

HOSTED BY

Contents lists available at ScienceDirect

Asia Pacific Management Review

journal homepage: www.elsevier.com/locate/apmr

The influence of organizational learning capability and organizational creativity on organizational innovation of Universities in East Java, Indonesia

Eddy Madiono Sutanto

Management Department, Faculty of Economics, Petra Christian University, Surabaya, Indonesia

ARTICLE INFO

Article history:

Received 11 March 2015

Accepted 29 November 2016

Available online xxx

Keywords:

Organizational learning capability

Organizational creativity

Organizational innovation

Higher education

University

East Java

Indonesia

ABSTRACT

In traditional business settings, learning capability and creativity are significant factors to push an innovation level. However, it's wondered whether if the same phenomenon will take place in higher educational institutions. This research used purposive random sampling method which involved 179 lecturers from all universities in East Java Province of Indonesia. The results indicated that both variables influenced organizational innovation, partially and simultaneously. There was no difference category either on public or private universities on those variables. Discussions and suggestions are provided to enhance further researches and universities management.

© 2016 College of Management, National Cheng Kung University. Production and hosting by Elsevier Taiwan LLC. All rights reserved.

1. Introduction

Globalization has made changes in many sectors. Each change demands higher product quality and higher service. The high demands cannot be avoided by people who work in commercial enterprise and industry and also by people who exercise in other sectors, such as university administrators. One of the needs faced by university administrators is to enhance a performance which creates a learning procedure which will yield graduates who are able to fill the needs of this historic period. This immense challenge requires changes in leadership, learning capacity, creativity, and innovative capability in all the components of the university.

Higher education is very important and vital for a country's development. Universities have the role and function as the center of knowledge and change, therefore universities should produce highly resourceful graduates (Hartanto, 2009). The university's role as an agent of change can become an alternative parameter based on the university's ideology which is known as the university's three duties which include education/instruction, research, and community service (Munir, 2009).

Universities in Indonesia are facing this huge challenge. This is

paired with the ratification of Asean Economic Community (AEC) by the close of 2015. Subsequently the government signs the free trade pact, there will be greater competitions faced by the universities, namely among universities in Indonesia, and also between Indonesian universities and foreign universities which may overwhelm Indonesia in the near future.

The great environmental and expectations changes faced by university graduates require universities to develop new and effective approaches, paradigms, practices, and strategies. The orientation of university management, including the management of the faculties and departments within the university should be readjusted. Universities should reorient, restructure, and redefine their organization, management, and strategies.

The universities' contribution towards our country's competitive advantage can be increased if the organizational health of higher education is good. Universities are required to produce highly qualified graduates with entrepreneurial spirit, who can create employment; develop and distribute knowledge, applied science, and art; participate actively in the growth of our nation's culture; and enhance the quality of the services rendered to the residential area. In order to meet these demands, Indonesian Universities are obliged to make changes through professional, progressive, creative, and innovative management, and entrepreneurial leadership.

The university administrators hold an important role in the success of the university's programs including entrepreneurship

E-mail address: esutanto@petra.ac.id.

Peer review under responsibility of College of Management, National Cheng Kung University.

<http://dx.doi.org/10.1016/j.apmr.2016.11.002>

1029-3132/© 2016 College of Management, National Cheng Kung University. Production and hosting by Elsevier Taiwan LLC. All rights reserved.

program. As the holder of authority in the university departments, university administrators have a central position and role. If the university administrators as a leader do not have leadership, capability, creativity, and innovative power, a department may go into a steep path. Thus, it is necessary to perform researches which study the university administrators' role in supporting their organization to achieve the expected performance.

The huge growth of information and communication technology at present and in the future will increase the flow of globalization around the Earth. This will increase competitions and uncertainty in industry and business. This alteration does not only affect profit oriented companies, but universities also. Therefore, universities are looking bigger and harder challenges. The competitions among universities are getting more exacting. This situation compels university administrators to continuously seek creative and advanced schemes in order to exist or to win the contests. Successful universities are not only successful in attaining their vision and missionary post, but also successful in contributing to overcome educated unemployment, by focusing on entrepreneurship programs in order to develop new entrepreneurs.

Several researchers have studied the influence of innovation variable or organizational innovation variable on performance. Innovation is regarded as an important factor in the company's performance and company's survival within a competitive surroundings (Aragon-Correa, Garcia-Morales, & Cordon-Pozo, 2007; Bello, Lohtia, & Sangtani, 2004; Bueno & Ordon˜ez, 2004; Dam- anpour & Gopalakrishnan, 2001; Ho, 2011; Salim & Sulaiman, 2011). The capability to learn is a necessary factor for an organization to grow and to innovate (Hult, Hurley, & Knight, 2004; Jim6nez-Jim6nez & Sanz-Valle, 2011; Jerez-Gomez Cespedes-Lor- ente & Valle-Cabrera, 2005; Lynn & Akg6n, 2000). Effective organizational innovation is the key to build and maintain a competitive advantage to face environmental changes (Lemon & Sahota, 2004; Liao, Fei, & Liu, 2008).

Some other variable which influences performance is leadership. Behavior of leaders greatly influences employees' performance. Leadership is influencing on innovation processes and activities (Oke, Munshi, & Walumbwa, 2009). Moreover, both innovation and transformational leadership influence on organizational performance (Samad, 2012). Leaders influence employees' innovative behavior, both through their deliberate actions aiming to stimulate idea generation and application as well as by their more general, daily behavior (De Jong & Den Hartog, 2007). This is supported by the finding which proves that an effective leader influences his followers to show expected behavior in order to reach expected goals. Leadership style influences organizational effectiveness or organizational performance (Nahavandi, 2002, p. 125). Yang (2008) adds that transformational leadership has a more significant correlation with business performance compared to other leadership styles.

This research focussed on the management of accredited universities (with grades A and B) which offer undergraduate programs in East Java, which have entrepreneurship program in their learning-instructing processes. University departments with grade A and B accreditation represent other university departments in Indonesia and can be considered as an important and valuable standard. The accreditation status of a university department shows the quality of the education process in the department (National Accreditation Board of Higher Education, 2014). This research observed the opinions of lecturers of undergraduate programs with class A and B accreditation in East Java who had full knowledge of their departments, especially their leaders or heads of sections. It was expected that this research might give inputs for developing a model for the management of university departments which can meet the challenges of this age. The aims of this research

were as follows: to test and analyze the influence of organizational learning capability on organizational innovation, the influence of organizational creativity on organizational innovation, the influence of organizational learning capability and organizational creativity in organizational innovation in universities in East Java, Indonesia.

2. Relationship between the concept and the hypothesis of the research

2.1. Organizational learning capability and organizational innovation

The greater the innovation achieved by an organization, the greater also the learning and the change required by the system. The foundation of organizational knowledge through which new knowledge is gained from existing knowledge (organizational learning) stimulates organizational innovation (Sanz-Valle, Naranjo-Valencia, Jim6nez-Jim6nez, & Perez-Caballero, 2011). A high innovation requires a high and effective organizational learning capability (Ho, 2011). A learning organization is an innovative organization (Nooteboom, 2010, p. 131). Organizational learning capability has a positive and significant influence on company's innovation (Chung, Sue, & Guan, 2011; Tohidi & Mandegari, 2012). This research aimed to recover out the relationship between these variables by proposing the following theory:

H1. Organizational learning capability has a substantial influence on organizational innovation of universities in East Java, Indonesia.

2.2. Organizational creativity and organizational innovation

Creativity is an important element of innovation. A company needs processes, operations, and structures which enable timely and efficient performance of projects so that its wares are genuinely innovative (Stamm, 2008). Invention is an execution of successful creative ideas in an organization (De Sousa, Pellissier, & Monteiro, 2012). According to this view, individual and group creativity is the starting point of innovation. Nevertheless, a successful innovation also depends on other components such as transfer of technology. This research sought to ascertain out the relationship between these variables by proposing the following theory:

H2. Organizational creativity has a substantial influence on organizational innovation of universities in East Java, Indonesia.

This research was performed to test and analyze the relationship or influence between the variables as detailed above and as can be seen in the conceptual frame in Fig. 1.

3. Research method

This was a quantitative research project. The approach used in this research was through multiple linear regression analysis, which aimed to test and analyze the influence between independent (exogen) variable and dependent (endogen) variable. The population was lecturers of undergraduate programs by grade A and B accreditation of universities in East Java, Indonesia. This research used purposive sampling technique or sampling with specific consideration (Sugiyono, 2013, p. 122).

The data collection technique used was through questionnaire of respondents' characteristics, research variables, and open questions. These questionnaires were distributed via emails to the lecturers. Six of the 185 questionnaires collected from the respondents

were considered not valid because they were sent by lecturers of unaccredited university programs. Thus, the number of the questionnaires processed was 179, which are 62 public universities and 117 private universities.

The collected data was processed through initial tests which included validity test, reliability test, classical assumption test, and multiple linear regression analysis, using the SPSS version 21.0. The validity test used the comparison of calculated r . If the calculated r was positive and $>$ critical r which was 0.30, the data was considered valid. If the calculated r was negative and $<$ 0.30, the data was considered not valid (Sugiyono, 2013). The reliability test was performed to find out how far the measurement results were consistent if the measurement was performed twice or more than twice in a similar situation with similar measurement tool (Siregar, 2013). If the value of the Cronbach Alpha was $>$ 0.6, the data could be considered reliable (Priyatno, 2012).

We set the operational definition of each variable as follows: Organizational Learning Capability variable was defined as the capability of the department head to produce ideas and generalize the ideas so that they could have impacts on the department. The department head's capability was measured by lecturers' opinions. The indicators of Organizational Learning Capability variable used in this research were as proposed by Yeung, Ulrich, Nason, and Glinow (1999), namely Discovery Capability, Invention Capability, Implementation Capability, and Diffusion Capability.

The organizational Creativity variable was defined as the department head's efforts to create new products, services, ideas, procedures, or processes which were valuable and beneficial. This variable would be measured by several indicators to find out the department head's intensity in accomplishing these efforts. The indicators of Organizational Creativity variable used in this research were as proposed by Brown (1989); Harrington (1990); Woodman, Sawyer, and Griffin (1993), namely the presence of new/creative processes, the presence of new/creative ideas, the presence of new/creative persons, the presence of new/creative situations, the presence of new/creative procedures.

The organizational Innovation variable was defined as the department head's efforts to utilize/execute the new ideas, behaviors, products, services, technologies, and administrative practices. This variable would be measured by several indicators to find out the department head's intensity in accomplishing these efforts. The indicators of Organizational Innovation variable used in this research were as proposed by Damanpour and Gopalakrishnan (2001); Hage and Aiken (1970); Oerlemans, Meeus, and Boekema (1998); Zaltman, Duncan, and Hulbek (1973); Zammuto and O'Connor (1992), namely utilize/execute new ideas, utilize/execute new behaviors, utilize/execute new products, utilize/execute new academic services, utilize/execute new technology,

utilize/execute new administrative practices.

4. Results and analyses

The validity test was performed to find out how well a measurement tool measured an object. Following are the results of the validity tests of the research variables. Table 1 indicates that the coefficient value of the correlation between the five statements concerning Organizational Learning Capability was larger than the critical value which was 0.3. This proved that the five statements were valid.

Table 2 indicates that the coefficient value of the correlation between the five statements concerning Organizational Creativity was larger than the critical value which was 0.3. This showed that the five statements were valid.

Table 3 indicates that the coefficient value of the correlation between the six statements concerning Organizational Innovation was larger than the critical value which was 0.3. This showed that the six statements were valid.

The results of the reliability test of the research variables can be seen in Table 4. The Cronbach Alpha values of the three variables were larger than the critical point which was 0.6. Thus, the three variables could be considered reliable.

The classical assumption test was done to recover out the data pattern, variation, and linearity. Pursuit was the consequence of the classical assumption test: the normality test was performed to recognize whether the data had normal distribution or non. This test could be performed through One Sample Kolmogorov-Smirnov Test and graphical analysis (normal P-P plot). The results of the normality test can be seen in Table 5 and Fig. 2.

Table 5 shows that the data used in this research had a normal distribution. This was indicated by the significance value (Asymp. Sig. (2-tailed)) which was larger than 0.05, namely 0.240, and Fig. 2 shows that the points had the pattern of spreading and following the diagonal line.

The multicollinearity test was performed to find out whether there was a perfect correlation between the independent variables or not. The outcome of this examination was good if there was no multicollinearity or if in that location was no perfect correlation between the independent variables. This can be viewed in the tolerance and variance inflating factor (VIF) values. The results of the multicollinearity test can be seen in Table 6.

Table 6 shows that there was no multicollinearity between the independent variables of this research. This was suggested by the tolerance value which was larger than 0.1, namely 0.380, and the VIF value which was smaller than 10, namely 2.629.

The heteroscedasticity test was performed to find out whether there was a variance similarity between the residue of an observation and that of another observation in the regression model. The method used was Glejser and graphic. The results of heteroscedasticity test can be seen in Table 7 and Fig. 3.

Table 7 shows that there was no heteroscedasticity. This was indicated by the significance value of the Organizational Learning Capability and Organizational Creativity which was larger than 0.05, namely 0.380, and by Fig. 3 which shows that the points spread in an irregular pattern.

4.1. The descriptive analysis of organizational learning capability

The Organizational Learning Capability variable was measured by using the following indicators, namely discovery capability, invention capability, implementation capability, and diffusion capability. Each indicator could be analyzed by observing the mean of respondents' answers. The formula to determine the length of class interval was as follows: Interval = (Highest value – Lowest value):

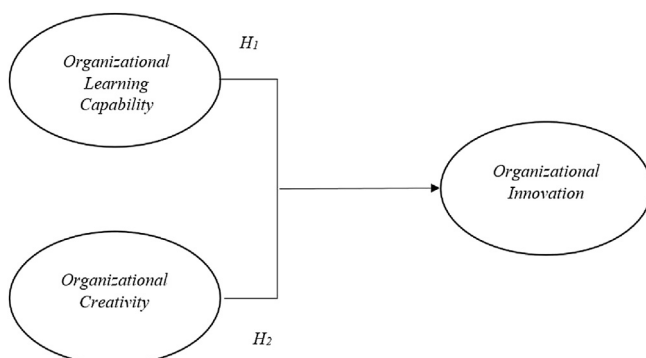


Fig. 1. Conceptual framework.

Table 1
Organizational learning capability validity test.

Statement	Critical point	Pearson correlation coefficient	Validity
Discover the difference between expectation and reality	0.3	0.775	Valid
Analyze the differences	0.3	0.912	Valid
Invent solutions to overcome the differences	0.3	0.937	Valid
Implement the solutions to overcome the differences	0.3	0.910	Valid
Apply the solutions to each new situation in order to overcome the differences	0.3	0.893	Valid

Table 2
Organizational creativity validity test.

Statement	Critical point	Pearson correlation coefficient	Validity
Create new elements for development	0.3	0.909	Valid
Develop new/creative ideas for development	0.3	0.910	Valid
Awaken people's creativity for development	0.3	0.885	Valid
Construct new/creative situations for development	0.3	0.883	Valid
Make new/creative methods or procedures for development	0.3	0.874	Valid

Table 3
Organizational innovation validity test.

Statement	Critical point	Pearson correlation coefficient	Validity
Utilize/execute new ideas for development	0.3	0.884	Valid
Utilize/execute new behaviors for development	0.3	0.906	Valid
Utilize/execute new products for development	0.3	0.887	Valid
Utilize/execute new academic services for development	0.3	0.865	Valid
Utilize/execute new technologies for development	0.3	0.847	Valid
Utilize/execute new administrative practices for development	0.3	0.864	Valid

Table 4
Reliability test.

Variable	Critical point	Cronbach's alpha	Remarks
Organizational Learning Capability	0.6	0.932	Reliable
Organizational Creativity	0.6	0.936	Reliable
Organizational Innovation	0.6	0.939	Reliable

Table 5
Normality test.

One-sample Kolmogorov-Smirnov test		
		Unstandardized residual
N		179
Normal Parameters (a, b)	Mean	0.000
	Std. Deviation	0.471
Most Extreme Differences	Absolute	0.077
	Positive	0.072
	Negative	-0.077
Kolmogorov-Smirnov Z		1.029
Asymp. Sig. (2-tailed)		0.240
a	Test distribution is Normal	
B	Calculated from data	

Table 6
Multicollinearity test.

Variable	Tolerance	VIF
Organizational Learning Capability	0.380	2.629
Organizational Creativity	0.380	2.629

number of classes. The interval was $(5-1) : 3 = 1.33$. Based on the mean of the class interval, we determined the categories of Organizational Learning Capability variable, which were high, moderate, and low as seen in Table 8.

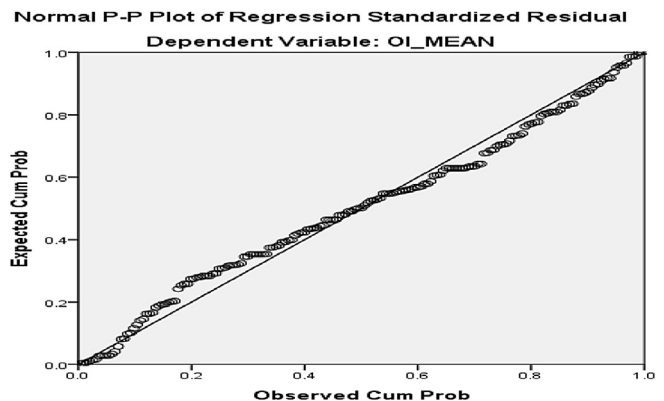


Fig. 2. Normality test normal P-P Plot.

In general, we could say that the Organizational Learning Capability of the universities in East Java, Indonesia was in the moderate category. This was the outcome of the formation of all the indicators, namely discovery, invention, implementation, and diffusion, which were moderate. Thus, the capabilities of the universities in East Java, Indonesia, concerning discovery, invention, implementation, diffusion were neither very good nor very bad. The outcome indicates that there is no difference category either on public (low 5.6%, moderate 13.4%, high 15.6%) or individual

Table 7
Heteroskedastisity Glejser test.

Variable	Count
Organizational Learning Capability	0.380
Organizational Creativity	0.380

universities (low 8.4%, moderate 26.3%, high 30.7%). All the universities tend to be moderate and high on Organizational Learning Capability. It seems they try very hard to fulfill the expectation of the Ministry of Higher Education of Indonesia on the level of accreditation of study program or institution. The Ministry values on all attempts of learning process improvement.

4.2. The descriptive analysis of organizational creativity

The Organizational creativity variable was assessed by applying the following indicators, namely the presence of fresh/creative processes, the presence of new/creative ideas, the presence of new/creative souls, the presence of new/creative situations, and the presence of fresh/creative processes. Each indicator could be analyzed by observing the mean of respondents' answers. The formula to determine the length of class interval was as follows: Interval = (Highest value – Lowest value): number of classes. The interval was (5–1): 3 = 1.33. Based on the mean of the class interval, we determined the categories of Organizational Creativity variable, which were high, moderate, and low as seen in Table 9.

In general, we could say that the Organizational Creativity of universities in East Java, Indonesia was in the moderate category. The efforts to produce new/creative ideas and to awaken people's creativity were high. However, the creation of new/creative elements for development, the construction of new/creative situations, the creation of new/creative procedures was in the moderate

category. This signified that the efforts to awaken or stimulate creativity in the universities in East Java, Indonesia, were neither very high nor very low. The outcome indicates that there is no difference category either on public (low 5.6%, moderate 12.3%, high 16.8%) or individual universities (low 3.4%, moderate 26.3%, high 35.8%). All the universities tend to be moderate and high on Organizational Creativity. It seems they try very hard to fulfill the expectation of the Ministry of Higher Education of Indonesia on the level of accreditation of study program or institution. The Ministry values all creative efforts, including pushing creativity programs on students' level.

4.3. The descriptive analysis of organizational innovation

The Organizational Innovation variable was assessed by applying the following indicators: utilize/execute new ideas, utilize/execute new behaviors, utilize/execute new products, utilize/execute new academic processes, utilize/execute new technologies, utilize/execute new administrative practices. Each indicator could be analyzed by observing the mean of respondents' answers. The formula to determine the length of class interval was as follows: Interval = (Highest value – Lowest value): number of classes. The interval was (5–1): 3 = 1.33. Based on the mean of the class interval, we determined the categories of Organizational Innovation variable, which were high, moderate, and low as seen in Table 10.

In general, we could say that the Organizational Innovation of the universities in East Java, Indonesia was in the moderate category. This was the outcome of the formation of all the indicators were moderate. Thus, the innovation of the universities in East Java, Indonesia, concerning utilizing or executing new ideas, behaviors, products, academic services, new technologies, and administrative practices was neither good nor bad.

The result shows that there is no difference category either on

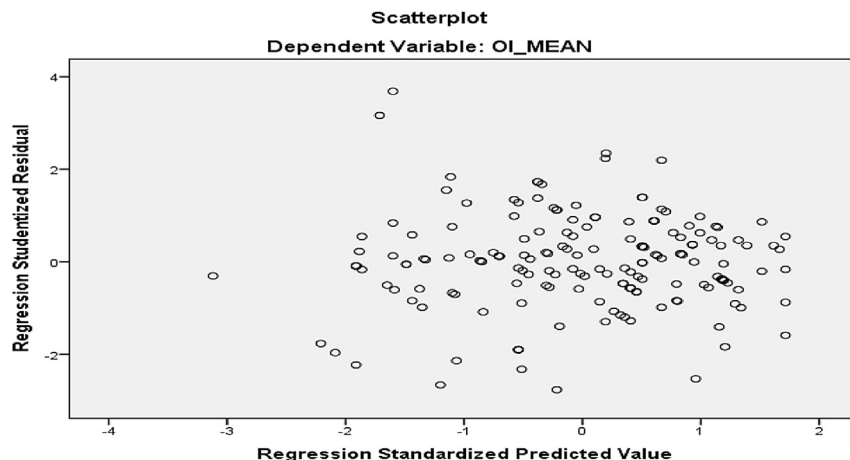


Fig. 3. Heteroscedasticity test graphs.

Table 8
Descriptive analysis of organizational learning capability.

Indicator	Statement	Mean	Indicator mean	Description
Discovery	Discover the difference between expectation and reality	3.469	3.461	Moderate
Invention	Analyze the differences	3.453		
Implementation	Invent solutions to overcome the differences		3.503	Moderate
Diffusion	Implement the solutions to overcome the differences		3.503	Moderate
	Apply the solutions to each new situation in order to overcome the differences		3.408	Moderate
	TOTAL		3.469	Moderate

Table 9
The descriptive analysis of organizational creativity.

Indicator	Statement	Indicator mean	Description
The presence of new/creative processes	Create new elements for development	3.570	Moderate
The presence of new/creative ideas	Produce new/creative ideas for development	3.720	High
The presence of new/creative persons	Construct new/creative situations for development	3.788	High
The presence of new/creative situations	Awaken people's creativity for development	3.559	Moderate
The presence of new/creative procedures	Make new/creative methods or procedures for development	3.547	Moderate
	TOTAL	3.637	Moderate

public (5.6%, moderate 14.5%, high 14.5%) or private universities (low 10.6%, moderate 25.7%, high 29.1%). All the universities tend to be moderate and high on Organizational Innovation. It seems they try very hard to fulfill the expectation of the Ministry of Higher Education of Indonesia on the level of accreditation of study program or institution. The Ministry values on all efforts of learning process innovation of universities in Indonesia.

4.4. Multiple linear regression analysis

The multiple linear regression analysis was done to recover out the influence of various independent variables on the dependent variable. The regression model of this research can be viewed in Table 11, and the equation of the multiple linear regression was:

- The value -0.241 was the constant which indicated the size of Organizational Innovation if not influenced by Organizational Learning Capability and Organizational Creativity.
- The regression coefficient of Organizational Learning Capability variable was 0.296 which showed that every time Organizational Learning Capability raised, Organizational Innovation would raise as much as 0.296.
- The regression coefficient of Organizational Creativity variable was 0.605 which showed that every time Organizational Creativity raised, Organizational Innovation would raise as much as 0.605

4.5. Determinant coefficient analysis

Determinant coefficient was applied to assess the ability of the regression model to explain the dependent variable. The value of the determinant coefficient can be pictured in Table 12 in the R Square column.

Table 12 shows that the value of the determinant coefficient was 0.715 or 71.5%, which meant that Organizational Learning Capability and Organizational Creativity influenced Organizational Innovation as much as 71.5%, while the other 28.5% was influenced by other variables.

4.6. T test (individual significance test)

The *t*-Test was performed to find out whether the independent

Table 11
The multiple linear regression analysis.

Variable	Unstandardized coefficients
Constanta	-0.241
Organizational Learning Capability	0.296
Organizational Creativity	0.605

$$Y = -0.241 + 0.296X_1 + 0.605X_2.$$

The result of the multiple linear regression equation had the following meanings.

Table 12
Determination coefficient.

Model	R	R square	Adjusted R square	Std. error of the estimate
1	0.846 ^a	0.715	0.712	0.47327

^a Predictors: (Constant), Organizational Learning Capability, Organizational Creativity.

Table 13
T test.

Variable	<i>T</i> table	<i>T</i> count	Significance count
Organizational Learning Capability	1.684	4.662	0,00
Organizational Creativity	1.684	8.965	0,00

variable, influenced the explanation of the dependent variable. The result of the *t*-test can be seen in Table 13 with the hypothesis $H_0: bi \leq 0$, which meant that Organizational Learning Capability variable or Organizational Creativity variable did not significantly influence Organizational Innovation, and $H_a: bi > 0$ which meant that Organizational Learning Capability variable or Organizational Creativity variable significantly influenced Organizational Innovation.

Table 13 shows that calculated *t* of Organizational Learning Capacity and Organizational Creativity were larger than table *t* which was 1.684, namely 4.662 and 8.965. The second method was by observing the significance value. The significance values of Organizational Learning Capability and Organizational Creativity were smaller than 0.05, which were respectively 0.00. Established along the formula given above, the answer was that hypothesis zero (H_0) was rejected. In other words, the alternative hypothesis (H_a) could be accepted, which meant that Organizational Learning

Table 10
Descriptive analysis of Organizational Innovation.

Indicator	Statement	Indicator mean	Description
Utilizing/executing new ideas	Utilize/execute new ideas for development	3.564	Moderate
Utilizing/executing new behaviors	Utilize/execute new behaviors for development	3.508	Moderate
Utilizing/executing new products	Utilize/execute new products for development	3.486	Moderate
Utilizing/executing new academic services	Utilize/execute new academic services for development	3.425	Moderate
Utilizing/executing new technologies	Utilize/execute new technologies for development	3.419	Moderate
Utilizing/executing new administrative practices	Utilize/execute new administrative practices for development	3.402	Moderate
	TOTAL	3.467	Moderat

Capability variable or Organizational Creativity variable positively and significantly influenced Organizational Innovation.

4.7. *F* test (simultaneous significance test)

The *F* test was performed to find out if all the independent variables simultaneously influenced the dependent variable. The results of the *F* test can be seen in Table 4 with the following hypothesis: $H_0: b_1 \leq b_2 \leq \dots \leq b_k \leq 0$ which meant that Organizational Learning Capability and Organizational Creativity did not significantly influence Organizational Innovation, and $H_a: b_1 > b_2 > \dots > b_k > 0$ which meant that Organizational Learning Capability and Organizational Creativity significantly influenced Organizational Innovation.

Table 14 shows that the significance value was <0.05 , namely 0.00 so that hypothesis zero (H_0) was refused. In other words, the alternative hypothesis (H_a) was accepted, which meant that Organizational Learning Capability variable and Organizational Creativity variable significantly influenced Organizational Innovation.

5. Discussion

The result of the multiple linear regression statistical test shows that the relationships between the researched variables, both partially and simultaneously, had positive and significant influences. These findings confirmed the findings of previous researches. Organizational Learning Capability was a positive driving factor for Organizational Innovation as can be seen in Table 13 which shows that the calculated *t* of Organizational Learning Capability and Organizational Creativity was larger than table *t* which was 1.684, namely 4.662, while the significance values of Organizational Learning Capability and Organizational Creativity were smaller than 0.05, which were respectively 0.00. The greater the innovation achieved by an organization, the greater also the learning and the change needed by the organization. The creation of organizational knowledge through which new knowledge is derived from existing knowledge (organizational learning) stimulates Organizational Innovation (Sanz-Valle et al., 2011). A high innovation requires a high and effective organizational learning capability (Ho, 2011). A learning organization is an innovative organization (Nooteboom, 2010, p. 131). Organizational learning capability has a positive and significant influence on the company's innovation (Chung et al., 2011; Jiménez-Jiménez & Sanz-Valle, 2011; Tohidi & Mandegari, 2012).

Organizational Creativity was a positive driving factor for Organizational Innovation as can be seen in Table 13 which shows that the calculated *t* of Organizational Creativity and Organizational Innovation was larger than table *t* which was 1.684, namely 8.965, while the significance values of Organizational Creativity and Organizational Innovation were smaller than 0.05, which were respectively 0.00. This finding agreed with the finding of De Sousa et al. (2012) who proposed that innovation was an implementation of successful creative ideas in an organization. According to this view, individual and group creativity was the starting point of innovation. However, a successful innovation also depended on other factors such as transfer of technology. Stamm (2008) also

stated that creativity was an important element of innovation. A company needs processes, procedures, and structures which enable timely and effective execution of projects so that its products are really innovative. Creativity has typically examined the stage of idea generation, whereas innovation studies commonly also include the latter phase of idea implementation. Creativity and innovation in any organization are vital to its successful performance (Anderson, Potočnik, & Zhou, 2014).

Table 14 shows that Organizational Learning Capability variable and Organizational Creativity positively and significantly influenced Organizational Innovation with the significance value <0.05 , namely 0.00. The size of the influence of these two independent variables on the dependent variable was considerably large. This is shown in Table 12 which indicates that the determinant coefficient was 0.715 or 71.5%, which meant that Organizational Learning Capability and Organizational Creativity influenced Organizational Innovation as much as 71.5%.

Interestingly, the findings show there are no differences in those variables between private and state or public universities. All universities compete each other in enhancing their quality. They also prove very hard to improve their learning capability, creativity, and innovation regularly in order to persuade prospect students and their parents. Private universities do not want to be left behind from state universities such as what happened in many developed countries.

Innovation is very important for any organizations including higher education institutions. Without such well-planned and systematic efforts they could not survive in the long term. Innovation is a must. A university administrator or leader should create innovation continuously on its programs, education or learning processes, networking and partnerships. Furthermore, a university leader who had the capability to create new ideas and generalize them in order to bring the impacts on his department would always strive creatively to create new products, services, ideas, procedures, or processes to enhance the organizational innovation expected by his organization. This such leadership will create a positive learning environment and creativity which are beneficial for boosting innovation of the institution.

Utilizing information and communication technology creatively and extensively in all university processes could become a competitive strategy. Instead of delivering lectures on a traditional way, e-learning is a creative method that could fulfill the expectations. For those busy students, they don't need to attend physically in the class, but they still could involve in the learning process intensive and actively. It will be much more efficient and effective process either for students or university. The internet development has been changing the world, including education or learning process. It provides so many resources which can support extensively. The university leaders have to stimulate innovation climate in their each department such as providing chances and rewarding all creative and innovative ideas on operational processes. An integrated online management information system, for example, will improve the service quality and also will increase the satisfaction of stakeholders including students, parents, staffs, etc.

6. Conclusion and suggestion

Organizational Learning Capability and Organizational Creativity have significantly influenced Organizational Innovation. So it is recommended for the policy makers in establishing innovative universities. Extending learning and creativity environment throughout university will increase many new ideas for improving its service quality. The policy makers should apply a participative leadership instead of autocratic leadership. Increasing freedom of speech in the universities will create positive climate. People tend

Table 14
F test.

Variable	Significance count
Organizational Learning Capability	
Organizational Creativity	0,00

to be dare delivering their new ideas. The more people involve in the system, the more improvement of learning, creativity, and innovation process grow fast. To establish the research results more strongly among universities, we hope that similar researches may be developed in a more extensive scale which involve all the provinces in Indonesia and all elements of the university (lecturers, students, alumni).

References

- Anderson, N., Potočník, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, 40(5), 1297–1333.
- Aragon-Correa, J. A., Garcia-Morales, V. J., & Cordon-Pozo, E. (2007). Leadership and organizational Learning's role on innovation and Performance: Lessons from Spain. *Industrial Marketing Management*, 36(3), 349–359.
- Bello, D. C., Lohtia, R., & Sangtani, V. (2004). An institutional analysis of supply chain innovations in global marketing channels. *Industrial Marketing Management*, 33(1), 57–64.
- Brown, R. T. (1989). Creativity: What are we to measure? In J. A. Glover, R. R. Ronning, & C. R. Reynolds (Eds.), *Handbook of creativity* (pp. NY, 3–32). New York: Plenum Press.
- Bueno, E., & Ordoñez, P. (2004). Innovation and learning in the knowledge based Economy: Challenges for the firm. *International Journal of Technology Management*, 27(6/7), 531–533.
- Chung, H. F., Sue, T. C., & Guan, L. C. (2011). Organizational Learning Capability and Organizational Innovation: The Moderating Role of Knowledge Inertia. *African Journal of Business Management*, 5(5), 1864–1870.
- Damanpour, F., & Gopalakrishnan, S. (2001). The dynamics of the adoption of product and process innovations in organizations. *Journal of Management Studies*, 38(1), 45–65.
- De Jong, J. P. J., & Den Hartog, D. N. (2007). How leaders influence employees' innovative behaviour. *European Journal of Innovation Management*, 10(1), 41–64.
- De Sousa, F. C., Pellissier, R., & Monteiro, I. P. (2012). Creativity, innovation and collaborative organizations. *The International Journal of Organizational Innovation*, 5(1), 1–39.
- Hage, J. T., & Aiken, M. (1970). *Social change in complex organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Harrington, D. M. (1990). The ecology of human creativity: A psychological perspective. In Dalam R. A. Runco, & R. S. Albert (Eds.), *Theories of creativity* (pp. 143–169). Newbury Park, CA: Sage.
- Hartanto, F. M. (2009). *New paradigm management Indonesia: Creating value with rests on policy and human potential*. Bandung, Indonesia: PT Mizan Pustaka.
- Ho, L. A. (2011). Meditation, learning, organizational innovation and performance. *Industrial Management & Data Systems*, 111(1), 113–131.
- Hult, G. T. M., Hurley, R. F., & Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing Management*, 33(5), 429–438.
- Jerez-Gomez, P., Cespedes-Lorente, J., & Valle-Cabrera, R. (2005). Organizational learning and compensation Strategies: Evidence from the spanish chemical industry. *Human Resource Management*, 44(3), 279–299.
- Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation, organizational learning, and performance. *Journal of Business Research*, 64(4), 408–417.
- Lemon, M., & Sahota, P. S. (2004). Organizational culture as a knowledge repository from increased innovative capacity. *Technovation*, 24(6), 483–498.
- Liao, S. H., Fei, W. C. H., & Liu, C. H. T. (2008). Relationship between knowledge inertia, organizational learning and organization innovation. *Technovation*, 28(4), 183–195.
- 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(5–8), 490–510.
- Munir, Z. (2009, February 15). *Problematics of Higher Education*. Retrieved from <http://zaldym.wordpress.com/2009/02/%2015/problematika-pendidikan-tinggi/>.
- Nahavandi, A. (2002). *The art and science of leadership* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- National Accreditation Board of Higher Education. (2014). *Accreditation directory*. Retrieved 25 October 2014 from <http://ban-pt.kemdiknas.go.id/>.
- Nooteboom, B. (2010). *Innovation, learning and cluster dynamics*. SSRN (Working Paper Series).
- Oerlemans, L., Meeus, M., & Boekema, W. (1998). Do networks matter for Innovation? The usefulness of the economic network approach in analyzing innovation. *Tijdschrift voor Economische en Sociale Geografie*, 89(3), 298–309.
- Oke, A., Munshi, N., & Walumbwa, F. O. (2009). The influence of leadership on innovation processes an activities. *Organizational Dynamics*, 38(1), 64–72.
- Priyatno, D. (2012). *Quick ways to study data analysis with SPSS 20* (1st ed.). Yogyakarta, Indonesia: ANDI.
- Salim, I. M., & Sulaiman, M. (2011). Organizational learning, innovation and performance: A study of malaysian small and medium sized enterprises. *International Journal of Business and Management*, 6(12), 118–125.
- Samad, S. (2012). The influence of innovation and transformational leadership on organizational performance. *Procedia – Social and Behavioral Sciences*, 57, 486–493.
- Sanz-Valle, R., Naranjo-Valencia, J. C., Jiménez-Jiménez, D., & Perez-Caballero, L. (2011). Linking organizational learning with technical innovation and organizational culture. *Journal of Knowledge Management*, 15(6), 997–1015.
- Siregar, S. (2013). *Parametric statistics for quantitative research*. Jakarta, Indonesia: PT Bumi Aksara.
- Stamm, B. V. (2008). *Managing innovation, design and creativity* (2nd ed.). UK: John Lt, Wiley & Sons Ltd.
- Sugiyono. (2013). *Business research Methods: Approaches quantitative, qualitative, and R&D*. Bandung, Indonesia: Alfabeta.
- Tohidi, H., & Mandegari, M. (2012). Assessing the impact of organizational learning capability on firm innovation. *African Journal of Business Management*, 6(12), 4522–4535.
- Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *The Academy of Management Review*, 18(2), 293–321.
- Yang, C. W. (2008). The relationships among leadership styles, entrepreneurial orientation, and business performance. *Managing Global Transitions*, 6(3), 257–275.
- Yeung, A., Ulrich, D., Nason, S., & Glinow, M. (1999). *Organizational learning Capability: Generating and generalizing ideas with impact*. Oxford, England: Oxford University Press.
- Zaltman, G., Duncan, R., & Hulbek, J. (1973). *Innovations and organizations*. New York, NY: Wiley.
- Zammuto, R., & O'Connor, E. (1992). Gaining advanced manufacturing technologies benefits: the role of organizational design and culture. *Academic Management Review*, 17(70), 1–28.