

Linkages of Entrepreneurial Experiences & Critical Thinking With Ability to Identify Business Opportunities Through Active Information Search

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Abstract - This research was conducted to analyze the linkages of entrepreneurial experience and critical thinking on the ability to identify business opportunities through active information search. The research population are Small and Medium Industries (SMI's) in East Java Province, Indonesia. The samples are 110 Small and Medium Industries. The sampling technique uses proportional random sampling. e-questionnaires were used to collect primary data. Further, the primary data analyzed using Partial Least Square (PLS). The research indicated that entrepreneurial experience and the ability to critically thinking directly effect on the ability to identify business opportunities and also indirectly effect on the ability to identify business opportunities through active information search. It means active information search plays a significant role in order to improve the ability to identify a business opportunity.

Keywords - *Entrepreneurial experience, critical thinking, active information*

1. Introduction

Entrepreneurial experience is a precious intangible asset. Many research results reveal that the business entity sustainability is determined mainly by these assets. That is because human resources who have these skills can create various innovative ideas and creation [1]. A creation that is unique then realized in the form of products and services will be highly competitive in the market. For this reason, more research is being carried out in order to find various key factors to foster the entrepreneurial spirit.

In Indonesia, there are thousands of small and medium businesses. Its existence does indeed contribute to the national economy, both in increasing employment opportunities and contributing to improve the society welfare . However, many small-scale businesses are slow-growing and even tend to remain small.

Empirical studies reveal the phenomenon is actually caused by a low entrepreneurial spirit. In other words, there is no entrepreneurial culture among the small-scale economic actors. The owners are stuck

on the origin of the and even without targets. Not surprisingly, these small business entities rarely become medium-scale moreover large-scale. Therefore, a solutive policy from the industry service as the leading sectors of the development of community-based businesses.

The ability to think critically facing the dynamics of change is necessary. Strong entrepreneurial mentality also needed. Even following the swift era of the information age is also extremely needed as an effort to get new opportunities in the business world. Because behind this informations, will be found new opportunities for entrepreneurship. In short, information on changes in macro factors, such as economic, social, political, legal and technological changes, will exactly get many new business opportunities.

Therefore, the research purpose of the relationship among, critical thinking abilities, active information search and business opportunity identification abilities are (a) analyzing the influence of entrepreneurial experience on identifying business opportunities, (b) analyzing the influence of critical thinking abilities on identifying business opportunities, (c) analyzing indirectly effect of entrepreneurial experience and critical thinking ability on the identification of business opportunities through active information search and (d) analyzing the influence of active information search to identifying business opportunities.

2. Literature Review

Several studies have revealed that critical thinking skills are crucial for someone in running a business [2]. The results of this study confirm that the ability to think critically is crucial for an entrepreneur to realize his business targets. The results of this study are supported by other research articles which state the development of critical thinking skills significantly influences the ability to manage business entities [3]. The findings of this research reinforce the importance train critical thinking skills to sustain business entities. Both of these results were also supported by other researchers who stated that the development of critical thinking skills would build collaborative abilities, which is undoubtedly essential in managing a business. That is because collaboration is an important strategy to improve networking for realization of higher competitiveness.

Furthermore, work experience very crucial in managing business entities as well. This opinion was revealed in the article "Work experience and the generation of new business ideas among entrepreneurs An integrated learning framework" which states that the combination of work experience and the new business ideas generation among entrepreneurs is important in entrepreneurship. Furthermore, it was also stated that the importance of one's entrepreneurial background in detecting the use of information in finding new business opportunities [4]. This study found strengthened by the revelation of the research results that entrepreneurial experience determines failure and success in entrepreneurship [5]. In the results of other studies, it was also stated that entrepreneurial experience had a significant impact on the sustainability of business entities [6].

Certainly, some results of the study confirm that experience in managing a business is one of the important factors in building a successful business entity. Another thing that is also interesting, to recognize business opportunities require a set of current information [7] . This is very logical, considering

the reverse dynamics of information will get a series of business opportunities. The research findings are in line with the results of previous studies which stated that the success of small and medium businesses determined by the intelligence of its managers in following the dynamics of ever-faster change [8]. These changes certainly show a lot of information that can be utilized to obtain new business opportunities [9]. This is in line with previous opinions which state that business opportunities must emerge from the dynamics of information-rich change [10].

Even this opinion received firm support from the article "Are opportunities recognized or constructed? An information perspective on entrepreneurial opportunity identification"[11]. Another opinion also states that the ability to understand the flow of information will get many new business ideas [12]. Meaning, the ability to identify business opportunities can be obtained from the flow of information obtained and then critically analyzed.

Furthermore, entrepreneurial ability has implications for marketing functions [13]. In other words, the entrepreneurial ability will hone one's marketing skills in the business world. Entrepreneurial skills will also be followed by the ability to identify new business opportunities [14]. This is very reasonable, considering that the characteristics of entrepreneurship are creative and innovative [15]. This opinion also received support that the ability to innovate is at the core of entrepreneurship [16]. However, overall it is stated that the ability to recognize a business opportunity is determined by one's desire to find new information that is supported by the ability to analyze information [17], [18].

Based on some of the previous studies, the formulation of this research hypothesis are (a) entrepreneurial experience significantly influences the ability to identify business opportunities, (b) critical thinking ability significantly influences the ability to identify business opportunities, (c) the ability to think critically and entrepreneurial experience indirectly effect on the ability to identify business opportunities through active information search and (d) active information search effect ability to identify business opportunities.

3. Method

This research was carried out using a survey approach and the questionnaire was used as a primary data collector. This research consists of 4 (four) variables. The operational definition of the research variable is (a) entrepreneurial experience is the experience in managing a business entity. Indicators of this research variable are types of entrepreneurial experience & duration of experience, (b) Creative thinking is the general individuals skill to generate many original ideas. This research variable is measured by the ability of various thoughts, creativity & ability to run a business, (c) Active information search is an activity carried out to actively search for new information using various media and make it as analytical material for decision making with indicators the frequency of information seeking, information assets, information as opportunities & curiosity, (d) The ability to identify business opportunities is to obtain several business opportunities by using a many information that arises from the dynamics of change with indicators the ability to obtain opportunities, the ability of cost management, the ability to predict profits & the ability to exploit opportunities, (f) The ability to innovate is the ability to generate new ideas, which

become solutions and actualized in completely new products and services with indicators the number of new ideas, Different ideas & abilities to take solutions.

4. Result

All primary data were analyzed with Smart Partial least square (PLS) statistical program. The results show that the measurement model used in this study is valid and reliable (table 1).

Table 1. Construct Reliability and Validity

	Cronbach Alpha	Rho_A	Composite Reliability	Average Variance Extracted
AIB	0.770	0.758	0.831	0.621
AIS	0.734	0.745	0.837	0.563
CT	0.701	0.705	0.807	0.585
EE	0.746	0.706	0.870	0.771

Source: Primary Data Source, 2020

As shown at table 1, the values of Cronbach Alpha are higher than 0.700, the values of Rho_A are higher than 0.700, composite reliability are higher than 0.700, the values of composite reliability are higher 0.700 and the values of Average Variance Extracted (AVE) are higher than 0.500 as well. It means, all values of model indicators meet the criteria of validity and reliability.

Further, the analysis is continued and the result of linkage among entrepreneurial experience, critical thinking, active information search and ability to identify business opportunity are demonstrated in figure 1 below.

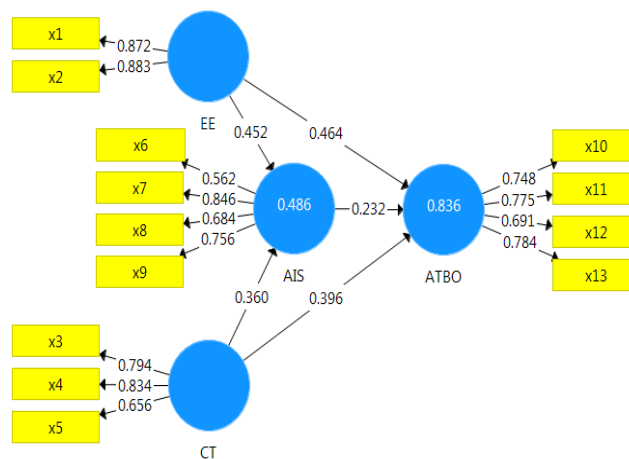


Figure. 1 Path Diagram

Source: Primary Data Source, 2020

As shown at figure 1, the loading factor coefficient of x6 is lower than 0.600. It means, this indicator does not valid and it must be dropped. Others are already higher than 0.600. Therefore, it has to be recalculated and the result can be seen at figure 2 below.

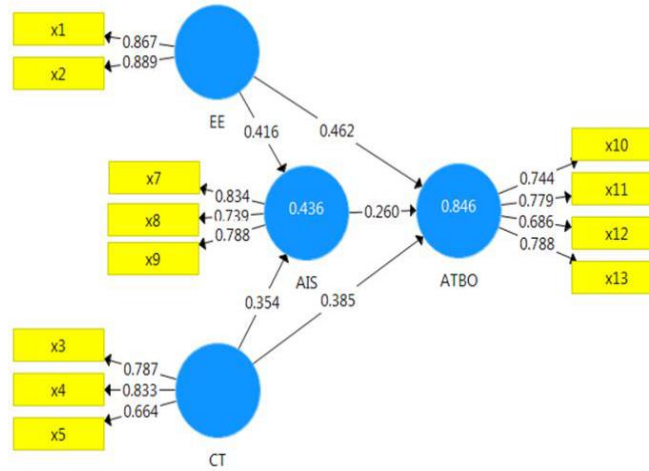


Figure 1. Path Diagram (Recalculated)
 Source: Primary Data Source, 2020

As demonstrated at figure 2, all loading factors have already higher than 0.600. it can be stated that all indicators of research variables are valid and reliable. So, it can be continued to bootstrapping calculation. Besides, based on figure 2, the coefficient effect of entrepreneurial experience on the ability to identify business opportunity is 0.462. The coefficient effect of critical thinking on the ability to identify business opportunity is 0.385 and the coefficient effect of active information search to the ability to identify business opportunity is 0.260. It means entrepreneurial experience, critical thinking and active information search positively effect the ability to identify a business opportunity.

Table 2. Path Coefficients

	Original Sample	Standard Deviation	T Statistics	P Values
EE->ATBO	0.462	0.082	5.615	0.000
CT->ATBO	0.385	0.066	5.876	0.001
AIS->AIB	0.260	0.070	3.718	0.000

Source: Primary Data Processed, 2020

Further, as seen at table 2, entrepreneurial experience effect significantly ability to identify a business opportunity, Critical thinking effect significantly ability to identify a business opportunity and active information search effect significantly ability to identify a business opportunity. That is due to all T Statistics values is higher than 1.96 and the P Values is less than 0.050.

Table 3. Specific Indirect Effect

	Original Sample	Standard Deviation	T Statistics	P Values
EE->AIS->AIB	0.108	0.038	2.862	0.004
CT->AIS->AIB	0.092	0.033	2.804	0.005

Source: Primary Data Processed, 2020

Additionally, as shown at table 3, active information search mediates the effect of entrepreneurial experience on the ability to identify a business opportunity and mediates the effect of critical thinking to identify business opportunity as well. It means that active information search plays an important role in order to improve the ability to identify business opportunity. Therefore, these research findings support all research hypotheses.

Tabel 4. R Square

	R Square	R Square Adjusted
AIS	0.436	0.424
ATBO	0.846	0.841

Source: Primary Data Processed, 2020

Hereafter, as demonstrated at table 4, the contribution of entrepreneurial experience and critical thinking to active information search is 0.436 or 43.60% and contribution of active information search on the ability to identify business opportunity is 0.846 or 84.60%. These research findings are very interesting. Therefore, active information seeking is extremely necessary for entrepreneurs to identify business opportunities in the information age lately.

5. Discussion

These research findings support several previous research that critical thinking skills are crucial for someone in the running a business [19]. Also, confirm that the ability to think critically is crucial for an entrepreneur to realize his business targets. Besides, supported by other research articles which state that the development of critical thinking skills significantly influences the ability to manage business entities [18].

In line with the statement that entrepreneurial ability has implications for marketing functions [13]. In other words, the entrepreneurial ability will train marketing skills in the business world. Entrepreneurial skills will also be followed by the ability to identify new business opportunities [14]. It is very reasonable,

considering that the characteristics of entrepreneurship are creative and innovative [15]. Also, support that the ability to innovate is the core of entrepreneurship [16]. But overall it is stated that the ability to recognize a business opportunity is determined desire to find new information that is supported by the ability to analyze information [17].

6. Conclusion

Based on the research result and discussion, active information search mediates the effect of entrepreneurial experience on the ability to identify business opportunity and also mediate the effect of critical thinking to identify business opportunity. It means that active information search plays a significant role in order determine the ability to identify a business opportunity. Therefore, in order to improve the ability to identify business opportunity and also to conduct business successfully required a lot of new information. These research findings may enrich management sciences and also become a new reference to conduct further research.

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References

- [1]. Sugito, P., (2018), *Resiliensi dan Asset Tak Berwujud*, Cetakan Pertama, Probolinggo: Antero Literasi Indonesia.
- [2]. Dwyer, C.P., Boswell, A. & Elliot, M.A., (2015), An Evaluation of Critical Thinking Competencies in Business Settings, *Journal of Education for Business*, 90(8):1-10.
- [3]. Changwong, K., Sukkamart, A. & Sisan, B., (2018), Critical thinking skill development: Analysis of a new learning management model for Thai high schools, *Journal of International Studies*, 11(2): 37-48.
- [4]. Kinias, I.G., (2013), The Importance of the Entrepreneurial Background in the Detection and the Utilization of the Information, *Procedia of Social & behavioral Scxience*, 73: 564 – 572.
- [5]. Ucbasaran, D., Westhead, P., Wright, M.,& Flores, M. ,The nature of entrepreneurial experience, business failure and comparative optimism, *Journal of Business Venturing*, 25: 541–555, 2010.
- [6]. Atsan, N., (2016), Failure Experiences of Entrepreneurs: Causes and Learning Outcomes, *12th International Strategic Management Conference*, 28-30, Antalya, Turkey.
- [7]. Gumel, B.I., (2018), Critical Factors Influencing Opportunity Recognition and Exploitation, *International Journal of Contemporary Research and Review*, 9(4): 20748-20759.

- [8]. Westhead, P., Ucbasaran, D., & Wright, M., (2009), Information Search and Opportunity Identification, *International Small Business Journal*, 27(6): 659-680.
- [9]. Turner, S., & Endres, A., (2017), Strategies for Enhancing Small-Business Owners' Success Rates, *International Journal of Applied Management and Technology*, 16(1): 34-49.
- [10]. Ardichvili, A., Cardozo, R., & Rayc, S., (2003), A theory of entrepreneurial opportunity identification and development, *Journal of Business Venturing*, 8:105 -123.
- [11]. Vaghely, I.P., Julien, P.A., (2010), Are opportunities recognized or constructed? An information perspective on entrepreneurial opportunity identification, *Journal of Business Venturing*, 25: 73–86.
- [12]. Kuckertz, A., Tobias, T., Krell, P., & Stöckmann, C., (2017), Understanding, differentiating, and measuring opportunity recognition and opportunity exploitation, *International Journal of Entrepreneurial Behavior & Research*, 23(1): 78-97.
- [13]. Isachi, S., (2016), Entrepreneurship Implications on Marketing Function, *Social Economic Debates*, 5(1):1-7.
- [14]. Tang, J., Kacmar, K.M., & Busenitz, L.W., (2010), Entrepreneurial alertness in the pursuit of new opportunities, *Journal of Business Venturing*, 27: 77–94.
- [15]. Ahmetoglu, G., Premuzic, T.C., Klinger, B., & Karcisky, T., (2017), *The Wiley Handbook of Entrepreneurship*, London: Wiley-Blackwell.
- [16]. Certo, S.C., & Certo, S.T., (2017), *Modern Management*, The Fourteenth Edition, Boston: Pearson Publishing.
- [17]. Gielnik, M.M., Krämer, A.C., Kappel, B., & Frese, M., (2017), Antecedents of Business Opportunity Identification and Innovation: Investigating the Interplay of Information Processing and Information Acquisition, *Applied Psychology: An International Review*, 63(2): 344–381.
- [18]. Sugito, P., Kamaludin, (2019), Supporting Entrepreneurship Through Migratory Culture and Information Acquisition, *International Journal of Engineering and Advanced Technology (IJEAT)*, 9(1): 2587- 2591.