

APPLICATION OF INTELLECTUAL CAPITAL DISCLOSURE IN PRIVATE UNIVERSITIES IN INDONESIA

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Abstract

Recognition of intellectual capital (IC) is an effort to increase organizational value and *competitive advantage* (Chen et al., 2005). The term IC is a combination of intellectual and capital that indicates the importance of knowledge (Lev & Zarowin, 1999; Serenko & Bontis, 2013), especially in universities where the main capital is resources in the form of knowledge owned by the entire academic community of universities. In particular, intellectual capital disclosure (ICD) can be a very effective means for companies to signal quality excellence due to the importance of intellectual capital for future wealth creation (Guthrie & Petty, 2000). Especially for companies with a strong intellectual capital foundation, intellectual capital disclosure is able to distinguish low-quality companies (An et al., 2011). The research method used is mixed-method analysis. The data used in this study are primary and secondary. Primary data is in the form of interviews with the *in-depth interview* method, with the aim of supporting research results from secondary data in the form of financial statements that have been prepared by universities. The universities used in this research as a pilot project are private universities that have been accredited and have sustainable financial reports. The result of this study is the compilation of items from three components of intellectual capital, which are the basis for the item of Intellectual Capital Disclosure of Higher Education in Indonesia, which is adjusted to BAN PT and Lamemba.

Keywords: *intellectual, capital, human capital, structural, and relation capital and disclosure*

1. Introduction

The current global situation has emphasized the importance of intellectual capital, particularly financial reporting, which is used to present information useful for economic decision-making about the financial position and performance of organizations. The accounting policy on asset recognition shows that most intangible assets cannot be shown on the balance sheet when they are an important resource for future performance. All costs sacrificed to develop intangible assets must be charged directly to the cost of the income statement. However, the recognition of intangible assets, especially intellectual capital (IC), to drive organizational value and competitive advantage is increasing (Chen et al., 2005).

Intellectual capital is viewed by companies as a form of capital that is not recorded in traditional accounting systems. The registered capital in question is knowledge-based capital that supports knowledge-based assets in companies and organizations. Universities, especially private universities, of course, have knowledge-based assets and are the main capital of a university, but this cannot be disclosed in the organization's financial statements and becomes part of a competitive advantage. Intellectual capital emphasizes the combination of intellect and capital to show the importance of knowledge (Serenko & Bontis, 2013). However, intangible assets such as *human capital* and *innovation capital* (Lev & Zarowin, 1999) If it is connected with universities that strongly emphasize the competence of human resources, including students, lecturers, and education staff, in creating human capital and *innovation capital*, *Innovation capital* is in the form of technological innovation products and appropriate products

for both industry and society. However, university shareholders, namely the owners of the university foundation, have received demands from stakeholders for the availability of resources that they will absorb in the industrial world, and the world of work is a workforce that has competencies according to the fields of science needed by *stakeholders*.

The government has been encouraged to respond to global economic changes both for the private sector and the public sector, including the education service sector. The government is required to increase global competition, both in terms of economic resources and human resources, as well as natural resources. The government is also required to carry out rapid dissemination of innovative products, *e-commerce*, changes in customer demand, and advances in science and technology. So far, the point of view of companies and organizations only focuses on tangible capital until finally switching to intangible capital, so that users of accounting information also feel the importance of intellectual capital disclosure. Limitations on the provisions of accounting standards on intellectual capital encourage experts to create measurement and reporting models for intellectual capital disclosure. One model that is often used by researchers is the one developed by Pulic, namely Value Added Intellectual Coefficient, or VAICTM (Pulic, 2004). However, based on Ulum's findings, et al. (2016) stated that VAICTM does not measure intellectual capital but only measures the impact of intellectual capital management (Ulum et al., 2016). This assumption states that a company that has good intellectual capital certainly has an impact. For this impact, Pulic with VAICTM is more accurately referred to as an IC (*Intellectual Capital Performance/ICP*) performance measure, which then calls it a business performance indicator (BPI) (Mavridis, 2004; Ulum, 2005).

Several studies in Indonesia conducted research on ICP using VAICTM as a projection, looking at its effect on financial performance. Several studies, one of which was conducted by Ulum (2005) and Soewarno & Tjahjadi (2020) stated that there is a positive influence of intellectual capital on company performance. However, in contrast to research conducted by Firer and Williams (2003) shows that ICP does not conclusively affect company performance, they claim that the absence of ICP influence on the company's financial performance is caused by the concept of value added (VA) in VAICTM calculations that are not related to the dimensions of financial performance. Profitability, which is one measure of company performance, is purely a measure of accounting performance for the benefit of stakeholders, while VA is defined as a contribution to increasing potential and welfare for stakeholders, not just shareholders.

Higher education has legitimacy for the community, government, and especially stakeholders who will absorb in the world of work and industry, so the importance of universities, especially private universities, to assess intellectual capital in measuring the financial performance of the organization Legitimacy theory is closely related to stakeholder theory. Legitimacy theory states that organizations continually seek ways to ensure their operations are within the limits and norms prevailing in society. Legitimacy theory is closely related to intellectual capital reporting (Dumay & Guthrie, 2019). Research that examines intellectual capital reporting on university websites in Indonesia still uses a framework built specifically for universities in Europe (Puspitasari & Rokhimah, 2018), so the research conducted by Ulum (2012) involves constructing the intellectual capital component for universities in Indonesia. The novelty of this study is that it has never been done in the context of disclosing university reporting with intellectual capital.

In general, companies, investors, and analysts want reliable information, especially in organizations related to the sustainability of the organization, especially universities owned by the Foundation in which there is a family ownership structure or *family ownership*, but the sustainability of universities makes it very important to disclose the intellectual capital owned by the organization. Several studies related to *intellectual capital disclosure* have been conducted, which show that companies that do so significantly increase company value (Abdolmohammadi, 2005; Ulum, 2005). Research that directly examines the effect of *intellectual capital (IC)* on a company's financial performance shows positive and influential

results (Chen et al., 2005; Mavridis, 2004; Soewarno & Tjahjadi, 2020; Tan et al., 2002; Weqar et al., 2020), but there are also several studies that show no effect of IC on financial performance, namely research conducted in South Africa (Firer & Williams, 2003). Research on green intellectual capital disclosure is *still very limited* (Bozzolan et al., 2003), while companies certainly hope that the intellectual capital information disclosed in the annual report will be well received by investors. Referred to here are the owners of university foundations and the community, which in this case are lecturers, students, and education staff as consumers who certainly care about the survival of the college they shelter.

However, the hope of the organization will be proven if the disclosure of intellectual capital in the organization's annual report has an effect on improving organizational performance. In addition, some characteristics of company ownership are divided into two categories: family ownership and non-family ownership. Several studies have been conducted to examine *the relationship between intellectual capital and financial performance moderated by family ownership, including finding no influence that strengthens the relationship between intellectual capital and financial performance* (Cinintya Pratama & Wibowo, 2017). However, there are results that show that there is an increase in company performance in companies that have *family ownership characters* (Alrawashedh, 2021; Pratama & Innayah, 2019), as well as the results of research conducted related to the quality of financial statements, which show that companies that have family ownership characters *have better quality financial statements* (Shiri et al., 2018), and research that shows that family ownership *has a positive effect on intellectual capital* (Forte et al., 2017; Ginesty & Ossorio, 2021). Research conducted with *family ownership* directly linked to *intellectual capital disclosure* shows a negative relationship (Mubarik et al., 2019).

Research on intellectual capital disclosure is still very little done, but based on previous research that examines intellectual capital disclosure, which tends to focus on value relevance to more specific intellectual capital indicators including the cost of research, development, advertising, patents, brands, customer satisfaction, and human resource competencies owned by companies, and how to capitalize on intellectual capital as an intangible asset owned by a company.

In particular, intellectual capital disclosure (ICD) can be a very effective means for companies to signal quality excellence due to the importance of intellectual capital for future wealth creation (Guthrie & Petty, 2000). Especially for companies with a strong intellectual capital foundation, intellectual capital disclosure is able to distinguish low-quality companies (An et al., 2011). This research has never been conducted in the education sector, especially in Indonesia, so it is a novelty of this research, which has never been done regarding the application of intellectual capital disclosure in universities, especially in private universities.

2. Methodology Research

The population of this study is in private universities in South Sulawesi. However, this research will use a private university as a pilot project, namely:

1. Have complete financial statements for the last 5 years.
2. Have good organizational governance.
3. All departments have been accredited by BAN-PT and Lamemba.

The research method used in this study is the mixed *method*. The data used in this study are primary and secondary. Primary data in the form of interviews with the *in-depth interview* method with the aim of supporting research results from secondary data in the form of financial statements that have been prepared by universities, but in this study financial statements cannot be analyzed for reasons of campus data privacy.

3. Results

The interview was conducted with the finance director at one of the private universities in South Sulawesi, located in the city of Makassar. The division of construction discussion of intellectual capital consists of three components, namely *human capital*, *structural capital* and *relational capital*. The most important thing in intellectual capital is *human capital*. The definition of human capital obtained from interviews shows that human capital in universities consists of teaching staff (lecturers), educational staff (technicians, laboratories, and technicians), and household staff who manage the needs of the entire university academic community.

As for the second component item, namely structural capital, what needs to be considered is the number of full-time professors owned by universities. The professors are expected to be able to be catalysts for quality-added value for students at the university. However, the component items of intellectual capital cannot be constructed with BAN-PT in Indonesia and LAMEMBA, including the use of assistant teachers, which is almost never used by universities because the use of assistants is not allowed in front of the class. The reason is that the teaching assistant was not recruited by the college, so it could not be recognized as part of the college's human capital.

The results of the interview further stated that the standard of BAN-PT with intellectual capital, namely the number and type of training, can be used as one of the IC items because training conducted by universities is one way to improve the quality and excellence of human resources owned. Thus, training conducted by universities affects the quality of their human resources. In addition, the number of lecturer achievements and the number of academic lecturer competencies Both component items of human capital are able to guarantee the quality of lecturers in providing teaching to their students. The more achievements achieved by lecturers, the more student confidence in the learning carried out by the lecturers. The increasing number of competencies of academic lecturers indicates the reliability and competence of lecturers. Meanwhile, the qualification item or number of academic lecturer positions is used as one of the human capital items because it can guarantee the quality of the implementation of study programs and universities.

The next component is structural capital. This component includes all *non-human storehouses of knowledge* in organizations (Serenko & Bontis, 2013). This includes *databases, organizational charts, process manuals, strategies, routines*, and everything that makes the value of the company (institution) greater than its material value. If in college, the form of this component can be in the form of library facilities owned. The existence of libraries and electronic media shows that universities are trying to meet the needs of students in order to create learning comfort and supporting facilities (Ulum, 2012). The structural capital component also considers the number of students per lecturer, which is the value of the ratio between students and the number of lecturers, and the number of guidance students who are the burden on lecturers so that the results of the final project or thesis can be maximized and produce quality work.

Facilities and services prepared by universities can also be applied because they are in accordance with BAN PT and Lamemba, which calculate the size of the laboratory and the facilities available in the laboratory. In addition, the number of publications from lecturers and students is a benchmark for BAN PT and Lamemba, which is in accordance with the structural capital items that should be As well as the optimal use of e-learning, it is expected that the teaching and learning process will be smooth and have an impact on the number of student achievements.

Higher education is also required optimally to be able to establish good relations with graduates. This is because college graduates are products and partners in making continuous improvements for universities. Higher education institutions are expected to have graduate data recording to be able to establish good cooperation with graduates as a form of graduate

participation in academic development. However, this can be very difficult if the data recording is very weak.

Based on the identification results from interviews with universities, the results of this study offer components of the application of intellectual capital disclosure to private universities in South Sulawesi that are adjusted to the rules of BAN PT and Lamemba as follows:

Human Capital

1. Number of Full-time Professors
2. Number and Types of Training for Lecturers and Education Staff
3. Number of Permanent Lecturers
4. Number of non-permanent lecturers (guest lecturers, extraordinary lecturers, industrial lecturers)
5. Lecturer achievements (awards, grants, program funding)
6. Qualifications (number of positions) of academic lecturers
7. Academic lecturer competition (number of S1, S2, S3 lecturer education levels)
8. Number of non-academic staff (librarians, laboratories, technicians, laboratories)

Structural Capital

1. Investment in Electronic Media Libraries
2. Income from licensing products and services
3. Number of licenses granted
4. Measurement and laboratory services
5. Vision of the study program
6. Study program mission
7. Goals and objectives
8. Delivery strategy (way of delivery)
9. Technology used in learning
10. Syllabus and semester learning plan
11. Learning techniques (Project Based Learning)
12. Facilities, Infrastructure, funds for learning
13. Learning evaluation system (attendance of student lecturers)
14. Guardianship system
15. Average study period
16. Number of lecturers per student
17. Ratio *Drop Out*
18. Average student per supervisor
19. Average number of meetings/advisors
20. Academic qualifications of supervisors
21. Availability of guidance on the mechanism of working on the final project
22. Target time for writing the final project
23. Number of graduates/Graduations

Relational Capital

1. Number of third-party research (overseas grants)
2. Number of third-party research of Higher Education
3. Number of conferences organized
4. Research / Community Service
5. Scientific publications in reputable International journals
6. Scientific publications in journals of organizations accredited by Sinta
7. E-Learning
8. The number of students' academic achievements and reputations, interests, and talents
9. Student services

10. Graduate services and utilization
11. Graduate data recording
12. Participation of graduates in academic development

Discussion

This research has compiled a higher education intellectual capital disclosure model in the form of a list of items that are considered for the implementation of intellectual capital. The list of items is arranged according to in-depth interviews conducted on university leaders, modified from Leitner (2002) and Ulum (2012). The limitation of this study is that financial statements from universities are still taboo to give to researchers. The suggestion in this study is that focus group discussions (FGD) can be carried out with several public and private universities.

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