

# **Entrepreneurial Model Based On Business Sector Case Study At Sidoarjo, Indonesia**

**Agus Sukoco, Iswachyu Dhaniarti and Wahyu Mulyo Utomo**  
Narotama University, Surabaya, Indonesia  
[agus.sukoco@narotama.ac.id](mailto:agus.sukoco@narotama.ac.id)

**Hening Widi Oetomo, Akhmad Riduwan, Asmara Indahingwati and Suhermin**  
Sekolah Tinggi Ilmu Ekonomi Indonesia  
(STIESIA) Surabaya, Indonesia

## **Abstract**

This study aims to find the model of entrepreneurship on small and medium scale which is reviewed from business volume, business age, number of staff and product innovation in Sidoarjo regency. The research method, this study uses quantitative descriptive, research data using secondary data, including business scale data and attributes of small and medium businesses in the district Sidoarjo. Data analysis technique use t test and F test for model under study. The results of the study found that the existence of small and medium sized businesses in the district of Sidoarjo received the greatest support from product innovation and number of members. while the age of business does not contribute significantly to the viability of the entrepreneur. The findings of this study are the findings that business continuity on small and mid-sized scale is not dominated by business age but is supported significantly by product innovation owned by entrepreneurs.

## **Keywords**

Entrepreneur, Business Sector, District

## **1 INTRODUCTION**

Number of Micro Small Medium Enterprises (SMEs) in Sidoarjo regency amounted to 171,264 businesses, consisting of micro scale of 154,891 units, small and medium scale as many as 154 units and large scale as many as 16,000 businesses. Micro, small and medium enterprises are the solution to low-income and low-income employment in low-income society. Employment difficulties resulted from the fact that in recent years some companies have reduced labor and limited new employment. SMEs provide a good contribution to economic growth, studies in Ghana and South Africa, SMEs in Ghana contributed to absorb 85% of the workforce and 70% of GDP. In Africa south of SMEs contribute to GDP advance of 52% to 57%, and absorb a workforce of around 61% (Abor & Quartey, 2010) support regional development (Setiawan et al., 2018).

Entrepreneurs are designed to grow and develop so as to provide benefits to business owners and labour. In addition, an effort is expected to be able to accommodate more manpower by increasing the business volume or by opening a business network.

Entrepreneurs make a good contribution to the improvement of a country's economic growth. Entrepreneurs contribute both tangible and intangible which contribute equally to the growth and stability of the country's economy.(Gulsevrim Yumuk Gunay, 2016). Micro-scale entrepreneurs, managed by families and family groups, the continuity of business is strongly influenced by the role of parents and families in encouraging their children to become entrepreneurs (Rachmawan, 2015). A person has a strong desire to entrepreneurship if it has the character and social culture that support to become entrepreneurs (Singh, Verma, & Rao, 2016). Rewards and supportive environments provide a positive influence on entrepreneurial interests (Sampedro, Fernández-Laviada, & Herrero Crespo, 2014). Wider entrepreneurship in developed countries like Japan (Paul & Shrivastava, 2015).

Emotional intelligence and the ability to manage emotions provide a positive effect on entrepreneurship. While confidence applies as a mediation between emotion and entrepreneurship (Mortan, Ripoll, Carvalho, & Bernal, 2014). Research that focuses on the role of gender finds that men have a stronger desire in entrepreneurship (Escobedo & Carlos Diaz Casero, 2014). That someone who has enough skill and knowledge tends to have a high willingness of entrepreneurship. otherwise it is necessary to collaborate and communicate with colleagues who have been in business (Moog, Werner, Houweling, & Backes-Gellner, 2015).

SMEs are very influenced by the surrounding environment and have unique properties that make it can survive for this. Development of tools is needed supporting tools to become a means of decision making (Kameyama et al., 2001). the other side SMEs can use tools such as business intelligence software to support operational systems that generally still use simple equipment for salary and database applications (Canes, 2009). a casework study in Australian owner of SMEs owned by women, has a desire to improve the capital structure by applying for credit to a financing institution, and the women have confidence in the success of their business (Watson, Newby, & Mahuka, 2009). Ability in marketing, product innovation and learning will have a positive and synergistic effect of improving SMEs performance in Australia and new Zealand (Sok, O'Cass, & Sok, 2013). External collaborations such as suppliers and characteristics such as age, employment skills, support tools and innovation capabilities have a positive effect on the growth of MSMEs (Robson & Bennett, 2001). analysis of internal and external eco-systems, which combine innovation, export interact in the growth of MSMEs (Vinet & Zhedanov, 2010). Based on the explanation above, this research will explore model to develop SMEs which viewed from product innovation aspect, business age and work force in community effort in Sidoarjo regency.

## **2 METHODE**

This research uses quantitative descriptive method to research data used in research. Descriptive analysis is used to explain and evaluate the profile and attribute of the research (Lawless & Heymann, 2010). Descriptive analysis can be used for quantitative and qualitative data analysis obtained from observation, behaviour and data integration (Sloman, 2010). Test of t, is used to see the effect of two independent variables to the dependent variable (Platt, 1998). Data retrieval strategy in research, there are two choices that is primary data and secondary data, with its advantages. Data retrieval strategy in research, there are two choices that is primary data and secondary data, with its advantages. This study uses secondary data on the grounds that to achieve research objectives better because it involves many samples and spread over a large area, so secondary data is used for this study (Hox & Boeije, 2005), (Church, 2002), data collected by other parties and used for certain purposes (Koziol & Arthur, 2012). secondary data suitable for research involving large and widespread data (Davis-Kean, Jager, & Maslowsky, 2015).

SMEs the data used in the study were in the district of Sidoarjo. Sidoarjo regency is a district in East Java Province, Indonesia. The capital is Sidoarjo. The regency is bordered by Surabaya City and Gresik Regency in the north, Madura Strait in the east, Pasuruan regency in the south, and Mojokerto regency in the west. Together with Gresik, Sidoarjo is one of the main buffers of Surabaya.

Test conducted to get the contribution of variables studied on business volume at SMEs in the district of Sidoarjo. Tests conducted on 355 SMEs, spread across Sidoarjo district, Indonesia with a variety of business scale from the micro scale to the scale of small and medium enterprises. The test was performed with SPSS version 20 software on multiple linear regression test (Field, Miles, & Field, 2013)(Kim, 2015)(de Winter & Dodou, 2010)(Iqbal, 2000). Other tests conducted are frequency and descriptive testing which will see the characteristics of SMEs being studied, and the characteristics of SMEs that are grouped per business line (Lawless & Heymann, 2010) (Baccini, 2010) (Trochim, 2006) and test data frequency SMEs. The business classification is divided into 6 categories: processing industry, service sector, construction field, trade, hotel and restaurant, agriculture and transportation. The study was conducted on SMEs with minimum asset value of five hundred million rupiah and maximum ten billion rupiah.

## **3 RESULTS AND DISCUSSIONS**

Description of the results of the study provides information that SMEs under study as many as 355 businesses with which consist of industrial processing, services, construction, trade, hotel and restaurant, agriculture, transportation. Based on asset value, SMEs under study have assets of at least 500 million and a maximum of Rp 10 billion and an average of Rp 1,71 billion. SMEs description based on business volume found that SMEs have minimum sales volume of Rp 2,7 billion and a maximum of Rp46,8 billion in a period of one year. Data on business volume and SME assets of each business line is shown in table 1.

Table 1: Frequency of MSME by business field

Business Fields	Frequency	Percent
Trade, Hotel And Restaurant	141	39.7
Agriculture	66	18.6
Services	65	18.3
Processing Industry	64	18.0
Transportation	12	3.4
Construction	7	2.0

Total	355	100.0
-------	-----	-------

Table 1 explained that according to the business field, the dominant business in Sidoarjo regency with the asset scale of between 500 million and 10 billion, the three dominant businesses are Trade, Hotel And Restaurant, Agriculture. Other fields in the order of the number of frequencies are the areas of Services, Processing Industry, Transportation, and Construction. a review of the assets and business volume, whether it corresponds to the number of SMEs in each business area as Table 2.

Table 2: Characteristics of assets and business volume (in billions rupiah Indonesian)

Business Fields	Asset	Business Volume
Trade, Hotel And Restaurant	218.93	414.44
Agriculture	123.02	49.97
Processing Industry	116.74	273.98
Services	102.06	86.88
Transportation	36.06	5.45
Construction	11.15	14.38

Table 2 provide information on the characteristics of SMEs in terms of total assets and business volume that are grouped according to their business field. Based on the total assets owned, the largest is owned by Trade, Hotel and Restaurant 218.93 billion rupiah. Second is agriculture business with asset equal to 123,02. The smallest asset is owned by the Construction business with an asset of 11.5 billion rupiah. While the field of transportation business above is less that amounted to 36.06 billion rupiah. based on the order of business volume, the largest amount up to the smallest is the largest volume of Trade, Hotel And Restaurant 414.44 billion rupiah, furthermore Processing Industry 273.98 billion rupiah, Services 86.88 billion rupiah, Agriculture 49.97 billion rupiah, Construction 14.38 billion rupiah and the smallest volume of Transportation 5.45 billion rupiah.

Table 3: Table contribution of each business field

Business Fields	Number	Business Volume	Asset
Trade, Hotel And Restaurant	1	1	1
Agriculture	2	4	2
Services	3	3	4
Processing Industry	4	2	3
Transportation	5	6	5
Construction	6	5	6

Table 3 show the contribution of each business sector as measured by the amount of business, asset value and business volume. Trade, Hotel and Restaurant has the largest number of businesses, as well as the greatest asset value and asset volume.

Furthermore Agriculture field, second position for the amount of business and asset value, but for the volume of business is not large, occupying the fourth position of six existing business fields. the transportation and construction fields occupy the 5th and 6th position for the amount of business, as well as for the assets and business volume of its position in the 5th and 6th rank. This matter provides very important information, because initially Sidoarjo district is agriculture and fishery area, with main result of field of rice and sugar cane and for fishery field dominated by fish pond result of milkfish and shrimp. Changes occur that Sidoarjo regency no longer as agricultural and fishery areas but has shifted in the field of trade, hotel and restaurant. meaning that the district will lead to Sidoarjo business climate metropolis like Surabaya with dominance in the trade hotel and restaurant. Visual representation of small and medium enterprises in Sidoarjo district as shown in figure 1.

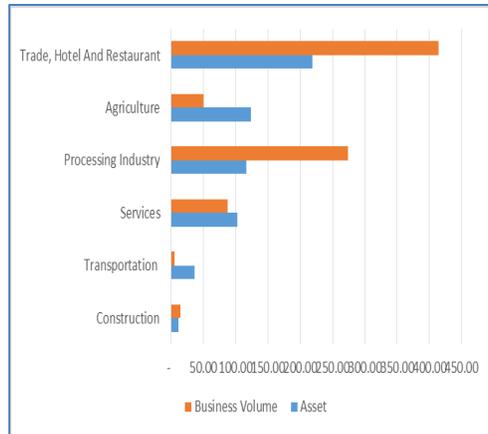


Figure 1: Assets and business volume per field of SME

Figure 1 gives an explanation that the dominance of business in the district of Sidoarjo based on asset value, the biggest contribution is from the business field of trade, hotel and restaurant, second position for agriculture. But the volume of business is not the same, the field of trading business, hotel and restaurant the first position and second position for industrial process field. Other fields are not well contributed, namely the field of services, construction and transportation.

This is an important note because in general the field of services and transportation will be directly proportional to the business of trade, hotels and restaurants, but in fact the field of this business is not well developed. This note will be an opportunity for business development in the district of Sidoarjo to encourage and provide stimulus in the development of the metropolis in the district of Sidoarjo. The contribution of assets and the number of company to the business volume, t-test is shown in table 4.

Table 4: Results of t test on multiple linear regression

Variable	t	Sig.
(Constant)	4.831	0.00
Asset	2.054	0.04
Business fields	-2.65	0.01

A dependent variable is business volume.

The regression model, the test of the model obtains the F value of 5.410 and the 0.005 significance, so the proposed model has been eligible for use in the estimation of the contribution of the variable. T test gives the result that the contribution of the assets to the business volume is positive and significant, while the contribution of business to the volume of business is negative although significant. These results provide a model of business development on a small and medium scale that the increase in business volume will be in line or directly proportional to the number of assets owned. As for the number of businesses will not always have a positive impact for business development. This is very important to always provide assistance and learning to small and medium business actors to always pay attention to the quality of business because the large number of businesses will actually be able to reduce the scale of business run on the sector.

SMEs are a means to entrepreneurial society, because by starting a business on a scale that is not large, it will minimize the risk of loss and will increase the desire human community in entrepreneurship. Because to make a business on a large scale it can be ascertained society will do, whether related to investment capital or business capital to be prepared. Based on the analysis of the data managed in the research, it can be recommended to the community in the district to start a business in the field of growing business that is Trade, Hotel and Restaurant. Other fields that can be developed and started to become entrepreneurs is the field associated with hotels and restaurants namely the field of services and the field of transportation. Because when the district of Sidoarjo has become a region with many restaurants and hotels, it will require adequate transportation services and other services.

## 4 CONCLUSION

The conclusion of this study which aims to see the opportunity of entrepreneurship that can be developed and that will grow, as a reference society in the process of becoming an entrepreneur or will develop the business. Sidoarjo regency has changed from agrarian area to region with business on trade sector, hotel and restaurant and industrial sector. The field of agricultural business is still much cultivated by the community but the volume of business and assets is minimal, so that the business in agriculture will be limited and not developed. Other areas of business that are likely to flourish are in the areas of services, transportation and industry, because the field is related to the growing field of trade and restaurants, so that novice entrepreneurs can start with the business sector.

## BIOGRAPHIES

## REFERENCES

- Abor, J., & Quartey, P. (2010). Issues in SME Development in Ghana and South Africa. *International Research Journal of Finance and Economics*, 39(39), 218–228. <https://doi.org/ISSN 1450-2887>
- Baccini, A. (2010). Statistique descriptive multidimensionnelle. *Publications de l'Institut de Mathématiques de Toulouse*, 33. <https://doi.org/10.2307/3499862>
- Canes, M. (2009). Business intelligence for the SME. *CA Magazine*, 142(September), 46–48.
- Church, R. M. (2002). The effective use of secondary data. *Learning and Motivation*, 33(1), 32–45. <https://doi.org/10.1006/lmot.2001.1098>
- Davis-Kean, P. E., Jager, J., & Maslowsky, J. (2015). Answering Developmental Questions Using Secondary Data. *Child Development Perspectives*, 9(4), 256–261. <https://doi.org/10.1111/cdep.12151>
- de Winter, J. C. F., & Dodou, D. (2010). Five-Point Likert Items : t test versus Mann-Whitney-Wilcoxon. *Practical Assessment, Research & Evaluation*, 15(11), 1–16. <https://doi.org/citeulike-article-id:10781922>
- Escobedo, de la C. S., & carlos Diaz Casero, A. M. D. A. & R. H.-M. (2014). Gender analysis of entrepreneurial intentions as a function of economic development across three groups of countries. *International Entrepreneurship and Management Journal*, 10(4), 747–765. <https://doi.org/10.1007/s11365-014-0314-7>
- Field, A., Miles, J., & Field, Z. (2013). *Discovering Statistics Using SPSS*. Sage (Vol. 81). [https://doi.org/10.1111/insr.12011\\_21](https://doi.org/10.1111/insr.12011_21)
- Gulsevim Yumuk Gunay. (2016). Demographic Factors that affect the Entrepreneurship Intentions of Students in Tourism Department: Comparison of Two State Universities. *Business and Economics Research Journal*, 7(3), 155–170.
- Hox, J. J., & Boeije, H. R. (2005). Data Collection, Primary vs. Secondary. In *Encyclopedia of Social Measurement* (pp. 593–599). <https://doi.org/10.1016/B0-12-369398-5/00041-4>
- Iqbal, M. (2000). Pengolahan Data dengan Regresi Linier Berganda. *Perbanas Institute Jakarta*, 4, 1985–2000.
- Kameyama, S., Kobayashi, H., Suetake, T., Hines, J. H., Diker, V. G., Langer, R. S., & Rowe, J. I. (2001). Model for SME Sector Development. *Proceedings of the 19th International Conference of the System Dynamics Society*, 13, 23–56.
- Kim, T. K. (2015). T test as a parametric statistic. *Korean Journal of Anesthesiology*, 68(6), 540–546. <https://doi.org/10.4097/kjae.2015.68.6.540>
- Koziol, N., & Arthur, A. (2012). An Introduction to Secondary Data Analysis. *Research Methodology Series*, 51. <https://doi.org/DOI: 10.1017/CBO9780511618802.002>
- Laksono, T. D., Kurniasih, N., Hasyim, C., Setiawan, M. I., & Ahmar, A. S. (2017). The Impact of Airport Performance towards Construction and Infrastructure Expansion in Indonesia. *Journal of Physics: Conf. Series*, 954. <https://doi.org/10.1088/1742-6596/954/1/012015>
- Lawless, H. T., & Heymann, H. (2010). *Descriptive Analysis. Sensory Evaluation of Food*. <https://doi.org/10.1007/978-1-4419-6488-5>
- Moog, P., Werner, A., Houweling, S., & Backes-Gellner, U. (2015). The impact of skills, working time allocation and peer effects on the entrepreneurial intentions of scientists. *Journal of Technology Transfer*, 40(3), 493–511. <https://doi.org/10.1007/s10961-014-9347-x>
- Mortan, R. A., Ripoll, P., Carvalho, C., & Bernal, M. C. (2014). Effects of emotional intelligence on entrepreneurial intention and self-efficacy. *Revista de Psicología Del Trabajo Y de Las Organizaciones*, 30(3), 97–104. <https://doi.org/10.1016/j.rpto.2014.11.004>
- Paul, J., & Shrivastava, A. (2015). Comparing entrepreneurial communities. *Journal of Enterprising Communities:*

- People and Places in the Global Economy*, 9(3), 206–220. <https://doi.org/10.1108/JEC-06-2013-0018>
- Platt, R. W. (1998). ANOVA, t tests, and linear regression. *Injury Prevention*, 4(1), 52–53. <https://doi.org/10.1136/ip.4.1.52>
- Rachmawan, A. (2015). the Role of Parent ' S Influence and Self Efficacy on Entrepreneurial Intention. *The Journal of Developing Areas*, 49(3), 417–430.
- Robson, P., & Bennett, R. (2001). SME Growth : The Relationship with Business Advice and External Collaboration. *Small Business Economics*, 15, 193–208. <https://doi.org/Doi.10.1023/A:1008129012953>
- Sampedro, I. R., Fernández-Laviada, A., & Herrero Crespo, A. (2014). Entrepreneurial intention: perceived advantages and disadvantages. *Academia Revista Latinoamericana de Administración*, 27(2), 284–315. <https://doi.org/10.1108/ARLA-09-2013-0144>
- Setiawan, M. I., Surjokusumo, S., Ma'soem, D. M., Johan, J., Hasyim, C., Kurniasih, N., ... Wajdi, M. B. N. (2018). Business Centre Development Model of Airport Area in Supporting Airport Sustainability in Indonesia. *Journal of Physics: Conference Series*, 954(1), 12024. <https://doi.org/10.1088/1742-6596/954/1/012024>
- Singh, B., Verma, P., & Rao, M. (2016). Influence of Individual and Socio-cultural Factors on Entrepreneurial Intention. *South Asian Journal of*, 23(1), 33–56. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=09715428&AN=115318407&h=mxMhhNskwm023qCsRHnKb3Z/oyNi5DTh1zl/jPlc17BgchQ3nXEYry7/airJjTnnVDMxuHrl71EzUJSIQ8LfIA==&cr=c>
- Sloman, K. N. (2010). Research Trends in Descriptive Analysis. *Behavior Analyst Today*, 11(1), 20–36. <https://doi.org/10.1037/h0100686>
- Sok, P., O'Cass, A., & Sok, K. M. (2013). Achieving superior SME performance: Overarching role of marketing, innovation, and learning capabilities. *Australasian Marketing Journal*, 21(3), 161–167. <https://doi.org/10.1016/j.ausmj.2013.04.001>
- Trochim, W. M. K. (2006). Descriptive Statistics. *Research Methods*, 2–7. <https://doi.org/10.1016/B978-0-12-384864-2.00005-6>
- Vinet, L., & Zhedanov, A. (2010). A “missing” family of classical orthogonal polynomials. *International Small Business Journal*, 33(1), 28–48. <https://doi.org/10.1088/1751-8113/44/8/085201>
- Watson, J., Newby, R., & Mahuka, A. (2009). Gender and the SME “finance gap.” *International Journal of Gender and Entrepreneurship*, 1(1), 42–56. <https://doi.org/10.1108/17566260910942336>