

The Impact of Entrepreneurial Ecosystem, Human Capital and Social Capital on Entrepreneurship Orientation

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ABSTRACT

The purpose of this study was to determine the criteria that influence the improvement of entrepreneurial orientation of SMEs in Sumatera Barat using analytic hierarchy process (AHP). The factors that influence entrepreneurial orientation are multidimensional so that they require special methods to be used by policy makers. This study uses three criteria that affect entrepreneurial orientation, namely the entrepreneurial ecosystem (with sub-criteria for government, financial institutions and industry), social capital (with sub-criteria for structural, relational and cognitive sub-criteria) and human capital (with sub-criteria for education, training and spirituality). The sample of this research is a component of society consisting of business actors, academics, employees, and other components of society in order to obtain more diverse data. The questionnaire was sent online and obtained data as many as 91 data. The results of data processing using AHP show that the priority criteria in improving entrepreneurial orientation are the entrepreneurial ecosystem, human capital and social capital. For sub-criteria, the priority sequentially is: training, industry, government support, relational, financial institutions, education, cognitive, structural and spiritual.

Keywords: *Entrepreneurial Ecosystem, Human Capital, Social Capital, Entrepreneurship Orientation.*

1. INTRODUCTION

Entrepreneurship increases people's income because it drives the economy by using existing resources to be more productive. Schumpeter emphasized that entrepreneurship is gradually becoming the engine of job creation and economic growth [1]. In addition, entrepreneurship increases innovation in society because it increases the economic value of the resources owned by the community [2].

The ability of individuals to become entrepreneurs is influenced by the level of openness of innovation in accepting and analyzing environmental changes, seeking and processing information into business opportunities that are able to develop and excel compared to other companies. Innovation has an important role in the success of small and medium companies because it has a high degree of flexibility in dealing with environmental changes compared to large companies. Beaver & Prince (2002) states that the role of innovation in corporate success must be supported by

commitment and motivation from individuals, and market-oriented managerial activities, good internal communication, fund management and adapting to environmental changes.

With this entrepreneurship, families will have the opportunity to manage their own business and manage cross-generational ownership to lead companies in the future [5]. Castaño et al., (2015) explained that there are three factors that can encourage someone to become an entrepreneur, namely social factors, cultural factors and economic factors. Social factors are the atmosphere or climate of the social, economic and institutional environment where individuals carry out daily activities that support individuals to become entrepreneurs. Cultural factors also pay attention to environmental support to provide freedom to run a business. Economic factors encourage entrepreneurial activities through government economic policies, economic performance, innovation and openness to new information and ideas.

Gao, Ge, Lang, & Xu, (2017) examined the influence of risk orientation, innovation and pro-active as well as entrepreneurial strategies on entrepreneurial performance. In this study, the performance of self-employed companies is different from other companies because of the courage of the owners to take risks, the ability to innovate and be pro-active towards changes and environmental needs. This is based on differences in research results that examine the effect of entrepreneurial orientation on entrepreneurial performance. Some studies show a positive effect, while other studies show a negative or no effect on entrepreneurial performance. Naoko & Yutaka, (2014) explain that entrepreneurship requires social and human capital to survive in the long term. However, there are several phases to starting a business: finding a business opportunity, starting a business, and making a profit.

2. METHODS

This type of research is a qualitative descriptive study that aims to explain or describe phenomena based on the real conditions that exist in society. This study aims to identify the factors that influence the entrepreneurial orientation of SME actors in West Sumatra and what stakeholders must provide so that these criteria are available and accessible to the public, especially SMEs in West Sumatra.

To get information about the criteria and sub-criteria that affect entrepreneurial orientation, the researchers distributed questionnaires to people from various fields such as business actors, employees, government elements and other elements of society. The consideration of researchers using respondents from various circles is to get the average weight that comes from almost all elements in society.

This study uses the AHP (Analytical Hierarchy Process) method using Microsoft Excel. The process of this research is to determine objectives, develop a hierarchical structure of the problem, create a pairwise comparison matrix, calculate the weight / priority of each variable at level 1 (criteria), namely the entrepreneurial ecosystem, social capital and human capital, calculate the weight / priority of each. variable at level 2 (sub-criteria) of each criterion, and calculating the overall weight of the sub-criteria.

3. RESULT AND DISCUSSION

Astronomically, West Sumatra is located between 0°54' North Latitude and 3°30' South Latitude and between 98°36'-101°53' East Longitude and is traversed by the equator or the equator which is located at latitude 0°. Based on its geographical position, West Sumatra

Province has boundaries - boundary: North - North Sumatra and Riau Provinces; South - Indian Ocean; West - Indian Ocean; East - Jambi and Bengkulu Provinces. West Sumatra consists of 19 Regencies / Cities, namely: Regencies: Mentawai Islands, Pesisir Selatan, Solok, Sijunjung, Tanah Datar, Padang Pariaman, Agam, Fifty Cities, Pasaman, South Solok, Dharmasraya and West Pasaman. Cities: Padang, Solok, Sawahlunto, Padang Panjang, Bukittinggi, Payakumbuh, Pariaman.

This study uses respondents from various professions and education to get more in-depth and comprehensive information on the criteria that can increase the entrepreneurial orientation of SMEs in West Sumatra. The data collection uses primary data to determine the respondent's opinion about what criteria affect entrepreneurial orientation. summary data as follows:

Table 1. Characteristics of Research Respondents

Characteristics of Respondents	Total
1. Gender	
Male	46
Female	45
2. Age	
< 30 Years	23
30 - 40 Years	9
40 - 50 Years	31
> 50 Years	28
3. Education	
=< SLTP	15
SLTA	54
Diploma	5
Sarjana	17
4. Work	
PNS / Lecturer / Government	10
Entrepreneur / Business Owner	27
BUMN employee	1
Private Employee	6
Farmer / rancher	13
Others	34
5. Work Experience	
=< 5 Years	31
5 - 10 Years	16
> 10 Years	44

From the 91 respondents, 27 respondents were business owners with the following characteristics

Table 2. Characteristics of Respondents Who Own a Business

Characteristics of Respondents		Total
1. Type of Business		
Food and Beverage		10
Convection		6
Others		11
2. Business Location		
Urban		14
Rural		13
3. Have Employees / Not		
Have		14
Not		13

After defining the problem, the next step in AHP analysis is to compile a hierarchy of criteria and sub-criteria according to the research problem, namely determining the criteria and sub-criteria that affect the entrepreneurial orientation of SMEs in West Sumatra. This study uses three criteria that influence the improvement of the entrepreneurial orientation of SME actors, namely the entrepreneurial ecosystem, social capital and human capital. The complete hierarchy can be seen in Figure 1.

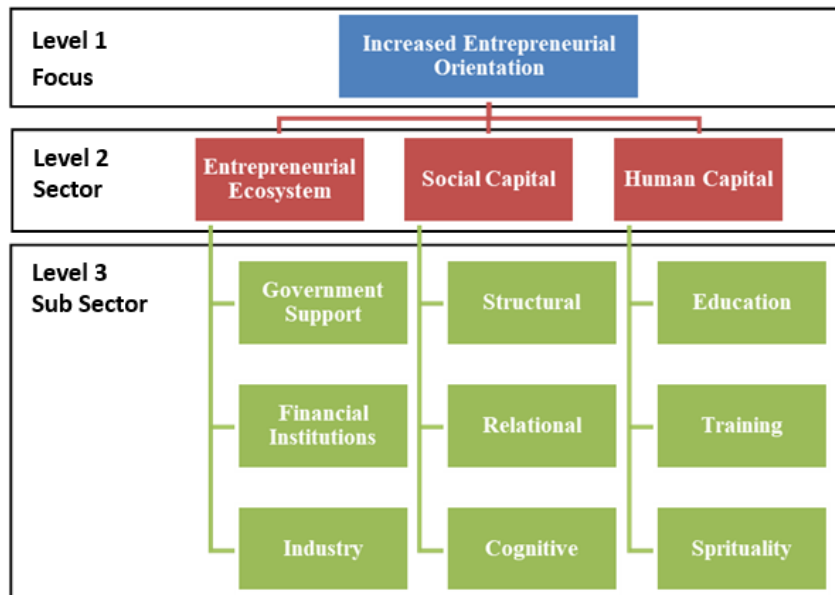


Figure 1. AHP Hierarchy

Calculate the weight / priority importance of each variable on the criteria

Data to measure the priority interests of each criterion that will improve the entrepreneurial orientation of SMEs in West Sumatra were obtained

through questionnaires to 91 respondents. The average respondent's assessment uses the geometric mean (geometric mean) because AHP requires only one answer for the comparison matrix. The results of data processing for each criterion are in table 2.

Table 3. Pairwise Comparison Matrix for the Criteria using AHP

	Entrepreneurial Ecosystem	Social Capital	Human Capital	Average	Priority
Entrepreneurial Ecosystem	1,00	1,74	1,36	0,43	I
Social Capital	0,57	1,00	0,92	0,26	III
Human Capital	0,74	1,08	1,00	0,30	II
Jumlah	2,31	3,82	3,28	1	

Source: processed data

Table 3 shows that the criterion that is the main priority in improving the entrepreneurial orientation of SMEs in West Sumatra is the entrepreneurial ecosystem with an average weight of 0.43. The next criterion is human capital with an average weight of 0.30 and the last criterion is social capital with an average weight of 0.26.

Calculating the weight / priority importance of each variable in the sub-criteria and priority totals.

Each criterion has sub-criteria that must be measured in weight for each existing criterion. The average respondent's assessment uses the geometric mean (geometric mean) because AHP requires only one answer for the comparison matrix. After getting the weight value of each criterion and sub-criteria, then this study identifies the weight of the criteria sequentially in order to identify what sub-criteria are the top priority according to the respondent. Criteria and overall priority sub-criteria can be seen in table 3

Table 4. Pairwise Comparison Matrix for the Sub-criteria using AHP

Purpose	Criteria*		Subcriteria*			Total Value	Total Priority
	Name	Average	Name	Average	Priority per Criteria		
Entrepreneurship Orientation Improvement	Entrepreneurial Ecosystem	0,43	Government Support	0,34	II	0,15	III
			Financial institutions	0,27	III	0,12	V
			Industry	0,39	I	0,17	II
	Social Capital	0,26	Structural	0,20	III	0,05	VIII
			Relational	0,55	I	0,15	IV
			Cognitive	0,25	II	0,07	VII
	Human Capital	0,30	Education	0,24	II	0,07	VI
			Training	0,61	I	0,18	I
			Spiritual	0,16	III	0,05	IX
Total						1	

Consistency Ratio < 0,01

Source: data processing

Table 4 shows that the sub-criteria that are the top priority in improving the entrepreneurial orientation of SMEs in West Sumatra on the criteria for the entrepreneurial ecosystem are industries with an average weight of 0.39. The next criterion is government support with an average weight of 0.34 and the last criterion is financial institutions with an average weight of 0.27. The sub-criteria that are the main priority in improving the entrepreneurial orientation of SMEs in West Sumatra on the criteria for social capital are relational with an average weight of 0.55. The next criterion is cognitive with an average weight of 0.25 and the last criterion is structural with an average weight of 0.20. The sub-criteria that is the main priority in improving the entrepreneurial orientation of MSME players in West Sumatra on the criteria for human capital is training with an average weight of 0.60. The next criterion is education with an average weight of 0.23 and the last criterion is spiritual with an average weight of 0.15.

After calculating the priority criteria and sub-criteria by calculating the weight of each criterion and sub-criteria, this study determines the overall sub-criteria priority by multiplying the criteria weight by the sub-criteria weight value. Based on these calculations, the sub-criteria with the highest weight compared to the

other criteria is training with a weight value of 0.18. In order, the other priority weights are industry, government support, relational, financial institutions, education, cognitive, structural and spiritual.

From the results of power processing using AHP analysis, it is found that the most influential criterion in the selection of an increase in entrepreneurial orientation of SME actors in West Sumatra is the entrepreneurial ecosystem criteria with a weight of 0.42. The next criterion that influences is the human capital criterion with a weight of 0.30, and finally the social capital criterion with a weight of 0.26. The entrepreneurial ecosystem is the most influential criterion for increasing entrepreneurial orientation because businesses need support from the environment in order to survive in increasingly high competition.

The entrepreneurial ecosystem criteria in this study use three sub-criteria, namely government support, financial institutions and industry. Of the three sub-criteria, the industry sub-criteria is the highest criteria in the entrepreneurial ecosystem, which is 0.39. Next is the government support sub-criteria with a weight of 0.34, and the last sub-criteria is financial financial institutions with a weight of 0.21.

The second criterion that affects the improvement of entrepreneurial orientation is human capital with a weight of 0.30. Human capital has a role in increasing entrepreneurial orientation because it becomes the basis for the competence of SME players in West Sumatra in starting and developing their businesses.

The criteria for human capital in this study use three sub-criteria, namely education, training and spirituality. Of the three sub-criteria, the training sub-criteria is the highest in the human capital criteria, which is 0.61. Next is the educational sub-criteria with a weight of 0.24, and the last sub-criteria is spiritual with a weight of 0.16.

The third criterion that affects the improvement of entrepreneurial orientation is social capital with a weight of 0.26. Social capital has a role in increasing entrepreneurial orientation because it becomes the capital for MSME players in West Sumatra in developing networks and accessing other institutions or organizations.

The social capital criteria in this study use three sub-criteria, namely structural, relational and cognitive. Of the three sub-criteria, the relational sub-criteria is the highest criterion in human capital, which is 0.55. Next is the cognitive sub-criteria with a weight of 0.25, and the last sub-criteria is spiritual with a weight of 0.20.

Furthermore, this research results that overall, training, industry, government support, relational and financial institutions are the 5 most dominant sub-criteria in improving the entrepreneurial orientation of SMEs in West Sumatra.

4. CONCLUSION

Based on the results of research using the AHP method to identify criteria and sub-criteria that improve the entrepreneurial orientation of SMEs in West Sumatra, this study concludes that the priority criteria that improve the entrepreneurial orientation of SMEs in West Sumatra, according to respondents, are entrepreneurial ecosystem with an average weight of 0.43. The next criterion is human capital with an average weight of 0.30 and the last criterion is social capital with an average weight of 0.26. The highest priority sub-criteria compared to the other criteria is training with a weight value of 0.18. In order, the other priority weights are industry, government support, relational, financial institutions, education, cognitive, structural and spiritual.

The suggestion of this research is to choose more criteria and sub-criteria by using a preliminary survey in order to know more about the criteria and sub-criteria that will improve the entrepreneurial orientation of MSME players in West Sumatra. The entrepreneurial orientation of the UMKM actors will greatly depend on

the type of business of the UMKM actor itself, so it is possible to analyze each type of business separately.

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REFERENCES

- [1] M. Castaño, M. Méndez, and M.-ángel Galindo, "The effect of social , cultural , and economic factors on entrepreneurship ☆," *J. Bus. Res.*, pp. 1–5, 2015.
- [2] H. Oosterbeek, M. V. P. Ñ, and A. Ijsselstein, "The impact of entrepreneurship education on entrepreneurship skills," *Eur. Econ. Rev.*, vol. 54, no. 3, pp. 442–454, 2010.
- [3] A. S. Gomezel and K. R Angus, "country An exploration of an entrepreneur ' s open innovation mindset in an emerging country," *Manag. Decis.*, 2018.
- [4] G. Beaver and C. Prince, "Innovation , entrepreneurship and competitive advantage in the entrepreneurial venture," *J. Small Bus. Enterp. Dev.*, vol. 9, no. 1, pp. 28–37, 2002.
- [5] D. H. B. Welsh, E. Memili, K. Rosplock, J. Roure, and J. Luis, "Journal of Family Business Strategy Perceptions of entrepreneurship across generations in family offices: A stewardship theory perspective," *J. Fam. Bus. Strateg.*, vol. 4, no. 3, pp. 213–226, 2013.
- [6] Y. Gao, B. Ge, X. Lang, and X. Xu, "Technological Forecasting & Social Change Impacts of proactive orientation and entrepreneurial strategy on entrepreneurial performance: An empirical research," *Technol. Forecast. Soc. Chang.*, no. November, pp. 0–1, 2017.
- [7] M. Naoko and M. Yutaka, "RIETI Discussion Paper Series 14-E-018 Empirical Analysis on Factors Behind Successful Entrepreneurs," *RIETI Discuss. Pap. Ser.*, vol. 14-E-018, 2014.