

**KNOWLEDGE SHARING ROLES IN DEVELOPING INNOVATION CAPABILITY IN
ORDER TO IMPROVE INDIVIDUAL PERFORMANCE**
(Study at Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service)

Bagus Rio Prasetya Wardhana

Fakultas Ekonomi Universitas Mayjend Sungkono Mojokerto

email : wardhana.acer@gmail.com

(Submit : 14 November 2018, Revised : 24 November 2018, Accepted : 1 Desember 2018)

Abstract This research aims to analyze knowledge sharing roles in developing innovation capability in order to improve individual performance. This research uses causal research type by quantitative approach. The samples used in this research are 50 businessmen of Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service. Data collection is conducted by spreading questionnaires. The data analysis technique used is SEM analysis by PLS program aid. The results in this research show that: (1) There are significant influences of knowledge sharing toward individual performance in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service; (2) There are significant influences of knowledge sharing toward individual performance in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service; (3) There are significant influences of innovation capability toward individual performance in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service.

Keywords : knowledge sharing, innovation capability, individual performance

I. INTRODUCTION

Micro, Small, and Medium Enterprises have important and strategic roles in national economical development. Micro, Small, and Medium Enterprises have proportions as 99.99% from the total businessmen in Indonesia or as 56.54 million units (Indonesian Banking Development Council, 2015). Micro, Small, and Medium Enterprises considerably influence national economics, because they can absorb the total very high unemployed people and give high contributions toward Gross Domestic Product. In 2013, the total Micro, Small, and Medium Enterprises in Indonesia are 56.6 millions. From the total ones, 99.8%

are Micro, Small, and Medium Enterprises that can absorb employees as 97% from the total employees available in Indonesia today.

Based on the data of Cooperative State Ministry and Micro, Small, and Medium Enterprises in 2011 to 2013, they stated that Micro, Small, and Medium Enterprises still become majority doers in business field, i.e. There are increases as 2.41% from 55,206,444 business units in 2011 to be 56,534,592 business units in 2012 or 99% from businessmen available in Indonesia. In the period of 2011 to 2012, from the total Gross Domestic Product of Micro, Small, and Medium Enterprises, there are increases as 12.67% from Rp 4,869,568 billions in 2012. Whereas Indonesian Commerce and

Industrial Chambers estimate that Micro, Small, and Medium Enterprises sectors will grow about 25% in 2012 compared with prediction in 2011 about 15 to 20%.

Micro, Small, and Medium Enterprises development also happens in Surabaya, seen in the total Micro, Small, and Medium Enterprises available in Surabaya from year to year experiencing rapid growths. Based on the data of Cooperative Service and Surabaya Micro Enterprises, the total Micro, Small, and Medium Enterprises in Surabaya recently have achieved more than 4,800 businesses (Widarti, 2017). The total ones are predicted to grow continually, but along with that, Micro, Small, and Medium Enterprises sectors continue facing challenges because Micro, Small, and Medium Enterprises doers react toward environmental factor changes such as emerging markets and standards for better product qualities in the world, needs about quicker delivery times and more rapid business friendships (Gupta and Cawthon in Setiawan, 2013). Therefore, Micro, Small, and Medium Enterprises doers need to understand many challenges.

In facing more tight and more tight challenges, it demands every Micro, Small, and Medium Enterprises in order to have abilities in doing innovations, such as Zimmerer, et al., (2008), who stated that for small businesses, innovations are hearts for small business abilities for competing toward their competitors. Innovations are abilities for applying creative solutions toward problems and chances for improving or for enriching human life. Value creation through innovation by someone can be determined by employee knowledges, skills, experiences (Wang and Wang, 2012), and then it can improve innovation capabilities by sharing knowledges (Kumar and Rose, 2010). Therefore, it can be explained that knowledge sharing has important roles in improving innovation abilities, in which knowledge sharing can drive human resources abilities for doing innovations (Mulyana, cs, 2015).

Knowledge sharing is an activity that facilitates knowledge exchanges, helps

cooperation, improves abilities for achieving organizational purposes, and so on (Dyer and Nobeoka in Mandasari, 2016). By knowledge sharing, it is hoped to be able to drive human resources abilities for doing innovations and finding creative ideas, such as Rahab (2011) who stated that knowledge sharing can improve abilities in doing innovations. This case is caused by knowledge sharing among the people who are involved in it, it can create cooperations that receive each other and give each other among employees, so they can trigger ability improvement in doing innovations. Lin (2007) also stated that employee readiness for contributing and collecting knowledges enables company for improving innovation abilities. Based on the description in the background, the formulation of the problem proposed in this study includes: (1) Whether knowledge sharing influences significantly and positively toward innovation capability in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service; (2) Whether knowledge sharing influences significantly and positively toward individual performance in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service; and (3) Whether innovation capability influences significantly and positively toward individual performance in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service. This research aims to analyze knowledge sharing roles in developing innovation capability in order to improve individual performance.

II. LITERATURE REVIEW

Knowledge Sharing

Knowledge sharing is systematical process in sending, distributing, and spreading knowledges and multidimensional contexts among individuals or organizations through many methods or medias (Lumbantobing in Arizqi, 2017). Hoof & Hendrix in Mandasari (2016) proposed that knowledge sharing is as a process in which individuals involved, change knowledge each other in forms of tacit and explicit ones and it is used for creating new knowledges.

Knowledge sharing or sharing knowledge can be defined as social interactional culture that involves transfer knowledges, experiences, and skills among organizational members (Lin, 2007). Furthermore, Subagyo in Ardians (2017) also defined knowledge sharing as one of methods or one of steps in knowledge management used for giving chances to members of some groups, organizations, instances or companies for sharing sciences, techniques, experiences and ideas that they own to the other members.

Innovation Capability

Hills (2008) defined innovation as idea, practice or object assumed as new by an individual or other user unit. According to Liao et al (2010) *innovation capability* is an ability for applying creativities in the range of solving problems and chances. Innovative organization has abilities for improving individual and organizational performances, solving problems and improving competitive superiorities.

Ussahawanitchakit (2007) defined innovation capability as abilities for developing new products that can satisfy market needs,

applying technological processes more proper for producing the new products, developing and adopting new products and processing technologies for future needs, responding unpredicted technological change activities, and unpredicted chances conducted by competitors.

Individual Performance

Mathis and Jackson (2012) defined performance as what is done or not done by an employee. General employee performances for general jobs involve quantity elements from results, qualities from results, time accuracies from results, presences, cooperation abilities. Whereas Wirawan (2013) explained that performance is an output resulted by functions or indicators of some job or profession in certain time. Furthermore, Mangkunegara (2013) explained that performances are performance results qualitatively and quantitatively achieved by an employee in conducting his/her job according to the responsibilities given to him/her.

Conceptual Framework

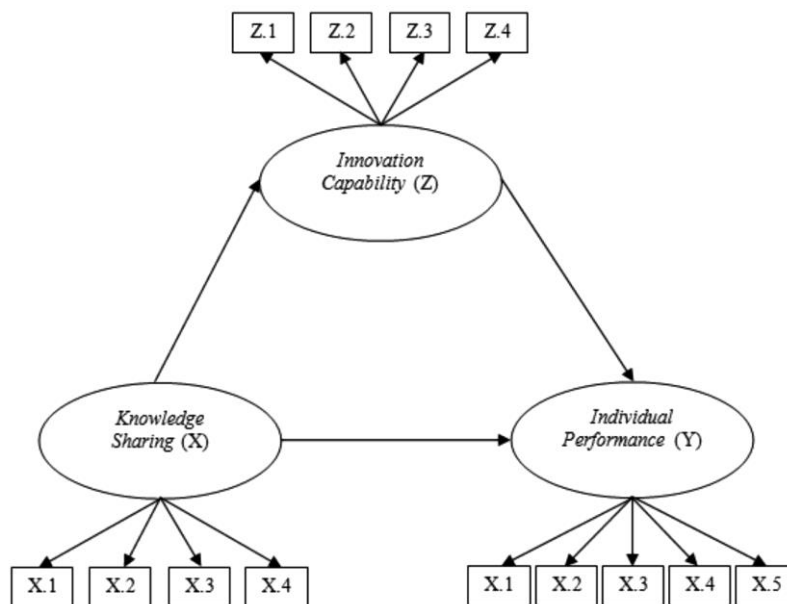


Figure 1. Conceptual Framework

Hypothesis

- H₁ : *Knowledge sharing* influences significantly and positively toward innovation capability in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service.
- H₂ : *Knowledge sharing* influences significantly and positively toward individual performance in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service.
- H₃ : *Innovation capability* influences significantly and positively toward individual performance in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service.

III. RESEARCH METHODS

Research Type

This research is included in causal research type because variable one and other variables are related each other, i.e. independent variables and dependent variables. According to (2016) causal relation is relation that characterizes as cause and effect, i.e. there are independent variables (influencing variables) and dependent variables (influenced). This research uses quantitative approach, i.e. research that uses research data such as numbers and analysis using statistics (Sugiyono, 2016).

Population and Sample

Population is generalization area that consists of object or subject that has qualities and characteristics determined by the researcher for learnt and then concluded (Sugiyono, 2016). The population in this research consists of all Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service.

Sample is a part from the totals and characteristics owned by the population (Sugiyono, 2014). Sampling technique is a technique of taking sample for determining sample that will be used in the research (Sugiyono, 2016). This research uses the

method of surfeited sampling, i.e. technique of determining sample if all population members are used as samples. So, the used samples in this research are as 50 businessmen of Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service.

Variable Operational Definition

Operational definition is a concept or something that can be measured and can be seen in dimensions of attitudes, aspects, or characters showed by the concept.

1. *Knowledge Sharing* (X)

Knowledge sharing is systematical process in sending, distributing, and spreading knowledges and multidimensional contexts among individuals or organizations through many methods or medias. Variable indicators of knowledge sharing refer to Silalahi cs (2016), they are:

- Sharing knowledges to colleagues without asked for.
- Accepting knowledges form colleagues without asking for.
- Sharing knowledges are normal things.
- Activities of exchanging ideas/experiences and skills without asked for.

2. *Innovation Capability* (Z)

Innovation capability is ability of applying creativities in the range of solving problems and chances. Variable indicators of innovation capability refer to Silalahi cs (2016), they are :

- Someone's ability level in offering improvement facilities toward available products today.
- Individual abilities for contributing toward new product developments in the range of improving consumer satisfactions
- Someone's ability level for resulting some better manufacturers or services.
- Company ability level in creating creativities

3. *Individual Performance* (Y)

Individual performance is achievement level achieved by human resources in their jobs both from quality and quantity aspects. Variable indicators of individual performance refer to Robbins (2006), they are :

- a. Performance quality
- b. Performance quantity
- c. Punctuality
- d. Effectivity
- e. Independence.

Data Type and Source

In this research, in order to get the data required, so this research uses data collection through primary data sources, i.e. data sources gotten directly from the sources, noted firstly and related directly to the problems researched (Kuncoro, 2013).

Data Collection Technique

The method used by the researcher in this research is survey method, by using instruments such as questionnaires. According to Sugiyono (2016) questionnaires are data collection techniques conducted by giving a set of written statements to the respondents for answered. The method of arranging scale is using Likert scale. The variables measured in Likert scale are described again in the forms of sub-variables, in which the sub-variables are described again to be components that can be measured.

Data Analysis Technique

Data analysis is data simplification process into the forms that are easier to read and implement. The analysis technique chosen for analyzing data and testing hypothesis in this research is *The Structural Equation Model* (SEM). For answering hypothesis, it is used *Partial Least Square* (PLS). According to Ghazali (2016) calculation is conducted by using aid of Smart *Partial Least Square* (PLS), because it has form of multi lane and the model used has Reflective form. The calculational model is conducted by using aid of Smart PLS because in this research, it has multi lane relationship and formative and reflective forms. Formative model is model that shows relationship direction from indicator to latent variable. Reflective model is model that shows relationship from latent variable to indicator.

IV. DISCUSSIONS

Model Inner Evaluation

Inner model that is sometimes called by (*inner relation, structural model and substantive theory*) specifies influences inter research (*structural model*).

Model Inner Test or Structural Model Test

In evaluating model by PLS, it is begun by seeing R-square for each dependent latent variable. R-square value changes can be used for evaluating influences of certain independent latent variables toward dependent latent variables whether they have substantive influences. For endogenous latent variable in structural model that has R² as 0.67, it indicates that the model is good, R² as 0.33 indicates that the model is moderate, R² as 0.19 indicates that the model is weak (Ghozali and Latan, 2015).

For variable of knowledge sharing that influences variable of innovation capability, it has the value of R² as 0.472 that indicates that the model is moderate. Therefore, suitability of structural model can be seen from Q² as follows :

$$\begin{aligned}
 Q^2 &= 1 - [(1 - R_1) * (1 - R_2)] \\
 &= 1 - [(1 - 0.472) * (1 - 0.568)] \\
 &= 1 - [(0.528) * (0.432)] \\
 &= 1 - [0.228] \\
 &= 0.772
 \end{aligned}$$

The analysis results of structural model suitability level developed, show the conclusions that the model is entirely relevant for explaining the variables researched and the influences in each variable. From value calculation of Q², it is achieved the value of 0.772 or more than critical limit of 0.5, therefore, the structural model is suitable and proper.

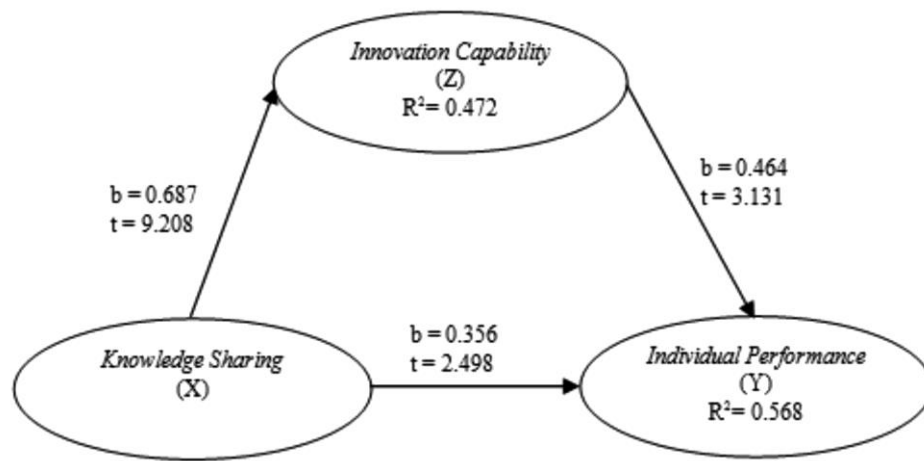


Figure 2. PLS Inner Model

There are exogenous variables in the inner model researched, i.e. knowledge sharing, then intervening variable in the inner model researched, i.e. innovation capability and endogenous variable in the inner model researched, i.e. individual performance. The results of inner weight value in picture 2 above show that variable of innovation capability is influenced by variable of knowledge sharing, whereas variable of individual performance is influenced by innovation capability and knowledge sharing showed in the similarities as follows :

Innovation Capability =

0.687 *Knowledge Sharing*

Individual Performance =

0.356 *Knowledge Sharing* + 0.464 *Innovation Capability*

Hypothesis Examinational Results

Hypothesis Test 1 (H₁)

The first hypothesis in the research is proven as true, because the data analysis results show that t-value as 9.208 means bigger than 1.96, so it can be said that knowledge sharing influences significantly and positively toward innovation capability in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service. The relationship direction of both variables is positive that means the higher

the knowledge sharing created in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service, so it can improve and improve innovation capabilities in businessmen by having big influences as 0.687.

Hypothesis 2 (H₂)

The second hypothesis in the research is proven as true, because the data analysis results show that t-value as 2.498 means bigger than 1.96, so it can be said that knowledge sharing influences significantly and positively toward individual performance in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service. Both variables of knowledge sharing and individual performance have positive relationship direction that means the higher the human resources readinesses in Micro, Small, and Medium Enterprise guided by Surabaya City Trade Service in sharing knowledges, so it can improve and improve individual performances by having big influences as 0.356.

Hypothesis 3 (H₃)

The third hypothesis in the research is proven as true, because the data analysis results show that t-value as 3.131 means bigger than 1.96, so it can be said that innovation capability influences significantly and positively toward

individual performance in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service. The relationship direction of both variables are positive that means the better the innovation capabilities owned by Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service, so it can improve and improve individual performances in it by having big influences as 0.464.

Influences of Knowledge Sharing toward Innovation Capability

The data analysis results conducted show that knowledge sharing has significant influences toward innovation capability proved from t-value as 9.208 that means bigger than 1.96, so it can be explained that innovation capability improvement can be conducted through processes of sharing knowledges among employees. Influences of knowledge sharing toward innovation capability are positive that show the better the ones in sharing knowledges among employees, so it can improve and improve abilities in doing innovations in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service. Therefore, the first hypothesis that sounds “*knowledge sharing* influences significantly and positively toward innovation capability in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service”, is accepted and proven as true.

The findings that show there are significant and positive influences of knowledge sharing toward innovation capability means if Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service want to improve innovation capabilities, so it is very important to care about to what extent sharing knowledges happens in business processes. In line with Rahab (2011) *knowledge sharing* states that among people involved in it, they will be able to create cooperations in accepting and giving each other among employees, so it can drive abilities for doing innovations. Knowledge sharing can improve company for doing innovations.

The results in this research are in line with the findings conducted by Wuryaningrat

(2013) who found that sharing knowledges gives positive influences toward innovation capabilities of Small and Medium Enterprises. These results are also in line with the research results conducted by Saputro and Mayowan (2018) who showed that *knowledge sharing* has significant influences toward *innovation capability*. The finding results of this research also support the research conducted by Aristanto (2017) who proved that *knowledge sharing* influences significantly positively toward *individual innovation capability*. So does the research of Aulawi cs (2009) who found that *knowledge sharing* has roles in driving *individual innovation capability*.

Influences of Knowledge Sharing toward Individual Performance

The data analysis results conducted find that knowledge sharing has significant influences toward individual performance proven from t-value as 2.498 that means smaller than 1.96. This case shows that individual performance improvement in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service will be able to be formed through sharing knowledges among employees. The influences of both variables are positive that means the better the processes of sharing knowledges applied in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service, so the higher the individual performances in it. Therefore, the second hypothesis that sounds “*Knowledge sharing* influences significantly and positively toward individual performance in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service”, is accepted and proven as true.

The findings that show there are significant and positive influences of knowledge sharing toward individual performance, mean if Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service want to improve individual performances, so it is very important for caring about to what extent sharing knowledges happens in business processes. Improving activities of *knowledge sharing* will

impact in improving individual performances (Wening, 2016). Activities of sharing knowledges involve sharing experiences and knowledges, it will help individuals in solving job problems based on the available experiences. So does from sharing the knowledges, individuals will get many more job knowledges for improving effectivities and efficiencies of job processes (Aristanto, 2017). Good innovation capabilities will help to make initiatives for resulting more effective and efficient job methods (Aristanto, 2017). Employees who have good innovation capabilities, they have considerably abilities in solving problems in jobs and they can quicken the jobs, so individual performances will be better.

The results in this research are in line with the research results conducted by Saputro and Mayowan (2018) who showed that *knowledge sharing* has significant influences toward employee performances. The finding results of this research also support the research conducted by Aristanto (2017) who proved that *knowledge sharing* influences significantly positively toward individual performances.

Brand Loyalty has significant effect on brand image (Rafhdian, Daengs, Andi, 2016 : 292).

Influences of Innovation Capability toward Individual Performance

The data analysis results conducted also find that innovation capability has significant influences toward individual performance proved from t-value as 3.131 that means bigger than 1.96, this case shows that individual performance improvement in Micro, Small, and Medium Enterprises can be formed through good innovation capability by Micro, Small, and Medium Enterprises. The influences of *innovation capability* toward *individual performance* are positive that shows that the better the innovation capabilities owned, so it can improve and improve individual performances in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service. Therefore, the third hypothesis that sounds “*Innovation capability* influences significantly and positively toward individual performance in Micro, Small, and Medium

Enterprises guided by Surabaya City Trade Service” is accepted and proven as true.

Improving innovation capability will help individuals in overcoming problems in jobs, so performance qualities and quantities can be better. By good innovation capability, it will help to make initiatives for resulting more effective and efficient performance methods (Aristanto, 2017). The innovative organizations have abilities for improving individual and organizational performances, solving problems and improving competitive superiorities (Liao et al, 2010)

The findings in this research show that innovation capability has important roles in improving individual performance in Micro, Small, and Medium Enterprises, such as the research results conducted by Aristanto (2017) who found that *individual innovation capability* influences significantly toward individual performances. The results in this research are also in line with the research results conducted by Saputro and Mayowan (2018) that proved that *individual innovation capability* influences positively toward employee performances.

V. CONCLUSIONS

1. There are significant influences of knowledge sharing toward innovation capability in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service. The influences of both variables are positive that means the higher the employee readinesses for sharing knowledges with the other employees, so the higher the abilities of doing innovations. These results show that the first hypothesis is accepted and proven as true.
2. There are significant influences of knowledge sharing toward individual performance in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service. The influences of both variables are positive that means the higher the employee readinesses for sharing knowledges with the other employees, so the higher the individual performances in Micro, Small, and Medium

Enterprises guided by Surabaya City Trade Service. These results show that the second hypothesis is accepted and proven as true.

3. There are significant influences of innovation capability toward individual performance in Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service. The influences of both variables are positive that means the better the innovation capabilities owned by Micro, Small, and Medium Enterprises guided by Surabaya City Trade Service, so the more improving the individual performances in it. These results show that the third hypothesis is accepted and proven as true.

VI. REFERENCES

- [1] Ghozali, I., dan Hengky Latan. 2015. Konsep, Teknik, Aplikasi Menggunakan Smart PLS 3.0 Untuk Penelitian Empiris. Semarang: BP Undip.
- [2] Hills, Gerald. 2008. Marketing and Entrepreneurship, Research Ideas and Opportunities. Westport, CT:Quorum Books
- [3] Kumar. N., dan R. Che Rose. 2010. "The Impact of Knowledge Sharing and Islamic Work Ethic on Innovation Capability", *Cruss Cultural Management*, Vol.19, No.2, pp. 142-165.
- [4] Liao, Shu-Hsien., Chi-Chuan Wu., dan Da-Chian Hu. 2010. "Relationships between Knowledge acquisition, absorptive capacity and innovation capability: an empirical study on Taiwan's financial and manufacturing", Vol.36, No.1.
- [5] Lin, Hsiu-Fen. 2007. "Knowledge Sharing and Firm Innovation Capability: an Empirical Study", *International Journal of Manpower*, Vol.28, No.3/4, pp.315-332
- [6] LPPI. 2015. Profil Bisnis Usaha Mikro, Kecil dan Menengah (UMKM). Kerjasama LPPI dengan Bank Indonesia.
- [7] Mandasari, N. 2016. "Pengaruh Information Sharing, Knowledge Sharing dan Relation Terhadap Performance Perusahaan", *Jurnal Ilmu Administrasi Bisnis*, Vol. 5, No.4, pp.1-11.
- [8] Mulyana., M. Assegaff., dan Wasitowati. 2015. "Pengaruh Knowledge Donating dan Knowledge Collecting terhadap Innovation Capability Kasus Pengembangan UKM Batik di Provinsi Jawa Tengah-Indonesia", *Jurnal Manajemen Teknologi*, Vol.14, No.3, pp.246-264.
- [9] Rafhdian, MA, Daengs GS, Achmad, Farouq Hasan, Andi, 2016. Brand Equity On Brand Image Of Tourism Object In Surabaya. IMC 2016 Proceedings Universitas Muhammadiyah Jakarta, Vol. 1 No. 1. 287-293.
- [10] Rahab., Sudjono., dan Sulistyandari. 2011. "The Development of Innovation Capability of Small Medium Enterprises through Knowledge Sharing Process: An Empirical Study of Indonesian Creative Industry", *International Journal of Business and Social Science*, Vol.2, No.21.
- [11] Setiawan, H. 2013. "Pengaruh Orientasi Pasar, Budaya Organisasi dan Orientasi Kewirausahaan Terhadap Kinerja Usaha (Studi pada Usaha Kecil Pengolahan di Kota Palembang)", *Jurnal Manajemen dan Bisnis Sriwijaya*, Vol.11 No. 3, pp.181-194
- [12] Ussahawanitchakit, P. 2007. "Innovation Capability and Export Performance: An Empirical Study of Textile Business in Thailand", *International Journal of Business Strategy*, Vol. 7, No. 1, pp. 1-9.
- [13] Wang, Z., dan Wang, N. 2012. "Knowledge sharing, innovation and firm performance", *Expert Systems with Applications*, Vol. 39, No.10, pp. 8899-8908.
- [14] Widarti, P. 2017. Kembangkan UMKM, Pemkot Surabaya Siapkan Rp. 11 Miliar. Available on: <http://kabar24.bisnis.com/read/20170306/78/634438/kembangkan-umkm-pemkot-surabaya-siapkan-rp11-miliar>, diakses tanggal 06 November 2018
- [15] Zimmerer, Thomas W. & Norman M. Scarborough. 2008. Essentials of Entrepreneurship and Small Business Management. 5th Edition, New Jersey: Pearson