

The Evaluation of Lecturer's Performance and Sekolah Tinggi Perikanan's Performance Through Intellectual Capital

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Abstract: Intellectual capital is an intangible resource owned by the organization that can be used to create value for the organization. Intellectual capital consists of the source of human capital, the organization itself and its relationship to the environment. The purpose of this research is to analyze the effect of intellectual capital on lecturer and organizational performance and the effect of lecturer performance on organizational performance. Lecturer performance was measured by Key Performance Indicator value. Organizational performance was measured by perspective of costumer, finance, internal business process, learning and growth. Respondents of this research were 106 lecturers in Sekolah Tinggi Perikanan. Data was analyzed by descriptive analysis and Structural Equation Modeling (SEM) with LISREL. The results showed that intellectual capital has positive effect and significant on lecturer and organizational performance. Lecturer performance has positive effect on organizational performance, but insignificant. University is the organization which high intellectual capital, so organization could be able to manage them for improving performance.

Keywords: human capital, intangible resource, organizational performance, SEM, structural capital

INTRODUCTION

Newsaday is the era of knowledge based economy, so economic growth is very dependent on the intellectual ability of human resources. The main core of knowledge based economy is preparing and developing competitive knowledge-based human capital to increase productivity and competitiveness at various levels, both individuals, corporates, communities and nations (Zuhail, 2010).

In broad sense, intellectual capital refers to organizational resources, not only for human capital resources, but also to the organization itself and its relationship to the environment (Leitner *et al.*, 2014). The human resources are seen as strategic resources for the organization, because they contribute greatly to the creation of competitive advantage and support for sustainability. Universities and research institutions have high intellectual capital, which is expected to produce efficient output and generate new knowledge and skills (Shehzad *et al.*, 2014). Management of intellectual capital owned is a strategy for universities to improve performance, both lecturer performance and organizational performance.

The number of higher education in Indonesia in 2018 is 4,693 (Kemenristekdikti, 2018), but only three universities are in the top 500 of the Quacquarelli Symonds (QS) World University Ranking 2018. The three universities are Universitas Indonesia, Institut Teknologi Bandung and Universitas Gadjah Mada. This data shows that the quality of universities in Indonesia has not competed internationally. In addition to assessments conducted internationally, the assessment was also conducted nationally. The assessment was carried out by the Board of National Accreditation for Higher Education (BAN-PT). Accreditation is a form of the university's external quality assurance system. The results of the assessment can be used as an evaluation to improve quality and as information for the community on the quality of higher education.

Sekolah Tinggi Perikanan (STP) is one of the universities in Indonesia managed by the Ministry of Maritime Affairs and Fisheries. STP has a great responsibility in preparing and developing knowledge-based on human capital, especially in the field of marine and fisheries. The results of the assessment carried out by BAN-PT, STP obtained B accreditation. The evaluation showed that there needs to be an increase in the number of researches and publications on scientific work, proposing intellectual property rights, and increasing cadets' achievements in the academic field.

Human resources in higher education consist of educators (lecturers) and education staff. The constitution No. 14 of 2005 concerning Teachers and Lecturers states that lecturers are professional educators and scientists with the main task of transforming, developing, and disseminating science, technology and art through education, research, and community service. Lecturer performance is a very important thing in the efforts of universities to achieve their goals. Lecturers who are in an environment with high intellectual capital are expected to show high performance, resulting in qualified graduates.

Based on the background and the core problem above, the purpose of this study is to 1) analyze the influence of intellectual capital on the performance of lecturers; 2) analyze the influence of intellectual capital on organizational performance and 3) analyze the influence of lecturer performance on organizational performance.

THEORITICAL REVIEW

Intellectual Capital. Intellectual capital is intellectual material, knowledge, information, intellectual property, and experience that can be used to create value and wealth (Stewart, 2002). Intellectual capital refers to all intangible assets that an organization has including processes, capacity of innovation, patents, knowledge possessed by its members, talents, skills, recognition from society, and cooperative networks (Corcoles *et al.*, 2011).

Intellectual capital consists of human capital, structural capital and relational capital (Leitner *et al.*, 2014). Human capital is knowledge, expertise, abilities and skills that make humans (employees) as capital or assets of a company (Gaol, 2014). Human capital in the university is an intangible value that lies in individual competence consisting of knowledge, expertise and experience (Leitner *et al.*, 2014). Investment in human capital is needed to achieve performance efficiency (Shehzad *et al.*, 2014).

Structural capital is a combination of the ability to achieve goals and handle change, thus improving decision-making processes, procedures and routines in the organization (Corcoles *et al.*, 2011). Structural capital changes employee knowledge into

explicit knowledge for the organization. This capital produces an environment that encourages human capital to create and influence the knowledge (Edvinsson and Sullivan, 1996). Structural capital in the university is a resource found in organizations including databases, research projects, research infrastructure, educational and research processes, and university culture (Leitner *et al.*, 2014).

Relational capital is defined as all resources related to external organizations, customers, suppliers or research and development partners (Meritum, 2002). The important relationship for state universities is the relationship with the government as the budget giver and the relationship with the organization that recruits the graduates (Bratianu and Pinzaru, 2015). Relational capital can be in the form of relationships that arise from outside the organization's environment, such as institutions carried out by universities. University partners are students, alumni, the community and other universities (Ulum, 2012). Research with third parties, scientific publications, e-learning, and the relationships with alumni are indicators of relational capital. Collaborative research with other universities will not only improve the quality of research, it will also increase more recognition of publications because they are carried out together (Knobel *et al.*, 2013). Relational capital of university is an intangible resource capable of producing value related to the external relations of higher education, including government and private relations, position and image on social networks, industry involvement in training, collaboration with research centers and student exchanges (Leitner *et al.*, 2014).

Lecturer Performance. Performance is the achievement of employee performance targets that have been set according to their main tasks and functions (Regulation of the Head of State Civil Service Agency Number 1 of 2013 concerning Provisions for the Implementation of Government Regulation Number 46 of 2011 concerning Civil Servant Performance Assessment). The performance assessment of civil servants is used as a control of productive work behavior to achieve agreed work results and not an assessment based on the personality of a civil servant. The elements of work behavior and affect performance evaluated must be relevant and related to the implementation of work duties in the position levels of each civil servant assessed. The civil servant's performance element is also called Target Employee Performance. Lecturers have the main task of implementing the Tridharma of Higher Education, namely education, research, and community service. The main tasks are elaborated in target employee performance and will be assessed by authorized officials.

Organizational Performance. Organizational performance is the result of accumulation of all work activities in the organization. Organizational leaders must understand the contributing factors of organizational performance, namely employee performance and team performance (Robbins and Coulter, 2010). Assessment of performance is very important thing for the organization, because the assessment can be used as a measure of the success of an organization in a certain period of time. Assessment can be used as input for the improvement or improvement of the performance of the organization concerned. One method used to measure organizational performance is using the Balance Score Card/BSC approach (Kaplan and Norton, 1996). BSC is the right performance management system and can be used to increase the accountability of higher education institutions. This approach can help universities as public organizations to translate vision,

mission and strategies into a series of performance indicators that can drive change towards better improvement (Sudirman, 2012).

Hypothesis. Research about the influence of intellectual capital on employee performance and organizational performance has been done by many researchers. Intellectual capital has an influence on employee productivity at banks in Nigeria. Employees at the bank have a high level of education (Ekwe, 2013). Structural capital and relational capital at the Universitas Terbuka also proved to have a positive and significant effect on the performance of its employees (Helmiatin *et al.*, 2016). Based on the literature review and previous research, the first hypothesis (H1) in this study is intellectual capital has a positive effect on the performance of lecturers.

Intellectual capital has a significant influence on organizational performance (Gogan *et al.*, 2016; Hashim *et al.*, 2015; Shehzad *et al.*, 2014; Saeed *et al.*, 2013). The existence of intellectual capital causes the university to focus on managing their resources, so they can survive in an environment based on knowledge that is rapidly changing (Secundo *et al.*, 2010). Intellectual capital and its indicators appear more tangible to the qualitative performance of an organization, which includes the performance of innovation, adaptation, operations and human resources (Ozer *et al.*, 2014). Based on the literature review and previous research, the second hypothesis (H2) in this study is intellectual capital has a positive effect on organizational performance.

The successful of organization depends on employee performance (Ismiyarto *et al.*, 2015). Individual performance is influenced by factors of knowledge, skills, motivation and role of the individual concerned. Accumulation of employee performance is the performance of the organization, the higher performance of employees, the higher performance of the organization (Sinambela, 2012). Based on the literature review and previous research, the third hypothesis (H3) in this study is lecturer performance has a positive effect on organizational performance.

METHODOLOGY

This research was conducted at STP Jakarta campus and Department of Fisheries Extension campus in Bogor. The primary data in this study were collected through a closed questionnaire with a Likert scale of 1 to 5 (strongly disagree, disagree, disagree enough, agree to strongly agree). The population in this study were all STP lecturers namely 108 people (Ministry of Marine Affairs and Fisheries Employee Information System). The sampling method uses a saturated sampling technique, namely the technique of determining the sample with all members of the population used as a sample (Sugiyono, 2013). The data obtained is then processed using descriptive analysis, while the hypothesis test is processed using Structural Equation Modeling (SEM) with LISREL. The SEM model hypothesis can be seen in Figure 1.

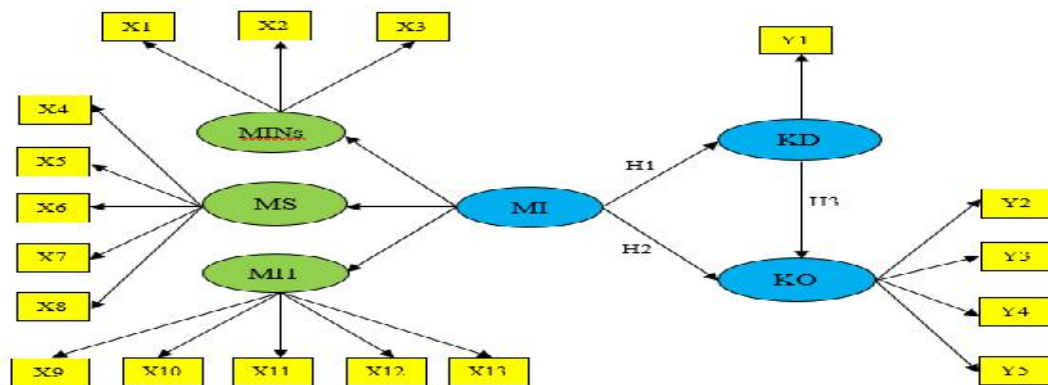


Figure 1. Model SEM Hypothesis

Note:

Information:	
X1: Knowledge	Y1: Key Performance Indicator
X2: Expertise	Y2: Customer perspective
X3: Experience	Y3: Financial perspective
X4: Database	Y4: Internal business processes perspective
X5: Research project	Y5: Learning and growth perspective
X6: Research infrastructure	MIns: Human Capital
X7: Process of education and research	MS: Structural Capital
X8: University culture	MH: Relational Capital
X9: Relations with government and private sector	MI: Intellectual Capital
X10: Position and image on social networks	KD: Lecturer performance
X11: Industry involvement in training	KO: Organizational performance
X12: Collaboration with the research center	
X13: Student exchange	

General Description of Sekolah Tinggi Perikanan. STP is a higher education in the Ministry of Maritime Affairs and Fisheries that is responsible to the Minister of Maritime Affairs and Fisheries through the Maritime and Fisheries Research and Human Resources Agency. The academic technical guidance is done by the Minister of Research and Higher Education, while technically operational and administrative activities are carried out by the Marine and Fisheries Research and Human Resources Agency. STP was established on September 7, 1962 with the initial name of the Akademi Usaha Perikanan. The change in organizational nomenclature to STP was on March 6, 1993. STP held a diploma IV education program with five study programs, namely Fishing Technology, Fisheries Engineering, Fisheries Products Processing Technology, Aquaculture Technology and Technology for Aquatic Resource Management. The Fisheries Extension study program which was originally under the auspices of the Sekolah Tinggi Penyuluhan Pertanian joined to STP in June 2004. STP tries to improve its role in developing human resources in fisheries that have high excellence and competence. STP opened a postgraduate program with a study program on Fisheries Resource Utilization in July 2009. The

education system implemented at STP is a boarding school system, where students (cadets) live in dormitories and all tuition fees are charged to the Ministry of Maritime Affairs and Fisheries budget.

The STP campus is located on Jalan AUP Pasar Minggu, South Jakarta for the Fishing Technology, Fisheries Engineering, Fisheries Products Processing Technology, Aquaculture Technology and Technology for Aquatic Resource Management study programs, while the Fisheries Extension study program is located at Jalan Aria Surialaga, Cibalagung Number 1 Bogor, 16001. STP also has an Education and Training Administration Section Field located on Jalan STP Raya Karangantu, Kasemen District, Serang City, Banten.

Descriptive Analysis of Respondents. Respondents in this study were all STP lecturers. Questionnaires were distributed to 108 lecturers, but there were two questionnaires that were not returned. Respondents were grouped based on several characteristics including gender, age, length of employment, the last education, class, and functional positions. The grouping can be seen in Table 1.

Table 1. Respondent Characteristics

Characteristics		Frequencies	Percentage (%)
Gender	Male	75	70.75
	Female	31	29.25
Age	40	14	13.21
	41-50	32	30.19
	51-60	45	42.45
	>60	15	14.15
Length of Employment	10-20	36	33.96
	21-30	20	18.87
	31-40	47	44.34
	>40	3	2.83
The Last Education	Master Degree (S2)	86	81.13
	Doctoral Degree (S3)	20	18.87
Group Classifying	III	35	33.02
	IV	71	66.98
Functional Position	Assistance	7	6.60
	Lector	35	33.02
	Head Lector	64	60.38

(Data Processed, 2018)

Table 1 shows that male lecturers have a greater proportion compared to female lecturers. The proportion of male lecturers is 70.75%, while female lecturers are only 29.25%. The education system at STP is vocational education with a comparison of practice and theory

is 70:30. Vocational education at STP prepares cadets for jobs with applied expertise in the field of marine and fisheries. The proportion of the practice of 70% makes the lecturers give more guidance to cadets outside the classroom, both in the laboratory, in the pond and on the boat. Especially in the Fishery Technology and Fishery Engineering study program, lecturers must guide cadets to practice on the boat. STP staffing data shows that all lecturers of the Fishery Technology and Fishery Engineering study programs are male.

The most STP lecturers are in the age range of 51-60 years, which is equal to 42.45%, then respectively in the range of age 41-50 years at 30.19%, age > 60 years at 14.15% and age < 40 at 13.21%. Data shows that lecturers aged > 60 years were 15 people. The lecturer will enter the age of retirement in less than five years, therefore it is necessary to recruit a lecturer at STP. Recruiting can be done from both the internal and the external organizations.

The data in Table 1 shows that the length of time STP lecturers work as the civil servant apparatus is at most in the range of 31-40 years, which is equal to 44.34%, then respectively lecturers with a tenure of 10-20 years and 21-30 years with a proportion of 33.96 % and 18.87%. A high working period has an influence on the lecturers' research performance, because lecturers have knowledge and experience that supports the implementation of research (Margaretha and Saragih, 2012).

The last education for STP lecturers have a master degree (S2) and doctoral degree (S3). This is in accordance with articles 45 and 46 (2) of constitution number 14 of 2005 concerning Teachers and Lecturers, namely lecturers must have academic qualifications obtained through higher education postgraduate programs. Table 1 shows that lecturers with master degree (S2) academic qualifications are 81.13%, and lecturers with doctoral degree (S3) academic qualifications of 18.87%.

Most STP lecturers are in Group classifying IV, as many as 71 people (66.98%), and Group classifying III as many as 35 people (33.02%). The lecturer functional position consists of expert assistants, lectors, head lectors and professors. Table 1 shows that the majority of STP lecturers have functional positions as head lectors (60.38%).

The influence of Intellectual Capital on Lecturer Performance and Organizational Performance. Data analysis was performed using SEM with LISREL software. SEM analysis is a second generation multivariate analysis technique that allows researchers to test structural models (test relationships between latent variables) and measurement models (test the relationship between indicators and latent variables) simultaneously (Ghozali, 2008). The tests were done on the influence of intellectual capital on lecturer performance and organizational performance, and the influence of lecturer performance on organizational performance. The tests are done through three stages of compatibility testing, namely overall model fit, measurement model fit and structural model fit test. The results of the overall suitability test model can be seen in Table 2.

Table 2. Compatibility test results for the whole model

<i>Goodness of Fit</i>	<i>Cut off Value</i>	Result	Note
χ² (Chi-square)	Expected to be small	155.15	<i>Poor fit</i>
Significance	0.05	P = 0.00016	
RMSEA	0.08	0.076	<i>Good fit</i>
GFI	0.90	0.96	<i>Good fit</i>

NFI	0.90	1.00	<i>Good fit</i>
CFI	0.95	1.00	<i>Good fit</i>

(Data Processed, 2018)

Table 2 shows that the most of suitability test requirements have met the cut-off value standard, except χ^2 (Chi-square) and significance. The results obtained are poor fit. This is caused by a sample that is not too large, but still meets the minimum requirements needed (at least 5 respondents for each indicator). The Chi-square test and significance assume that the variables observed are normal multivariate and require large data. Both tests are very sensitive to sample size, so other indicators can be used as a basis for acceptance or rejection (Engel et al., 2003). Other fit indicators used for model suitability tests include the value of the Root Mean Square Error of Approximation (RMSEA), the Goodness of Fit Index (GFI), the Normed Fit Index (NFI) and the Comparative Fit Index (CFI).

RMSEA measures the value of the model parameter deviation with the population covariance matrix. The model is said to be good fit if the value of RMSEA is ≤ 0.08 . The RMSEA value in this study was 0.076. This value shows the criteria for good or good fit (Hair et al., 2014). GFI value is 0.96. GFI shows the value of the accuracy of a model in producing the observed covariance matrix. The model is considered good, because the GFI value is ≥ 0.90 . The NFI value is the magnitude of the mismatch between the target models and the base model. The model NFI value is 1.00. This shows that the model is included in the good fit criteria (Wijanto, 2015). The last criterion observed was CFI. CFI is a revision of NFI that takes into account sample size, which can test well even when the sample size is small. The CFI value of the model is 1.00, which means the model is in the criteria of good fit. Based on the results of the overall compatibility test above, it can be concluded that the model is in good criteria.

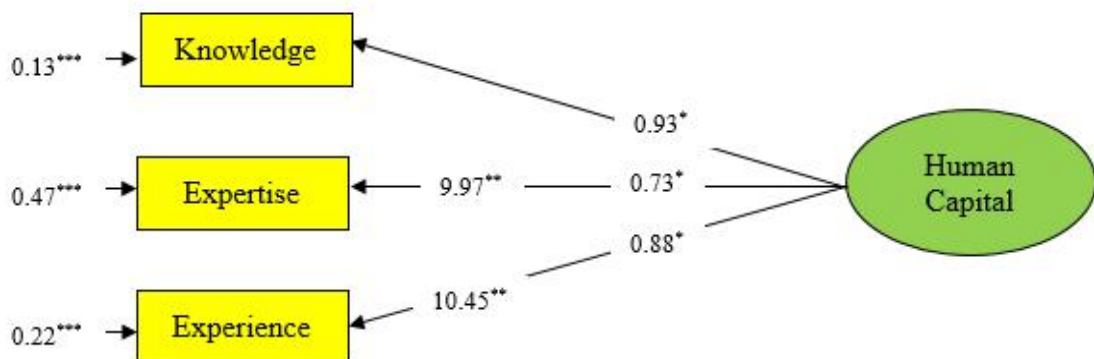
The second test is the measurement model match test. This test is done on each measurement model, related to the relationship between latent variables and indicators. The measurement model in SEM is also called confirmatory factor analysis, because the relationship between latent variables and indicators is in the form of factor analysis. The latent variable has one or more indicators. The indicators used in SEM are reflective indicators. The theory of measurement is reflective based on the idea that latent variables cause the formation of measurement variables (Hair *et al.*, 2014).

This study uses Second Order Confirmatory Factor Analysis (2nd Order CFA) and First Order Confirmatory Factor Analysis (1st Order CFA). 2nd Order CFA is a measurement model consisting of two levels. The first level analysis is done on latent constructs of human capital, structural capital and relational capital with the indicators. The indicators of human capital are knowledge (X1), expertise (X2) and experience (X3). The indicators of structural capital are database (X4), research projects (X5), research infrastructure (X6), education and research processes (X7), and university culture (X8). The indicators or relational capital are government and private relations (X9), position and image on social networks (X10), industry involvement in training (X11), collaboration with research centers (X12), and student exchanges (X13). The second level analysis is done on latent constructs of intellectual capital with dimensions, namely human capital (MIns), structural capital (MS) and relational capital (MH). Analysis of the 1st Order CFA is performed on the latent variables of lecturer performance and organizational

performance. Lecturer performance variables have a single indicator, namely Key Performance Indicator (Y1). The latent variable of organizational performance has indicators based on BSC, namely customer (Y2), financial (Y3), internal business processes (Y4) and learning and growth (Y5).

The measurement test is done by determining the validity and reliability of the indicators in the construct. Validity test is used to determine the ability level of an indicator in measuring its latent variables. An indicator is stated to have good validity if it has a Standardized Loading Factor (SLF) value of ≥ 0.5 and the t-count value is ≥ 1.96 (Hair *et al.*, 2014). Reliability test aims to measure the level of consistency of indicators in measuring latent constructs. Constructs have good reliability if they have a value of Construct Reliability (CR) ≥ 0.7 and Variance Extracted (VE) ≥ 0.5 (Hair *et al.*, 2014). A good value of CR and VE indicates that the indicators have a high level of consistency, so that if re-research is conducted at different times, the respondent will provide a reliable or consistent answer.

The results of human capital validity test can be seen in Figure 2. Human capital variable has good validity. This can be seen from the SLF value of each indicator ≥ 0.5 and t-count ≥ 1.96 . Latent variables of human capital also have good reliability. The results of CR and VE calculations are 0.89 and 0.73. The knowledge indicator has the greatest SLF of 0.93, then followed by experience indicators with SLF 0.88 and expertise indicators with SLF 0.73.



Note: *Standardized Loading Factor (SLF)

** t-count

*** Error variance

Figure 2. SLF, t-count and Error Variance of Human Capital Indicators

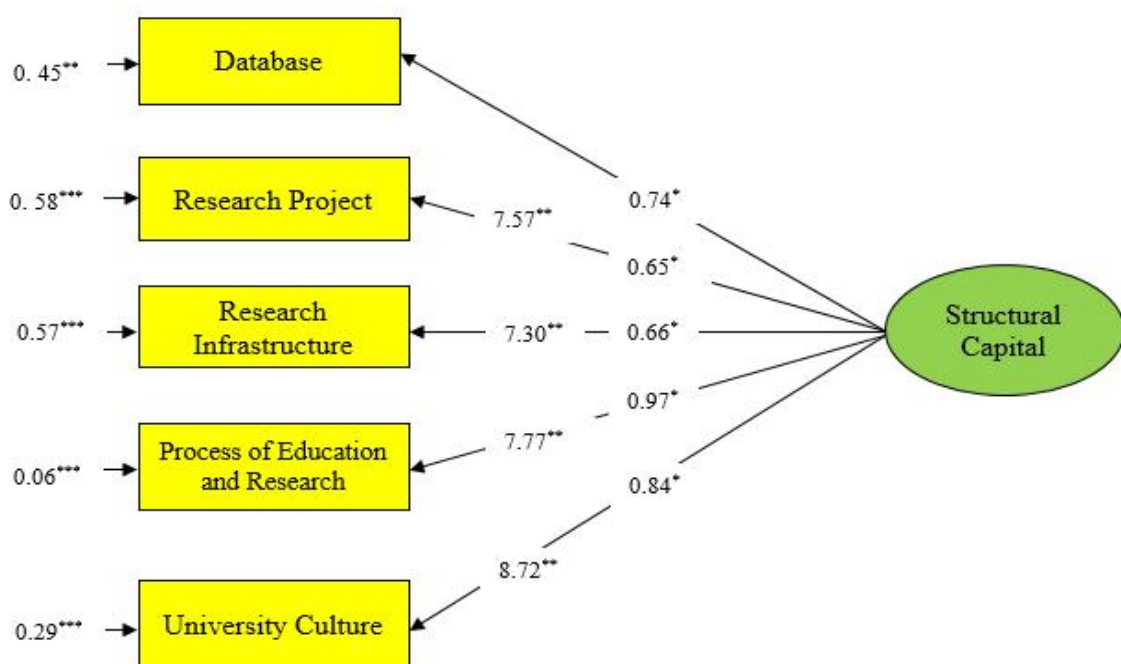
The assumption of knowledge as a highly strategic organizational resource is based on the fact that knowledge can be used to develop valuable organizational competitiveness, rare, difficult to imitate by competitors and cannot be replaced by other types of resources (Gaol, 2014). Knowledge is obtained through the education process both formal and informal. The research data shows that all STP lecturers have taken formal education at the postgraduate level.

Human capital is an asset that is related to the knowledge and skills of employees, as well as access to training and education. Employees are not considered costs, but as an investment for the organization (Rossi *et al.*, 2016). STP lecturers are given the

opportunity to take part in education and training to improve their knowledge and expertise. The investment issued by the organization in the form of training produces value for the future in the form of developing expertise and potential employees (Mayo, 2000). Expertise is the ability to perform certain functions (Dessler, 2012). Expertise is also defined as the ability to apply special knowledge (Robbins and Judge, 2013). Education and training given to Surabaya Shipping Polytechnic lecturers proved to be able to improve knowledge and skills and will lead to improved performance (Putri and Mashudi, 2016).

Work experience shows how long an employee works. The experience of employees will support performance achievement (Pamungkas *et al.*, 2017). Experienced employees have a better level of knowledge and skills, so they understand their duties and responsibilities.

The latent variable structural capital also has good indicators. Figure 3 shows that the SLF value of each indicator is 0.5 with t-count 1.96. The results of the CR calculation are 0.89 and VE is 0.63. The indicators of the education and research process have the highest SLF of 0.97, then followed by successive indicators of university culture with SLF 0.84, database with SLF 0.74, research infrastructure with SLF 0.66 and research projects with SLF 0.65. The process of education and research is a routine done in each university. Education is a business done consciously and planned to realize the learning atmosphere and learning process, so that students actively develop their own potential and skills needed.



Note: *Standardized Loading Factor (SLF)

** t-count

*** Error variance

Figure 3. SLF, t-count and Error Variance of Structural Capital Indicators

Research is an activity carried out according to scientific principles and methods systematically to obtain information, data, and information relating to the understanding and/or testing of a branch of science and technology (Constitution Number 12 of 2012). Work procedures and organizational routines as the basic principle of a government are supporters of the structural capital of local governments in Italy (Rossi *et al.*, 2016). Work procedures and organizational routines will move the organization to achieve its objectives.

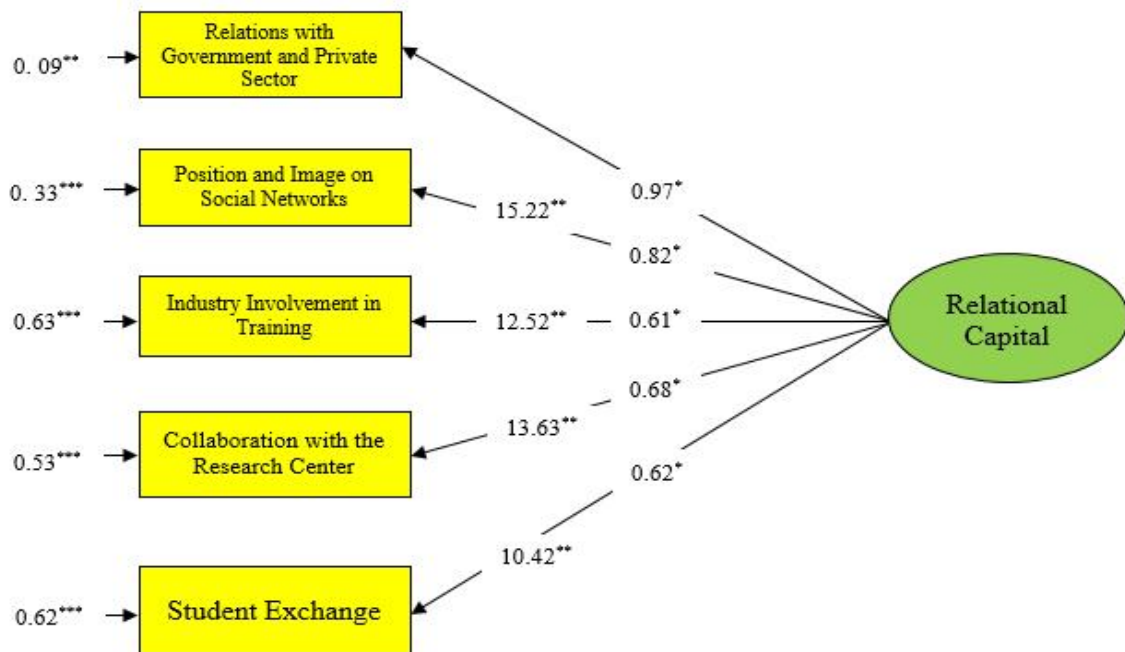
Organizational culture is the pattern of behavior and mindset of everyone in an organization, including the values, beliefs and behavior of employees that are different from other organizations (Shahzad, 2014). Lecturers of STP complete the work done through team work. One form of team work that is implemented is the presence of team teaching for a course. This will merge the cultural differences of each lecturer and shape the culture of university. Communication patterns are one indicator of organizational culture. Good communication will have an impact on good coordination between employees, so it can complete work effectively and efficiently (Syarief *et al.*, 2017). Organizational culture serves to build internal integration that is able to reduce conflict and build togetherness (Muhammad, 2017). Organizational culture is a good indicator of structural capital (Ozer *et al.*, 2014). The work culture contains the components that are owned by employees, namely the understanding of the basic substance about the meaning of work, attitudes toward work and the work environment, behavior at work, work ethic, attitude towards time, and the way or tools used to work. Sharing knowledge requires trust and cooperation. The culture of sharing knowledge can increase the intellectual capital of universities (Bejinaru, 2017).

Databases can be used to share knowledge and work together between individuals in organizations (Starovic and Maar, 2004). The database owned by STP is in the form of an employee system, academic information systems and research and community service systems. The existing information system helps lecturers to get the information needed can be used for making information, online databases for storing information and networks for sharing information.

Research infrastructure is a good indicator of structural capital. Supporting infrastructure includes computer network devices, software and internet networks. Improving infrastructure, improving information and technology systems for education, learning and research and developing facilities such as libraries and laboratories will increase the university's structural capital (Secundo *et al.*, 2010). The research project is the smallest indicator with SLF for structural capital. The results of interviews with several lecturers stated that research funding at STP was still lacking. Research funding from other institutions is still small. Collaboration in the form of research that has been carried out by STP including the NICHE Project and the VALCAPFISH project, is a collaboration with the Dutch Embassy, and the SMART-Fish Project which is a collaboration with the Australian government.

The latent variable relational capital has a good indicator. Figure 4 shows that the SLF value of each indicator is 0.5 with t-count 1.96. CR 0.89 and VE 0.62. Indicators of relations with government and the private sector have the highest SLF, 0.97, then subsequently followed by position and image indicators on social networks with SLF 0.82, collaboration with research centers with SLF 0.68, student exchanges with SLF 0.62, and industry involvement in training with SLF 0.61. Social capital (relational capital) in the

form of cooperation conducted by lecturers results in the exchange of information and knowledge (Fauzan, 2012). Continuous cooperation is also a certification of social trust from external agents to the individual concerned and has an impact on the higher performance of lecturers.



Note: *Standardized Loading Factor (SLF)

** t-count

*** Error variance

Figure 4. SLF, t-count and Error Variance of Relational Capital Indicators

Respondents stated that STP has good relations with the government and the private sector because STP is a higher education whose technical guidance is carried out by the Ministry of Maritime Affairs and Fisheries through the Marine and Fisheries Research and Human Resources Agency. STP has also collaborated with the private sector of the marine and fisheries sector. Relations with government, industry, and research centers are indicators of university relational capital (Secundo *et al.*, 2010). Relational capital can also be seen from cooperation with the business and industrial world (Corcoles *et al.*, 2011; Chatterji and Kiran, 2017). The universities and industries need each other, where universities produce graduates needed by industry as labor (Chatterji and Kiran, 2017). Industry can also provide training opportunities to cadets through field work practices. Relational capital occurs because of trust and interaction between individuals, between organizations and create a basis for learning and sharing knowledge (Kale *et al.*, 2000).

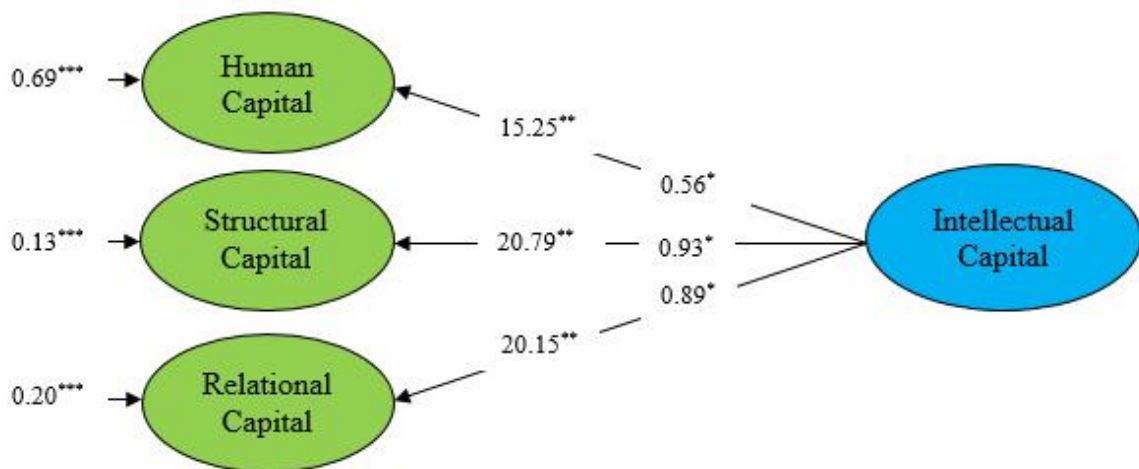
The position and image of STP on social networks is also considered good by lecturers, because STP location is in Jakarta and Bogor and is close to the settlement, making it easily accessible. A location that is convenient and close to the location of fishing is a strength for a university (Fazlagic and Skikiewicz, 2014). Image and

reputation can be improved through intensive interaction with the surrounding community (Nulhaqim *et al.*, 2016).

Collaboration with research centers is a good indicator of relational capital. Research collaboration with other universities will improve the quality of research and gain more recognition because publications are carried out together (Knobel *et al.*, 2013). STP collaboration with research centers in other universities is established when the lecturer performs the task of studying at a university.

Student exchange is an indicator that can explain relational capital. This activity is able to enhance cooperation between universities so that it can increase relational capital (Chatterji and Kiran, 2017).

The second level analysis of 2nd Order CFA can be seen in Figure 5. The analysis was performed on latent variables of intellectual capital with dimensions of human capital, structural capital and relational capital. Structural capital is the best dimension for intellectual capital, namely with SLF 0.93 and t-count 20.79. Furthermore, followed by relational capital with SLF 0.89 and t-count 20.15 and human capital with SLF 0.56 and t-count 15.25. Structural capital has the greatest influence for intellectual capital (Nazem and Mozaiini, 2014). Organizations that have high structural capital have a culture that supports employees to try new things, learn and fail. Organizations with high structural capital try to codify organizational knowledge and develop structural capital that will produce competitive advantage. This benefit will result in high organizational performance (Bontis *et al.*, 2000).



Note: *Standardized Loading Factor (SLF)

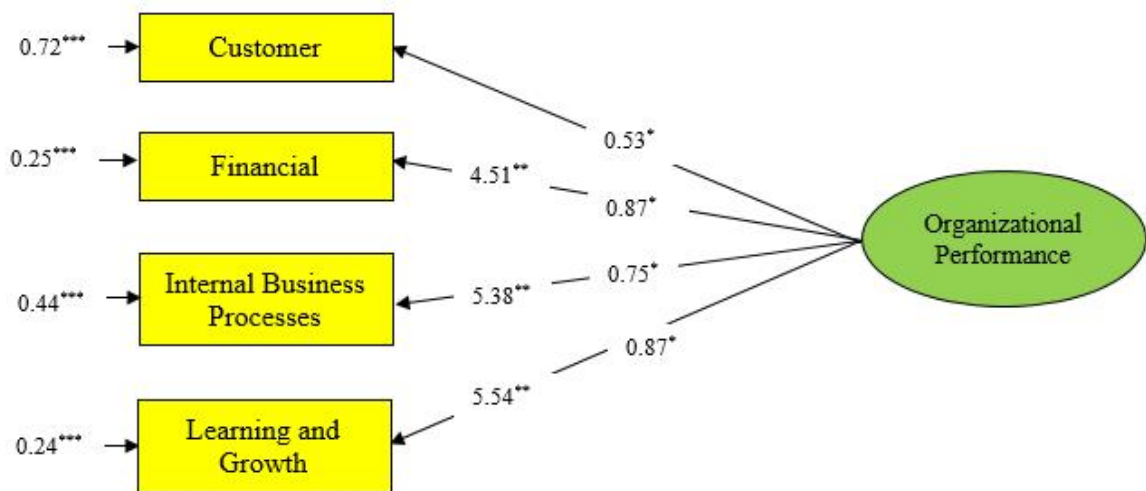
** t-count

*** Error variance

Figure 5. SLF, t-count and Error Variance of Intellectual Capital Dimensions

The latent variable of lecturer performance only has one indicator, namely the value of Key Performance Indicator (Y1). The value ranges from 0 - 100. This indicator is a good indicator, seen from the CR value 0.7 (0.90), VE 0.5 (0.90) and SLF value 0.95.

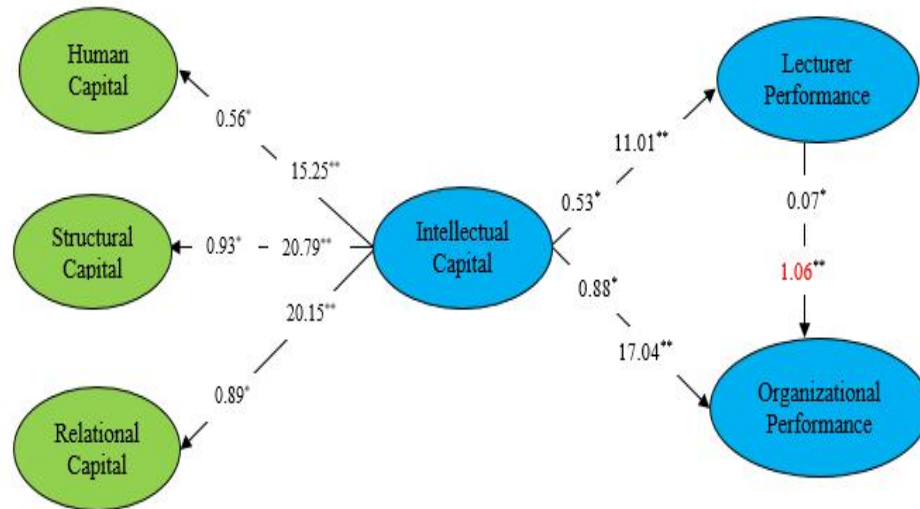
The latent variable of organizational performance has a good indicator. Figure 6 shows that the SLF value of each indicator is 0.5 with t-count 1.96. The calculation results of the CR values are 0.85 and VE is 0.59. Financial perspective, learning and growth perspective have the highest SLF value of 0.87, followed by internal business process perspective with SLF 0.75 and customer perspective with SLF 0.53. Learning and growth perspective is the main focus of higher education, because universities are organization-based on knowledge, their performance is strongly related to creating student entrepreneurial skills (Zangouinezhad and Moshabaki, 2011). Learning and growth are also most able to explain organizational performance at PTPN VII Lampung (Sutisna *et al.*, 2014).



Note: *Standardized Loading Factor (SLF)
 ** t-count
 *** Error variance

Figure 6. SLF, t-count and Error Variance of Organizational Performance Indicators

The third match test is a structural model fit. Structural suitability tests describe the relationship between latent variables (Hair *et al.*, 2014). The results of the measurement of the significance relationship between variables is known from the output model by finding out the value of the path coefficient and t-value produced. The results can be seen in Figure 7.



Chi-Square=155.15, df=97, P-value=0.00016, RMSEA=0.076
 Chi-Square = 155.15, df = 97, P-value = 0.00016, RMSEA = 0.076

Figure 7. Path Coefficient and t-Value of Structural Model

Hypothesis testing using SEM is done after all compatibility tests are fulfilled. Acceptance or rejection of a hypothesis can be seen from the value of t-count. The limit of rejection of the hypothesis uses alpha 0.05 with a t-table value of 1.96. If the value of t-count > 1.96 then the hypothesis is accepted, and if t-count < 1.96 then the hypothesis is rejected. The results of hypothesis testing can be seen in Table 3.

Table 3. Result of Hypothesis Test

Hypothesis	Path	Estimate	t-count	Result
H1	Intellectual Capital→Lecturer Performance	0.53	11.01	Accepted
H2	Intellectual Capital→Organizational Performance	0.88	17.04	Accepted
H3	Lecturer Performance→Organizational Performance	0.07	1.06	Rejected

(Data Processed, 2018)

Intellectual Capital Has a Positive Effect on Lecturer Performance (H1 accepted).

The result of hypothesis testing is stated that intellectual capital owned by STP has a positive and significant effect on lecturer performance, with path coefficients 0.53 and t-count 11.01. The result indicated that the increasing in one unit of intellectual capital, the performance of lecturers increased by 0.53 units.

This study used the dimensions of intellectual capital consisting of human capital, structural capital and relational capital. The strongest indicators of each dimension of

intellectual capital are knowledge for human capital, the process of education and research for structural capital and relations with government and the private sector for relational capital. Lecturers have an obligation to transform, develop and disseminate science, technology and art through education, research and community service. The process of education and research is a routine in the university. Through the routine process of education, cadets obtain science and knowledge, which is expected to produce graduates who have expertise and can be accepted in the world of work and industry. Human capital owned by lecturers, supported by structural capital and relational capital will facilitate the implementation of the Tridharma of Higher Education which is the main task of the lecturer. The performance of lecturers in the field of research can be improved by collaborating with research centers and other universities. This collaboration can increase the number and quality of research and publication of scientific works produced.

The result of this study is expected by the results of research which conducted at the Universitas Terbuka (Helmiatin *et al.*, 2016). Intellectual capital (structural capital and relational capital) has a significant influence on employee performance. Organizational culture, infrastructure, information systems and consumer loyalty support the performance of employees. Employees who are able to utilize intangible resources in the form of intellectual capital will be able to improve performance and achieve the targets that have been charged to them (Katili *et al.*, 2016). Human capital, organizational capital (structural capital) and social capital (relational capital) also have a significant influence on the performance of employees of the SKPD or Regional Work Unit in Lebak Regency.

Increasing human capital is done through education and training. Lecturers are given the opportunity to increase their knowledge and expertise through education and training. Lecturers are also given the opportunity to take formal education through study assignments and study permits. Increased human capital has been proven to improve employee performance in research conducted at PTPN VII Lampung (Sutisna *et al.*, 2014).

Intellectual Capital Has a Positive Effect on Organizational Performance (H2 accepted). The results of hypothesis testing state that intellectual capital has a positive and significant effect on organizational performance, with path coefficients 0.88 and t-count 17.04. The result indicates that the increasing one unit of intellectual capital, the organizational performance will increase by 0.88 units. Organizations that have high intellectual capital, especially structural capital have accumulated knowledge into organizational knowledge and have a culture of continuing to learn and develop themselves to achieve high performance.

The results of this study is expected with the research conducted in drinking water distribution companies in Romania, where intellectual capital consisting of human capital, structural capital and relational capital has a significant effect on organizational performance (Gogan *et al.*, 2016). The performance of several companies in Malaysia is also strongly influenced by intellectual capital owned (Hashim *et al.*, 2015).

Human capital and relational capital in universities in North India have a significant influence on organizational performance. Collaboration between faculties, between universities or with industry will improve performance and will encourage the creation of world-class universities (Chatterji and Kiran, 2017). Relations between universities and the government and the private sector are the strongest indicators of the

dimension of relational capital. This relationship provides an opportunity for cadets to do field work practices. Cadets who have good performance while field work practices in private companies often get recommendations and are accepted as employees. It will improve the performance of higher education because graduates can be absorbed by the business world and the industrial world.

Lecturer Performance has Positive Effect on Organizational Performance (H3 is rejected). Hypothesis testing stated that lecturer performance has a positive effect on organizational performance, but is not significant, with path coefficient 0.07 with t-count 1.06. Improving one unit of lecturer performance is only able to improve organizational performance by 0.07 units.

University performance is not only created by the performance of lecturers (educators), but also by the performance of education staff and structural officials. Determination of employee performance indicators must support organizational performance, which the organization's strategic goals and objectives can be achieved. Organizational performance indicators determined by STP have not facilitated the performance indicators that must be achieved by lecturers, especially research and publication of scientific works. This is thought to be the cause of the insignificant influence of lecturer performance on organizational performance.

Employees must be involved in the preparation of objectives and indicators that affect the area that is the responsibility of each employee (Tatar, 2011). The misalignment between the strategies carried out by the study program and the strategies are done by the organization can lead not to achieving organizational goals. The study program only focuses on academic activities and other routine activities, which is less involved in achieving organizational goals (Sudirman, 2012).

The result of this study is as expected as research conducted at the Ministry of Communication and Information. Employee performance has a positive effect, but not significantly on organizational performance (Julianry *et al.*, 2017). This research is different from the results of research conducted at PT Perkebunan Nusantara (PTPN) VII Lampung, where employee performance has a significant effect on organizational performance (Sutisna *et al.*, 2014). The difference in the results of this study was allegedly due to the selection of research samples conducted. Research conducted at STP only used respondents from lecturers, while in research at PTPN VII Lampung samples were chosen from all employees.

CONCLUSION

The results of this study indicated that intellectual capital has a positive and significant influence on lecturer performance and organizational performance, lecturer performance has a positive influence on organizational performance, but is not significant. This is because the performance of the organization is not only determined by the performance of the lecturer, but also by the performance of the educational staff and structural officials in the STP. Besides that, there are lecturer performance indicators that are not in line with organizational performance indicators. Lecturers have an obligation to publish research results in accredited journals, but these indicators are not in line with

organizational performance indicators. Organizational performance indicators do not list the number of research publications that must be produced by universities.

Lecturer performance and organizational performance can be improved through the management of intellectual capital. STP is recommended to manage intellectual capital owned, especially structural capital so that it can improve lecturer performance and organizational performance. Publication of intellectual capital must also be done, which the community and prospective cadets know the excellence they have and in the end can attract the interest of prospective cadets to study at STP.

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