cooperation and Small and Medium Enterprise of The Republic of Indonesia, "Data development of micro, small, medium, and big enterprises 2016-2017," no. 1, pp. 2016–2017, 2017.
- [10] D. Vida, "Strategi penetrasi pasar dalam meningkatkan pembiayaan ritel pada pembiayaan pemilikan rumah (ppr) di bank panin dubai syariah keu hr muhammad surabaya," 2018.
- [11] E. Y. Arifianto, J. T. Industri, F. Teknik, and U. Brawijaya, "Rakhmat Himawan," pp. 567–574, 2018.
- [12] V. E. Satya, "Kajian Singkat Terhadap Isu Aktual Dan Strategis Strategi Indonesia Menghadapi Industri 4.0," *Kaji. Singk. Terhadap Isu Aktual Dan Strateg. Strateg. Indones. Menghadapi Ind. 4.0*, vol. X, no. 09, p. 19, 2018.
- [13] A. R. Setyanto, B. R. Samodra, and Y. P. Pratama, "Kajian Strategi Pemberdayaan UMKM dalam Menghadapi Perdagangan Bebas Kawasan ASEAN (Studi Kasus Kampung Batik Laweyan)," *Etikonomi*, vol. 14, no. 2, pp. 205–220, 2015.
- [14] C. I. Musa and M. Hasan, "The Influence of Social, Economic, and Demographic Characteristic on Working Hours of Micro, Small, and Medium Enterprises (MSMEs) in Makassar City," *J. Phys. Conf. Ser.*, vol. 1028, no. 1, 2018.
- [15] Y. Sri Susilo, "Strategi Meningkatkan Daya Saing UMKM Dalam Menghadapi Implementasi Cfta Dan Mea," *Bul. Ekon. Agustus*, vol. 8, no. 2, pp. 70–170, 2010.
- [16] Sudaryanto, Ragimun, and R. R. Wijayanti, "Strategi Pemberdayaan UMKM Menghadapi Pasar Bebas Asean," *Www.Kemenkeu.Go.Id*, pp. 1–32, 2014.
- [17] S. Machmud and I. Sidharta, "Model Kajian Pendekatan Manajemen Strategik," *J. Comput. Bisnis*, vol. 7, no. 1, pp. 56–66, 2013.
- [18] Gunawan, I. Metode penelitian kualitatif. *Jakart. : Bumi Aksara, 143*. 2013