

# SMES and HEI Collaboration: Improving SMEs' Performance and Knowledge Management Capability to Cope with Economic Disruption

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**Abstract:** Small and medium enterprises (SMEs) face challenging competition in this economic disruption era. Effort to improve competitiveness through performance and knowledge management capability has become a must to cope with the economic disruptions. Performance and knowledge management capability in SMEs need to be addressed to improve their competitiveness. Higher Education Institution (HEIs) and SMEs collaboration has become a tool to improve SMEs' performance and knowledge management. The aim of this study is to examine relationship between entrepreneurial orientation on organisational learning; the role of HEI engagement in moderating entrepreneurial orientation on organisational learning; relationship between organisational learning on organisational performance and organisational learning on knowledge management capability. This study applies PLS SEM analysis. SMEs business owners in Semarang, Magelang, Pekalongan and Grobogan region are respondents of this study. Results of this study shows that entrepreneurial orientation has positive influence on organisational learning; there is no moderation effect of HEI engagement on entrepreneurial orientation and organisational learning; organisational learning has positive influence on organisational performance and organisational learning influence positively on knowledge management capability.

## 1 INTRODUCTION

SME sector becomes the backbone of global economy in recent decades. According to International Trade Centre, in 2015, 95% of companies in this globe are SMEs. They provide 50% of global Gross Domestic Product (GDP), which consist of 420-510 million companies, and 310 million of them are in emerging markets. SMEs as a business entity covers wide array of business formations, ranging from sole-proprietorship to massive company. Alongside its capability to obtain certain level of performance, SME also must have a sound knowledge of management capability. Based on that fact, it is pertinent that SMEs must focus on several factors which are very crucial in enhancing the SMEs' withstand on economic disruptions, those factors are capability in managing knowledge, entrepreneurial orientation, learning aspect of organisation, and SMEs' performance themselves (Dess et al., 2003; Ashforth et al., 2007; Wiklund et al., 2009; Sanzo et al., 2012; Wilson et al., 2012). To

be able to obtain better performance and knowledge management capability, SMEs must have organisational learning factor which is influenced by entrepreneurial orientation (Dess et al., 2003; Ashforth et al., 2007). Asad Sadi and Henderson (2011) emphasise that SMEs in global relationships context can be in form of licensing, joint venture, franchising and other strategic alliances formation, and to attain sound relationships in the alliances, performance and capability in managing knowledge transfer are needed. University as higher education institution (HEI) has responsibility in enhancing those two factors, performance and managing knowledge transfer (Tedjakusuma, 2014). Establishing better relationship between entrepreneurial orientation and organisational learning and role of universities is needed to have a clear view of how those factors related among others. Moreover, this study also attempts to respond for further research in SMEs performance and knowledge management capability which is conducted in specific sector, the higher education

institution or university. (Chaston, 2001; Vargo & Seville, 2011; Tedjasuksmana, 2014).

## 2 THEORETICAL BACKGROUND

Knowledge Based View (KBV) is derived from resource-based theory and organisational theory; by applying knowledge, an organisation can explore its resources to increase competitive advantage and creating more consumer value (Nonaka, 1994; Hsung & Tang, 2010). Grant dan Baden-Fuller (2004) emphasised that there are two major rationales in explaining KBV, the first is knowledge acquisition by organisational learning and secondly is by applying organisational efficiency advantage in strategic alliance to exploit knowledge.

Collaboration between SMEs and university is important key in developing a certain level of trust between the two parties. Furthermore, the level of trust can accelerate knowledge transfer to obtain strategic alliance and innovation (De La MAza et al., 2012). Petkovska (2015) emphasised that naturally SMEs are centre of innovation initiation, and they produce a lot of innovative product and services to fulfil consumer needs. Networking can be a capital source for SMEs as well. Gilmore et al. (2011) emphasised that SMEs have distinctive approach compare to larger companies, so called the marketing for networking. This kind of networking is suitable for SMEs due to limitation of resources, knowledge specialist and impact on market (Chaston & Mangles, 2000; European Commission, 2005 in Jamsa et al., 2011,p.143). One of the strategies in SMEs networking is to establish relationship with Higher Education Institution (HEI) or universities.

HEIs have become SMEs' resource of knowledge and technology for decades through research and technology research and development (Guston, 2000). Based on previous statement, there are two questions that can be discussed; the first is "What has been done by the universities as knowledge resources?" and the second is "Why are the universities doing all of these things?". Universities or HEIs has obligation to their stakeholders, including business community. Gunasekara (2006, p.4) stated in philosophical way that "The role of university in the development of regional innovation systems may be categorised using a duality of spanning generative and developmental categories..."; Thus, in theory, the universities' roles in developing innovation in a region has evolved in the last two decades, from spill

overs approach to stimulate the economic development in a region (Gunasekara, 2006). Furthermore, government is perceived to be able to add its involvement in expertise transfer for the SMEs, for instance in form of business incubator (Tedjasuksmana, 2014). The involvement is also supposed to enhance the SMEs' managers active support both in training and accompaniment programmes (Tedjasuksmana, 2014). This will determine success of the collaboration between SMEs and universities (Peças & Henriques, 2006). Lambooy (2004) stated that to improve the SMEs' competitiveness, SMEs need to pay more attention on creativity within the organisation due to variations of creativity levels owned by each individual, so called the human capital. The human capital resource within the SMEs can be improved by utilising network social capital (Street & Cameroon, 2007; Bosworth, 2009). The human capital resource in the SMEs become pertinent factors in knowledge transfer from HEIs to SMEs, this type of knowledge transfer is called "vertical transfer", the transfer is in form of operation/production process (Decter et al., 2007). This type of transfer also relatively hard to transfer due to knowledge complexities. In order to analyse the HEIs and SMEs collaboration based on previous studies (Guston, 2000; Tödtling & Kaufmann, 2001; Lambooy, 2004; Charles, 2006; Peças & Henriques, 2006; Gunasekara, 2006; Decter et al., 2007; Tedjasuksmana, 2014), this study develop a collaboration framework between HEIs and SMEs to enhance the SMEs performance and competitiveness in coping with global competition as follows:

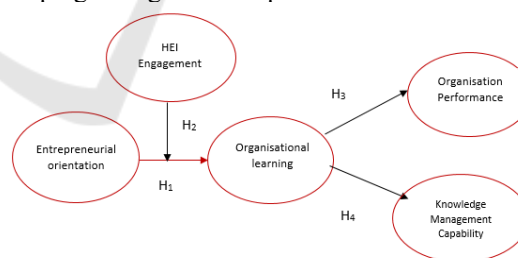


Figure 2.1: HEI-SME Collaboration Model

## 3 HYPOTHESES DEVELOPMENT

### 3.1 Entrepreneurial Orientation (EO) and Organisational Learning (OL)

A business entity which embrace entrepreneurial orientation (EO) is expected to increase its

organisational learning (OL), especially for its innovative products and services (Chaston et al., 2001). An organisation with high level of EO will seek for knowledge actively. Applying EO will provide the organisation with better market position to obtain and combine specific series of knowledge needed. Study by Ashforth et al. (2007), emphasised that proactive behaviour is embedded in EO will facilitate firm's learning process. Furthermore, Dess et al. (2003) argued that by commencing knowledge development through EO, a firm can form an effective corporate network to enhance innovation. Based on that description, the first hypothesis is:

H<sub>1</sub>: Entrepreneurial Orientation has positive influence on Organisational Learning

### 3.2 Higher Education Institution Engagement (HE) Moderates the Relationship between EO and OL

SMEs have resources limitation, that is way SMEs need to get access for various kinds of resources, in this context, the knowledge. In terms of knowledge, SMES can apply networking resources with HEIs in their environment to gain knowledge (Wiklund et al., 2009). Moreover, HEIs have a wide array of resources especially the knowledge-based 21<sup>st</sup> century knowledge (Wilson, 2012: 2). Thus, that it can be concluded that SMEs involvement or engagement with HEIs is very pertinent. This involvement or engagement can be a useful resource to support growth and development.

Previous study emphasised that joint research between firm and HEIs acts as vehicle to enhance the involvement and commitment, as a result it has massive impact on firm's resources access on knowledge (Huggins et al., 2008). HEIs provide SMEs with several services such as accompaniment, acceleration The form of services offered and provided by higher education institutions such as universities to small companies includes various matters of business assistance, such as: extension services, and accelerator and outreach programs designed to transfer academic expertise in the form of the latest technology and business practices to improve product performance, product quality, and process efficiency (Huggins et al., 2008). Through engagement with universities, businesses or companies can get access to the latest research in their fields and employees who have an innovative spirit in the form of graduates or innovative students in a workplace (BIS, 2012); they can also get access to a series of innovative ideas

The relationship between higher education institutions and industry has become a popular mindset or direction of knowledge today, where academics act as providers of knowledge through university-industry collaboration that encourages learning exchanges in gaining knowledge (Baba et al., 2009). Philbin (2012) suggested that university involvement will bridge the learning process, university collaboration with business is a form of strategic alliance that provides a foundation for learning. Furthermore, companies that collaborate with higher education institutions gain access to specific knowledge that in the future can be further developed to improve the competitiveness of the industry or the company itself (Philbin, 2012). If the level of science and technology-based knowledge resources can be transferred through university involvement, both Resource-Based View (RBV) and Knowledge Based Theory (KBT) show that small and medium enterprises with high EO levels and working with universities will have advantages in terms of OL. Moreover, companies that are aware of the benefits of business / university involvement are able to integrate academic capabilities with their product and service development opportunities (Philbin, 2012). Afore mentioned earlier, companies try to create appropriate value in relations between companies by utilising their resources to complement useful resources (Anatan, 2013). Given that EO is a strategic resource, it can be assumed that business / university collaboration is a complementary pertinent resource that will increase the OL level. Therefore, the second hypothesis is proposed as follows:

H<sub>2</sub>: HEI engagement positively moderates the relationship between EO and OL

### 3.3 Relationship between Organizational Learning (OL) and Organizational Performance (OP)

Huber (1998) stated that OL increases ability of a business organisation to innovate, which in turn can have an impact on improving organisational competitiveness and performance. Rhodes et al. (2008) also emphasised that OL has focal positive relationship with innovation process in Indonesia, specifically in knowledge transfer process to improve company-organisational performance (OP) performance. Theriou and Chatzoglou (2008) suggested that knowledge management (KM) and OL play a pertinent role in creating organisational capabilities, which leads to sound performance. Yang et al. (2007) provided a more in-depth assessment of

the relationship between OL and OP. Their findings indicated that the application of OL influences company performance. Furthermore, Hanvanich et al. (2006) suggested that learning and organisational orientation memory is related to the output of an organisation, not only when the company has various levels of disruption in its environment but also when the company has a similar level of environmental turbulence. Ruiz-Mercader et al. (2006) emphasize that individuals and OL show positive and significant effects on OP. Thus, the next hypothesis is:

H<sub>3</sub>: Organisational Learning has a positive influence on the Organization Performance

### 3.4 Relationship between Organizational Learning (OL) and Knowledge Management Capability

Harvey et al. (2004) emphasised that one of main organisational capabilities is ability to learn to adapt to changing environments, both regionally and dynamically. The purpose of an organization in the learning process is to enhance managers' and employees' ability in applying the knowledge in current era where information technology is dominant. Theriou and Chatzoglou (2008) argue that so that Knowledge Management (KM) and OL can be more optimal in playing their roles that are somewhat unique in creating organisational capabilities, which leads to performance. Lee et al. (2007) in his research, he proposed that learning ability and factor knowledge ability are the source of a company's competitive advantage. Moreover, Currie and Kerrin (2003) in their study adopted an OL perspective to reflect more accurately the issues related to KM. Previous research has shown a correlation between OL and KMC, such as Theriou and Chatzoglou (2008), Battor et al. (2008), and Sense (2007). Therefore, the next hypothesis is as follows:

H<sub>4</sub>: Organizational Learning has a positive influence on Knowledge Capability Management

Based on these hypotheses, researchers conducted research using cross-sectional data to analyse the various relationships between these variables.

## 4 METHODOLOGY

### 4.1 Population and Sample

The population in this study is the MSME sector in Central Java. The MSME spreads in Central Java region. This research applies SEM-PLS analysis. The amount of the sample is 240 samples, assuming that normality assumption is fulfilled and using Maximum Likelihood Estimation (ML) technique (Sholihin & Ratmono, 2013). The samples are SMEs businesses' owners in Semarang, Pekalongan, Magelang and Grobogan region.

### 4.2 Data Collection and Analysis

This study applies a structured and closed questionnaire (Brace, 2004). The questionnaire contains a series of statements which are carefully arranged with a specific perspective to stimulate a reliable response from the sample (Collis & Hussey, 2003). The statement in the questionnaire will be measured using a Likert scale with a score of 1-5 (Brace, 2004). The sample unit is individual of MSME business person in the regional area of Central Java. Inferential analysis which will provide an analysis of causal relationships between the determinants (Ferdinand, 2006) in this study uses SEM analysis with SEM-PLS software.

### 4.3 Reliability and Validity Test

The reliability and validity of the indicators in this study will be tested using two methods, which are convergent validity test and the discriminant validity test (Ferdinand, 2006). The purpose of the reliability and validity test is to verify whether the indicators used are part of the construct and can be used to measure the determinants (Byrne, 2010). Reliability and validity tests on this indicator are also carried out in order to test whether each construct or determinant has special characteristics and the determinant is reliable and can be used in a model (Ferdinand, 2006; Santoso, 2010).

#### 4.3.1 Structural Equation Model (SEM) Test

This section contains data analysis, relating to the relationships between the variables in the model. Data analysis will provide results and statistical analysis whether there is a relationship between the variables in the model.

Analysis of the data used in this study uses the Structural Equation Model (SEM) approach with the

SmartPLS 3.0 program. which consists of two stages, the analysis of the outer model and the inner model.

*Measurement Model Analysis (Outer Model)*

**a. Convergent Validity Test**

The measurement model convergent validity test can be analysed based on the correlation between indicator score with construct score (loading factor) with the criteria for the loading factor of each indicator bigger than 0.70. Furthermore, if the p-value <0.50, it is considered as significant. Sholihin and Ratmono (2013) explain that in some cases, newly developed questionnaires is hard to reach loading factor value of 0.70. Therefore, base on the statement loading factors between 0.40-0.70 must be considered to be considered as valid.

Table 4.1: Convergent Validity

No.	Determinant	Indicator	Loading factor	SE	p value	Valid/ Not Valid
1	Entrepreneurial Orientation (EO)	X1	0.713	0.057	0.001	Valid
		X2	0.649	0.058	0.001	Valid
		X3	0.589	0.058	0.001	Valid
		X4	0.805	0.056	0.001	Valid
		X5	0.774	0.056	0.001	Valid
2	Organisational Learning (OL)	X6	0.768	0.056	0.001	Valid
		X7	0.757	0.057	0.001	Valid
		X8	0.589	0.058	0.001	Valid
		X9	0.770	0.056	0.001	Valid
		X10	0.694	0.057	0.001	Valid
3	Organisational Performance (OP)	X11	0.821	0.056	0.001	Valid
		X12	0.811	0.056	0.001	Valid
		X13	0.868	0.055	0.001	Valid
		X14	0.829	0.056	0.001	Valid
4	Knowledge Management Capability (KCM)	X16	0.843	0.056	0.001	Valid
		X17	0.849	0.056	0.001	Valid
		X18	0.788	0.056	0.001	Valid
5	HEI Engangement	X19	0.903	0.055	0.001	Valid
		X20	0.935	0.055	0.001	Valid
		X21	0.881	0.055	0.001	Valid

Source: WarpPLS output

Discriminant validity is assessed based on cross-loading measurements with determinants. There are two ways to evaluate discriminant validity requirement, the first is when construct correlation with principal measurement (each indicator) is greater than size of other constructs so it can be concluded the discriminant is valid. The second is by analysing discriminant validity with AVE criteria. The criteria used are square roots of average variance extracted (AVE), which is a diagonal column and given parentheses must be higher than the correlation

between latent variables in the same column (top or bottom).

The results of loading can be seen in table 4.2. below:

Table 4.2. Laten construct output loading factor value

Indicator	Loading Factor	> <	Factor loading value compare to other constructs					Criteria		
			EO	OL	OP	KC M	HEI			
X1	0.713	>	-	-	0.193	0.204	0.115	-	0.032	Valid
X2	0.649	>	-	0.292	0.277	0.025	-	0.132	-	Valid
X3	0.589	>	-	0.023	0.040	0.123	0.056	-	-	Valid
X4	0.805	>	-	0.138	0.195	0.054	0.109	-	-	Valid
X5	0.774	>	-	0.095	0.247	0.165	0.017	-	-	Valid
X6	0.768	>	-	0.314	0.073	0.164	0.120	-	-	Valid
X7	0.757	>	-	0.137	0.223	0.077	0.001	-	-	Valid
X8	0.589	>	-	0.147	0.220	0.208	0.190	-	-	Valid
X9	0.770	>	-	0.215	0.236	0.072	0.160	-	-	Valid
X10	0.694	>	-	0.134	0.087	0.010	0.472	-	-	Valid
X11	0.821	>	-	0.041	0.122	0.054	0.161	-	-	Valid
X12	0.811	>	-	0.081	0.204	0.070	0.056	-	-	Valid
X13	0.868	>	-	0.040	0.025	0.027	0.042	-	-	Valid
X14	0.829	>	-	0.074	0.288	0.011	0.151	-	-	Valid
X16	0.843	>	-	0.090	0.070	0.042	0.125	-	-	Valid
X17	0.849	>	-	0.046	0.182	0.141	0.086	-	-	Valid
X18	0.788	>	-	0.047	0.121	0.107	0.226	-	-	Valid
X19	0.903	>	-	0.056	0.001	0.088	0.091	-	-	Valid
X20	0.935	>	-	0.066	0.018	0.045	0.029	-	-	Valid
X21	0.881	>	-	0.012	0.019	0.043	0.124	-	-	Valid

Source: WarpPLS output

Based on the first stage of the above results, all indicators have met the criteria for discriminant

validity. Thus, it can be concluded that all indicators have met the criteria for convergent validity. The second method (AVE criteria), this method can be done by evaluating the AVE criteria. AVE which is in a diagonal column and given parentheses must be higher than the correlation between latent variables in the same column. Following AVE calculation results:

Table 4.3: Correlations among latent variables

	EO	OL	OP	KCM	HEI
EO	0.710	0.618	0.606	0.596	0.456
OL	0.618	0.719	0.733	0.714	0.576
OP	0.606	0.733	0.752	0.563	0.551
KCM	0.596	0.714	0.563	0.827	0.578
HEI	0.456	0.576	0.551	0.578	0.906

Source: WarpPLS output

Table 4.3 shows the discriminant validity criteria have been fulfilled indicated by the square root AVE is greater than the correlation coefficient between constructs on each variable.

**b. Reliability Test Result**

Table 4.4: Instrument reliability test Hasil Uji Reliabilitas Instrumen

No.	Variabel	Composite reliability	Criteria
1	EO	0.834	Reliabel
2	OL	0.841	Reliabel
3	OP	0.853	Reliabel
4	KCM	0.866	Reliabel
5	HEI	0.932	Reliabel

Source: WarpPLS output

Based on the table 4.4 it can be seen that the reliability test results with the reliability composite value of each variable used in this study are above 0.70, which means reliable.

*Evaluation of Structural Model (Inner Model)*

The next step is to conduct a structural evaluation (inner model) which includes a model fit) path coefficient test, and R<sup>2</sup>. Based on the WarpPLs 3.0 analysis, the model fitness can be evaluate using several criteria, as follows:

- a. The average path coefficient (APC) has a p value <0.05.
- b. Average R-Squared (ARS) has a p value <0.05.
- c. Average Block Variance Inflation (AVIF) has a value <5; ideally 3.3.

The p values for APC and ARS are recommended below 0.05 or significant. Furthermore, AVIF as an indicator of multicollinearity is recommended has

lower value than 5. The output results indicate that model goodness of fit model is fulfilled, the APC value of 0.549 and ARS 0.517 and significant. AVIF value of 1,802 also meets the criteria.

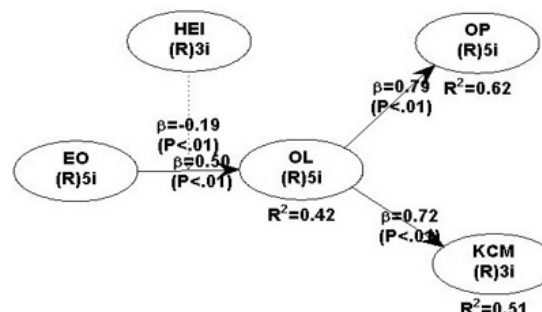


Figure 4.1. HEI-SME Structural Model

**a. Direct Influence**

This study applies table path coefficients to commence hypothesis testing. The path coefficients table which contains the values of t statistics and p-values that shows the determinants relationships and direction are provided in the table 4.6 below.

Table 4.5 Output Path Coefficients Model Direct Effect

Variabel	EO-OL	OL-OP	OL-KCM
Path Coefficients	0.502	0.788	0.716
P-Value	0.001	0.001	0.001

The independent variable at the 5% significance level was declared significant as seen from the p-value that was smaller than the alpha level that had been set ( $\alpha = 0.05$ ). Based on Table 4.6. can be seen the direct effect of this research model which can be explained as follows:

**Entrepreneurial Orientation (EO) and Organisational Learning (OL)**

Table 4.5 shows that EO has a positive influence (0.502) on OL and is significant with a p value of 0.001 (<0.05). The table shows that entrepreneurial orientation has a significant positive effect on organizational learning, so the first hypothesis that formulates Entrepreneurial Orientation has a positive effect on Organizational Learning is accepted.

**Organisational Learning (OL) and Organisational Performance (OP)**

Table 4.5 shows that OL has a positive influence (0.788) on OP and is significant with a p value of

0.001 (<0.05). The table shows that organisational learning has a significant positive effect on organisational performance, so the third hypothesis that formulates organizational learning has a positive effect on organisational performance is accepted.

**Organisational Learning (OL) and Knowledge Management Capability (KM) Variables**

Table 4.5. shows that OL has a positive influence (0.716) on KMC and is significant with a p value of 0.001 (<0.05). The table explains that Organizational Learning has a significant positive effect on Knowledge Management Capability, so that fourth hypothesis that formulates Organizational Learning has a positive effect on Knowledge Management Capability is accepted.

**b. Test for Moderation Effect**

Higher Education Institution (HEI) Engagement moderates the relationship between EO and OL variables. Table 4.6 shows the moderation effect of Higher Education Institution (HEI) Engagement on the relationship between Entrepreneurial Orientation and Organisational Learning.

Table 4.6: Moderation effect

Determinants	EO-OL	HEI*EO-OL	OL-OP	OL-KCM
Path Coefficients	0.502	-0.191	0.788	0.716
P-Value	0.001	0.001	0.001	0.001

Source: WarpPLS output

The interaction coefficient of HEI \* EO-OL (b = -0.191; p = 0.001) indicates that Higher Education Institution (HEI) Engagement weakens the relationship between Entrepreneurial Orientation and Organisational Learning. The higher the level of Higher Education Institution (HEI) Engagement, the lower the relationship between Entrepreneurial Orientation and Organisational Learning. Likewise, if the level of Higher Education Institution (HEI) Engagement decrease, the relationship between the two variables gets stronger. So, the second hypothesis that formulates HEI engagement positively moderates the relationship between EO and OL is rejected.

**5 FINDINGS AND DISCUSSION**

This study has four hypotheses, the second hypothesis is rejected, the discussion in this section provide in

depth analysis in HEI-MSMEs relationships. Specifically, the moderating effect that has no significance results.

Table 5.1: Hypotheses tests summary

Hypotheses	Statement	Result
H <sub>1</sub>	Entrepreneurial Orientation has positive influence on Organisational Learning	Accepted
H <sub>2</sub>	HEI engagement positively moderates the relationship between EO and OL	Rejected
H <sub>3</sub>	Organisational Learning has a positive influence on the Organisation Performance	Accepted
H <sub>4</sub>	Organisational Learning has a positive influence on the Organisation Performance	Accepted

**5.1 Entrepreneurial Orientation (EO) and Organisational Learning (OL)**

Based on the data analysis, the results show that Entrepreneurial Orientation has a positive influence on Organisational Learning, this result is in line with previous studies conducted by several previous researchers (Chaston et al., 2001; Dess et al., 2003; Ashforth et al., 2007); by implementing EO, the company will have a better market position to obtain and combine the knowledge needed. In addition, the study commenced by Dess et al. (2003) argued that companies that develop knowledge through EO or entrepreneurial orientation are able to form an effective corporation, namely in form of uniqueness such as innovation. Chaston et al. (2001) in their research emphasised that companies or institutions that adopt Entrepreneurial Orientation (EO) based on their market position to offer their products in form of innovative goods and services, are expected to increase higher level of Organizational Learning (OL). Further evidence shows that companies with high EO levels will actively seek new knowledge. This idea is reinforced by research conducted by Ashforth et al. (2007) which emphasised an argument that the proactive behavior contained in EO can facilitate the learning process carried out by a company. EO has pertinent role in enable companies to accommodate learning process. Moreover, by applying proper EO will provide companies with

more willingness to learn and attempt for better knowledge understandings.

## **5.2 Higher Education Institution (HEI) Engagement Moderates the Relationship between EO and OL Variables**

The results of data analysis showed that Entrepreneurial Orientation and Organisational Learning variables were not positively moderated by Higher Education Institutional Engagement variable. The results show that a coefficient of -0.19 means that HEI Engagement weakens the EO and OL relationships. This is in contrast with the results of research conducted by several experts such as Baba et al., 2009; Wiklund, et al., 2009; Huggins et al., 2008; Sanzo et al., 2012; Philbin, 2012 and Wilson, 2012. They stated that: MSMEs have limited resources, because of those resources, MSMEs need to access a variety of resources, including knowledge. Using a resource perspective, such companies can use network resources, such as some MSMEs that have a network with higher education institutions (universities), to gain knowledge (Wiklund et al., 2009) and to build additional network-based knowledge with another organization. Previous research has emphasised that the role of relationship-based variables has and is the basis and special relevance in the relationship between companies and higher education institutions (Sanzo et al., 2012). In addition, universities are a source of strength in the knowledge-based economy of the twenty-first century (Wilson, 2012: 2) so that involvement between SMEs and universities is very important to support growth and development. Previous research also has found that joint research between companies and universities, as a means of growing engagement and commitment, has a large impact that allows a company to access various resources (Huggins et al., 2008). The forms of services offered and provided by higher education institutions such as universities to small companies include various types of business assistance, such as: extension services, and accelerator and outreach programs designed to transfer academic expertise in the form of the latest technology and business practices to improve product performance, product quality, and process efficiency (Huggins et al., 2008). The relationship between higher education institutions and industry has become a popular mindset or direction of knowledge today, where academics act as suppliers of knowledge through university-industry collaboration that encourages learning interactions in gaining

knowledge (Baba et al., 2009). Philbin (2012) suggested that university involvement will bridge the learning process, university collaboration with business is a form of alliance that provides a foundation for learning. Furthermore, companies that collaborate with higher education institutions gain access to specific knowledge that in the future can be further developed to improve the competitiveness of the industry or the company itself (Philbin, 2012).

This research obtains different results. It is possible that there are some ineffective programs provided by HEI or higher education institutions. Another cause is the possibility that in the application of accompanying, the assistance carried out so far has not been carried out by an effective measurement of impact to the MSME businesses. Furthermore, the results do not support the opinions of some of the experts above are also caused by the ability of the absorption of science and especially innovative ideas provided by higher education institutions (Cohen & Levinthal, 2000).

## **5.3 Relationship between Organizational Learning (OL) and Organizational Performance (OP)**

Organisational Learning has a positive influence on Organisational Performance, these results support a study which is commenced by Huber (1998) which confirms that OL increases the ability of a business organisation to innovate, which in turn can have an impact on improving competitiveness and organisational performance. Yang et al. (2007) provided a more thorough assessment of the relationship between OL and OP. Their findings indicated that the application of OL influences company performance. Hanvanich et al. (2006) suggested that learning orientation and organisational memory are related to the outcomes of an organization, not only when companies have different levels of disruption in their environment but also when companies have similar levels of environmental disruptions. Ruiz-Mercader et al. (2006) emphasised that individuals and OL show positive and significant effects on OP. Theriou and Chatzoglou (2008) also suggested that knowledge management (KM) and OL play a focal role in creating organisational capabilities, which leads to good performance. Furthermore, Rhodes et al. (2008) stated that OL has positive relationship with innovation process in Indonesia in form of knowledge transfer to improve company performance-organisational performance (OP).



## 5.4 Organisational Learning and Knowledge Management Capability Variables

The results of the data analysis concluded that Organizational Learning (OL) has a positive influence on Knowledge Management Capability (KM), these results support previous research by Theriou and Chatzoglou (2008), Battor et al. (2008), and Sense (2007). Furthermore, these study also supports Harvey et al. (2004) which emphasised that one of main organisational capabilities is ability to learn and to adapt to regional and global environment disruptions. The benefit of a learning process in an organisation is to improve its managers' and employees' ability in knowledge application in present information technology era. Theriou and Chatzoglou (2008) argued that Knowledge Management (KM) and OL can be optimised in playing their roles in creating organisational unique capabilities, which leads to performance. Lee et al. (2007) in his research stated that ability to learn and ability of knowledge factors are the source of a company's competitive advantage. Currie and Kerrin (2003) in their study adopted an OL perspective to reflect more accurately the issues related to KM.

## 6 CONCLUSION AND FURTHER RESEARCH

From the results of data analysis several conclusions can be drawn as follows:

1. Entrepreneurial Orientation has a positive influence on Organisational Learning.
2. Higher Education Institutional Engagement does not moderate the positive Relationship between Entrepreneurial Orientation and Organisational Learning.
3. Organisational Learning has a positive influence on Organizational Performance.
4. Organisational Learning has a positive influence on Knowledge Management Capability.

### FURTHER RESEARCH

As researchers we are aware that this research still has some weaknesses, such as the geographical coverage of existing respondents, there is also probability that respondents have never experienced innovation and knowledge from existing higher education

institutions or there is also possibility that they have not been able to captivate knowledge and innovation.

Further research is suggested to be able to provide a clearer picture of the role of higher education institutions in the MSME sector in Central Java, as well as the need to be more optimal in identifying areas that have or have not been touched by the active involvement of higher education institutions.

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