



Intellectual Capital Disclosure of Muhammadiyah Universities: Evidence from 4ICU 2018

Ihyaul Ulum* and Pratiwi Fitri Wijayanti



¹Department of Accounting, Universitas Muhammadiyah Malang, Jl. Raya Tlogomas No. 246, Malang, East Java, Indonesia.

*Correspondence: 

ihyaul@umm.ac.id

This article is available in:

<http://journal.umy.ac.id/index.php/ai>

DOI: [10.18196/jai.2001113](https://doi.org/10.18196/jai.2001113)

Citation:

Ulum, I & Wijayanti, P. F. (2019). Intellectual Capital Disclosure of Muhammadiyah Universities: Evidence from 4ICU 2018. *Journal of Accounting and Investment*, 20(1), 145-155.

Received:

23 October 2018

Reviewed:

30 October 2018

Revised:

11 November 2018

Accepted:

27 December 2018

Copyright: © 2019 Ulum & Wijayanti. This is an open access article distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

ABSTRACT: This study aimed to identify the practice of disclosure on intellectual capital (IC) information on the website of Muhammadiyah Universities in Indonesia. This study used the 44 websites of best Muhammadiyah universities (version 4 International Colleges and Universities survey 2018) as the samples of study. Intellectual capital components used in this study were a framework constructed by Ulum (2012), which consists of 46 items: 8 items on human capital, 23 items on structural capital, and 15 items on relational capital. The research method used was content analysis. The results showed that from the 44 websites of Muhammadiyah Universities, the IC information which was in form of a narrative was 16%, the figure was 8%, the currency (rupiah) was 0.15%, and the graph was 0.75%. From the 44 Muhammadiyah Universities, none of them revealed the information completely, and it is proved low disclosure of intellectual capital in the website. In terms of the amount of information disclosed, on the average, Muhammadiyah Universities tended to reveal information in forms of narrative format.

KEYWORDS: intellectual capital disclosure; muhammadiyah universities; website

Introduction

Intellectual capital is an issue for various sectors such as academics, government, and other stakeholders including universities. In the last few years a lot of researches focus more on the definition and classification of Intellectual Capital in the private sector, while researches for IC disclosure in the public sector are only few. Unlike the private sector, the public sector tends to have a lot of non-financial objectives, such as the use of human resources and knowledge more intensively. Their final tasks are to provide services and intangible. Therefore, the public sector is a good framework for the implementation of the ideas associated with the theory of Intellectual Capital.

Intellectual Capital defined by the European Commission (2006) is a combination of intangible resources and activities of the organization in changing the quantity of material, financial resources, and human beings in a system which can create value. University has a great autonomy in organization, management and budget allocation, management and reporting which then require a new system as it faces challenges due to political initiatives, economy, society and new research mode (Leitner, 2002). The academic community, as well as public, thinks that the IC university must achieve the highest level of excellence and does not require a wide range of interference, but the reality shows that innovating university is still slow (Fazlagic, 2006).

Research on IC at universities has been conducted by several researchers, one of them is Bezhani (2010) who investigated IC reporting at 30 universities in the UK. The results of this study indicated that the number of IC information disclosed by UK universities in the annual report of was low. Kuralova and Margarisoa (2016) investigated the disclosure of IC in universities in the Czech Republic. The results showed that the number of IC disclosure by universities in the Czech Republic was still on the secondary level. Not only abroad, Ulum and Pratiwi (2012) studied the disclosure of Intellectual Capital with three components consist of 46 items in which the objects of the study were 35 universities winning QS-Star in Indonesia. The study stated that the highest IC disclosure in human capital, structural capital and relational capital was Airlangga University, while the lowest was the National Institute of Technology Bandung. Tower, Plummer, Ridgewell, Goforth, and Tower (2008) conducted empirical study to assess the most valuable asset of IC disclosure for 78 items using descriptive analysis. The study stated that the level of disclosure of the IC from the University of Australia ranged between 21.4% and 53.3% for the customer to process. This indicates the spread and depth of IC communication are mix and uneven.

The era of globalization makes all information can be accessed online, such as a research conducted by Rossi, Nicolò and Polcini (2018) which examined empirically disclosure of intellectual capital through their website. The results showed that the components of human capital and internal capital are the most disclosed information, while the external capital component was still limited. This is due to the positive influence of internationality and online visibility on the disclosure of intellectual capital. In accordance with the disclosure of intellectual capital which is considered very important for the university has been proven by a research conducted by Córcoles and Córcoles and Ponce (2013) which examined how important the disclosure of intellectual capital in university in Spain by distributing questionnaires to members of the social council of universities in Spain to identify the components of IC which are needed most for stakeholders. The study stated that the disclosure of intellectual capital was very important because the disclosure of Intellectual Capital could facilitate the stakeholders in decision making.

This study developed a model framework for reporting capital intellectual in Muhammadiyah¹ Universities/ Perguruan Tinggi Muhammadiyah (PTM). The sample of this study is listed in the flat PTM best universities in Indonesia with 4ICU 2018 version. The 4ICU version used as a reference because the required data can be viewed and accessed easily. In addition, this study also refers to the official website of each PTM. Based on phenomenon of intellectual capital and stunning development of the Muhammadiyah Universities, it attracted the authors to conduct research on disclosure of intellectual capital in the Muhammadiyah Universities (PTM) in Indonesia with 4ICU 2018 version. PTM were chosen as the subject of the study

¹ Muhammadiyah (Arabic: *محمديّة*, followers of Muhammad. full name: Persyarikatan Muhammadiyah) is a major Islamic non-governmental organization in Indonesia. The organization was founded in 1912 by Ahmad Dahlan in the city of Yogyakarta as a reformist socioreligious Muhammadiyah has 155 colleges, consisting of: 40 universities, 88 high schools, 23 academies, 4 polytechnics, and 14 Aisyiyah Universities. Among the 150 higher institutions, 3 were included in the 50 leading universities in Indonesia. Source: <http://www.muhammadiyah.or.id>

because those institutions are under auspices of Muhammadiyah had significant progress. This can be seen from the existence of five PTM that have achieved "A" accreditation (Excellent) by the Ministry of Research, Technology and Higher Education of Republic of Indonesia, and several PTM that have grown to become university status from high school and academy. The study is derived from a research by Ulum (2012) that modified the study of Leitner (2002). This modification refers to the standard of higher education in Indonesia which is arranged in the standard of accreditation of the National Accreditation Board of Higher Education/ Badan Akreditasi Nasional – Perguruan Tinggi (BAN-PT). In addition, the research on disclosure of intellectual capital with 4ICU version has never been conducted before in Indonesia, so this research is the first research of intellectual capital in Indonesia using 4ICU version.

The results of this study provide new insights into the development of IC studies in universities context during a few related researches conducted. Practically, the results of this research provide information to university management regarding the extent to which the IC has been delivered to the public given that IC disclosure is important in promoting the competitiveness of universities (Rahayuningtyas, Prihatni & Triana, 2017).

Literature Review and Research Focus

Stakeholder Theory

Freeman (1984) in Roberts (1992) defines stakeholders as "... any group or individual who can affect or is affected by the achievements of an organization's objectives". This theory suggests that the management of an organization is required to perform the activity expected by stakeholders since they are entitled to know the information that affects their company's activities. According to Purnomosidhi (2006), organization's reporting activities are not limited to any economic or financial performance. Thus, a report on intellectual capital and other information beyond the mandatory disclosure is also important to do. This is consistent with the research conducted by Córcoles and Ponce (2013) which revealed the importance of intellectual capital disclosure for stakeholders of the university. The results showed that 75.3% considered that the disclosure of the IC was very important. Disclosure of the IC in the university will add information to the public, otherwise, it will increase user satisfaction, increase credibility, achieve the vision of the university, enhance the image and reputation of the university and increase the confidence of the workers.

Intellectual Capital

Intellectual Capital is defined by the European Commission (2006) as a combination of intangible resources and activities of the organization in changing the quantity of material, financial resources, and human beings in a system which can create value. Aligned with Bukh, Nielsen, Gormsen, and Mouritsen (2005) intellectual capital is the process of value creation for an organization as various combinations of knowledge resources in the forms of employee, customer, process or technology. Not only that, the definition

which is often used by some literature referring to the Organization for Economic Co-Operation and Development (OECD, 1999) describes IC as two categories of economic value as intangible assets and is divided into two parts, namely the organizational and human capital.

Intellectual capital components have been categorized in a various way. However, there is a classification which is undoubtedly the most widely accepted and in special literature such as Bontis (2001), Leitner (2004), Perez (2007), Ramirez, Lorduy and Rojas (2007), Sánchez, Elena and Castrillo (2009), Bezhani (2010), Casanueva and Gallego (2010), and Secundo, Margherita, Elia and Passiante (2010) in which classification of intellectual capital consists of three basic components that are closely related as follows:

Human Capital

Human capital is the amount of explicit knowledge. Human Capital is source of innovation and improvisation, but these components are difficult to quantify. Besides, these components are considered into a source of knowledge as skills and competencies within an organization (Bontis, 2001). Human Capital describes how an organization produces the best solution based on the knowledge of the organization. Human capital is increased when an organization can manage the capabilities of its employees. Components of human capital as stated by Ulum (2012), adapted from Leitner (2002) and accreditation guidelines of BAN-PT in the university consists of: The number of full-time professors, the number and type of research, the number of tenured faculty, the number of part-time lecturers (guest lecturers, outstanding faculty, faculty experts), the achievements of lecturers (awards, grants, funding programs), qualification (number of positions) academic lecturers, academic lecturer competence (education level of S1, S2, S3), and the number of non-academic staff (librarians, laboratory technicians).

Structural Capital

Structural capital is an explicit knowledge related to the internal process of dissemination, communication, and management of scientific and technical knowledge in university (Yolanda & Silvia, 2014). According to Sawarjuwono and Kadir (2003), structural capital is the ability of an organization to produce optimal intellectual performance and overall business performance through a continuous process and structure in which a company can support employee efforts. An employee could potentially have a high intellect when systems and procedures in an organization are also good, but on the contrary, if the systems and procedures are bad then the intellectual capital organizations cannot achieve its performance and cannot be fully utilized. Structural components of capital by Ulum (2012) adapted from Leitner (2002) and accreditation guidelines BAN-PT in the university consists of: Investments in library electronic media, income from license, the number of licenses granted, measurement and laboratory services, vision of study program, mission of the study program, goals and objectives, delivery strategy (way of delivery), technology used in learning, syllabus and lesson plan, the evaluation system of learning (the presence of faculty students), the trusteeship system, the average study period, the

number of professors per student, the dropped out ratio, the average student per tutor, the average number of meeting / mentor, academic qualification of lecturers, the availability of a guide mechanism final project, the target of a thesis, and the number of graduates / graduations.

Relational Capital

This component is a set of economic, political and institutional relationships that is developed and enforced between the university and non-academic, corporate, non-profit organizations, local governments and the public in general. It is also a perception that other people have a university, the image of the appeal, reliability, etc. (Yolanda & Silvia, 2014). According to Ulum (2012) capital relational component is a component of the provision of real value. Relational capital shows whether the relationship of an organization with its stakeholders is good or not. Relational capital can be seen from various external parts which can add value to an organization. Relational component of capital by Ulum (2012) adapted from Leitner (2002) and accreditation guidelines BAN-PT at the university consists of: The number of third-party research grants abroad, the number of third-party research Higher Education, international scientists in universities, the number of conferences held, research/community service, scientific publications in international journals, publications of scientific journals in accredited organization, scientific publications in local journals, the site hits the internet, e-learning, the number of achievements and academic reputation, interests and talents, services student affairs, service and utilization of graduates, data recording graduates, and the participation of graduates in academic development.

Disclosures made up of two types, the first is compulsory (mandatory) in which the disclosure of information required in an organization based on specific rules or standards, while the latter is not required which disclosure of the information beyond the requirements of specific regulations or standards. According to Yolanda and Silvia (2014), the purpose of the disclosure of intellectual capital provides a series of indicators which contribute to improve the quality of accounting information in an organization.

Disclosure of information Intellectual Capital for the University is as a tool to find out all the information in the University. In particular, intellectual capital within the University includes all non-physical assets from universities, including processes, skills capacity, recognition, partnerships, network collaboration, contacts, etc. (Bezhani, 2010; Casanueva and Gallego, 2010; Ramirez et al., 2007; Secundo et al., 2010). According to Ulum (2012) disclosure of Intellectual Capital at the University can be seen from how some universities describe their purposes, and how they create a broader economic strategy. According to Leitner (2002) disclosure of intellectual capital requires more difficult preparation than the disclosure of the IC in the industry. This is because the university has a lot of goals and objectives that make it as a benchmark for its performance.

Research Method

This study is a descriptive study. Descriptive research is a research that describes and interprets the information with the actual circumstances (Ulum & Juanda, 2016). The objects of this study were 44 (forty-four) best Muhammadiyah university version 4 International Colleges and Universities (4ICU) 2018. The type of data in this study was the disclosure of intellectual capital on the website of Muhammadiyah universities in 4ICU rank. The data used in this study were secondary data. Secondary data are a source of research data obtained by researchers indirectly or through an intermediary (Supomo & Indriantoro, 2002). The data used were obtained through the official website of each university Muhammadiyah with the observation period was from 18th August 2018 to 18th September 2018. Framework Intellectual Capital Disclosure (ICD) used was the Intellectual Capital Disclosure framework for Muhammadiyah universities comprises 46 components of Intellectual Capital by Ulum (2012) adapted from Leitner (2002) and accreditation guidelines BAN-PT. Table 1 depicts 46 items of Intellectual Capital used in this study.

Content Analysis is used to analyze the data. Content analysis is defined as a methods to collect and analyze from a text. The text here can be words, numbers, or pictures that can be delivered. Content analysis is done by providing a checklist for each item of disclosure of intellectual capital. After the checklist, the next stage is summation of the items disclosed in each university Muhammadiyah. Disclosure of intellectual capital approach used five ways numerical coding system to provide appropriate criteria using projections numeric code. In this approach the following criteria is used:

- 0 : IC information item not disclosure
- 1 : IC information items reported in narrative form
- 2 : IC information items reported in a numeric form
- 3 : IC information items reported in the form of monetary value
- 4 : IC information items reported in the form of images/graphics

Result and Discussion

This study was conducted on 18 August to 18 September 2018. The objects of research used 44 samples of best Muhammadiyah universities version International Colleges and Universities (4 ICU) in 2018. The first analysis was performed under analysis. Content analysis was used to collect the data item IC disclosed at the official website of Muhammadiyah university. This analysis was conducted by scoring. Scoring in the valuation of intellectual capital disclosures made up of the numbers 0, 1, 2, 3, and 4. Reporting intellectual capital components were presented in the form of a value ranging from "0" if the item is not disclosed, the value of "1" if the item is expressed in narrative form, value "2" if the item is expressed as a number, the value of "3" if the item is expressed in the form of rupiah, and a "4" if the item is expressed in graphical form.

Table 1 Items Disclosure of Intellectual Capital

Human Capital	structural Capital	Relational Capital
1. Number of Full-Time Professors	9. Investment in an electronic media library	32. The number of 3rd parties research foreign grants
2. The number and type of study	10. Income from licenses	33. The number of 3rd parties research Higher Education
3. Total Full time	11. The number of licenses granted	34. International scientists at universities
4. Total Lecturer Variable	12. Measurement and laboratory services	35. The number of conferences held
5. Lecturer achievements (awards, grants and program funding)	13. Vision courses	36. Research/community service
6. Qualifications (number of positions) academic lecturers	14. The mission of the study program	37. Scientific publications in international journals
7. Competence academic lecturer (number of education level S1, S2, S3)	15. Aims and objectives delivery strategy	38. Scientific publications in journals organization accredited
8. Number of non-academic staffs	16. The technology used in the learning	39. Scientific publications in international journals
	17. Syllabus and lesson plan	40. Hits Internet sites
	18. learning techniques	41. <i>E-Learning</i>
	19. Facilities, infrastructure, funds for learning	42. Total achievements and academic reputation, interests, and talents
	20. Learning evaluation system	43. Student services
	21. Trusteeship system	44. Service and utilization of graduates
	22. The average period of study	45. graduates data recording
	23. Number of lecturers per-student	46. Participation in the development of academic graduates
	24. The ratio of drop-outs	
	25. On average students per lecturer	
	26. The average number of meetings/mentors	
	27. Academic qualifications supervisor	
	28. Availability guide mechanism final project	
	29. Target of thesis period	
	30. Number of graduates/graduations	

Source: Ulum (2012)

Not only using content analysis, but data analysis was also performed using descriptive statistics. Descriptive statistics were used to present the criteria for distributing the sample data (Ghozali, 2009). Table 2 shows the disclosure of descriptive statistical test IC Muhammadiyah universities.

According to the Table 2, it shows that of the 44 samples of best Muhammadiyah universities version 4ICU, those that do not report IC information in average are 22%, while 16% of IC information report are in forms of narratives, 8% are in forms of numeric, while the mean in form of the currency (IDR) and the graph are 0.15% and 0.75% respectively. From those 44 Muhammadiyah universities, the maximum number of the IC disclosures that are not reported are 38%, while the maximum of those being reported in the forms of narratives are 26%, the maximum of the numeric rate is 22%, the currency (IDR) at least 2% and the maximum for

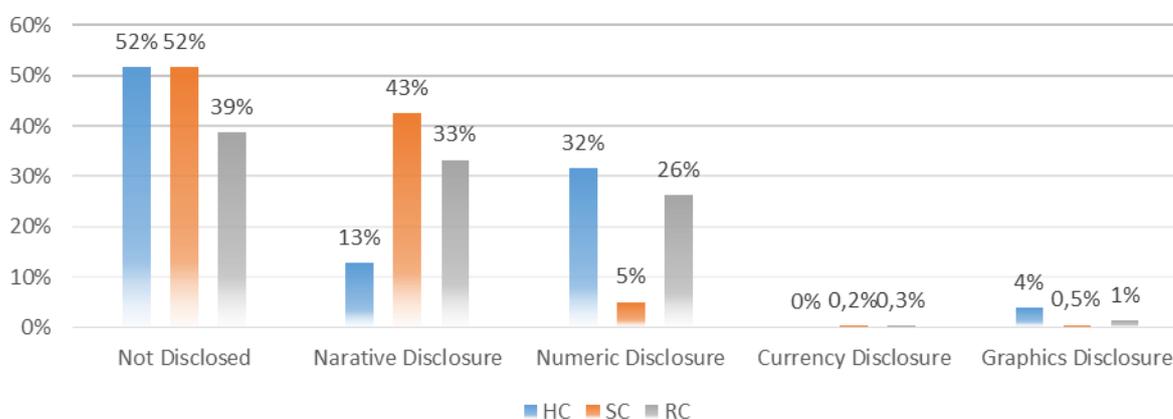
Table 2 Descriptive Statistics

	N	Min.	Max.	Sum	Mean	Std. deviation	variance
Index	44	19:57	91.30	2345.65	53.3103	25.41470	645907
Not_Disclosed	44	4.00	38.00	968.00	22.0000	12.21893	149302
Narative_Dis	44	8.00	26.00	701.00	15.9318	5.24026	27460
Numeric_Dis	44	.00	22.00	338.00	7.6818	6.91400	47803
Currency_Dis	44	.00	2.00	7.00	.1591	.42826	.183
Graphics_Dis	44	.00	8.00	33.00	.7500	1.39975	1959
Valid N (listwise)	44						

figure is 8%. In addition, the minimum of IC disclosure that are not reported from 44 Muhammadiyah universities are 4% and reported in the form of the narrative are 8%. The standard deviation on intellectual capital disclosures indicates that it is smaller than the average value. This means it showed good results because the standard deviation reflects the deviation of the sample data is that is smaller than the average value. Standard deviation indicates that the ICD is disclosed for each best Muhammadiyah universities version 4ICU has almost the same magnitude between each university sample.

Based on Figure 1, the highest disclosure of intellectual capital components is in the Relational Capital of 15 items with a total of 61%. This is because many universities have already expressed Muhammadiyah research and publications, knowledge transfer to public such as E-learning and internet site hits, student services, and recording as well as the participation of alumni. While the disclosure of intellectual capital components is still low in terms of human capital. It is because of the number of items are the least in comparing human capital with other components. Moreover, many Muhammadiyah universities do not disclose information related to part-time lecturers and none of the universities provide information about the number of full-time professors.

INTELLECTUAL CAPITAL DISCLOSURE



Note: HC: Human Capital; SC: Structural Capital; RC: Relational Capital

Figure 1 Percentage Disclosure of Intellectual Capital

The description of the practice of intellectual capital disclosure on the official website of Muhammadiyah universities in Indonesia used content analysis by providing a score for each IC item that is disclosed. Scoring in intellectual capital disclosure assessment consists of numbers 0, 1, 2, 3, and 4. Reporting on the intellectual capital component is presented in the form of values starting from "0" if the item is not disclosed, "1" if the item is expressed in narrative form, "2" if the item is expressed in the form of a number, "3" if the item is expressed in the form of rupiah, and "4" if the item is expressed in graphical form.

In general, many IC items are not disclosed (figure 1). In fact, none of the 'full time professors' in the human capital group is revealed. Similarly, the structural capital component for the 'student drop out ratio' item. For the relational capital component, 50% of universities do not disclose items from overseas third-party research. It is assumed that the university did not reveal information about the number of students drop out because they thought that the information would disrupt their credibility in relation to the learning system they held.

The researchers used four disclosure choices in this study, namely narrative, numbers, currency, and graphs. Descriptive statistics show that the disclosure method in narrative form is very dominant (34.44%). The IC component which is almost always expressed in narrative format is structural capital (for example about laboratory services, vision and mission, and infrastructure). Universities may assume that by disclosing such information narratively it will be easier to influence public perceptions about the quality they have. What interesting is that the selection of graphs to deliver messages through websites is still very scarce. From the 46 IC items identified, only 1.38% were disclosed in graphic format and only 4 universities used them. This finding is quite paradoxical, because universities should be able to maximize information about their 'wealth' through various forms of graphics that will be much more informative since those who access the university websites are generally well educated. By presenting information in graphical forms, university stakeholders will gain more information they need and faster.

Conclusion

The highest disclosure of intellectual capital components is the Relational Capital. While the lowest disclosure of intellectual capital components is human capital. It is because of the number of items in human capital are the least compared to other components. Out of 44 samples studied, the University of Muhammadiyah Malang is the PTM that the most revealed information about IC on the website. Details, UMM discloses information. In details, UMM revealed 7 items of information about human capital (i.e. number and type of research, number of permanent lecturers, number of non-permanent lecturers, academic achievements, the qualifications of lecturer, lecturer competencies, and number of non-academic staff), structural capital 20 items (i.e. structural capital, university culture, learning systems, and thesis guidance mechanism), and 15 items of relational capital (i.e. research and publications, knowledge for publications, student

services, and alumni participation). Overall, UMM revealed 42 IC items from a total of 46 items that were used as references in this study. While the university with the least number of IC disclosures is Buton Muhammadiyah University which expresses only 9 items.

The standard deviation on intellectual capital disclosures indicates that the standard deviation is smaller than the average value. This means that the results show good results because the standard deviation reflects the deviation of the sample data is that is smaller than the average value. Standard deviation indicates that the ICD is disclosed for each best Muhammadiyah universities version 4ICU has almost the same magnitude between each university sample. Limitations of this study are due to the are limit information displayed on university website so researchers have difficulty in finding information on intellectual capital disclosure of Muhammadiyah universities.

References

- Bezhani, I. (2010). Intellectual capital reporting at UK universities. *Journal of Intellectual Capital*, 11(2), 179-207. <https://doi.org/10.1108/14691931011039679>
- Bontis, N. (2001). Assessing knowledge assets: a review of the models used to measure intellectual capital. *International Journal of Management Reviews*, 3(1), 41-60. <https://doi.org/10.1111/1468-2370.00053>
- Bukh, P. N., Nielsen, C., Gormsen, P., & Mouritsen, J. (2005). Disclosure of information on intellectual capital in Danish IPO prospectuses. *Accounting, Auditing & Accountability Journal*, 18(6), 713-732. <https://doi.org/10.1108/09513570510627685>
- Casanueva, C., & Gallego, A. (2010). Social capital and individual innovativeness in university research networks. *Innovation*, 12(1), 105–117. <https://doi.org/10.5172/impp.12.1.105>
- Córcoles, Y. R., & Ponce, Á. T. (2013). Cost–benefit analysis of intellectual capital disclosure: University stakeholders' view. *Revista de Contabilidad*, 16(2), 106-117. <https://doi.org/10.1016/j.rcsar.2013.07.001>
- European Commission. (2006). Reporting Intellectual Capital to Augment Research, Development and Innovation in SMEs. Belgium: European Communities.
- Fazlagic, A. (2006). Measuring the intellectual capital of a university. Paper presented at the Conference on Trends in the Management of Human Resources in Higher Education, Poland.
- Ghozali, I. (2009). *Aplikasi Analisis Multivariate Dengan Program SPSS*. Semarang: Badan Penerbit Universitas Diponegoro.
- Kuralova, K., & Margarisova, K. (2016). Intellectual Capital Disclosure at Czech Public Universities in Relation to the Stakeholder Information Need. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 64(6), 1989–1998. <https://doi.org/10.11118/actaun201664061989>
- Leitner, K. H. (2002). Intellectual Capital Reporting for Universities: Conceptual background and application within the reorganisation of Austrian universities. paper presented at The Transparent Enterprise, The Value of Intangibles conference, Autonomous University of Madrid Ministry of Economy, Madrid.
- Leitner, K. H. (2004). Intellectual capital reporting for universities: conceptual background and application for Austrian universities. *Research Evaluation*, 13(2), 129–140. <https://doi.org/10.3152/147154404781776464>

- OECD. (1999). Measuring and Reporting Intellectual Capital: Experience, Issues, and Prospects. Paper presented at the An International Symposium, Amsterdam.
- Perez, S. E. (2007). Governing the university of the 21st century: Intellectual capital as a tool for strategic management. Universidad autonoma de Madrid,
- Purnomosidhi, B. (2006). Analisis Empiris terhadap Diterminan Praktik Pengungkapan Modal Intelektual pada Perusahaan Publik di BEJ. *The Indonesian Journal of Accounting Research (IJAR)*, 9(1).
- Ramirez, Y., Lorduy, C., & Rojas, J. A. (2007). Intellectual capital management in Spanish universities. *Journal of Intellectual Capital*, 8(4), 732-748. <https://doi.org/10.1108/14691930710830873>
- Roberts, R. W. (1992). Determinants of Corporate Social Responsibility Disclosure : An Application of Stakeholder Theory. *Accounting Organizations and Society*, 17(6), 595-612. [https://doi.org/10.1016/0361-3682\(92\)90015-k](https://doi.org/10.1016/0361-3682(92)90015-k)
- Rossi, F. M., Nicolò, G., & Polcini, P. T. (2018). New trends in intellectual capital reporting: Exploring online intellectual capital disclosure in Italian universities. *Journal of Intellectual Capital*, 19(4) 1469-1930. <https://doi.org/10.1108/JIC-09-2017-0119>
- Sánchez, M. P., Elena, S., & Castrillo, R. (2009). Intellectual capital dynamics in universities: a reporting model. *Journal of Intellectual Capital*, 10(2), 307-324. <https://doi.org/10.1108/14691930910952687>
- Sawarjuwono, T., & Kadir, A. P. (2003). Intellectual capital: Perlakuan, pengukuran dan pelaporan (sebuah library research). *Jurnal Akuntansi & Keuangan*, 5(1), 35-37.
- Secundo, G., Margherita, A., Elia, G., & Passiante, G. (2010). Intangible assets in higher education and research: mission, performance or both?. *Journal of Intellectual Capital*, 11(2), 140 - 157. <https://doi.org/10.1108/14691931011039651>
- Supomo, B., & Indriantoro, N. (2002). *Metodologi Penelitian Bisnis*. Yogyakarta: BPFEE.
- Tower, G., Plummer, J., Ridgewell, B., Goforth, E., & Tower, S. (2008). Intellectual Capital Disclosure of Australian Universities. *Financial Reporting, Regulation and Governance*, 7(1), 1-17.
- Ulum, I. (2012). Konstruksi Komponen Intellectual Capital untuk Perguruan Tinggi di Indonesia. *Jurnal Reviu Akuntansi dan Keuangan*, 2(2), 251-262.
- Ulum, I., & Juanda, A. (2016). *Metodologi Penelitian Akuntansi*. Yogyakarta: Aditya Media Publishing.
- Ulum, I., & Pratiwi, R. Y. (2012). Analisis Praktik Pengungkapan Intellectual Capital Pada Website Universitas Peraih QS-Star 2011. *Jurnal Reviu Akuntansi dan Keuangan*, 2(2), 323-334.
- Yolanda, R., & Silvia, G. (2014). Recognition and measurement of intellectual capital in Spanish universities. *Journal of Intellectual Capital*, 15(1), 173-188. <https://doi.org/10.1108/JIC-05-2013-0058>