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COMPETITIVE INTELLIGENCE AND COMPETITIVE ADVANTAGES OF ENTREPRENEURIAL COMPETITIVENESS OF INDONESIA ENTREPRENEUR

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ABSTRACT

Indonesia's entrepreneurs play an important role in the structure of the country's economy. Based on Bank Indonesia's report in 2016, the small- and medium-sized sector dominated 99.9% of business units in Indonesia and was able to absorb almost 97% of the country's workforce. The present study aims to understand the condition of today's entrepreneurial competitiveness of Indonesia's entrepreneurs, the influence of competitive intelligence, and the advantages of entrepreneurial competitiveness for Indonesia's entrepreneurs. Data collection techniques were utilized through questionnaires given to Indonesia's entrepreneurs and then processed through SPSS 20 using simple and multiple regression. The results show that (1) competitive intelligence (X1) and competitive advantages (X2) have a linear relationship with the variable of entrepreneurial competitiveness (Y); (2) Indonesia's entrepreneurs tend to be significantly competitive at $\alpha < 0.05$, toward having a significant competitive intelligence at $\alpha < 0.05$; (3) the most capable of establishing entrepreneurial competitiveness of Indonesia's entrepreneurial competitive intelligence (X1); (4) that the condition of entrepreneurial competitiveness of Indonesia's entrepreneurial competitive intelligence (X1); (4) that the emphasis on competitive intelligence rather than competitive advantage is significant at α <0.01.

INTRODUCTION

Entrepreneurs have an important and strategic role in national economic development, which can be seen from its current position in the business world (Ediraras, 2010). In 1998, Indonesia was hit by an economic crisis, wherein major companies became stagnant and even stopped their activities. However, many small- and medium-sized entrepreneurs survived and ultimately became restorers of the economy.

Currently, the Indonesian government continues to strive, to encourage and empower small- and medium-sized micro enterprises to be able to contribute more to the country's economy (Sudaryanto & Wijayanti, 2013).

Thus, micro, small, and medium entrepreneurs in Indonesia must be able to face global challenges amid globalization and high competition due to the open global market agreement among countries the world over. Activities or programs that can be pursued include improving product and service innovation, human and technological development, expansion of marketing areas, competitive intelligence, competitive advantage, and entrepreneurial competition.

The initiative program needs to be done routinely and seriously by Indonesia's entrepreneurs in small and medium enterprises so their businesses have their own selling points and are able to compete with foreign products that continue to enter the business and manufacturing sectors in Indonesia. Micro-, small-, and medium-sized enterprises are also the largest labor-absorbing industry in Indonesia (Sudaryanto & Wijayanti, 2013).

Based on data from the Bank Indonesia in 2016, the small and medium enterprises sector dominates 99.9% of business units in Indonesia and is able to absorb almost 97% of the country's workforce. In other words, the small- and medium-enterprises sector in Indonesia is important and significant to the country's economy. These enterprises are also important and significant in the jobs created in Indonesia. By creating more jobs in Indonesia, the country will benefit from its economic growth.

Based on the Central Bureau of Statistics (2016), the number of the smalland medium-sized entrepreneurs in Indonesia from 2013–2014 continues to increase, wherein 2013 reached 57.895.721 units with 2.41% growth, and 2014–2016 reached 57.9 million units. According to the Ministry of Cooperatives and Small and Medium Enterprises, in 2017 the number of SMEs in Indonesia reached 59.2 million business actors. In addition, the Central Bureau of Statistics records that small- and medium-sized entrepreneurs also contributed to the national gross domestic product, which is 57% or as much as Rp1.537 billion in 2017.

Agha, Alrubaiee, and Jamhour (2011) indicated that core competence has a strong and positive impact on competitive advantage and organizational performance and that competitive advantage has also a significant impact on organizational performance. Further, Vriens (2004) stated that competitive intelligence can be described as producing and processing information about the environment of an organization for strategic

purposes, and Dishman and Calof (2008) explored competitive intelligence as a complex business construct and as a precedent for marketing strategy formulation.

Small- medium- and large-scale businesses require competitive intelligence and competitive advantage capabilities in order to survive and compete with other similar businesses. Identifying trends, competitor conditions, competitor strengths and weaknesses, potential opportunities, potential threats, and variation needs are part of competitive intelligence capabilities.

The data collected from these competitive intelligence capabilities will be critical for business people in making decisions and gaining competitive advantages. For example, by knowing and analyzing the conditions of a poor competitor, one will know what not to do, obtain ideas how to make a product or service offered more successful in the market, understand the needs of today's society, etc. Thus, data and information obtained must be valid, so it can be followed up to improve a business position.

This research discusses the competitive intelligence and competitive advantages of Indonesia's entrepreneurs in order to help them create entrepreneurial competitiveness. Therefore, this research (1) analyzes Indonesia's entrepreneurial competitiveness (Y), (2) tendencies of competitive intelligence (XI) toward entrepreneurial competitiveness (Y), (3) tendencies of competitive advantage (X2) toward entrepreneurial competitiveness (Y), (3) tendencies of (Y), and (4) competitive intelligence (XI) versus competitive advantage (X2) in regard to entrepreneurial competitiveness (Y).

LITERATURE REVIEW

Competitive Intelligence

Calof and Wright (2008) supported the view of competitive intelligence activity consisting dominantly of environmental scanning and strategic management literature. Shih, Liu, and Hsu (2010) proposed an approach that produces competitive intelligence to help managers develop appropriate business strategies for the semiconductor industry in Taiwan. Moreover, according to Kahaner (1997), competitive intelligence is a systematic program for gathering and analyzing information about your competitors' activities and general business trends to further a company's goals.

Competitive Advantage

According to Porter and Millar (1985), to gain the competitive advantage over its rivals, a company must either perform these activities at a lower cost or perform them in a way that leads to differentiation and a premium price (more value). In addition, Surjaatmadja and Adriansyah (2016) showed that capital is the only factor of advantage for Islamic banks. Reider (2014) stated that having a unique competitive advantage as a strategic skill is something an organization can do exceptionally well, such as through manufacturing, service delivery, quality control, or marketing and promotion, and which has strategic importance to that organization. Furthermore, Barney and Hesterly (2010) stated a firm has a competitive advantage when it is able to create more economic value than that of a rival firm.

Entrepreneurial Competitiveness

Kyndt and Baert (2015) indicated that perseverance and insight into the market contributed positively to being and remaining active as an entrepreneur. Moreover, according to Hisrich and Ramadani (2016), entrepreneurs as individuals tend to have characteristics such as strong drive and energy, a motivation to change, a desire to achieve, challenge the past ways of doing things, focus on the future and new opportunities, willingness to take risks, being proactive, and developing a strong team and coalition to build competitiveness.

Small Medium Enterprise

Based on Indonesian regulation, UU. No. 20, 2008 (Republik Indonesia, 2008) several criteria of SMEs are:

a. Micro is defined as enterprise that belongs to individual(s) or a business entity which having most of net IDR 50,000,000,00 (fifty million rupiah) exclude fixed assets or having most of annual sales IDR 300,000,000,00 (three hundred million rupiah).

b. Small is defined as enterprise that stands independently, not a subsidiary or company branch which having net worth around IDR 50,000,000,00 (fifty million rupiah) until IDR 500,000,000,00 (five hundred million rupiah) exclude fixed assets or having annual sales around IDR 300,000,000,00 (three hundred million rupiah) until IDR 2,500,000,000,00 (two billion and five hundred million rupiah).

c. Medium is defined as enterprise that stands independently, not a subsidiary or branch company which having a net worth around IDR 500,000,000,000 (five hundred million rupiah) up to IDR 10,000,000,000 (ten billion rupiah) exclude fixed assets or having annual sales around IDR 2,500,000,000,000 (2 billion and five hundred million rupiah) up to IDR 50,000,000,000 (fifty billion rupiah).

According to Bouazza, Ardjouman & Abada (2015), the classification of SMEs is different, some small or medium are considered different for every country.

MATERIALS AND METHODS

This research uses a quantitative method with a correlational survey. The research is divided into three stages: 1) instrument calibration; 2) normality test; 3) linearity test.

Data collection using questionnaires given to Indonesia's entrepreneurs on all kinds of business such as food and beverages, art, entertainments, design, architecture and others. The questioners are distributed offline and online in Jabodetabek area around March – April 2018.

The purpose of this research is to capture how competitive intelligence and competitive advantages of Indonesia's entrepreneurs influence their entrepreneurial competitiveness.

The hypothesis in this research is competitive intelligence (XI), competitive advantage (X2), and entrepreneurial competitiveness (Y). Therefore, this research (1) analyzes Indonesia's entrepreneurial competitiveness (Y), (2) tendencies of competitive intelligence (XI) toward entrepreneurial

competitiveness (Y), (3) tendencies of competitive advantage (X2) toward entrepreneurial competitiveness (Y), and (4) competitive intelligence (X1) versus competitive advantage (X2) in regard to entrepreneurial competitiveness (Y).

RESULTS AND DISCUSSIONS

Instrument calibration for entrepreneurial competitiveness (Y) consists of two sub variables, i.e., competitive intelligence (X1) and competitive advantage (X2). The first stage is completed with a content validity instrument via expert judgment. Content validity results in eight dimensions, 15 indicators, and 17 items. The second stage is completed with construct validity through an orthogonal iteration approach, the sample of research instruments is 30 people, with r-criterion 0.361 at a 5% significance level. The result of construct validity is 16 items as valid instruments. The third stage is the calculation of the reliability index of entrepreneurial competitiveness instruments of Indonesia's (Y)entrepreneurs with a Cronbach alpha formula (0.834).

Table 1.

Data Normality Test of Entrepreneurial Competitiveness Variables (Y) Reliability Statistics

| Cronbach's | |
|------------|-------------|
| Alpha | N of Ite ms |
| .834 | 16 |

The normality test is done by proportion estimation through Blom formula with a Q-Q plot approach because the sample size was greater than 200 participants. The calculation showed that the distribution of entrepreneurial competitiveness (Y) data, and the sub variables of competitiveness intelligence (X1), and advantage competitive (X2) of Indonesia's entrepreneurs are normally distributed.

The linearity test is calculated by deviation from linearity. The results are shown in Table 2.

| | | Table 2. : Linearity Test | | | | | | |
|----|-------------------|---------------------------|-------|------------|---------|--------|--|--|
| No | Line | Deviation | Estim | ation Curv | Remarks | | | |
| | Relationships | from | | Linearity | | | | |
| | | Linearity | | | | | | |
| | | F | Sig. | F | Sig. | | | |
| 1. | Competitive | 10.628 | 0.019 | 2060.356 | 0.000 | Linear | | |
| | Intelligence (X1) | | | | | | | |
| | with | | | | | | | |
| | Entrepreneurial | | | | | | | |
| | Competitiveness | | | | | | | |
| | (<i>Y</i>) | | | | | | | |
| 2. | Competitive | 9.792 | 0.453 | - | - | Linear | | |
| | Advantage (X2) | | | | | | | |
| | with | | | | | | | |
| | Entrepreneurial | | | | | | | |

| Competitiveness | | |
|-----------------|--|--|
| (Y) | | |

Hypothesis Test 1.

The three categories of conditions of entrepreneurial competitiveness of Indonesia's entrepreneurs (Y): (a) not competitive, (b) occasionally competitive, and (c) competitive. The results of the analysis are shown in Table 3.

| | | En | trepreneur | S | |
|---|--|---------------------------------|----------------|----------------|---|
| Trends in the Conditions of Entrepreneurs in Indonesia | Category | Class Interval | Lower Bound | Upper Bound | Conclusion Hypothesis Testing |
| Entrepreneurial Competitiveness (Y) | Not Competitive Occasionally Competitive Competitive | 1.36-52 2.53-69 3.70-86 | 69.7439 | 71.7137 | In general, Indonesia's entrepreneurs tend to be significantly competitive at $\alpha < 0.05$ |
| Competitive Intelligence (X1) | Not CompetitiveOccasionally CompetitiveCompetitive | 1.19-27 2.28-36 3.37-45 | 35.8408 | 36.9558 | The condition of Indonesia's entrepreneurs tends to be heading toward having competitive intelligence significantly at $\alpha < 0.05$ |
| Competitive Advantage (X ₂) | Not Competitive Occasionally Competitive Competitive | 1. 6-22 2. 23-29 3. 30-36 | 29.4938 | 30.3961 | The condition of Indonesia's entrepreneurs tends to be heading toward having competitive advantage significantly at $\alpha < 0.05$ |

Table 3: Conditions of Entrepreneurial Competitiveness of Indonesia

Based on the results of the trend analysis of the condition of Indonesia's entrepreneurs, it can be concluded that (a) in general, Indonesia's entrepreneurs tend to be significantly competitive at $\alpha < 0.05$, (b) the condition of Indonesia's entrepreneurs tend to be toward having a significant competitive intelligence at $\alpha < 0.05$, and (c) the condition of Indonesia's entrepreneurs tends to be heading toward having a significant competitive advantage at $\alpha < 0.05$.

Hypothesis Test 2. The second hypothesis includes two stages of analysis: independent influence analysis of sub variable competitive intelligence (X1) and competitive advantage (X2) on entrepreneurial competitiveness of

entrepreneur Indonesia (Y) and analysis of sub variable competitive intelligence (XI) together with competitive advantage (X2) on entrepreneurial competitiveness of entrepreneurs in Indonesia (Y). The analysis was conducted twice; thus, the consistency of the most dominant findings in realizing entrepreneurial competitiveness of entrepreneurs in Indonesia (Y) is proven.

Table 4.

| Self-Assessment Sub Variable Competitive Intelligence (X1) and |
|--|
| Competitive Advantage (X2) on Entrepreneurial Competitiveness of |
| Entrepreneur Indonesia (Y) |

| No. | Analysis | Symbol | $X1 \rightarrow Y$ | $X_2 \rightarrow Y$ |
|-----|--|--------------------------------|--------------------|---------------------|
| 1. | Relationship between X and Y in | r _{yn} | 0.948 | 0.914 |
| | the sample | | | |
| 2. | Variance determination | r^2_{yn} | 0.898 | 0.834 |
| 3. | The relative contribution of <i>X</i> | $r_{yn}^{2}(\%)$ | 89.8 | 83.4 |
| | informing Y | | | |
| 4. | X relationship with Y in | t | 45.391 | 34.405 |
| | population | | | |
| 5. | Significance value | Sig. | 0.000 | 0.000 |
| 6. | Effect of <i>X</i> on <i>Y</i> in the sample | Ŷ | 1.674 <i>X1</i> | $1.995X_2$ |
| 7. | Effect of X on Y in the | F_{Reg} | 2060.356 | 1183.688 |
| | population | | | |
| 8. | Significance value | Sig | 0.000 | 0.000 |
| 9. | Greatest pure relationship | $r^{2}_{yn.m}$ | 0.962 | 0.939 |
| 10. | Relatively pure contribution X | r ² _{yn.m} | 96.2 | 93.9 |
| | with Y | (%) | | |

Notes:

- *Y* : Entrepreneurial Competitiveness Variable of entrepreneurs in Indonesia
- *X1* : Competitive Intelligence
- X_2 : Competitive Advantage

The results reveal that the most capable of establishing entrepreneurial competitiveness of Indonesia's entrepreneurs (Y) is competitive intelligence (X1). The relationship between competitive intelligence (X1) and entrepreneurial competitiveness of Indonesia's entrepreneurs (Y) in the ry1 of 0.948 is positive. The relative contribution of competitive intelligence (XI) to entrepreneurial competitiveness of Indonesia's entrepreneurs (Y) is 89.8%. Meanwhile, the relationship between competitive intelligence (X1) and entrepreneurial competitiveness of entrepreneurs in Indonesia (Y) in the population is shown with a t value of 45.391, with a significance value of 0.000 at $\alpha < 0.01$. Thus, the relationship between competitive intelligence (X1) and entrepreneurial competitiveness of entrepreneurs in Indonesia (Y) in the population is equal to the positive sample and 89.8% of entrepreneurial competitiveness of entrepreneurs in Indonesia (Y). The influence of competitive intelligence (X1) on the competitiveness of Indonesia's entrepreneurs (Y) is depicted through regression line equation $\hat{Y} = 1.674XI$. While the conditions in the population are shown through Freg test results of 2060.356, with a

significance value of 0.000 at $\alpha < 0.01$. This means that entrepreneurial competitiveness of entrepreneurs in Indonesia (*Y*) will increase more than three times from the current condition of competitive intelligence (*X1*) entrepreneurs in Indonesia and is improved with two priority recovery programs. The conclusions are presented below.



Figure 2. Entrepreneurial Competitive Model

Notes:

- Y : Entrepreneurial Competitiveness Variable of Entrepreneurs in Indonesia
- X1 : Competitive Intelligence
- X₂ : Competitive Advantage

Hypothesis 3.

The condition of entrepreneurial competitiveness of Indonesia's entrepreneurs is shown in Table 5.

Table 5.

Entrepreneurial Competitiveness of Indonesia Entrepreneurs: Competitive Intelligence vs. Competitive Advantage

| Test of | Test for Equality of | | Т | Sig. | Conclusion | | |
|--|----------------------|-------|--------------------------------------|--------|------------|--|--|
| Difference | Variances (L | | evene's) | | | | |
| | F | Sig. | Status | | | | |
| Intelligence vs. advantage | 5.755 | 0.017 | Equal variances not assumed | 17.728 | 0.000 | Indonesia's entrepreneurs have more competitive intelligence compared with competitive advantage is significant at $\alpha < 0.01$ | |
| Marketplac e opportuniti es vs. value | 89.475 | 0.000 | Equal variances not assumed | 18.337 | 0.000 | Indonesia's entrepreneur focus on the marketplace of opportunity compared with the value is significant at $\alpha < 0.01$ | |
| Competitor threats vs. advantage | 143.766 | 0.000 | Equal variances not assumed | 76.465 | 0.000 | Indonesia's entrepreneurs place more emphasis on competitor threats compared with the advantage is | |

significant at $\alpha < 0.01$

| Competitor risk vs. readiness | 2.379 | 0.124 | Equal variances assumed | 2.727 | 0.007 | Indonesia's entrepreneurs place more emphasis on competitors' risk compared with readiness is significant at $\alpha < 0.01$ |
|---|---------|-------|--------------------------------------|--------|-------|---|
| Expanding opportuniti es vs. customer focus | 212.843 | 0.000 | Equal variances not assumed | 24.056 | 0.000 | Indonesia's entrepreneurs place more focus on expanding opportunities to expand opportunities than customers significantly at α <0.01 |
| Potential market opportuniti es vs. quality | 0.047 | 0.829 | Equal variances assumed | 2.133 | 0.033 | Indonesia's entrepreneurs pay more attention to market opportunities than on quality is significant at $\alpha < 0.01$ |
| Overcome impact vs. empowerin g employees | 0.322 | 0.571 | Equal variances assumed | 4.042 | 0.000 | Indonesia's entrepreneurs are attempting to overcome the impact compared with empowering employees is significant at $\alpha < 0.01$ |
| Analysis ability vs. ability toC choose O effectiveN strategiego L U | 7.946 | 0.005 | Equal variances assumed | 38.292 | 0.000 | Indonesia's entrepreneurs are more focused on the market analysis ability compared with the ability to determine effective strategies significantly on α <0.01 |

CONCLUSIONS

Based on the result of analysis data, it can be concluding that

- 1. Competitive intelligence (*X1*) and competitive advantages (*X*2) have a linear relationship with the variable of entrepreneurial competitiveness (*Y*).
- 2. Indonesia's entrepreneurs tend to be significantly competitive at $\alpha < 0.05$, toward having a significant competitive intelligence at $\alpha < 0.05$, and to be heading toward having a significant competitive advantage at $\alpha < 0.05$.

- 3. The condition most capable of establishing entrepreneurial competitiveness of Indonesia's entrepreneurs (Y) is competitive intelligence (X1).
- 4. The condition that entrepreneurial competitiveness of Indonesia's entrepreneurs places more emphasis on competitive intelligence rather than competitive advantage is significant at $\alpha < 0.01$.
- 5. The result of research can be used for all types of entrepreneurs since the respondents of this research represent all of them.

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REFERENCES

- Agha, S., Alrubaiee, L., & Jamhour, M. (2011). Effect of core competence on competitive advantage and organizational performance. *International Journal of Business and management*, 7(1), 192.
- Barney, J. B., & Hesterly, W. S. (2010). Strategic management and competitive advantage: Concepts. Englewood Cliffs, NJ: Prentice hall.
- Bouazza, A. B., Ardjouman, D., & Abada, D. (2015). Establishing the Factors Affecting the Growth of Small and Medium-sized Enterprises in Algeria. American International Journal of Social Science, 107.
- Calof, J. L. & Wright,S. (2008). Competitive intelligence: A practitioner, academic and inter-disciplinary perspective. *European Journal of Marketing*, 42(7/8), 717-730, https://doi.org/10.1108/03090560810877114.
- Central Bureau of Statistics. (2016). Perkembangan UMKM periode 1997 -2013. (*online*). Retrieved on 19 Agustus 2017 from <u>http://www.bps.go.id/tab_sub/view.php?kat=2&tabel=1&daftar=1&</u> id_subyek=13¬ab=42
- Dishman, P. L., & Calof, J. L. (2008). Competitive intelligence: a multiphasic precedent to marketing strategy. *European Journal of Marketing*, 42(7/8), 766-785.
- Ediraras, D. T. (2010). Akuntansi dan Kinerja UKM. Jurnal Ekonomi Bisnis, 15(100), 152–158.
- Hisrich, R. D. & Ramadani, V. (2016). *Effective Entrepreneurial Management: Strategy, Planning, Risk Management, and Organization.* Spirnger.
- Kahaner, L. (1997). *Competitive intelligence: how to gather analyze and use information to move your business to the top.* New York: Simon and Schuster.
- Kyndt, E., & Baert, H. (2015). Entrepreneurial competencies: Assessment and predictive value for entrepreneurship. *Journal of Vocational Behavior*, 90, 13-25.

- Porter, M. E., & Millar, V. E. (1985). *How information gives you competitive advantage*. New York: Free Press.
- Reider, R. (2014). *Developing successful business strategies: Gaining the competitive advantage*. Business Expert Press.
- Republik Indonesia. (2008). Undang-Undang No. 20 Tahun 2008 tentang Usaha Mikro, Kecil, dan Menengah. Lembaran Negara RI Tahun 2008, No. 4866. Jakarta: Sekretariat Negara.
- Shih, M., Liu, D., & Hsu, M. (2010). Discovering competitive intelligence by mining changes in patent trends. *Expert Systems with Application*, 37(4), 2882–2890.
- Sudaryanto, R., & Wijayanti, R. R. (2013). *Strategi pemberdayaan UMKM menghadapi pasar bebas Asean*. Jakarta: Pusat Kebijakan Ekonomi Makro. Badan Kebijakan Fiskal. Kementerian Keuangan.
- Surjaatmadja, S., & Adriansyah, A. (2016). Does Islamic Banking have a Competitive Advantage over Conventional Banking in Indonesia?: A Study of Perspectives. *Pertanika J. Soc. Sci. & Hum, 24*(S), 205 – 214.
- Vriens, D. J. (Ed.). (2004). *Information and communication technology for competitive intelligence*. IGI Global.