The Study of Entrepreneurial Performance With Entrepreneurial Leadership and Organizational Learning Capability as Antecedent Variables in East Java Higher Education, Indonesia

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ABSTRACT

This study aims to test a model of entrepreneurial performance to be applied to the college setting. The approach used in this study is the theory confirmatory analysis. This analysis aims to confirm theories or hypotheses. The statistical test used is Structural Equation Modeling. Accredited A or B undergraduate program at universities in East Java as the analysis unit amounted to 584 which is the total population. This study used purposive sampling method. Lecturers of entrepreneurship programs defined as respondents. The amount of research questionnaires collected are 185 and six declared invalid. Of the 179 valid respondents are clustered into 107 programs. The results of the structural model analysis show the influence of entrepreneurial leadership on organizational learning capability, entrepreneurial leadership on entrepreneurial performance, and organizational learning capability on entrepreneurial performance are in positive direction. Through the value of the square multiple correlations can be seen that 58.3% level of organizational learning capability is influenced by the level of entrepreneurial leadership; 93.8% level of entrepreneurial performance is influenced by the level of entrepreneurial leadership and organizational learning capability, while the rest is determined by other factors not examined. Entrepreneurial leadership has a significant influence on entrepreneurial performance, as a mediator variable organizational learning capability was excluded from the analysis model. The effect of entrepreneurial leadership on entrepreneurial performance is described partial mediation effect of organizational creativity. The effect of entrepreneurial leadership on entrepreneurial performance is described through partial mediation effect of organizational learning capability.

Keywords: Entrepreneurial leadership, organizational learning capability, entrepreneurial performance, east java higher education

INTRODUCTION

In the present globalization era, universities as higher education institutions are required to show a performance which creates a learning process which can produce highly qualified graduates. This high demand urges universities to make changes in leadership, learning capability, and to make innovation in all university elements. Universities have a vital and important role in a country's life, namely as a centre of knowledge development and change. Therefore universities must be able to produce highly resourceful graduates (Hartanto, 2009).

With the ratification of ASEAN Economic Community at the end of year 2015, Indonesian universities now face greater challenges. The competition among Indonesian universities is increasing, so does the competition between Indonesian universities and foreign universities which will operate in Indonesia. The changes in the environment and also in the expectations pertained to university graduates compel Indonesian universities to make adjustments by

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utilizing newest and most effective approaches, paradigms, practices and strategies. University management should be reoriented, restructured, and redefined in a professional, progressive, creative, and innovative management, accompanied with entrepreneurial leadership.

Sanberg states that to be able to yield entrepreneurial performance, a university needs to pay attention to several variables comprehensively (Chrisman and McDougall, 1986), among others entrepreneurial leadership variable and organizational learning capability. In order to achieve entrepreneurial organizational performance, Indonesian universities should have entrepreneurial leadership which vision is directed towards the future, should dare to make new breakthroughs and take risks, and should be creative and innovative. This agrees with the opinion of Cohen which asserts that within a dynamic, complex, and uncertain environment, we need different leadership behaviour (in Yang, 2008).

In the last 20 years there have been various scientific studies on entrepreneurial performance concerning the aspects researched and their various antecedent factors (Redmond et al., 1993; Hurley and Hult, 1998; Damanpour and Gopalakrishnan, 2001; Bello et al., 2004; Bueno and Ordon˜ez, 2004; Aragon-Correa et al., 2007; Richard et al., 2009; Hayton, 2003). Hayton's study (2003) on 90 small and medium businesses concludes that Human Resources Management practices which encourage employee free actions, knowledge sharing, and organizational learning have positive associations with entrepreneurial performance. Entrepreneurial performance is a multidimensional concept with relates to stakeholders, market conditions of heterogeneous products, and time. The performance measurement which is generally accepted is effectiveness (Richard et al., 2009).

This research was focused on the management of undergraduate programs in universities in East Java with A or B accreditation grade, which offer entrepreneurship programs in their learning-instructing process. The accreditation status of a university study program reflects the quality of the learning-instructing process in the study program (Badan Akreditasi Nasional Perguruan Tinggi, 2014/Higher Education National Accreditation Board, 2014). This research was performed by distributing questionnaires to lecturers who taught entrepreneurship study programs in universities. These lecturers were selected as respondents because they had knowledge of the leadership style of their program head as the representative of the study program, and also knowledge of the existing entrepreneurship programs in their study program. The chief aim of this research was to study the relationship of entrepreneurial leadership and organizational learning capability to entrepreneurial performance in undergraduate programs with A/B accreditation grade in East Java universities.

CONTEXT AND LITERATURE REVIEW

The Relationship between Entrepreneurial Leadership and Organizational Learning Capability

Yeung et al. (1999) assume that learning is important for the whole company's capability to evaluate and to adapt to changing conditions. Learning is important for the product division when the division is undertaking to create innovative product and service. Learning is important for managers when they have to overcome crises effectively and immediately. Learning is important for executives who have the responsibility to articulate and apply continuously developing strategies. Learning is important for employees who need to master new skills and build competencies for their work. In other words, learning is important for everybody, including managers – especially human resources managers and senior executives – who are responsible to build continuing organizational commitment to advance the organization.

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Theorists have criticized that the perspectives of organizational learning are sometimes too normative (Bower, 1993; Marquardt, 2006), indicating that there is something wrong with the organization, which does not meet the ideal condition required for understanding learning orientation and capability (DiBella, 1995). Today there has been a shift in organizational learning. The focus of organizational learning now is to develop organizational capabilities (Armstrong, 2000; Pettigrew and Whipp, 1991). Goh (2003) offers a theoretical perspective which defines learning capability as the organization capability to apply the right structural and procedural practices, which facilitate and encourage learning (Leonard-Barton, 1992; Popper and Lipshitz, 1998; Garvin, 2000; Goh, 1998). Bhatnagar (2006) proposes that learning capability can be intangible and can include strategy; guidance on the principles of learning; structure; leadership; accountability and role for learning; system and process, organizational learning theories, tools, competencies, resources, and essential values.

Organizational learning capability (OLC) as the factor which facilitates learning has become of more concern for academicians and practitioners. OLC (DiBella et al., 1996; Goh and Richards, 1997; Hult and Ferrell, 1997, Jerez-Gomez et al., 2005; Yeung et al., 1999) highlights the factors or characteristics which facilitate the organization to learn. On the other hand, Ulrich et al. (1993) defines OLC as the organization's leaders capacity to generate ideas and to generalize the ideas in such a way that they will make impacts. Yeung et al. (1999) formulates it in a simple formula: g x g. OLC = generating ideas x generalizing ideas with impacts. OLC is the capacity to generate and generalize ideas with impacts, beyond boundaries, through specific management initiatives. From the background presented above, this research proposed the following hypothesis:

H_1: Entrepreneurial Leadership has a significant influence on Organizational Learning Capability in the undergraduate programs with A or B accreditation grade in East Java.

The Relationship between Entrepreneurial Leadership and Entrepreneurial Performance

The concept of entrepreneurial leadership was introduced in year 2000 by McGrath and MacMillan who suggest that in a dynamic market there is increasing uncertainty and competition pressure which demand for a new type of leadership. They describe this leadership as entrepreneurial leadership. Fastly changing market or situation give entrepreneurial leaders capability to utilize opportunity to gain profit for their organization more quickly than other leaders (McGrath and MacMillan, 2000). Entrepreneurial leadership variable in a study program is defined as the program head capability to anticipate the future, maintain flexibility, think strategically, and cooperate with other people to start a change which will create a healthy future for the entrepreneurship programs within his study program. The capability of the program head was measured by the opinions of the entrepreneurship lecturers in the study program.

Winardi (2008) states that there are five dimensions of a company which are performed with entrepreneurial leadership, namely strategic orientation which is urged by perception of opportunities; commitment to opportunities; commitment of resources; control of resources; and realistic vision. While Kuratko and Hodgetts (2001) propose that the dimension of entrepreneurial leadership includes defining company's vision or goal; improving skills and practicing continuously; developing human resources; sustaining the culture which exists within the organization; practicing moral values in the organization's practices; stabilizing and balancing the function of control within the organization. The indicators used in this research are the combination of those used in previous researches which identify several entrepreneurial leadership indicators, namely innovativeness, risk taking capacity, proactive-

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ness, competitive aggresiveness, autonomy (Roomi and Harrison, 2011; Roebuck, 2011; Suryana, 2007; Bateman and Snell, 2009; Lumpkin and Dess, 2001; Robbins and Judge, 2013).

Liden et al. (1993) assume that leader's behavior or leadership style is closely related to employee performance. Cassar (2006) presents his findings about the numerous failures of newly started bussinesses, which make academicians realize the importance of entrepreneurial leadership for employee performance and for the success of entrepreneurial bussinesses. While Garcia-Morales et al. (2008) state that (transformational) leadership influences organizational performance. However, there are still very few researches which study the relationship between entrepreneurial leadership and entrepreneurial performance. Gibson et al. (2009) emphasize that performance in an organization is influenced by the leader's behavior. Besides, Redmond et al (1993) state that when effective leaders can solve problems creatively, employees will have better creative performance. There is a positive correlation between the leader's supporting attitude and the employee's creativity. Employee's creativity is closely related to manager's effort to understand employee's feeling and emotion (Stahl and Koser, 1978; Oldham and Cummings, 1996). This is confirmed by the findings which show that an effective leader influences his followers to show expected behavior to achieve desired goals. There are various leadership style which influence organizational effectiveness or performance (Nahavandi, 2002). While Yang (2008) adds that transformational leadership has a more significant correlation with bussiness performance than other leadership styles. Therefore, in this research we proposed the following hypothesis:

H_2: Entrepreneurial Leadership has a significant influence on Entrepreneurial Performance in the undergraduate programs with A or B accreditation grade in East Java.

The Relationship between Organizational Learning Capability and Entrepreneurial Performance

Frederick Taylor who develops scientific management believes that when management "truth" is articulated and measurable, it can transfer learning to employees, thus improving the organization's efficiency (Yeung et al., 1999). Argyris and Schon state that single -loop learning will enhance organizational capacity to achieve goals through routine learning (Yeung et al., 1999). The concept of organizational learning is further developed by experts such as George Huber, Peter Senge and his associates at MIT, George McGregor, Peter Drucker, Warren Bennis, Edward Deming, William Ouchi, Michael Porter, Tom Peters, Gary Hamel, dan C. K. Prahalad. Learning plays a very important role in multiplying the whole organization's capability to evaluate and to adapt to changing conditions.

Contemporary researches find out that learning gives value, rarity, perfect imitation, and non-substitutional elements for organization's resources (Grant, 1991; Lei et al., 2000; Snell et al., 1996). Knowledge as a result of the learning process inside a person is an important factor for the organization's success and is also a source for achieving competitive advantages (Pfeffer, 1994; Storey and Quintas, 2001; Noon and Blyton, 2002). Goh (2003) proposes that learning capability is the organization's capability to apply the right structural practices and management procedures, which facilitate and encourage learning (Leonard-Barton, 1992; Popper and Lipshitz, 1998; Garvin, 2000; Goh, 1998).

The type of the learning style can characterize an organization and identify the profile of the organization's learning capability. This profile represents the organization's method of generating ideas which will have impacts. Once developed, the profile of learning capability can be used to describe how the learning takes place and what are the changes in the learning that can help the organization to be more competitive (Yeung et al., 1999; Bhatnagar, 2006). Yeung et al. (1999) also state that learning companies can adapt to the change of customer

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needs more quickly. They can also achieve their financial goals for growth and profitability better. Besides, the capability to learn is an important factor for the organization in order to grow and innovate (Jerez-Gomez et al., 2005; Lynn and Akgün, 2000; Hult et al., 2004). Therefore this research meant to find out the relationship between the two variables through the following hypothesis:

H_3: Organizational Learning Capability has a significant influence on Entrepreneurial Performance in the undergraduate programs with A or B accreditation grade in East Java.

RESEARCH METHOD

Population, Sample, and Sampling Method

The population of this research is the undergraduate programs with A or B accreditation grade in East Java, namely the undergraduate programs which offers entrepreneurship programs. The reason of setting the criteria according to accreditation status is because accreditation status reflects the appropriateness of a study program to issue diplomas for its graduates. Besides, the accreditation status of a study program reflects the quality of the learning -instructing process in the study program (Badan Akreditasi Nasional Perguruan Tinggi, 2014/Higher Education National Accreditation Board, 2014). Thus lecturers of undergraduate programs with A or B accreditation grade are appropriate to become the population of this research because the accreditation status shows that the study program has a high quality management.

The number of undergraduate programs with A or B accreditation grade in East Java is 584, which became the subject of this research. They are distributed in State Universities (204 or 35%) and Private Universities (380 or 65%). The study programs selected for this research were the ones which offer entrepreneurship programs. The study programs which became the subject of this research or the analysis unit amounted to 584 which was the total population. This total population came from eight state universities and 98 private universities (Direktorat Jenderal Pendidikan Tinggi Kementerian Pendidikan dan Kebudayaan RI, 2013/The Directorate General of Higher Education of the Ministry of Education and Culture of the Republic of Indonesia, 2013; Badan Akreditasi Nasional-Perguruan Tinggi, 2014/ Higher Education National Accreditation Board, 2014).

This research used the census sampling method. All the lecturers of entrepreneurship programs in each undergraduate program with A or B accreditation grade in East Java were selected as respondents because they had knowledge of the leadership style of their program head as the representative of the study program, and also knowledge of the existing entrepreneurship programs in their study program. From the data obtained, we distributed the research questionnaires, directly or via email, to each respondent. The number of questionnaires collected was 185, of which 6 were considered not valid because they came from undergraduate programs which did not have the required accreditation. The 179 valid respondents belonged to 107 study programs. The number of the research sample was 179 persons who were qualified to be analysed by the Structural Equation Modeling (SEM) analysis as determined by Hair et al. (2010), since it had exceeded the minimal requirement of sample which was 100.

Analysis Method

The analysis method used in this research was SEM with the AMOS version 21.0 program, which included analysis of confirmatory factor and analysis of structural equation modeling. The confirmatory factor analysis was the measurement of the dimensions which formed latent variable/construct in the research model. The purpose of confirmatory factor analysis was to

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test the validity and reliability of the dimension of the creator of each latent variable. The confirmatory factor analysis of exogen and endogen construct tested the united dimensions of each creator of exogen and endogen construct's latent variable. The structural equation modeling analysis tested the model and hypotheses developed in the research. The tests consisted of two tests, namely the test of the model's goodness of fit and the test of causal significance in regression coefficient.

Operational Definition of Variables

The Entrepreneurial Leadership variable was defined as the program head capability to anticipate the future, maintain flexibility, think strategically, and cooperate with other people to start a change which will create a healthy future for the entrepreneurship programs within his study program. The capability of the program head was measured by the opinions of the entrepreneurship lecturers in the study program. The indicators of Entrepreneurial Leadership variable used in this research were according to Roomi and Harrison (2011), Roebuck (2011), Suryana (2007), Bateman and Snell (2009), Lumpkin and Dess (2001), Robbins and Judge (2013), which were innovativeness, risk taking capacity, proactiveness, competitive aggresiveness, autonomy.

The Organizational Learning Capability variable was defined as the program head capability to generate ideas and generalize the ideas with impacts on the entrepeneurship programs within his study program. The capability of the program head was measured by the opinions of the entrepreneurship lecturers in the study program. The indicators of Organizational Learning Capability variable used in this research were according to Yeung et al. (1999), which were discovery, invention, implementation, and diffusion.

The Entrepreneurial Performance variable was defined as the program head capability to innovate, accept risks, identify and exploit entrepreneurial opportunities. The indicators of Entrepreneurial Performance variable used in this research were according to the entrepreneurial study program success indicators set by the Directorate of Learning and University Student of the Directorate General of Higher Education of the Ministry of Education and Culture (2013), which were: number of student entrepreneur, quality of entrepreneurship education, and existence of entrepreneurship units.

FINDINGS

Confirmatory Factor Analysis

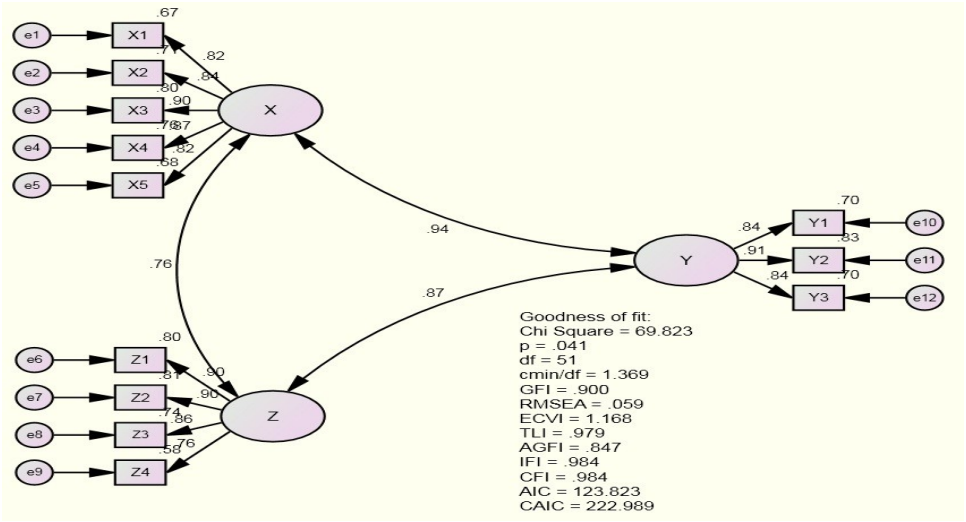

Figure 1. Confirmatory Factor Analysis

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Confirmatory factor analysis was the measurement of the dimensions which form the latent variables/constructs in the research model. The aim of this analysis was to test the validity and reliability of the dimension of the creator of each latent variable. The confirmatory factor analysis of exogen and endogen constructs tested the unity of the dimensions of the creators. The exogen construct of this research was entrepreneurial leadership variable *(X)*, while the endogen constructs consisted of organizational learning capability variable *(Z)* and entrepreneurial performance variable *(Y)*. Figure 1 showed the result of confirmatory factor analysis of all constructs. The result of goodness of fit test for confirmatory factor analysis and boundaries of value criteria which indicated good fit could be seen in Table 1. The result of the whole goodness of fit test showed the the model fitted the existing data, since most of the test results showed fair goodness of fit level.

Table 1. Goodness of Fit (GOF) Test and Fit Rate Confirmatory Factor Analysis

Measure of GOF	*Fit Rate Target*	*Estimation*	*Fit Rate*
Chi Square	Less than 68.67	$X^2 = 69.82$	Poor Fit
P	(p= 0.05; df = 51)	P = 0.041	Poor Fit
CMIN/DF	< 5	1.369	Good Fit
GFI	GFI ≥ 0.90	0.900	Good Fit
RMSEA	RMSEA ≤ 0.08	0.059	Good Fit
P (close fit)	P ≥ 0.05	0.317	Good Fit
ECVI	Score less than ECVI Saturated and Independence	D* = 1.168 S* = 1.472 I* = 11.836	Good Fit
TLI	TLI≥ 0.90	0.979	Good Fit
AGFI	AGFI ≥ 0.90	0.847	Marginal Fit
IFI	IFI ≥ 0.90	0.984	Good Fit
CFI	CFI ≥ 0.90	0.984	Good Fit
AIC	Score less than AIC saturated and independence	D* = 123.823 S* = 156.000 I* = 1254.568	Good Fit
CAIC	Score less than CAIC saturated and independence	D* = 222.989 S* = 442.481 I* = 1298.642	Good Fit

(D* = Default, S* = Saturated, I* = Independence)

Table 2 showed that each indicator had fulfil the convergent validity criteria of the dimensions of the creators of entrepreneurial leadership variable (*X*), organizational learning capability variable (*Z*), and entrepreneurial performance variable (*Y*), because they had the standardized loading factor value larger than 0.7. Concerning the standardized loading value, the chief consideration in estimating entrepreneurial leadership depended on proactive energy indicator since it showed the highest standardized loading value, namely 0.897. And the chief consideration in estimating organizational learning capability depended on problem solving capability indicator since it showed the highest standardized loading value, namely 0.901. While the chief consideration in estimating entrepreneurial performance depended on program quality indicator since it had the highest standardized loading value, namely 0.910.

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The test result in Table 2 showed that the values of the construct reliability of the entrepreneurial leadership variable (*X*), organizational learning capability variable (*Z*), and entrepreneurial performance variable (*Y*) were subsequently 0.929; 0.916; and 0.898 which were larger than the cut off value which was 0.7. This was consistent with the measurement based on the AVE value, since the entrepreneurial leadership variable (*X*), organizational learning capability variable (*Z*), and entrepreneurial performance variable (*Y*) subsequently had the AVE values of 0.724; 0.734; and 0.745 which were larger than the cut off value which was 0.5. This result confirmed that the indicator which measured the latent variable had shown unity of dimensions.

Table 2. Convergent Validity and Reliability Test

Variable	*Indicator*	*Standardized Loading*	*Square Standardized Loading*	*Error*	*Construct Reliability*	*AVE*
X	X_1	0.819	0.671	0.329	0.929	0.724
	X_2	0.842	0.709	0.291		
	X_3	0.897	0.805	0.195		
	X_4	0.870	0.757	0.243		
	X_5	0.824	0.679	0.321		
Total		4.252	3.620	1.380		
Square Total Std Loading		18.080				
Z	Z_1	0.896	0.803	0.197	0.916	0.734
	Z_2	0.901	0.812	0.188		
	Z_3	0.860	0.740	0.260		
	Z_4	0.762	0.581	0.419		
Total		3.419	2.935	1.065		
Square Total Std Loading		11.690				
Y	Y_1	0.839	0.704	0.296	0.898	0.745
	Y_2	0.910	0.828	0.172		
	Y_3	0.839	0.704	0.296		
Total		2.588	2.236	0.764		
Square Total Std Loading		6.698				

The Structural Equation Modeling Analysis

The structural equation modeling analysis tested the model and hypotheses developed in the research. The tests of the structural equation modeling consisted of two tests, namely the test of the model's goodness of fit and the test of causal significance in regression coefficient.

Normality Test

The normality test tried to find out whether in the model, the research variables had normal or nearing normal distributions. A distribution was considered normal if the normal curve did not tend to the left or to the right (symmetrical with the skewness value = 0), and it had ideal

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sharpness (the curtosis value = 0). The data would be distributed around the skewness and the negative or positive curtosis.

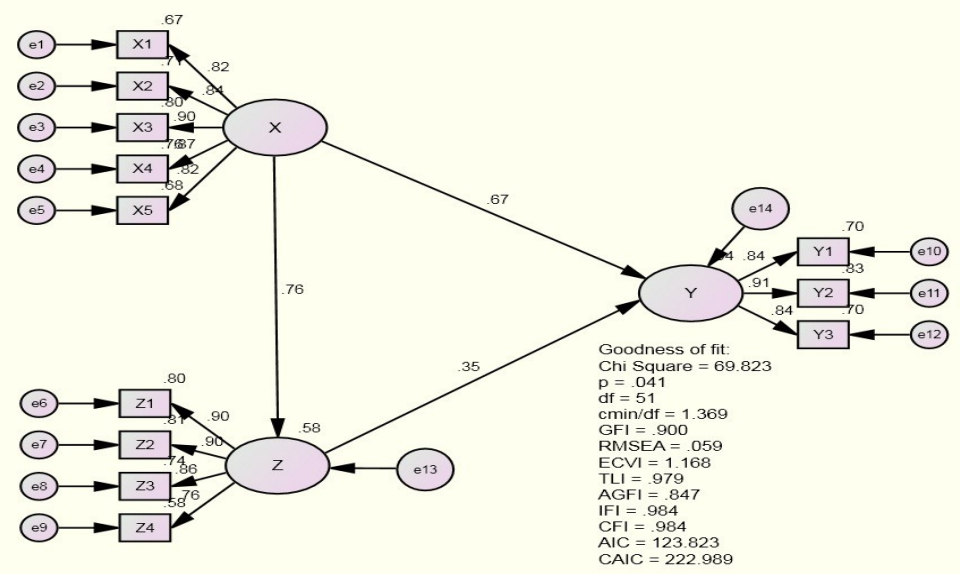

Figure 2. Structural Equation Model Test

According to Byrne (2010), in the analysis of covariance structure, curtosis value has more inluence than skewness value. Since SEM analysis is based on covariance analysis, evaluation of curtosis value has a greater role in determining univariate normality. A curtosis value of > 7 or < -7 indicates a breach of univariate normality. Table 3 showed that the curtosis values of all the variables had fulfilled the univariate normality criteria.

In the multivariate normality test, Bentler (2005) proposes that the data belongs to normal multivariate category if the critical ratio (cr) value is < 5.00. The test result showed that the multivariate cr value was 2.584, which was smaller that 5.00, therefore the data distribution in this research fulfilled the multivariate normality criteria.

Table 3. Normality Analysis

Variable	*min*	*max*	*skew*	*c.r.*	*kurtosis*	*c.r.*
Y_3	1.000	5.000	-.426	-1.800	-.252	-.533
Y_2	1.000	5.000	-.377	-1.592	-.426	-.899
Y_1	1.000	5.000	.061	.259	-.348	-.736
Z_1	1.500	5.000	-.155	-.653	-.365	-.771
Z_2	1.000	5.000	-.172	-.725	-.063	-.133
Z_3	1.000	5.000	-.197	-.834	-.540	-1.141
Z_4	1.000	5.000	.052	.220	-.249	-.526
X_1	1.000	5.000	-.395	-1.667	.034	.073
X_2	1.000	5.000	-.047	-.200	-.395	-.834
X_3	1.000	5.000	-.294	-1.240	-.283	-.597
X_4	1.000	5.000	-.083	-.351	-.415	-.877
X_5	1.000	5.000	-.414	-1.747	.046	.097
Multivariate					9.158	2.584

Outlier Test

Outliers multivariate test was performed by using Mahalanobis distance test where every data was calculated and would show the distance of the data from the average of all variables in a multidimensional space (Hair et al., 2010). If the highest value of data error probability (*p2*) in the Mahalanobis distance is larger than the significance level of 0.001, there are no multivariate outliers. If the value is smaller, there are multivariate outliers. The data with the highest Mahalanobis distance, which causes the outlier, will be presented in the most upper rank, while the lower ranks present the data with smaller distance. In this research, the result of the outliers test with the Mahalanobis distance had the highest value (*p2*) of 0.216. Thus, there were no multivariate outliers in this research since the *p2* value was 0.216 which was larger than 0.001. The result of the outliers test was given in Table 4.

Table 4. Multivariate Outliers Test

Observation Number	*Mahalanobis d-squared*	*p1*	*p2*
84	30.601	.002	.216
86	28.374	.005	.097
97	26.368	.010	.083
68	22.709	.030	.408
11	21.931	.038	.391
71	20.972	.051	.462
5	19.811	.071	.639
90	19.596	.075	.558
52	19.420	.079	.471
73	19.281	.082	.381

The Evaluation of the Model's Goodness of Fit

The result of the goodness of fit test on the structural model and boundaries of value criteria which showed good fit could be seen in Table 5. The whole goodness of fit test result showed that the model fitted the existing data, since most of the test result showed a good fit.

Table 5 (Part-I). Goodness of Fit (GOF) Test and Fit Rate of Structural Model

Measure of GOF	Fit Rate Target	Estimation	Fit Rate
Chi Square	Less than 68,67	X^2 = 69,82	Poor Fit
P	(p= 0,05, df = 51)	P = 0,041	Poor Fit
CMIN/DF	< 5	1,369	Good Fit
GFI	GFI ≥ 0,90	0,900	Good Fit
RMSEA	RMSEA ≤ 0,08	0,059	Good Fit
P (close fit)	P ≥ 0,05	0,317	Good Fit
ECVI	Less than ECVI saturated and independence	D* = 1,168 S* = 1,472 I* = 11,836	Good Fit

(D* = Default, S* = Saturated, I* = Independence)

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Table 5 (Part-II). Goodness of Fit (GOF) Test and Fit Rate of Structural Model

Measure of GOF	Fit Rate Target	Estimation	Fit Rate
TLI	TLI≥ 0,90	0,979	Good Fit
AGFI	AGFI ≥ 0,90	0,847	Marginal Fit
IFI	IFI ≥ 0,90	0,984	Good Fit
CFI	CFI ≥ 0,90	0,984	Good Fit
AIC	Less than AIC saturated and independence	D* = 123,823 S* = 156,000 I* = 1254,568	Good Fit
CAIC	Less than CAIC saturated and independence	D* = 222,989 S* = 442,481 I* = 1298,642	Good Fit

(D* = Default, S* = Saturated, I* = Independence)

The Variable Relationship Significance Test

The result of the structural model analysis between the research variables was presented in Table 6, which showed the influence of entrepreneurial leadership variable *(X)* on organizational learning capability variable *(Z)*, and the influence of entrepreneurial leadership variable *(X)* and organizational learning capability variable *(Z)* on entrepreneurial performance *(Y)*. The results of the structural model analysis were as follows:

1. Entrepreneurial leadership *(X)* had a positive influence on organizational learning capability *(Z)* because it had a positive standardized regression weight value which was 0.764. This meant that if entrepreneurial leadership improved, organizational learning capability would also improve according to the standardized regression weight value. The influence of entrepreneurial leadership on organizational learning capability was significant since it had an error probability value (p) of 0.000 which was smaller than the significance level (α) which was 0.05.
2. Entrepreneurial leadership *(X)* had a positive influence on entrepreneurial performance *(Y)*, since it had a positive standardized regression weight value which was 0.673. Thus, if entrepreneurial leadership improved, entrepreneurial performance would also improve according to the standardized regression weight value. The influence of entrepreneurial leadership on entrepreneurial performance was significant since it had an error probability value (p) of 0.000 which was smaller than the significance level (α) which was 0.05.
3. Organizational learning capability (Z) had a positive influence on entrepreneurial performance (Y) because it had a positive standardized regression weight value which was 0.352. This indicated that if organizational learning capability improved, entrepreneurial performance would also improve according to the standardized regression weight value. The influence of organizational learning capability on entrepreneurial performance was significant since it had an error probability value (p) of 0.000 which was smaller than the significance level (α) which was 0.05.

   Through the square value of multiple correlations (R^2) we can see the influence contribution of some variables on other variables. The research result showed that the influence contribution of entrepreneurial leadership on organizational learning

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capability was 0.583. This meant that 58.3% of organizational learning capability was influenced by entrepreneurial leadership, while the other 41.7% was influenced by other factors which were not studied in this research.

The influence contribution of entrepreneurial leadership and organizational learning capability on entrepreneurial performance was 0.938. Thus, 93.8% of entrepreneurial performance was influenced by entrepreneurial leadership and organizational learning capability, while the other 6.2% was influenced by other factors which were not studied in this research.

Table 6. Structural Model Analysis

Effect	*Unstandardized Regression Weight*	*S.E.*	*C.R.*	*P*	*Standardized Regression Weight*	*Squared Multiple Correlations*
$Z \leftarrow X$	0.687	0.098	6.986	0.000	0.764	0.583
$Y \leftarrow X$	0.661	0.095	6.927	0.000	0.673	0.938
$Y \leftarrow Z$	0.385	0.096	3.993	0.000	0.352	

To evaluate the influence of intervening mediation, Baron and Kenny in Frazier et al., (2004) suggest that we employ the following criteria:

a. The influence of independent variable on dependent variable is not significant (without intervening variable), or significant which was evaluated by the next criteria.

b. The influence of independent variable on intervening variable should be significant.

c. The influence of intervening variable on dependent variable should be significant.

d. When the influence of independent variable on dependent variable was significant with the presence of intervening variable, it was called partial intervention. When the influence of independent variable was not significant with the presence of intervening variable, it was called full intervention.

4. The result of the analysis of the influence of entrepreneurial leadership on entrepreneurial performance by excluding the organizational learning capability intervening variable from the model was presented in Table 7. We could see that when organization learning capability intervening variable was excluded from the analysis model, entrepreneurial leadership exogen variable had a significant influence on entrepreneurial performance. This was indicated by the error probability value (p) of each variable which was 0.000 which was smaller than the significance level (α) which was 0.05.

Table 7. Effect Entrepreneurial Leadership to Entrepreneurial Performance without Organizational Learning Capability

Effect	*Unstandardized Regression Weight*	*Standardized Regression Weight*	*P*	*Remarks*
$X \rightarrow Y$	0.895	0.938	0.000	Significant

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The value of the indirect effect could be obtained by multiplying the path coefficient of the influence of exogen variable on intervening variable with the influence of intervening variable on endogen variable. The direct and indirect effects could be seen in Table 8.

Table 8. Standardized Direct Effect, Standardized Indirect Effect, and Standardized Total Effect

Effect	*Direct Effect*	*Indirect Effect*	*Total Effect*
$X \rightarrow Y$ (through Z)	0.673	0.269	0.942

According to Hair et al. (2010), the intervening variable absorption on the direct influence of exogen variable on endogen variable can be seen from the Variance Accounted For (VAF) value. VAF determines the indirect influence which relates to total effect (direct effect + indirect effect), thus we can determine how far the endogen variable variance was directly explained by the exogen variable, and how far the endogen construct variance was explained by the indirect influence through the intervening variable. Hair et al. (2010) state that if the VAF value is larger than 80%, there is a full intervention. If the VAF value is larger than 20% but smaller than 80%, there is a partial intervention. If the VAF value is smaller than 20%, the intervention is quite weak. The VAF value is calculated by dividing indirect effect with total effect.

In the previous path coefficient significance test presented in Table 6, entrepreneurial leadership variable had a positive and significant influence on entrepreneurial performance. Then entrepreneurial leadership had a direct, positive, and significant influence on entrepreneurial performance without intervening variable. This showed that conditions 1, 2, and 3 were fulfilled to show the presence of intervening influence. The VAF value of organizational learning capability intervention towards the influence of entrepreneurial leadership on entrepreneurial performance was 0.269/0.942 = 0.286. This meant that 28.6% influence of entrepreneurial leadership on entrepreneurial performance was explained by the influence of organizational learning capability intervention. Since the VAF value was larger than 20% but smaller than 80%, we concluded that there was a condition of partial intervention (Hair et al., 2010).

DISCUSSION

The Test of the First Hypothesis

The first hypothesis which stated that entrepreneurial leadership had a significant influence on organizational learning capability in the undergraduate programs with A or B accreditation grade in East Java, Indonesia, could be accepted. The analysis result showed that the error probability value (p) of the influence of entrepreneurial leadership on organizational learning capability was 0.000, smaller than the significance level (α) which was 0.05, with a positive standardized regression weight value of 0.764. Therefore we could conclude that entrepreneurial leadership had a positive and significant influence on organizational learning capability.

This finding agreed with the opinion of experts which states that learning is important for the whole organization's capability to evaluate and to adapt to changing conditions. Learning is important for managers when they have to overcome crises effectively and immediately. Learning is important for executives who have the responsibility to articulate and apply continuously developing strategies (Yeung et al, 1999). Bhatnagar (2006) states that organizational learning capability has a close relationship to leadership. The result of this research showed that the capability of a study program head to anticipate the future, maintain

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flexibility, think strategically, and cooperate with other people to start a change which would create a healthy future for the entrepreneurship programs in his study program had a positive influence on his capacity to generate ideas and generalize the ideas with impacts. This finding confirmed the importance of entrepreneurial leadership as the chief requirement in the selection of a study program head, in order to create learning capability in the study program.

The Test of the Second Hypothesis

The second hypothesis which stated that entrepreneurial leadership had a significant influence on entrepreneurial performance in the undergraduate programs with A or B accreditation grade in East Java, Indonesia, could be accepted. The analysis result showed that the error probability value (p) of the influence of entrepreneurial leadership on entrepreneurial performance was 0.000, smaller than the significance level (α) which was 0.05, with a positive standardized regression weight value of 0.673. Therefore we could conclude that entrepreneurial leadership had a positive and significant influence on entrepreneurial performance. A study program head who had innovativeness, risk taking capacity, proactiveness, competitive aggresiveness, and autonomy was more capable to direct and urge all the potentials within his study program to work maximally in order to achieve the expected organizational performance.

This finding agreed with the conclusion of experts like McGrath and MacMillan (2000) who state that entrepreneurial leaders have the capability to utilize opportunities to gain profit for their organizations more quickly than other leaders. This can happen because entrepreneurial leadership has a strategic orientation which is urged by perception of opportunities; commitment to opportunities; commitment of resources; control of resources; and realistic vision (Winardi, 2008) and shows fitting behavior such as defining organization's vision or goal; improving skills and practicing continuously; developing human resources; sustaining the culture which exists within the organization; practicing moral values in the practices of the organization; stabilizing and balancing the function of control within the organization (Kuratko and Hodgetts, 2001). Liden et al. (1993) assume that leader's behavior or leadership style is closely related to employee performance. Cassar (2006) presented the importance of entrepreneurial leadership for employee performance and for the success of entrepreneurial bussinesses. While Garcia-Morales et al. (2008) propose that (transformational) leadership influences organizational performance. Gibson et al. (2009) emphasize that performance in an organization is influenced by the leader's behavior. Besides, Redmond et al (1993) state that when effective leaders can solve problems creatively, employees will have better creative performance. There is a positive correlation between the leader's supporting attitude and the employee's creativity. Employee's creativity is closely related to manager's effort to understand employee's feeling and emotion (Stahl and Koser, 1978; Oldham and Cummings, 1996). This is confirmed by the findings which show that an effective leader influences his followers to show expected behavior to achieve desired goals. There are various leadership styles which influence organizational effectiveness or performance (Nahavandi, 2002). This finding confirmed the importance of entrepreneurial leadership as the chief requirement in the selection of a study program head in order to improve the performance of the study program.

The Test of the Third Hypothesis

The third hypothesis which stated that organizational learning capability has a significant influence on entrepreneurial performance in the undergraduate programs with A or B accreditation grade in East Java, Indonesia, could be accepted. The analysis result showed that the error probability value (p) of the influence of organizational learning capability on entrepreneurial performance was 0.000, smaller than the significance level (α) which was 0.05, with a positive standardized regression weight value of 0.352. Therefore we could conclude

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that organizational learning capability had a positive and significant influence on entrepreneurial performance. The respondents stated that when the study program head possessed a high capability to generate ideas and generalize the ideas with impacts on the entrepreneurship programs in his study program, this would improve the performance of the study program. On the other hand, the entrepreneurial performance of a study program would not be realized if the study program head possessed insufficient capacity to generate ideas and generalize the ideas with impacts on the entrepreneurship programs in his study program.

This finding agreed with the following previous theories or research results: Yeung et al. (1999) assume that the type of the learning style can characterize an organization and identify the profile of the organization's learning capability. This profile represents the organization's method of generating ideas which will have impacts. Then Bhatnagar (2006) proposes that once developed, the profile of learning capability can be used to describe how the learning takes place and what are the changes in the learning that can help the organization to be more competitive. Yeung et al. (1999) also state that learning companies can adapt to the change of customer needs more quickly. They can also achieve their financial goals for growth and profitability better.

CONCLUSION & IMPLICATION

From the data processing and SEM analysis we could make some conclusions from this research, namely entrepreneurial leadership had a significant influence on organizational learning capability, entrepreneurial leadership had a significant influence on entrepreneurial performance, and organizational learning capability had a significant influence on entrepreneurial performance. These findings agreed with the findings of previous researches performed by experts.

In order to create organizational learning capability and to achieve entrepreneurial organizational performance, in the selection of organization leaders including heads of undergraduate programs with A or B accreditation grade in East Java, the policy makers should consider the entrepreneurial leadership requirement besides other administrative requirements. Organization leaders which are equipped with entrepreneurial leadership will have competitive advantage, risk taking capacity, pro-activeness, aggresiveness, and autonomy, which are needed by an organization to enhance organizational learning capability and entrepreneurial organizational performance.

A study program head has a central and significant role, not only in realizing entrepreneurial performance and organizational sustainability of his study program, but also in supporting the university. Therefore study program heads should be equipped and should also equip themselves with the mastery and understanding of the values, vision, mission, and culture of the university, and with the capacity and capability to achieve competitive advantage, risk taking capacity, proactiveness, aggresiveness, and autonomy.

The research model as presented in Figure 2, which became the conceptual frame of this research, was tested and accepted, and proved that an organization's entrepreneurial performance was directly and indirectly influenced by variables like entrepreneurial leadership and organizational learning capability. The influence contribution of entrepreneurial leadership and organizational learning capability on entrepreneurial performance was 0.938 (presented in Table 6). This meant that 93.8% of entrepreneurial performance was influenced by entrepreneurial leadership and organizational learning capability, while the other 6.2% was influenced by other factors which were not studied in this research. Therefore, we would like to suggest that future researches develop a research model which also examined other variables or constructs such as organizational commitment, organizational citizenship behavior, etc.

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The findings of this research confirmed that the concept of entrepreneurial performance could also be executed in university organizations as in business organizations. This was also an answer to the fastly changing environment of universities. Future researches should also apply this research model on other non-business organizations in order to find out the level of the generalization of the research model.

REFERENCES

[1] Aragon-Correa et al. (2007). Leadership and Organizational Learning's Role on Innovation and Performance: Lessons from Spain. *Industrial Marketing Management, 36*(3), 349–359.

[2] Armstrong, M. (2000). The Learning Organization: Changed Means to an Unchanged End. *Organization, 7*(2), 355–361.

[3] Badan Akreditasi Nasional-Perguruan Tinggi. (2014). *Accreditation Directory.* Retrieved October 25, 2014, from http://ban-pt.kemdiknas.go.id/

[4] Bateman, T. S., & Snell, S. (2009). *Management: Leading & Collaborating in a Competitive World.* Eigth Edition. New York: McGraw Hill.

[5] Bello et al. (2004). An Institutional Analysis of Supply Chain Innovations in Global Marketing Channels. *Industrial Marketing Management, 33*(1), 57–64.

[6] Bentler, P. M. (2005). *EQS 6 Structural Equations Program Manual*. Encino, CA: Multivariate Software (www.mvsoft.com).

[7] Bhatnagar, J. (2006). Measuring Organizational Learning Capability in Indian Managers and Establishing Firm Performance Linkage: An Empirical Analysis. *The Learning Organization*, *13*(5), 416–433.

[8] Bower, D. (1993). The Learning Organization: A Rover Perspective. *Executive Development,* 6(2), 3–6.

[9] Bueno, E., & Ordon˜ez, P. (2004). Innovation and Learning in the Knowledge Based Economy: Challenges for the Firm. *International Journal of Technology Management, 27*(6/7), 531–533.

[10] Byrne, B. M. (2010). *Structural Equation Modeling with AMOS, Basic Concepts, Applications and Programming* (Second Edition). New York: Routledge, Taylor & Francis Group.

[11] Cassar, G. (2006). Entrepreneur Opportunity and Intended Venture Growth. *Journal of Business Venturing, 21*(5), 610–632.

[12] Chrisman, J. J., & McDougall, P. (Fall 1986). Entrepreneurial Performance Research: References. *Sloan Management Review (1986-1998), 28*(1).

[13] Damanpour, F., & Gopalakrishnan, S. (2001). The Dynamics of the Adoption of Product and Process Innovations in Organizations. *Journal of Management Studies, 38*, 45–65.

[14] DiBella, A. (1995). Developing Learning Organizations: A Matter of Perspective. *Proceedings of the 1995 Academy of Management Meeting*, 287–290.

[15] DiBella et al., (1996). Organisational Learning Style as a Core Capability. In Moingeon, B. and Edmondson, A. (eds.) *Organisational Learning and Competitive Advantage.* London: Sage.

ISSN: 2223-9944, eISSN: 2223-9553

[16] The Directorate General of Higher Education, Ministry of Education and Cultural Affairs (2013). *Data Evaluation of Higher Education.* Retrieved July 18, 2013, from the Higher Education Data Base, the Directorate General of Higher Education, Ministry of Education and Cultural Affairs: http://forlap.dikti.go.id/.

[17] Frazier et al. (2004). A meta-analysis of intellectual and neuropsychological test performance in attention-deficit/hyperactivity disorder. *Neuropsychology*, *18*, 543–555.

[18] Garcia-Morales et al. (2008). Influence of Transformational Leadership on Organizational Innovation and Performance Depending on the Level of Organizational Learning in the Pharmaceutical Sector. *Journal of Organizational Change*, 21(2), 188–212.

[19] Garvin, D. A. (2000). *Learning in Action: A Guide to Putting the Learning Organization to Work.* Boston: Harvard Business School Press.

[20] Gibson et al. (2009). *Organizations* (Thirteenth Edition). New York: McGraw-Hill/Irwin.

[21] Goh, S. C. (1998). Toward a Learning Organization: The Strategic Building Blocks. *Sam Advanced Management Journal, 63*(2), 15–22.

[22] Goh, S. C. (2003). Improving Organizational Learning Capability: Lessons From Two Case Studies. *Learning Organization, 10*(4), 216–227.

[23] Goh, S. C. & Richards, G. (1997). Benchmarking the Learning Capability of Organizations. *European Management Journal*, *15*(5), 575–583.

[24] Grant, R. M. (1991). Contemporary Strategy Analysis: Concepts, Techniques and Applications. Cambridge: Black-well Publishers.

[25] Hair et al. (2010). *Multivariate Data Analysis* (Seventh Edition).Upper Saddle River, NJ: Prentice Hall.

[26] Hartanto, F. M. (2009). *Paradigma Baru Manajemen Indonesia: Menciptakan Nilai dengan Bertumpu pada Kebijakan dan Potensi Insani.* Bandung: PT Mizan Pustaka.

[27] Hayton, J. C. (2003). Strategic Human capital Management in SMEs: An Empirical Study of Entrepreneurial Performance. *Human Resource Management, 42*(4), 375–391.

[28] Hult, G. T. M., & Ferrell, O. C. (1997). Global Organizational Learning Capability in Purchasing: Construct and Measurement. *Journal of Business Research*, *40*, 97–111.

[29] Hult et al. (2004). Innovativeness: Its Antecedents and Impact on Business Performance. *Industrial Marketing Management, 33*, 429–438.

[30] Hurley, R. F., & Hult, G. T. M. (1998). Innovation, Market Orientation and Organizational Learning: An Integration and Empirical Examination. *Journal of Marketing, 62*(3), 42–54.

[31] Jerez-Gomez et al., (2005). Organizational Learning and Compensation Strategies: Evidence from the Spanish Chemical Industry. *Human Resource Management, 44*(3), 279–299.

[32] Kuratko, D. F., & Hodgetts, R. M. (2001). *Entrepreneurship: A Contemporary Approach.* Fort Worth: Harcourt College Publishers.

[33] Lei et al. (2000). Designing Organizations for Competitive Advantage: The Power of Unlearning and Learning. *Organizational Dynamics, 27*(3), 24–38.

ISSN: 2223-9944, eISSN: 2223-9553

[34] Leonard-Barton, D. (1992). The Factory as a Learning Laboratory. *Sloan Management Review, 34*(1), 23–38.

[35] Liden et al. (1993). A Longitudinal Study on the Early Development of Leader-Member Exchange. *Journal of Applied Psychology*, *78*, 662–674.

[36] Lumpkin, G. T., & Dess, G. G. (2001). Linking Two Dimensions of Entrepreneurial Orientation to Firm Performance: The Moderating Role of Environment and Industry Life Cycle. *Journal of Business Venturing, 16*(5), 429–451.

[37] Lynn, G. S., & Akgün, A. E. (2000). A New Product Development Learning Model: Antecedents and Consequences of Declarative and Procedural Knowledge. *International Journal Technology Management, 20*, 490–510.

[38] Marquardt, M. J. (2006). *Building the Learnng Organization.* New York: McGraw-Hill Companies, Inc.

[39] McGrath, R. G., & MacMillan, I. C. (2000). *The Entrepreneurial Mindset: Strategies for Continuously Creating Opportunity in an Age of Uncertainty.* Boston, MA: Harvard Business School Press.

[40] Nahavandi, A. (2002). *The Art and Science of Leadership* (Third Edition). Upper Saddle River, NJ: Prentice Hall.

[41] Noon, M., & Blyton, P. (2002). *The Realities of Work.* Hampshire: Houndsmills.

[42] Oldham, G. R., & Cummings, A. (1996). Employee Creativity: Personal and Contextual Factors at Work. *Academy of Management Journal, 39*, 607–634.

[43] Pettigrew, A., & Whipp, R. (1991). *Managing Change for Competitive Success*. Oxford, England: Basil Blackwell.

[44] Pfeffer, J. (1994). *Competitive Advantage through People*. Boston, MA: HBS Press.

[45] Popper, M., & Lipshitz, R. (1998). Organizational Learning Mechanisms: A Structural and Cultural Approach to Organizational Learning. *Journal of Applied Behavioral Science, 34*, 161–179.

[46] Redmond et al. (1993). Putting Creativity in Work: Effects of Leader Behavior on Subordinate Creativity. *Organizational Behavior and Human Decision Processes*, *55*, 120–151.

[47] Richard et al. (2009). Measuring Organizational Performance: Towards Methodological Best Practice. *Journal of Management*, *35*(3), 718–804.

[48] Robbins, S., & Judge, T. (2013). *Organizational Behavior* (Fifteenth Edition). Upper Saddle River: Pearson.

[49] Roebuck, C. (2011). *Entrepreneurial Leadership and HR – The Future for HR and Business.* Retrieved October 28, 2013, from Chris Roebuck Transforming Organisasional & Individual Performance via Entrepreneurial Leadership: http://chrisroebuck.co/media/tv-and-radio-interviews/1299-2/

[50] Roomi, M. A., & Harrison, P. (2011). Entrepreneurial Leadership: What Is It and How Should It Be Taught? *International Review of Entrepreneurship, 9*(3). Senate Hall Academic Publishing.

[51] Sadler-Smith et al. (1999). Adding Value to HRD: Evaluation, Investors in People and Small Firm Training. *Human Resource Development International, 2*(4), 369–390.

ISSN: 2223-9944, eISSN: 2223-9553

[52] Snell et al. (1996). Establishing a Framework for Research in Strategic Human Resource Management. Merging Resource Theory and Organisational Learning. In G.Ferris (Ed.) *Research in Personnel and Human Resource Management, 14*, 61–90.

[53] Stahl, M. J., & Koser, M. C. (1978). Weighted Productivity in R&D: Some Associated Individual and Organizational Variables. *IEEE Transactions on Engineering Management,* EM-*25*, 20 –24.

[54] Storey, J., & Quintas, P. (2001). Knowledge Management and HRM. In Storey, J (Ed). *Human Resource Management: A Critical Text.* London: Thomson Learning.

[55] Suryana. (2007). *Kewirausahaan Pedoman Praktis: Kiat dan Proses Menuju Sukses. Edisi Ketiga.* Jakarta: Salemba Empat.

[56] Ulrich et al. (1993). High Impact Learning: Building and Iffusing Learning Capability. *Organizational Dynamics*, *22*(2), 52–66.

[57] Winardi, J. (2008). *Manajemen Perubahan*. Jakarta: Kencana.

[58] Yang, C. W. (2008). The Relationships among Leadership Styles, Entrepreneurial Orientation, and Business Performance. *Managing Global Transitions, 6*(3), 257–275.

[59] Yeung et al. (1999). *Organizational Learning Capability: Generating and Generalizing Ideas with Impact.* Oxford: Oxford University Press.

ISSN: 2223-9944, eISSN: 2223-9553