# Intellectual Capital Disclosure Analysis based on Profitability in Tourism and Hospitality Sector in Indonesia and Thailand

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**Abstract**
This research aims to investigate the level of disclosure of intellectual capital components in tourism and hospitality companies in Indonesia and Thailand. We use intellectual capital components and profitability levels as variables. This research analyzes the differences in the level of disclosure of intellectual capital components between tourism and hospitality companies in Indonesia and Thailand that fall into the category of having high profitability and companies that fall into the category of having low profitability. This research uses One-Sample Kolmogorov-Smirnov Test and Wilcoxon Signed Ranks Test to analyze the data. The results showed significant differences in the disclosure of intellectual capital components in tourism and hospitality companies in Indonesia and Thailand. Human Capital is the component with the highest level of disclosures. Companies classified as having high profitability tend to disclose more about intellectual capital than companies classified as having low profitability.

**Keywords:** Human capital disclosure, Intellectual capital disclosure; Profitability; relational capital disclosure; Structural capital disclosure.

## INTRODUCTION

After globalization and rapid technological developments in recent years, these events have shaken the world economy and changed the economy from a tangible to an intangible economy (Anifowose et al., 2018). It makes individual investors and companies or entities realize how important intellectual capital is for the company because of its role in creating value for the company. (Masri et al., 2018) stated that the process of creating value for investors does involve not only management but also non-physical resources that exist

within a company or entity. This non-physical resource is referred to as intellectual capital, which includes essential assets such as knowledge, employee competence, customer loyalty, and the use of technology in the company. Intellectual Capital is also referred to as a pillar of the company. The components of capital describe the company's process of creating value, competitive advantage, achieving company business goals, and being an essential consideration for investment decisions (Salvi et al., 2020). Over time, many different reporting frameworks have been developed to meet more information needs than traditional financial reporting can provide. This includes intellectual capital and corporate social responsibility (CSR) or sustainability reporting (De Villiers & Sharma, 2017) Therefore, intellectual capital becomes an important concept because of its ability to increase the entity's competitiveness by adding value to the entity. The entity can process its intellectual capital properly to provide a competitive advantage.

In practice, intellectual capital disclosure is often categorized into three main parts: human capital, structural capital, and relational capital. Human capital is defined as capital that controls and manages other assets, both tangible assets and intangible assets, owned by a company. This positively indicates that human capital is one of the most critical company assets because it includes the company's skills, abilities, and experience. Structural capital itself is the company's ability to implement processes and structures expected to produce optimal overall performance. Structural capital consists of processes, methods, brands, intellectual property, and intangible assets not listed in the company's financial statements. Finally, relational capital is the result of the company's ability to interact positively with stakeholders, which is carried out to improve the welfare of human capital and structural capital where this relational capital is influenced by the relationship between the company and its customers, suppliers and employees(Anifowose et al., 2018). The company has provided intellectual capital information through intellectual capital statements, environmental and corporate social responsibility (CSR) reports (Vitolla et al., 2019).

Several previous researchers have shown a relationship between intellectual capital and firm profitability. In this study, researchers used the company's profitability variables classified based on Return on Assets (ROA). Companies commonly

use ROA to measure their ability to generate profits from their resources. Investors will undoubtedly look for companies with a high level of ROA because it can be seen if its management is efficient. Researchers use ROA as an important indicator in measuring company profitability because ROA shows a company's profit ratio and will trigger investors to invest in the company to increase company value (Husna & Satria, 2019).

In modern knowledge of economics, intellectual capital marks the transition to innovative, competitive and sustainable development (Alvino et al., 2019). Where the components of intellectual capital that are honed well will be able to create a value that gives a company a competitive advantage, the role of intellectual capital in creating value for the company will indirectly build good sustainability for the company. According to (Masaro et al., 2018) the performance of employees involved in the company will be better than employees involved in making company decisions. In addition, the use of technology within the company can help companies find new solutions to support accountability because the internet and the media will help speed up the flow of information and redefine the concept of media as a medium for disseminating information (Zhang,

2016). This can also help companies increase stakeholder trust by disseminating transparent information to improve good relations between stakeholders and the company (Masaro et al., 2018) The research results conducted by (Masaro et al., 2018) and (Zhang, 2016) show how the components of structural capital can support company sustainability.

This research is conducted because the researchers wanted to examine the effect of company profitability on the disclosure of intellectual capital of companies in developing countries such as Indonesia and Thailand. The companies that we use as samples are companies engaged in tourism and hospitality. This study measures the extent to which tourism and hospitality companies in Indonesia and Thailand disclose their intellectual capital in the company's annual financial statements. The quality of flexible human resources and different knowledge in each developing country is one of the critical factors in forming a competitive advantage that leads to an increase in the quality of the company. Likewise, the company's innovations to improve the company's performance and the rapid use of technology will certainly add to the company's value in the eyes of stakeholders. To summarize all that

has been stated, the researcher also wants to conduct research on the difference in the amount of intellectual capital disclosure between companies with high levels of profitability and companies with low levels of profitability. Companies with high levels of profitability should disclose more intellectual capital in their annual financial statements when compared to companies with low levels of profitability.

This research uses agency theory, as well as signal theory. Agency theory discusses corporate governance and how it affects information disclosure. Agency theory also explains that the main problem between agents and principals is the existence of information asymmetry. Signal theory itself talks about how a company will provide a signal in the form of information to external parties to indicate the company's performance in the future. Moreover, this study measures the intellectual capital disclosure by human capital disclosure (HCD), structural capital disclosure (SCD), relational capital disclosure (RCD). Finally, this study examines the impact of profitability on ICD in tourism and hospitality sector companies located in Indonesia and Thailand during 2015 - 2019.

Based on the empirical results and facts explained above, the formulated research questions are: Is there a significant difference in the disclosure of HCD, SCD, and RCD in the tourism and tourism sector companies? hospitality sector during the period 2015 - 2019 in Indonesia and Thailand?, Is there a significant difference in the disclosure of HCD, SCD and RCD in companies with low profitability with those with high profitability in tourism and hospitality sector companies during the period 2015 - 2019 in Indonesia and Thailand?.

The purpose of this study is to determine whether the disclosure of HCD, SCD, and RCD in Indonesia and Thailand have significant differences. In addition, this study also analyses whether disclosures of HCD, SCD and RCD in companies with low profitability and those with high profitability in Indonesia and Thailand has a significant difference.

## LITERATURE REVIEW AND HYPOTHESES FORMULATION
### Intellectual Capital Disclosure

Intellectual capital is described as a valuable resource that includes both tacit and explicit knowledge-based abilities (Subaida & Mardiati, 2018). According to (Popkova & Sergi, 2020), intellectual capital is a valuable and unique non-material asset that defines a company's competitiveness. As a

result, intellectual capital can be defined as a resource consisting of firm employees' knowledge, skills, training, or any other information that might give the organization a competitive advantage. As a result, many businesses are beginning to recognize intellectual capital as a source of competitive advantage. On the other hand, intellectual capital is a company's hidden asset that cannot be reflected in financial accounts because it only represents its tangible assets (Hatane et al., 2021). In prior scientific investigations, intellectual capital has been categorized into three types: human capital, structural capital, and relational capital (Dumay, 2016);(Ulum et al., 2019); (Solikhah et al., 2020); (Salvi et al., 2020); (Ali & Anwar, 2021).

**Human Capital**

Human capital refers to an individual's level of education, training, skills, and health related to an organization's production (Lim et al., 2018). Furthermore, human capital is defined as a trait of an individual that pushes individuals to excel (Raimo et al., 2020); (De Villiers & Sharma, 2017); (Sardo et al., 2018). Human capital is frequently viewed as its most valuable asset because it underpins an organization's ability to make decisions and allocate resources (De Villiers & Sharma, 2017) This demonstrates that

human capital is considered to be capable of increasing a company's investment by virtue of its talents. Furthermore, human capital is also regarded as a key determinant of economic progress, according to (Lim et al., 2018). This is due to the fact that human capital is thought to be capable of increasing staff competence, which leads to increased customer satisfaction.

**Structural Capital**

Structural capital is capital related to organizational mechanisms and structures that support employees in their quest to produce optimal intellectual performance (De Villiers & Sharma, 2017). Structural capital is a structure that promotes human capital, including organizational processes, procedures, technology, information resources, and intellectual property rights. Structural capital is knowledge embedded in organizational processes, routines, and practitioners. In addition, structural capital includes databases, organizational charts, processes, strategies, patterns, policies and organizational culture, information systems, patents, procedures, and much more (Al-Jinini et al., 2019; Gogan et al., 2016).

## Relational Capital

Relational capital is the company's ability to create value through complex relationships with external stakeholders, whether individuals, communities, or society (Masaro et al., 2018; Masri et al., 2018; Vitolla et al., 2019). Relational capital is defined as an organization's association with the company's internal and external stakeholders. According to (Saeed et al., 2016) relational capital allows companies to develop company databases with external stakeholder information to anticipate and develop future corporate strategies. Some of the things included in relational capital are customers, employees, suppliers, industry associations, stakeholders, and strategic alliance partners of a company (Al-Jinini et al., 2019).

## Agency Theory

Agency theory popularized by Jensen & Meckling is a theory that arises due to agency relationship problems. Agency theory itself has become the principle used in solving these problems. An agency relationship is a contract between the principal and agent, in where each of them works for their interests, resulting in an agency conflict (Panda & Leepsa, 2017). The principal, in this case, is an investor and an agent is a manager in the company. The principal has the task of monitoring the agent's actions. Monitoring is one way that can be done to control agency costs. Jensen and Meckling provide an overview of agency theory where companies are likened to a black box, which operates to maximize their profitability. Profitability can be achieved with good coordination between parties within the company. However, each party has different interests. This is where the conflict of interest arises. Agency theory also talks that agents have more information about the company where sometimes agents will hide this information for their own interests. This is where the condition of information asymmetry arises. Information asymmetry between shareholders (principals) and managers (agents) can result in pursuing personal goals and failing to act in the best interests of shareholders (Raimo et al., 2020; Vitolla et al., 2019).

## Signaling Theory

(Spence, 1973) suggests that signal theory focuses on communication between 2 or more individuals in the midst of information asymmetry. Signal theory is a theory that explains how an action is communicated as a signal to external parties regarding its quality and

potential (Drover et al., 2017). The signal given by the company can change to a signal of success or a signal of failure from the company's management. Signals are often used to distinguish company quality (Drover et al., 2017). Signal theory explains how signals from company management can be conveyed to investors. In addition, this theory also explains why companies have the urge to provide financial statement information to investors. Real investors will not dare to inject their funds into the company if there is a lack of information provided by the company. The condition of information asymmetry can disrupt the running of the company. Therefore, according to signal theory, companies will have the urge to disclose their information due to information asymmetry (Moratis, 2018). In addition, with the disclosure of information, investors can better understand the company's prospects.

**Intellectual Capital Disclosure**

Agency theory explains the existence of information asymmetry between principals and agents due to differences in interests. According to (Komara et al., 2020) the company will send a signal to the market in the form of financial information to show the company's performance. Intellectual capital information is considered to be

able to reduce information asymmetry where this can be a good signal for investors (Barokah & Fachrurrozie, 2019). The problem of information asymmetry is a characteristic of products that sell experiences, such as tourism (Rocha & Fink, 2017). (Taj, 2016) also reveals that signals are often sent to influence tourists for the tourism industry. Tourists tend to rely on signals, which saves them from searching for information and allows them to make more rational decisions (Ballina et al., 2019). (Kamath, 2017) finds that companies in India are more likely to disclose HC than RC as well as SC. In addition, research conducted by (Duff, 2018) also found that HC has the highest disclosure value for large companies in the UK. Even so, service sector companies will provide more information regarding the competencies of their employees and the efforts made by companies to promote human development through training Based on this explanation, our hypothesis is as follows:

$H_1$: There is a significant difference in HCD, SCD, and RCD where HCD has the highest level of disclosure.

## Low Profit and High Profit Companies Disclose Intellectual Capital

Profitability is a management performance measured by company's ability in managing assets to generate profits . Companies with a higher profitability level will provide more information even if the disclosure is made voluntarily (Barokah & Fachrurrozie, 2019). Several reasons can cause this, such as the company wants value-added from its investors so that managers will increase their disclosures. The company considers that the more information disclosed, the more confidence investors will have in the company . Raimo et al. (2020 ) suggest that firms with high levels of profitability may choose to increase the level of voluntary disclosure to differentiate their performance from underperforming competitors and promote a positive image of themselves. (Hamzah et al., 2011) also suggest that the higher the level of company profitability , the company will voluntarily disclose its company information . In addition , companies with poor performance will disclose less information to hide the company's performance from investors (Raimo et al., 2020 ). Therefore , the second hypothesis is that:

$H_2$: There is a significant difference in HCD, SCD and RCD in companies with low and high profitability.

## METHOD

### Population and Sample

This study uses data from companies engaged in the tourism and hospitality sector in Indonesia and Thailand. Researchers use tourism and hospitality sector companies because the tourism and hospitality sector is one industry that continues to grow rapidly and has an important role in supporting the economy both in Indonesia and Thailand. The tourism sector is one of the industries always built by the government. It has an essential role as a foreign exchange earner and a source of additional funds for its development. With the advancement of the tourism sector, of course, this will directly impact the hotel sector, which also helps the country's economy. The tourism sector is considered to be one of the most significant contributors to gross domestic product (GDP), where the tourism sector contributed 5.5% of Indonesia's total GDP in 2019 (Kemenparekraf, 2020). This data also shows an increase in national GDP from the tourism sector by 0.25% from 2018. In addition, Thailand's GDP in 2018 was at 21.6% and increased to 21.9% in 2019 (Knoema, nd).

This study uses purposive sampling, with the following criteria (a) tourism and hospitality sector companies listed on the Indonesia Stock Exchange (IDX) in 2015 - 2019, (b) tourism and hospitality sector companies listed on The Stock Exchange of Thailand (SET) in 2015 - 2019, (c) Attaching the company's financial statements for 2015 - 2019, (d) All data for research are available in total. The population of this study consisted of 33 companies in Indonesia and 25 companies in Thailand. From the criteria that have been set, this study obtained sample data that meet the requirements of 31 companies in the tourism and hospitality sector from Indonesia and 20 companies in the tourism and hospitality sector from Thailand.

**Variable Measurement**

The variable to explain the level of intellectual capital disclosure in this study is Intellectual Capital Disclosure. The level of intellectual capital disclosure (ICD) comes from 141 items which are divided into three main components, namely human capital disclosure (HCD), structural capital disclosure (SCD), and relational

**Table 1. Observation Details**

| Sample Criteria | Number of Observations |
| --- | --- |
| Tourism and hospitality sector companies listed on the BEI | 33 |
| Tourism and hospitality sector companies registered with SET | 25 |
| Total tourism and hospitality sector companies listed on the BEI and SET | 58 |
| Companies that do not meet the criteria | 7 |
| Total sample company | 51 |
| Total observations (5 years) | 255 |

capital disclosure (RCD). The disclosure of human capital consists of 78 items, the disclosure of structural capital consists of 32 items, and the disclosure of relational capital consists of 31 items.

The variable used as a comparison in this study is profitability. Return on Assets (ROA) is used to explain the level of company profitability in this study. ROA is calculated by dividing Net Profit by the

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company's Total Assets. The profitability variable will be divided into 2 parts: companies with high profitability and companies with low profitability. The researcher gives code 1 for high profitability and code 0 for low profitability. Companies with higher ROA (greater than the median of ROA) are classified into companies with a high level of profitability. Meanwhile, companies with smaller ROA (smaller than the median of ROA) are classified as companies with low levels of profitability.

## RESULTS AND DISCUSSION
### Descriptive Statistics

Table 2 shows that in 2015, HCD had the highest number of disclosures in Indonesia and Thailand. At the same time, HCD in Indonesia was lower than HCD in Thailand. Meanwhile, SCD in Indonesia has surpassed Thailand, although it had decreased in 2018, then quickly increased again in 2019. However, as shown in Table 2, it can be seen that tourism and hospitality companies in Indonesia continue to try to increase the level of ICD disclosure every year. That is why since 2017, the total ICD disclosure in Indonesia has succeeded in surpassing the total ICD disclosure in Thailand. Even so, it can clearly be seen that there was an increase in ICD disclosure in both countries during 2015 - 2019.

**Table 2. Disclosure Ordered by Year (2015 - 2019)**

| Items | Thailand | | | | | Indonesia | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2015 | 2016 | 2017 | 2018 | 2019 |
| HCD | 47% | 47% | 48% | 49% | 50% | 45% | 47% | 48% | 50% | 52% |
| SCD | 42% | 44% | 45% | 48% | 48% | 44% | 45% | 47% | 46% | 47% |
| RCD | 29% | 29% | 29% | 29% | 31% | 27% | 29% | 31% | 32% | 33% |
| ICD | 39% | 40% | 41% | 42% | 43% | 39% | 40% | 42% | 43% | 44% |

**Table 3. Descriptive Statistics Continuous Variable Table**

|  | HCD | SCD | RCD | ICD | Profitability |
|---|---|---|---|---|---|
| Minimum | 0.10256 | 0.15625 | 0.03226 | 0.20380 | -39.57000 |
| Maximum | 0.78205 | 0.75000 | 0.64516 | 0.64734 | 26.05000 |
| Mean | 0.48301 | 0.45625 | 0.29892 | 0.41273 | 3.30239 |
| Std Deviation | 0.12789 | 0.13234 | 0.13731 | 0.10825 | 7.53561 |
| N | 255 | 255 | 255 | 255 | 255 |

**Table 4. Descriptive Statistics Dichotomous Variable Table.**

| Country | Item | Frequency |
|---|---|---|
| Indonesia | Low Profitability | 80 |
|  | High Profitability | 75 |
| Thailand | Low Profitability | 50 |
|  | High Profitability | 50 |

Table 3 shows that the total observations were 255 observations from 20 tourism and hospitality sector companies in Thailand and 31 tourism and hospitality sector companies in Indonesia during 2015 - 2019. It appears that HCD is the most abundant component disclosed by companies in the tourism and hospitality sector in Thailand and Indonesia, with a mean number of 0.48301. SCD and RCD followed it with a mean number of 0.45625 and 0.29892. When viewed from the minimum number, it can be seen that the minimum SCD number is the highest, with a minimum number of 0.15625. It shows that tourism and hospitality companies in Indonesia and Thailand actually disclose more SCD than HCD. However, the total maximum SCD of 0.75 is lower than the total maximum HCD of 0.78205.Table 4 shows that 75 observations fall into the high profitability category in Indonesia, while there are 50 observations in Thailand. In addition, 80 observations show the condition of companies included in the low profitability group in Indonesia, while in Thailand, there are 50 observations.

**Normality Test**

Below are the normality test results conducted using the One-Sample Kolmogorov-Smirnov Test on

**Table 5. Table Normality Test**

|  | Kolmogorov-Smirnov Z | Asymp. Sig. (p.value 2-tailed) |
|---|---|---|
| HCD | 1.25258 | 0.08674* |
| SCD | 1.57811 | 0.01374** |
| RCD | 1.74521 | 0.00452*** |
| ICD | 0.71796 | 0.68117 |
| Profitability | 5.52404 | 0.00000*** |

Notes: statistical significance is at the following levels: *** = 1%; ** = 5%; * = 10%

**Table 6. ICD Component Average Difference Test Table**

| Variable | Observation | Negative Rank | Positive Rank | Wilcoxon Signed Ranks Test | |
|---|---|---|---|---|---|
|  |  |  |  | Z | Asymp. Sig. (2-tailed) |
| SCD - HCD | N | 148 | 107 | -2.85 | 0.004365748*** |
|  | Mean Rank | 132.98 | 121.12 |  |  |
| RCD - HCD | N | 216 | 39 | -12.52 | 5.95084E-36*** |
|  | Mean Rank | 143.88 | 40.05 |  |  |
| RCD - SCD | N | 245 | 10 | -13.7 | 1.01832E-42*** |
|  | Mean Rank | 132.53 | 16.90 |  |  |

Notes: statistical significance is at the following levels: *** = 1%; ** = 5%; * = 10%

HCD, SCD, RCD, ICD, and Profitability (ROA).

Table 5 shows the results of the normality test where Asymp. sig (2-tailed) of SCD and RCD shows less than 5%. Therefore, it can be concluded that the SCD and RCD variables do not meet the normality requirements. On the other hand, HCD and ICD have a sig value of the Kolmogorov-Smirnov Z test greater than 5%, so the two variables meet normality requirements. However, because this study compares the differences of each ICD item with these mixed results, it is recommended that the test be carried out with a non-parametric test approach.

**Discussion**

Table 6 shows the number of observations in negative ranks as well as positive ranks. We assume the first variable as i and the second variable as j. A negative rank is obtained if the value of i is smaller than the value of j. While a positive rank is obtained if the value of i is greater than the value of j.

From Table 6, the results conclude that the observation numbers of negative ranks are much greater than positive ranks. For example, the negative ranks of SCD compared to HCD show a number of 148, which is greater than the observation of positive ranks of 107. The same thing happens when comparing RCD to HCD. as well as comparing RCD to SCD.

From a total of 255 observations, in terms of the positive ranks, it can be concluded that there are 45% of events where SCD has a greater disclosure value than HCD. It is 15% of events where RCD has a greater disclosure value than HCD, and 4% events where RCD has a greater disclosure value than SCD. This shows that tourism and hospitality companies in Indonesia and Thailand emphasise HC and SC disclosures more than RC, considering that RC disclosures have little value. But that does not mean that RC is less important. It is because HC, SC, and RC are inseparable and have different goals.

Asymp significant value from the Wilcoxon Signed Ranks Test shows a significant number with an error rate of 1%. It indicates that the mean difference between the ICD components is significant. It shows that tourism and hospitality companies in Indonesia and Thailand are more motivated to disclose HC than

SC, RC, and SC than RC. So it can be said that **the first hypothesis is accepted**, where HC is the most widely disclosed capital by tourism and hospitality companies, followed by SC and RC.

(Engström et al., 2003) found that human capital strongly relates to structural capital in the hospitality sector. Personal knowledge about the products and learning about routines, systems, and customer databases are also considered essential elements in running tourism and hospitality in a competitive environment. Human capital is assessed as a component of intellectual capital with the most important influence on hotel financial performance, which shows the importance of human resources for the hotel industry's performance (Adeola, 2016). In addition, (Ognjanović, 2017) also suggests that the tourism industry is highly dependent on employees' skills and knowledge. The tourism and hospitality sectors, as the service sectors, have a high dependency on the ability and skills of human resources and require good infrastructure to increase their competitive advantages. Therefore, it can be concluded that companies in the tourism and hospitality sector will disclose more human capital as well as structural capital to support the company's relationship with customers.

The results also show that structural capital is the capital with the second-highest level of disclosure of the three components of intellectual capital. Structural capital is considered to support and empower human capital to achieve its full potential in value creation and company performance (Saeed et al., 2016), (Rudez & Mihalic, 2007) also find that the components of human capital and structural capital work together to ensure service quality in the hospitality industry. Therefore, human capital and structural capital are considered interdependent and interact in creating IC value. Besides, structural capital is also designated as a supporting infrastructure for the formation of external relations (Sardo et al., 2018)

Table 7 shows that there has been an increase in HCD, SCD, RCD and ICD as a whole in Indonesia and also Thailand during the periods. The results of the rank-based trend test show a significant number of less than 1% for HCD with Asymp values. Sig. of 0.01 and a significant figure of less than 10% for SCD and RCD with Asymp values. Sig. respectively 0.06 and 0.07. From Table 7, in 2019. SCD is the lowest item disclosed. On the other hand, HCD was most disclosed by tourism and hospitality companies in Indonesia and Thailand. In addition,

in 2018, the level of HCD experienced the highest increasing number of 9.05 points, followed by RCD increased by 7.39 points. It shows that RCD will always follow the rise in HCD as well as SCD.

Table 8 shows that the observations for the low profitability group are more than the high profitability group. The results of the independent sample t-test showed a significant number of less than 5% for HCD and significant figures of less than 1% for SCD and RCD. It can also be seen from the mean ranking figures, the group of companies that are included in the high profitability group has a higher mean rating value than the group of companies that are included in the low profitability group. It indicates a significant difference in the number of disclosures of HCD, SCD, and RCD in companies classified as high profitability compared to the low profitability. So it can be said that **the second hypothesis is accepted.**

High profitability companies disclose more intellectual capital because these companies have the funds to make extensive and detailed

**Table 7. ICD Disclosure Trend Table**

| Years | N | Mean Rank | | | |
| --- | --- | --- | --- | --- | --- |
| | | HCD | SCD | RCD | ICD |
| 2015 | 51 | 111.37 | 114.29 | 116.33 | 111.75 |
| 2016 | 51 | 119.48 | 121.50 | 122.55 | 120.32 |
| 2017 | 51 | 127.45 | 131.46 | 126.88 | 128.94 |
| 2018 | 51 | 136.50 | 134.44 | 133.42 | 135.64 |
| 2019 | 51 | 145.20 | 138.30 | 140.81 | 143.34 |
| Jonckheere-Terpstra Test | Std. J-T Statistic | 2.62 | 1.91 | 1.84 | 2.41 |
| | Asymp. Sig. (2-tailed) | 0.01*** | 0.06* | 0.07* | 0.02** |

Notes: statistical significance is at the following levels: *** = 1%; ** = 5%; * = 10%

**Table 8. ICD Independent Sample Test Components based on Profitability**

| Profitability | N | Mean Rank | | |
| --- | --- | --- | --- | --- |
| | | HCD | SCD | RCD |
| Low Profitability | 130 | 118.4923 | 115.6538 | 113.2538 |
| High profitability | 125 | 137.8880 | 140.8400 | 143.3360 |
| Mann-Whitney U | Z | -2.1006 | -2.7323 | -3.2637 |
| | Asymp. Sig. (2-tailed) | 0.0357** | 0.0063*** | 0.0011** |

Notes: statistical significance is at the following levels: *** = 1%; ** = 5%; * = 10%

disclosures. In addition, the high-profit companies will also reveal more intellectual capital since it provides added value to attract investors to invest in the company ((Ballina et al., 2019; Duff, 2018; Hamzah et al., 2011). These results are also in line with signaling theory which states that companies with high profitability have more resources to maintain their profitability.

However, this does not mean that companies that are included in the low profitability category do not carry out these activities. It can be only that these companies have not disclosed all of these activities in their annual reports. Low-profit companies will find it difficult to reveal a complete intellectual capital disclosure with a broad scope. Making detailed disclosures require additional costs. The companies need additional

resources to remember, record and report their activities.

In the findings, in low-profit companies, HC's disclosure is the most widely disclosed component compared to the other two components. Meanwhile, in companies with high profitability, RC disclosure is the component that is most widely disclosed. This is also in line with research conducted by Babaje et al. (2020). The high profitability companies choose to disclose more RC because they have gained stakeholders' perceived value reflected in the quality of the human resources and corporate infrastructure. So that the companies will focus more on increasing RC to maintain good relations with stakeholders, which will increase their value due to the trust of stakeholders. These findings are in line with the results of (Saeed et al., 2016), where IC is a process that develops according to the flow, in where the rise of human and structural capital will increase relational capital. Finally, the growth of relational capital can create financial growth for tourism and hospitality companies.

Meanwhile, companies with low profitability choose to disclose more HC to develop good relations with stakeholders. The focus on revealing HC is vital to promote the companies' reputation, since the tourism and hospitality sector focuses on service quality which depends on the human resources (Hamzah et al., 2011; Ognjanović, 2017). By disclosing HC, stakeholders will know the quality of the company's human resources to attract stakeholders and increase the value of the company.

## CONCLUSION, IMPLICATION AND LIMITATION

This study aims to see the differences in the disclosure of intellectual capital components in terms of the level of profitability in the tourism and hospitality sector in Indonesia and Thailand. The observation period is 2015-2019. The samples taken were 31 companies in Indonesia with a total of 155 observations and 20 companies in Thailand with a total of 100 observations.

This study concludes that HCD, SCD, and RCD disclosures in Indonesia and Thailand have significant differences. According to the profitability categories, this study also found significant differences in HCD, SCD and RCD in Indonesia and Thailand.

This study shows that companies in the tourism and hospitality sector in Indonesia and Thailand have different levels of HCD, SCD and RCD, where HCD is the most disclosed componet

by companies in the tourism and hospitality sector in Thailand and Indonesia. SCD. and RCDs then followed it. When viewed from the minimum number, it can be seen that the minimum number of SCD shows the highest value, which indicates that tourism and hospitality sector companies in Indonesia and Thailand actually disclose more SCD than HCD. However, the maximum total SCD is lower than the maximum total HCD. This study shows that service companies will be more revealing of their human capital as well as their structural capital. This is because the stakeholders are more interested in the competence of human resources and the advantages of infrastructure owned by the company. In other words, disclosing HC and SC indirectly helps the company support relationships with its customers.

In addition, this study also found a significant difference in the amount of disclosure of HCD, SCD, and RCD in companies classified as high profitability compared to companies classified as low profitability. High profitability companies are found to disclose more extensive ICD and its components compared to low profitability companies. Conversely, HCD is the most widely disclosed component in low-profit companies.

Moreover, the tourism and hospitality industry cannot be separated from macro factors that cannot be controlled. When people have an increasing level of wealth, community tourism needs will also increase and become a new lifestyle for people in developing countries. It is shown from the increase in people's living standards in 2015 until 2019, which led to the rise of income in the tourism and hospitality industry. However, during the pandemic, the country's economy was destroyed, and the tertiary need like vacation became less important. So, then it declined the revenues of tourism and hospitality companies. Therefore, in a pandemic condition, the tourism and hospitality industry need to maintain the viability of the industry and build a plan to be able to bounce back from adversity during the pandemic. This study found that the HCD component was the most widely disclosed in tourism and hospitality companies. It is because the knowledge and skills of employees are very much needed, especially during the pandemic, which will transition to a new normal, where innovative individuals are required. Apart from that, SCD and RCD are also essential resources that will help the company to deal with the pandemic and the new normal. For instance, the company's infrastructure and ability to

maintain qualified relationships with stakeholders. Although this research uses data from 2015 to 2019, which has not yet entered the pandemic period, it is hoped that this research can be input for companies in the tourism and hospitality sector to bounce back.

This study still has some limitations. For example, the value of intellectual capital disclosure is measured by content analysis according to the researcher's assessment, which can be subjective. In addition, the research was conducted on companies in Indonesia and Thailand's tourism and hospitality sectors. In order to expand the empirical studies in ICD, future studies may consider these limitations. Future studies may examine more indicators that can influence the quality of intellectual capital disclosures, do the research in other sectors and other countries.

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