iJournals: International Journal of Social Relevance & Concern (IJSRC)
ISSN-2347-9698
Volume 9 Issue 8 August 2021

The Influence of Intellectual Capital Toward Architect Performance Through Competency in Malang

Authors: Breeze A. Maringka[1]; Nusa Sebayang[2]

Faculty of Civil Engineering and Planning, National Institute of Technology Malang Indonesia[1,2]

breezemaringka@lecturer.itn.ac.id[1]; nusasebayang@lecturer.itn.ac.id[2]

ABSTRACT

This study aimed to analyze effect of Intellectual Capital on Competency, analyze effect of Intellectual Capital on Architects' Performance, analyze effect of Competency on Architect Performance and analyze effect of Intellectual Capital on Architects' Performance through Competency. The population of this research are architects in Malang area who are members of Indonesian Architects Association (Ikatan Arsitek Indonesia/IAI) as the Architects Professional Association, for Malang region with total number of 657 architects. The total sample taken for this research were 186 architects. The data analysis technique employed in this research was SEM analysis, and according to result analysis showed that Intellectual Capital affected the architect's competency explained as the higher intellectual capital of the architects, it can increase the architect' competency. By utilizing the intellectual capital owned by architects, the architect' competency will be increased. Intellectual capital affects the performance of architects as explained that higher intellectual capital will able to improve the performance of architects. Then, intellectual capital is a resource owned by a company that will provide benefits in the future time. While competency affects the performance of the architects, as explained by the more competent the architect is, the better performance of architect that can be improved. Competency plays a significant role in supporting the smoothness implementation of architects activities. Competency also able mediates the influence of intellectual capital on the architects' performance which means that the higher the intellectual capital on the architects' performance at work, when supported by the architects will resulted in a high competency value.

Keywords: Intellectual Capital, Competence, Performance

1. INTRODUCTION

World economy globalization has made an escalation in the business world development and architect services in Indonesia. This development makes the intensity of competition between companies and architects getting intensified. With these conditions, then, one way to have work competitiveness is to improve the architects' work performance. Architect work performance is an Architect's service that is broadly outlined in Republic of Indonesia Act Number 6 of 2017 about Architects. This research was analyzed the performance of the architects because they are the

originator of work development or work planning ideas.

Technological innovation and intensified business competition today compelled consulting firms and architects to change the way in running their business. For surviving, consulting firms and architects are rapidly changing their strategies from a business that prioritizes labor (labor-based business), because it is mixed with development (construction) implementation to a knowledge-based business that prioritizes specificity only as a designer architect or planner, so the main characteristic will become science competitiveness. Alongside to economic changes that characterized by a science-based economy with the application of knowledge management, the prosperity of companies will depend on a transformation in creation and capitalization of knowledge itself (Sawarjuwono, 2003).

A successful company is a company that is able to innovate continuously, builds upon the use of the latest technology, and is able to develop the skills and knowledge of its employees (Maheran et al., 2009). In addition, company values can be generated from intangible assets which are not always disclosed in the financial reports. In this present era, where intangible assets have become a source of wealth and company progress, intellectual capital may be one of the "missing links" (Young et al., 2009). Young predicts that three components of intellectual capital (human capital, relational capital, organizational capital) will become a link between human resource management and organizational performance.

The new economic development controlled by technology and knowledge, brings an increasing attention to intellectual capital (Hong, 2007; Petty and Guthrie, 2000). According to Chen, et al. (2005), Intellectual Capital is a combination of intangible assets such as knowledge, skills, and information systems. While Stewart (1997) states that intellectual capital consists of two components; the human capital (human capital) and the structural capital (structural capital). Human capital focuses on the value of worker or employees in a company and the knowledge they have. Meanwhile, structural capital is the company's resources in the form of information systems, knowledge of market distribution, customer relationships, and management focus.

Competency is characteristics of a person that can be demonstrated in real working environment that includes knowledge, skills, and behaviors that can produce performance and work achievement (Dessler, 2004).

This study refers to research by Tayles, et. al, 2007 in Malaysia. There are reasons why researches on intellectual capital must be conducted evenly as the concept of intellectual capital is still relatively new in Indonesia and to researcher's knowledge, a research on intellectual capital and its relationship to architect performance has never been done in Indonesia.

This study aims to describe intellectual capital, competency and performance of architects, analyze the effect of intellectual capital on competency, analyze the effect of intellectual capital on architect performance, analyze the effect of competency on architect performance, and analyze the effect of intellectual capital on architect performance through competency.

2. LITERATURE REVIEW

2.1 Performance

According to Pasolong (2008: 197), the concept of performance can basically be seen from two aspects of employee performance (an individual) and organizational performance. Employee

performance is the result of individual work in an organization while an organizational performance is the totality of the work achieved by an organization. Employees' performance and organizational performance are closely related, a success in achieving organizational goals cannot be separated from the resources owned by the organization that are driven or run by employees who play an active role as actors in achieving the goals of the organization (Pasolong, 2008: 57).

According to Keban (2004: 192), performance of an organization can be seen from the level to which the organization can achieve its goals based on the vision and mission that has been previously set. Mahsun (2006: 25) explained that a performance is a description of implementation level of an activity or program or policy in realizing the goals, objectives, mission and vision of the organization as stated in the strategic planning of an organization. Organizational performance or company performance is the indicator for the level of achievement that can be attained and reflects the success of its manager or its entrepreneur. Performance in an organization is an inseparable element in carrying out many organizational tasks, both in governmental institutions and private institutions.

In explaining the performance of an architect, it is necessary to describe the meaning of architecture, an architect, and the architect practices. The definition of Architecture (Republic of Indonesia Act No.6 section 2, 2017) is a resulted form of series of application of science technology and art as a whole in composing space and the built environment as part of human culture and civilization that fulfills the rules of function, rules of construction, and aesthetic principles and includes factors of safety, security, health, comfort and convenience. Meanwhile, the Architect Practice (Republic of Indonesia Act No.6 section 3, 2017) is implementation of activities to produce architectural works which include planning, designing, monitoring, and/or studies for buildings and their environment, as well as those related to areas and cities. Then, the Architect definition (Republic of Indonesia No.6 section 3, 2017) is someone who do an architectural practice.

2.2 Intellectual capital

Edvinsson (1997) states that intellectual capital is a combination of applied experience, organizational technology, customer relations, and expertise that can create a company's competitive advantages. The Organization for Economic Co-Operation and Development (OECD, 1999) describes intellectual capital as the economic value of two categories of the company's intangible assets: Organizational (structural) capital and Human capital. Structural capital includes proprietary software and systems, distribution networks, and supply chains while Human capital includes human resources within the organization and from outside the organization such as their customers and suppliers.

The definition and components of Intellectual Capital according to Stewart (1997) is intellectual materials that has been formulated, captured, and leveraged to create wealth, by producing high value assets. Its components are: human capital, structural capital, and customer capital. Similar to it, Edvinsson and Malone (1997) state that Intellectual Capital is the ownership of knowledge, application, experience, technology, organization, customer relations, and professional skills. Its components are: human capital, and structural capital, Skandia (1998) stated that Intellectual Capital is a number of structural and human capitals which shows the ability of future profits from a human perspective through ability to sustainably create the best value with two

components of human capital and structural capital. Saint-Onge, (1998) added with Intellectual Capital is a pattern consisting of two elements of human capital and structural capital. Its components are: human capital and structural capital that includes; customer capital and organizational capital. The last statement is Cavendish (1999) that said Intellectual capital is a combination of financial, structural, human capital and relations where its components are: financial capital, structural capital, human capital, and relational capital.

2.3 Competency

Competency is the ability to carry out or perform a job or task that is based on skills and knowledge and is supported by the work attitude demanded by the job (Wibowo, 2007). Competency as a characteristic of someone who can be shown (in the working environment) includes knowledge, skills, and behavior, which can produce performance and achievement (Dessler, 2004). In the book written by Edison, et al. (2016) it is also stated that "Competency is an individual's ability to carry out a job properly and has advantages based on matters relating to knowledge, expertise or skill, and attitude".

3. RESEARCH METHOD

3.1 Population, Sample, and Location of Research

The population in this research were architects in the Malang region who are members of *Ikatan Arsitek Indonesia* (IAI) or Association of Indonesian Architect as the professional association of Architects and stationed in Malang region amounting to 657 people, according to the 2018 final annual report.

The sample of this research were architects in the Malang region who are active members of IAI according to the report from Head of the Indonesian Architects Association Malang where 186 architects were taken by census. The sample amount for this research has met the requirements of the Structural Equation Model (SEM) where as an analysis tool is prepared to be used in required number of samples ranges from 100 to 200 people.

3.2 Data Analysis Technique

The data analysis technique employs a descriptive analysis and SEM analysis techniques. Descriptive analysis technique is used to determine the characteristics of the respondents as measured by a number of indicators stated in the questionnaire. By using descriptive analysis, it will generate the frequency and mean value of each indicator. Then, structural equation modeling (SEM) analysis technique was AMOS 22 program. Ghozali (2009) explains that SEM is a combination of two separate statistical methods, namely factor analysis and simultaneous equation modeling. Through SEM, it can be described and analyzed for the effect of exogenous variables on endogenous variables.

4. RESULT AND DISCUSSION

4.1 Result

The Structural Equation Modeling (SEM) is chosen to perform inferential analysis in this research. In carrying out the analysis by applying SEM technique then estimation is carried out in several stages whereas the first stage, the Confirmatory Factor Analysis technique is performed with results as presented below.

4.1.1 Confirmatory analysis of architects' performance variables

Confirmatory analysis of architect performance variables is carried out to confirm whether the observed variables reflect the analyzed factors; which have significant factor weights and lambda values or factor loading (table 1).

According to information displayed in Table 1, it shows that the factor loading value of each indicator exceeds the cut-off value of 0.5 with probability (p) value less than or equal to 0.05. The Reliability Construct value is 0.792, a greater number than the cut-off value of 0.7, and the Variance Extract value of 0.517 which is greater than the cut-off value of 0.5. Of the six architectural performance indicators that show highest factor loading value is the creation of a working drawing with a value of 0.719. The results of this test indicate that all indicators have good reliability for shaping and operating the latent variables of architect performance.

Table 1. Test result of architect performance variables

Indicators	Latent Variables	Factor Loading	CR	P Value	Description
Design Concept	Architect Performance	0,543		0,000	Valid
Design	Architect Performance	0,524	5,535	0,000	Valid
Design Development	Architect Performance	0,587	5,983	0,000	Valid
The Working Drawing	Architect Performance	0,719	6,752	0,000	Valid
Procurement of Construction Executors	Architect Performance	0,676	6,526	0,000	Valid
Periodic Supervision	Architect Performance	0,680	6,545	0,000	Valid
Reliability Construct = 0,792 (cut-off value = 0,7)					Reliable
Variance Extract = 0,517 (cut off value = 0,5)					Reliable

According to information displayed in Table 1, it shows that the factor loading value of each indicator exceeds the cut-off value of 0.5 with probability (p) value less than or equal to 0.05. The Reliability Construct value is 0.792, a greater number than the cut-off value of 0.7, and the Variance Extract value of 0.517 which is greater than the cut-off value of 0.5. Of the six architectural performance indicators that show highest factor loading value is the creation of a working drawing with a value of 0.719. The results of this test indicate that all indicators have good reliability for shaping and operating the latent variables of architect performance.

4.1.2 Confirmatory analysis of architect' competency variables

Confirmatory analysis of intellectual capital variables was carried out to confirm whether the observed variables reflected the analyzed factors

which are having significant factor weight and lambda value or factor loading (table 2).

According to the information displayed in Table 2, it shows that the value of the factor loading for each indicator exceeds the cut-off value of 0.5. The probability (p) value is less than or equal to 0.05, the Reliability Construct value of 0.805 which is greater than the cut-off value of 0.7 and the Variance Extract value of 0.587 is greater than the cut-off value of 0.5. Of the three indicators of intellectual capital that show highest factor loading value is human capital with a value of 0.937. The results of this test indicate that the indicators tested have good reliability in shaping and operating the latent variables of intellectual capital.

Table 2. The result of intellectual capital variables

Indicators	Latent Variables	Factor Loading	CR	P Value	Description
Human Capital	Intellectual Capital	0,937	8,670	0,000	Valid
Customer Capital	Intellectual Capital	0,727	10,694	0,000	Valid
Technology Capital	Intellectual Capital	0,608		0,000	Valid
Reliability Construct = 0,805 (cut-off value = 0,7)					Reliable
Variance Extract = 0,587 (cut off value = 0,5)					Reliable

4.1.3 Confirmatory analysis of architect' competency variables

Confirmatory analysis of the architect competency variable was carried out to confirm whether the observed variable could reflect the analyzed factor, which has a significant factor weight and lambda value or factor loading (table 3).

According to the information displayed in Table 3, it shows that the factor loading value of each indicator exceeds the cut-off value of 0.5. The probability (p) value less than or equal to 0.05, the Reliability Construct value of 0.805 is greater than the cut-off value of 0, 7 and the Variance Extract value of 0.903 is greater than the cut-off value of 0.5. Of the twelve indicators from architect competencies that show highest factor loading value is Physical and Physic of Building Knowledge with a value of 0.729. These results indicate that the tested indicators have good reliability in shaping and operating the latent variable of architect competencies.

Table 3. The result of architect competency variables

Indicators	Latent Variables	Factor Loading	CR	P Value	Description
Architectural Design	Architect Competency	0,518		0,000	Valid
Architectural Knowledge	Architect Competency	0,557	5,816	0,000	Valid
Art Knowledge	Architect Competency	0,627	6,258	0,000	Valid
Urban Planning and Design	Architect Competency	0,571	5,911	0,000	Valid
Relation of Human, Environment, and Buildings	Architect Competency	0,521	5,569	0,000	Valid
Supporting Environment Knowledge	Architect Competency	0,677	6,542	0,000	Valid
Role of Architect in Society	Architect Competency	0,676	6,535	0,000	Valid
Indicators	**Latent Variables**	**Factor Loading**	**CR**	**P Value**	**Description**
Preparation of Work Planning	Architect Competency	0,696	6,638	0,000	Valid
Definition of Interdisciplinary Problems	Architect Competency	0,673	6,522	0,000	Valid
Physical and Physic of Building Knowledge	Architect Competency	0,729	6,804	0,000	Valid
Application of Budgets and Building Regulations	Architect Competency	0,725	6,782	0,000	Valid
Industry Construction Knowledge	Architect Competency	0,711	6,715	0,000	Valid
Reliability Construct = 0,903 (cut-off value = 0.7)					Reliable
Variance Extract = 0,521 (cut off value = 0.5)					Reliable

4.1.4 The goodness of fit

In accordance with the literature review and research objectives, an overall structural model was developed as follows (figure 1).

According to AMOS 18 computation for this SEM model, the goodness of fit indexes is generated and presented in table 4. Then, these index values are compared with the critical value (cut-off value) of each index. A good model is expected to have the goodness of fit indices that greater than or equal to the critical value.

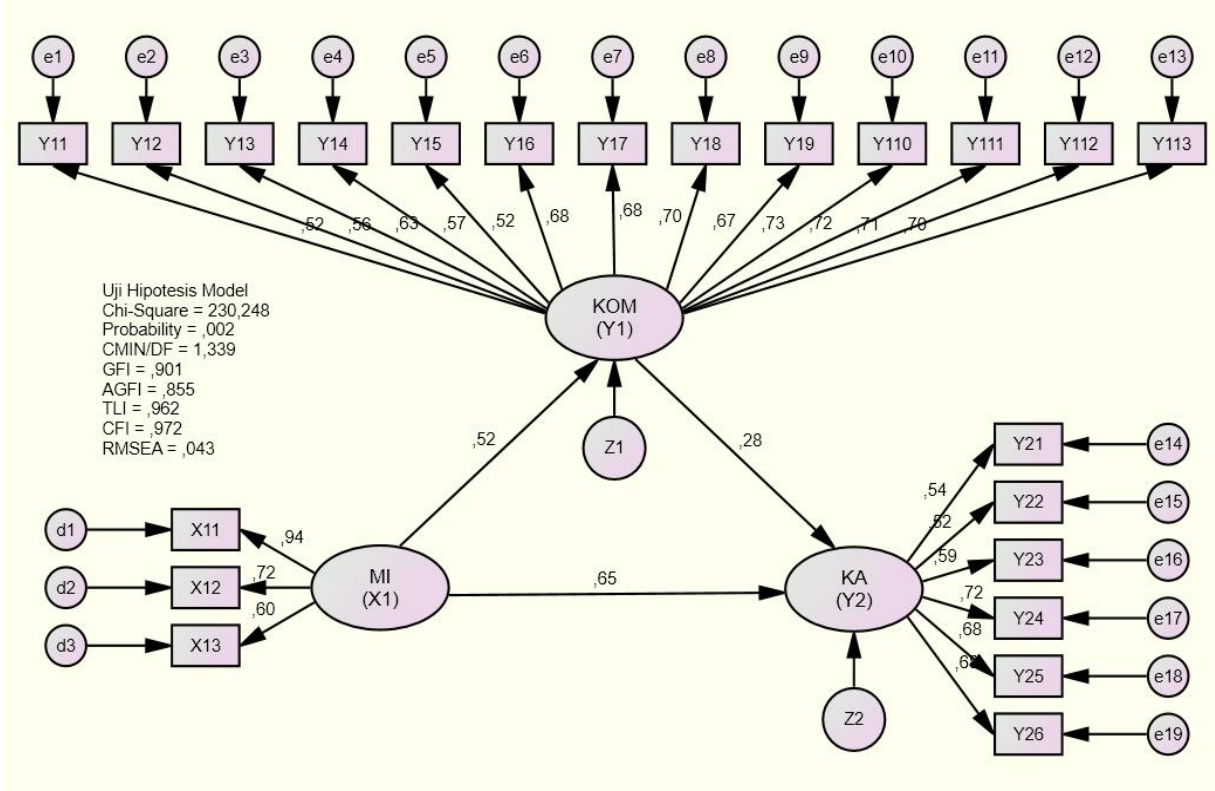

Figure 1. The result of SEM analysis

Table 4. Test result of goodness of fit in a modified structural model

Indicators	Latent Variables	Factor Loading	Description
Chi-Square	124,34	230,248	Marginal
Probability Chi-Square	≥ 0,05	0,002	Marginal
CMIN/DF	≤ 2,00	1,339	Good
RMSEA	≤ 0,08	0,043	Good
GFI	≥ 0,90	0,901	Good
AGFI	≥ 0,90	0,855	Marginal
CFI	≥ 0,95	0,962	Good
TLI	≥ 0,95	0,972	Good

The evaluation of this model shows that not all model criteria are good. Although the AGFI value still below the cut-off value, however, it is not too far from the cut-off value. As Arbuckle and Wothke (1999: 617) said, the best criteria used as an indication of the goodness of fit are CMIN / DF values that are less than 2 and RMSEA value which is below than 0.08. While in this research, the

CMIN/DF and RMSEA values have met the cut off value, as well as the CFI and TLI values, therefore the model can be categorized as suitable and fit for use, so an interpretation ready to be made for further discussion.

4.2 Hypothesis Testing Result

Hypothesis testing for this research was carried out by observing the probability (p) value, when the p value is more than or equal to 0.05 then it is said there exists a significant effect.

4.2.1 The goodness of fit

Hypothesis one states that intellectual capital has a significant effect on competency. The result obtained based on the analysis result for hypothesis one testing is shown in Table 5.

Table 5 shows that the intellectual capital variable has a critical ratio (CR) value greater than 2 and probability (p) value is smaller than or equal to 0.05 in the form of standardized regression weight coefficient of intellectual capital by 0.525. These results provide a decision that the intellectual capital variable has a positive and significant effect on the architect' competency. The research hypothesis which states that intellectual capital has a significant effect on competency is statistically approved (has tested).

Table 5. Intellectual capital of architect' competency

Variable	Standardized Regression Weight	Estimate	SE	CR	P
Intellectual capital	0,525	0,284	0,055	5,209	0,000

4.2.2 Second hypothesis testing

Hypothesis two states that intellectual capital has a significant effect on performance. The result obtained based on the analysis results for hypothesis two testing is shown in table 6.

Table 6 shows that the intellectual capital variable has a CR value greater than 2 and a p-value less than or equal to 0.05 in the form of standardized regression weight coefficient of intellectual capital by 0.645. These results provide a decision that the intellectual capital variable has a positive and significant effect on architect performance. The research hypothesis which state that intellectual capital has a significant effect on architect performance is statistically approved (has tested).

Table 6. The influence of intellectual capital on architect performance

Variable	Standardized Regression Weight	Estimate	SE	CR	P
Intellectual capital	0,645	0,509	0,090	5,662	0,000

4.2.3 Third hypothesis testing

Hypothesis three states that competency has a significant effect on architect performance. The result obtained based on the analysis results for hypothesis three testing is shown in table 7.

Table 7 shows that the architect competency variable has a CR value greater than 2 and a p-

value of 0.002 less than or equal to 0.05, and the standardized regression weight coefficient value of 0.280. These results provide a decision that the architect competency variable has a positive and significant effect on architect performance, thus the third hypothesis is statistically approved (has tested).

Table 7. The influence of intellectual capital on architect' performance

Variable	Standardized Regression Weight	Estimate	SE	CR	P
Intellectual capital	0,280	0,407	0,131	3,120	0,002

4.2.4 .Fourth hypothesis testing

Hypothesis four states that intellectual capital has a significant effect on architect' performance through competency. The result obtained based on the analysis results for hypothesis four testing is shown in Table 8.

Table 8 shows that the architect competency is an intervening variable that can mediate the intellectual capital variable to architect' performance, as seen from total effect value which is greater than the direct effect (0.792> 0.645). It means that intellectual capital has a significant effect to architect' performance through competency variable is statistically approved (has tested).

Table 8. The influence of intellectual capital to architect' performance through competency

Variable	Direct Effect	Indirect Effect	Total Effect
Intellectual Capital to Architect' Performance Through Competency	0,645	0,525 x 0,280 = 0,147	0,792

4.3 Discussion

4.3.1 The influence of intellectual capital on architect competency

Intellectual capital affects the competency of an architect where the higher the intellectual capital is, the better it can increase the architect competency. The type of iintellectual capital which able to provide highest contribution for increasing architect competency is the human capital. Human capital is a combination of knowledge, skills, innovation and a person's ability to carry out his duties, so as to create value to achieve his or her goals. The measurement of human capital is not intended to determine the intrinsic value of human resources, but rather for observing the impact of human resource behavior on organizational processes. An architect greatly affects a person's own ability to the work he or she is engaged in. Considering that architect work cannot be done with ordinary skills aside from architectural development itself, it is very necessary for someone to be competent in the field of architecture. The result of this study supports Růžičková, K., Novák, P. (2010) and Prusak Rafal

(2015) which state that intellectual capital affects competency.

4.3.2 The influence of intellectual capital on architect performance

Intellectual capital affects the architect' performance which means that the higher the intellectual capital is, the higher the architect' performance. Intellectual capital is the ability needed to carry out various mental activities such as to think, to reason and to solve problems for an architect. Intellectual capital is a resource owned by a company which will provide benefits in the future. The intellectual capital dimensions consisted of knowledge related to human capital, knowledge related to customers capital, and any knowledge related to the company which will form one intellectual capital for the company. Intellectual capital is very important for the company because it can find out the extent of progress and capabilities possessed by architects, which can also be used as a consideration for developing the company in the future time. The result of this study is in line with Helmiatin (2015) which stated that intellectual capital has an effect on performance. This is also aligned with Natalia Sutanto and I Gede Siswantaya (2014) who state that intellectual capital affects company performance.

4.3.3 The influence of competency capital on architect performance

Competency affects the performance of an architect, which means that the more competent the architect is, the higher the improvement in the architect's performance area. The architect competency that gives the biggest contribution in improving performance is physical and physic of building knowledge. Competency is a fundamental characteristic of an individual as the causes that associated with the criteria references for effective performance. A competent architect will able to obtain and develop the tasks they are assigned, so that the architect' performance level is improving or getting better. Competency plays an important role in supporting the smoothness implementation of any architect activities. Thus, architects competency must be put into consideration and be assisted to ensure the architect performance maintained at a high quality and quantity. The result of this study is in line with Dina Rande (2016) and Yuliana (2017) which state that competency affects performance.

4.3.4 The influence of intellectual capital on architect performance through competency

Competency is able to mediate the influence of intellectual capital on architect performance, which means that the higher intellectual capital on architect performance, if supported by architects, will have high competency. Competency is the ability to carry out or perform a job or task that is based on skills and knowledge and also supported by the work attitude demanded by the job. Thus, a competency will show skills and knowledge characterized by professionalism in a field of architect as the most important thing or as superior aspect in the field of architect, because competency (in general) concerns about a person's basic ability to do work. The intellectual capital owned by architects mostly able to support the completion of an architect's work, thus will improve the performance of the architect

5. CONCLUTION

Intellectual capital composed from human capital, customer capital and technology capital. The greatest contribution to the formation of intellectual capital is human capital which reflected in having a

concept in action. While architect competency is formed from architectural design, architectural knowledge, art knowledge, urban planning and design, relation of human to the environment and buildings, the environmental support, the role of architect in society, preparation of planning work, understanding of interdisciplinary problems, physic and physical knowledge of building, implementation of building budgeting, regulations, construction industry knowledge and the project management knowledge. The biggest contribution to the formation of architect competency is architectural design, which is reflected in being able to design residential houses. While the architect's performance is formed from the design concept, pre-design, design development, procurement of work drawings, procurement of construction executors and periodic supervision. The biggest contribution to the formation of an architect's performance is periodic supervision which is reflected in checking and improving work drawings.

Intellectual capital affects the competency of an architect, which means that the higher the intellectual capital is, the higher the competency of an architect. By utilizing intellectual capital owned by architects, it can increase architects' competency.

Intellectual capital has an effect on the performance of an architect, which means that the higher the intellectual capital is, the better (higher) the architect's performance. Intellectual capital is a resource owned by a company which will provide benefits in the future time.

Competency affects the performance of an architect, which means that the more competent the aarchitect is, he or she can improve the architect's performance. Competency is playing a role for supporting a smoothness implementation of any architect' activities.

Competency can mediate the influence of intellectual capital on architect performance, which means that the higher intellectual capital on architect performance when supported by architects will possess a high competency value.

6. REFERENCES

[1]. Cavendish S., Curry A., Blekkenhorst, E. van Herk, A. Mulder, P. de Roo M., et al. "Understand intellectual capital," 1999, Retrieved 20 July 2017 from http://www.itconsultancy.com/extern/intelcapt/index.html

[2]. Chen M. C., S. J. Cheng, Y. Hwang, "An empirical investigation of the relationship between intellectual capital and firm's market valuie and financial performance," Journal of Intellectual Capital, vol. 6, no. 2, pp. 159-176, 2005.

[3]. D. Gary, "Manajemen sumber daya manusia," 9th ed., Jakarta: PT. Indeks Kelompok Gramedia, 2004.

[4]. D. Rande, "Pengaruh kompetensi terhadap kinerja pegawai pada dinas perhubungan, komunikasi dan informatika Kabupaten Mamuju Utara," E-Jurnal Katalogis, vol. 4, no. 2, pp. 101-109, 2016.

[5]. E. Emron, A. Yohny, and K. Imas, "Manajemen sumber daya manusia," first ed., Bandung: Alfabeta, 2016.

[6]. E. Leif, and M. S. Malone, "Intellectual capital: realising your company's true value by finding its hidden brainpower," New York: Harper Collins, 1997.

[7]. Helmiatin, "Optimalisasi peran modal intelektual terhadap kinerja karyawan,"

Journal Etikonomi, vol. 14, no. 1, pp. 51–68, 2015.

[8]. H. P. Tan, D. Plowman, and P. Hancock, "Intellectual capital and financial returns of companies," Journal of Intellectual Capital, vol. 8, no. 1, pp. 76-95, 2007.

[9]. K. Yeremias T., "Enam dimensi strategis administrasi publik: konsep, teori, dan isu, Yogyakarta: Gaya Media, 2004.

[10]. M. Nik, and I. Khairu Amin, "Intellectual capital efficiency and firm's performance: study on Malaysian Financial Sector," International Journal of Economics and Finance, vol. 1, no. 2, pp. 206-212, 2009.

[11]. M. Mohamad, "Pengukuran kinerja sektor publik", Yogyakarta: BPFE, 2006.

[12]. M. Tayles, P. Richard H., and S. Saudah, "Intellectual capital, management accounting practices and corporate performance: perception of managers," Accounting, Auditing & Accountability Journal, vol. 20, no. 4, pp. 522-548, 2007.

[13]. Organization for Economis Co-Operation and Development (OECD). "International symposium for measuring and reporting intellectual capital: experience, issue and prospects," Amsterdam, 1999.

[14]. P. Harbani, "Kepemimpinan birokrasi," Bandung: CV. Alfabeta, 2008.

[15]. P. Richard, and G. James, "Intellectual capital literature review: measurement, reporting, and management," Journal of Intellectual Capital, vol. 1, no. 2, pp. 155-176, 2000.

[16]. S. Hubert, "Tacit knowledge; the key to the strategic aligment of intellectual capital, strategic leadership," Planning Review, vol. 24, no. 2, pp. 10-16, 1996.

[17]. S. Natalia, and S. I Gede, "Pengaruh modal intelektual terhadap kinerja perusahaan pada perusahaan perbankan yang terdaftar di Bursa Efek Indonesia," Modus Journals, vol. 26, no. 1, pp. 1-17, 2014.

[18]. S. Tjiptohadi, K. Agustine Prihatin, "Intellectual capital: perlakuan, pengukuran dan pelaporan (sebuah library research)," Jurnal Akuntansi dan Keuanga, vol. 5, no. 1, pp. 35-57, 2003.

[19]. Skandia, "The pioneer of intellectual capitazl reporting. Business Strategy Review 08.04 (Winter 1997)," pp. 38-41, 1998.

[20]. Stewart T. A., "Intellectual capital: the new wealth of organizations," New York: Doubleday, 1997.

[21]. Republic of Indonesia Law, "Arsitek," no. 6, Jakarta, 2017.

[22]. Wibowo, "*Manajemen kinerja*," Jakarta: PT. Raja Grafindo Parsada, 2007.

[23]. Yuliana, "Pengaruh kompetensi dan motivasi kerja terhadap kinerja karyawan perusahaan pada PT Haluan Star Logistic," Jurnal Ilmiah Manajemen Bisnis, vol. 17, no. 2, pp. 135-150, 2017.

