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# Intellectual Capital Against Firm's Profitability with Resource Based View Theory Approach

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**Abstract.** The purpose of this research is to verify the relationship between Capital Employed Efficiency (CEE), Human Capital Efficiency (HCE), and Structural Capital Efficiency (SCE) against firm's profitability. Problem approach using collaboration of two theories, are Resource Based View and Stakeholder Theory. Sample of this research is trading companies listed on IDX from year 2016 to 2018. Panel data is used. Random effect model has been chosen. Data is regressed using software of Eviews 8.1. The result shows that Capital Employed Efficiency and Human Capital Efficiency are positively affect to firm's profitability, while Structural Capital Efficiency is not affect to firm's profitability. The implication of this research is the choosing of capital and investing in human resources to increase efficiency are very significant to improve firm's profitability.

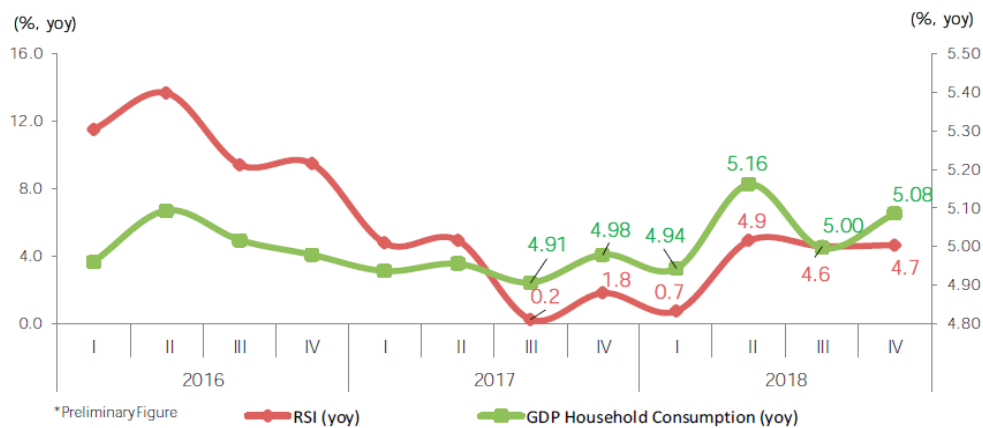
**Keywords:** Capital Employed Efficiency, Human Capital Efficiency, Structural Capital Efficiency, Firm's Profitability.

## 1. Introduction

Resource Based View (RBV) Theory explains that resource management is important to achieve competitive advantage. The competitive advantage will positively affected to firm's performance [1]. Management of economic resources can drive the productivity through the efficiency on firm's activities. Increase in this productivity will impact to firm's performance.

Going concern of the firm is willingness of all parties. But development economic environment, such business competition, is tighter until some companies have faced bankrupt and loss. This is threatening the companies' existence. Therefore, competitive advantage is going to be important thing as the firm's focus. The competitive advantage can be achieved through performance and increase in sales and profit. Profitability performance is greatly important because profit can be used to increase market share, firm' size, dan employees' welfare [2]. Instead of them, profit also can be utilized for firm's growth [3], firm's value improvement [4] and maximize the wealth of shareholders [5] at once.

Tighter competition has given negative impact to some firms in Indonesia. Survey result from Bank Indonesia (2018) describes diminishing of sales index aggregately on retail firms in Indonesia 2016 – 2018. This phenomenon is illustrated on Figure 1.



**Fig.1.** Survey of Retail Sales for Period 2016 – 2018  
Source : Bank Indonesia (2018)

Figure 1 present survey result about Real Sales Index (RSI) per quarter Year on Year (YoY) of Retail Companies which is conducted by Bank Indonesia on period 2016 – 2018. Problem of firm’s performance is shown on RSI Curve that the trend of sales become decrease (refer to red lines). Starting on 1<sup>st</sup> quarter in 2016, the sales index become high. Then since 2<sup>nd</sup> quarter in 2016 until 1<sup>st</sup> quarter in 2018, the curve tend to decrease all over the time. After that, the RSI Curve is going up and being quite stable until 4<sup>th</sup> quarter in 2018. In fact, the increasement cannot heal the increasement happened in 2<sup>nd</sup> quarter in 2016, even though the GDP is tend to be decreased (Bank Indonesia, 2018).

From micro side, there was big stores closing on some Super Markets in Indonesia. Table 1 present five big retailing companies that closed their stores in Indonesia as supporting the impact of decrease sales performance on trading firms. Pasopati (2015) states the closing stores is conducted due to the profitability performance become lowering down or even suffering from loss as the sales become decrease.

**Table 1.** Total Closing Stores for Period 2016 – 2018

PT Modern International Tbk. <sup>1</sup>	166
PT Matahari Putra Prima Tbk. <sup>2</sup>	80
PT Mitra Adiperkasa Tbk. <sup>3</sup>	28
PT Hero Supermarket Tbk. <sup>4</sup>	26
PT Ramayana Lestari Sentosa Tbk. <sup>3</sup>	24

Source : <sup>2</sup>Gumiwang (2017), <sup>4</sup>Pasopati (2015), <sup>1</sup>Rosyadi (2017), <sup>3</sup>Sugianto (2018)

Decrease in performance is related to efficiency. The efficiency can be done throughout management and utilization of firm’s assets as it is economic resources to produce the productivity in firm’s activities. Increase in productivity will be impacted to firm’s performance. This assumption can be explained by Resource Based View (RBV) Theory which is developed by [2]. This theory emphasizes on resources which present special

characteristics and can be utilized by the companies to determine the business strategy and become the source of competitive advantage to compete out. Those competitive advantages will contribute to firm's performance. [1]. Performance is a result of company's ability in creating the competitive advantage whereas come from management's ability in determining good strategy on exploiting resources and capabilities which can bring impact to the increasement in efficiency and effectiveness firm's performance, so the value added is being created in every business activity of the company [11]. The companies shall determined the best strategy due to they have Intellectual Capacity from the employees.

Intellectual capital is a process of adapting transformation of value creation on a business unit due to changes in economic system. The value creation occurred on firm's focus which primarily concern about cost, then turns out into value added and wealth [12]. It is wished that efficiency and effectiveness operational activities can provide better performance to be evaluated and informed to all stakeholders as they will know how far the firm's performance and interest the other stakeholders to take parts into. Relationship between companies' management and stakeholders can be used to share ideas and information each other, also understand strengths and weaknesses for every stakeholders. Hence, there will be plenty of variations of resources to enhance their capabilities and strategy evaluation to gain optimal profits [13]. This theory is based on thinking that the firm's health is depend on aspects of human, organizational structure, relational, and value from capital conversion capital from one to another forms [14].

One of another method which can be used to measure effectiveness of Intellectual Capital is Value Added Intellectual Coefficient (VAIC). VAIC provides the information about value creation of efficiency from all firm's assets, both tangible and intangible [12]. VAIC also shows how much value added resulted by the firm based on efficiency in utilizing intellectual resources. The greater VAIC will indicate the greater value added resulted from efficiency of resources [15].

Value Added Intellectual Coefficient (VAIC) consists of three components, are Capital Employed Efficiency (CEE), Human Capital Efficiency (HCE), and Structural Capital Efficiency (SCE) [16]. Previous relevant research has been conducted to analyse the relationship between Intellectual Capital against firm's performance, but the result is inconsistent. [17] conducts research to banking industry in India, [18] conduct research to high technology companies in Italy, and [19] conduct research to hotel industries in Portugal. Those result shows that Intellectual Capital is positively affected to firm's profitability. Then [20] confirm Capital Employed Efficiency is positively affected to performance, v[21] confirms Human Capital Efficiency is positively affected to performance, and [22] confirm Structural Capital Efficiency is positively affected to performance. The opposite results is proved by Lotfi et al. (2016) that Capital Employed Efficiency is not affected to performance and [24] that Human Capital Efficiency is negatively affected to performance. Another evidence is confirmed by Sardo et al. (2018) which Structural Capital Efficiency is negatively affected to performance.

The aim of this research is to verify the relationship between Capital Employed Efficiency (CEE), Human Capital Efficiency (HCE), and Structural Capital Efficiency (SCE) toward firm's profitability. To explain the model, there is collaboration between Resource Based View (RBV) Theory used by [23] and Stakeholder Theory used by [22]. Samples is using trading companies that listed on Indonesia Stock Exchange (IDX) from period 2016 – 2018.

## **2. Literature Review**

### **2.1. Grand Theory**

In theory of Resource Based View (RBV), [25] explains the resource are everything that lead into strengths and weaknesses of the company. Resource is an important assets with special characteristics, hence can be used for determining business strategy and as a source for competitive advantage to compete. The competitive advantages can be formed as barrier to entry, monopoly, bargaining power, low cost benefits, and ability to differentiate the products. Those characteristics is able to measure how powerful the competitive advantage to compete among competitors [1]. Firm's resources can be classified into tangible and intangible. Tangible assets are resources that physically can be identified and measured. Meanwhile the intangible assets are non-physic resources that need certain measurement for their contribution into the firm's performance, such as Intellectual Capital [26].

The perspective of Resource Based View Theory is competitive which naturally dynamic capabilities owned by companies. Term "dynamic" refers to adaptation of changes in environment, strategic responses when time-to-market, rapid innovation phase, and competition in the future. And term "capabilities" focuses on important role of strategic management in adapting, integrating, and configuring knowledges, resources, and internal & external competition needed to respond the environment change by [27]. As hard as possible, the resources must be hard to imitate as its nature as tacit or socially complex. Tacit resources are based on knowledge and labour intensive which mostly acquired through learning by doing method, so will be resulted into experience and good practices. Meanwhile socially complex resources are depend on the quantity and wide view of personnel to understand whole phenomenon [28]. Resources can provide competitive advantage if fulfil four characteristics named "VRIN" as follow [29]:

- a. Valuable (V), means valued resources can help companies to arrange and applied strategies to enhance efficiency and effectiveness its operational activities;
- b. Rare (R), means resources that are potentially establish sustainable competitive advantage must be rare and hard to find and/or owned by another companies;
- c. Imperfectly Imitable (I), means resources must be hard to be imitated or duplicated; and
- d. Non-substitutable (N), means resources must hard to be substituted with the other resources.

### **2.2. Performance and Profit**

In Resource Based View Theory, aspect of competitive advantage arise through efficiency and effectiveness from resources management. That competitive advantage can be optimized for improving overall firm's performance. Therefore, profitability is often relate to company's ability in managing their assets and resources to earn profit [30]. Measurement of firm's performance is a quantification process of efficiency and effectiveness organizational activities. "Efficiency" refers to how economic does the company produce the products. Meanwhile "effectiveness" refers to how accurate does the company accommodate their products to satisfy customers [31]. Company's performance is relate to financial context which can present the healthy of firms during a certain period. This generally connect to the steps shall be taken by Company's management to increase sales, profit, and ownership of the entity through management of assets, liabilities, equity, revenue, and expenses. In theoretically

and real life, firm's performance is expressed into profitability or growth of financial conditions [32].

### **2.3. Intellectual Capital toward Performance**

The theory of RBV is primarily based on fact that the companies compete using their resources and abilities [32]. The implication of this may be accurate if they evaluate their resource utilization which impacted to compete in different markets. One of this resources is Intellectual Capital [33] Using Intellectual Capital as independent variable toward firm's performance is based on thinking concept that changes in business and technology is rapid and dynamic. This forces companies to move fast to retain their real and sustain competitive advantage [34]. This theory concerns about key resources are very important to special characters to be used by the companies in planning and implementing business strategy and as source for competitive advantage to compete [25]. The special characters can be barriers to entry, monopoly, bargaining power, until the ability to apply efficiency and ability to differentiate products. With Intellectual Capital, those characters can be used by the firms to measure how attractive the companies do the business and the competitive advantage to compete among competitors [1].

Intellectual Capital is intangible assets owned by the companies become focus attention for manager because it has knowledge and capabilities of management in managing the resources. Those resources shall be communicated and synergized throughout all stakeholders. Then, they will know benefits and advantages earned from their contribution. Therefore, all stakeholders will be more interested to join with firms to achieve optimal performance [13].

In Stakeholder Theory, the stakeholders are part of company whose responsible to shareholders and firm's operational activities. Stakeholders are group or individual who can influence and be impacted of firm's goal. They create dependency each other while executing activities [35]. On a broader view, appliance of Stakeholder Theory explains that all stakeholders shall give contribution in achieving firm's goal, so management as central figure has to make decisions to create good relationship among the other stakeholders as inline with business activity [36]. The approach for Stakeholder Theory enables company's management to prepare strategy analysis tied to value and foal of the firm [37]. Stakeholder Theory is commonly used in research of Intellectual Capital agains Firm's Profitability which previously conducted by [38], [39], and [19].

Intellectual Capital is intangible resources in formed as knowledge, skills, experience, and information which are being synergized can provide success in the current and future. Intellectual Capital will become a differentiator with competitors in terms of management system, patent, copyrights, or even licensing agreement [40]. This theory is based on belief that the health of company is determined by its human, organizational structure, relational, and value creation from capital conversion from one into another forms [14]. Intellectual Capital will create competitive advantage if fulfils four characteristics, are valuable, rare, imperfectly inimitable, and non-substitutable. Then, those characteristics with its components need to be communicated to all parties to gain competitive advantage for companies [14].

From various professionals, Intellectual Capital consisted of three elements which are as follows:

- a. Human capital. Is value and wealth owned by every stakeholders, such as behaviour, education, and experience in company's business activity. This value and wealth in forms of ability and specialization of employees and knowledge will be shared inside organization to gain more value added [41]man [42]. Organization with great human

capital will have competitive advantage and better capabilities to decide strategic decisions with business environment. The purpose of human capital is to create new products or services and innovation throughout business process. Human capital can be developed via training, improvement of satisfaction, and motivation to employees [43].

- b. **Structural Capital.** Is the firm's capital in forms of ability to establish management planning and control over system, process, network, policy, and so on to support companies in providing value [42]. Inside is included non-human resource knowledge that consisted of database, organizational chart, procedure and administration process, strategies, and the other aspects to create more value than physical aspects [44]. The component of structural capital is: (1) Infrastructure, covering process, IT System & Database, communication system, financial structure, and operation models, (2) Intellectual Property, covering patent, protection right, trademark and trading secrets, copyrights over design, service trademark, and (3) Culture of the Firm, covering management philosophy, management process, information system, networking system, financial relationship, prize and rewards, and management structure [45].
- c. **Customer Capital, Relational Capital, or External Capital.** Is business relationship and interaction with the clients [43]. Instead of them, this also regarding to relationship between the companies with vendor, supplier, government, trade associations, brand name, trademark, and reputation [41].

#### **2.4. Intellectual Capital and Value Added Intellectual Coefficient**

One of among methods for measurement of Intellectual Capital is Value Added Intellectual Coefficient (VAIC) which developed by [16]. VAIC Method is based on three component to create Intellectual Capital. The value of VAIC provide information about value creation efficiency from all assets owned by companies. As in terms of efficiency, the components are named as: (1) *Human Capital Efficiency* (HCE), (2) *Structural Capital Efficiency* (SCE), and (3) *Capital Employed Efficiency* (CEE).

Based on relationship between Intellectual Capital and Firm's Performance which come from collaboration between Resource Based View (RBV) Theory and Stakeholder Theory, by separating variable of Intellectual Capital into each components, will be established the research hypotheses are as follows:

- 1<sup>st</sup> Hypothesis : Human Capital Efficiency (HCE) is positively affected to Firm's Profitability**
- 2<sup>nd</sup> Hypothesis : Structural Capital Efficiency (SCE) is positively affected to Firm's Profitability**
- 3<sup>rd</sup> Hypothesis : Capital Employed Efficiency (CEE) is positively affected to Firm's Profitability**

### **3. Research Methods**

Subject in this research which is the samples is group of trading companies that listed on Indonesia Stock Exchange (IDX). Data period is yearly during 2016 – 2018. Object in this research consisted of dependent variable, which is firm's profitability, and independent variables, which are *Human Capital Efficiency* (HCE), *Structural Capital Efficiency* (SCE), dan *Capital Employed Efficiency* (CEE). Sampling method is non-probability sampling, using *purposive sampling*. The criteria for samples are as follow:

- a. Trading companies listed in IDX during 2016 – 2018;
- b. Trading companies are never being delisted during 2016 – 2018;
- c. Financial statements of trading companies have been audited as of end reporting period during 2016 – 2018; and
- d. Trading companies are never having merger or acquisition during 2016 -2018.

Type of data is panel data. According to [46], while regressing panel data, there will be three choice of model, are fixed effect, common effect, and random effect. Chow Test is conducted to determine whether fixed effect model is better than common effect model, while Hausman Test is conducted to determine whether fixed effect model is better than random effect model when estimating the panel data. Data is analyse using software of Eviews 8.1 and SPSS version24. This analysis is using multiple linear regression.

### 3.1. Structure Model

Structure model in this research is to test impact and relationship of Intellectual Capital toward Firm's Profitability. The Intellectual Capital is separated based on its components into Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), and Capital Employed Efficiency (CEE). Meanwhile for performance is using profitability variable. Intellectual Capital measured by Value Added (VA) using formula developed by Pulic (2008) and can be found in income statement, is as follow:

$$VA = P + C + D + A$$

Remark:

- VA : Value Added  
P : Operating Profit  
C : Employee Costs  
D : Depreciation Expense  
A : Amortization Expense

**Table 2.** The Operationalization of Research Variables

No.	Variable Name	Variable Type	Measurement
1.	Human Capital Efficiency (HCE) (Pulic, 2008)	Independent Variable	$HCE = \frac{VA}{HC}$ <i>HC = Total Wages and Salary Cost</i>
2.	Structural Capital Efficiency (SCE) (Pulic, 2008)	Independent Variable	$SC = VA - HC$ $SCE = \frac{SC}{VA}$
3.	Capital Employed Efficiency (CEE) (Pulic, 2008)	Independent Variable	$CEE = \frac{VA}{CE}$ <i>CE = Total Equity</i>
4.	Firm's Profitability [21]	Dependent Variable	$ROA = \frac{Net\ Income}{Total\ Assets}$

Table 2 shows formula to determine the proxy value from operational all variables in this analysis, both independent and dependent. All information data can be found in the



financial statement of companies, especially balance sheets and income statement. The structural equation is:

$$ROA_{it} = \beta_{0t} + \beta_{1it} HCE + \beta_{2it} SCE + \beta_{3it} CEE + \varepsilon_{it} \dots\dots\dots (1)$$

### 3.2. Statistic Analysis

The next step is testing of classic assumption to ensure that panel data is free from multicollinearity and heteroskedasticity problem. According to [47], Variance Inflation factor (VIF) with less than or equal to 10, means panel data estimation is free from multicollinearity problem. Meanwhile, according to Startz (2019), Glejser Test with significance value greater than 0.05 means panel data estimation is free from heteroskedasticity problem.

Testing of hypotheses is conducted using t test of which significance value if less than 0.05 means independent variables partially affected to dependent variables. After that, using F test of which significance value if less than 0.05 means all independent variables together affected to dependent variable. Then, coefficient determination (R-squared) test is ranging from 0 (weakening) to 1 (strengthening) to know how much independent variables can explain dependent variable [46].

## 3. Results and Discussion

### 3.1. Statistic Descriptive Analysis

In Table 3 shows from 36 trading companies have mean of firm's profitability which is proxied by Return on Assets (ROA) is amounting to 0.0043, value added from the efficiency of investing in human resource or Human Capital Efficiency (HCE) is amounting to 3.0705, value added from the efficiency of structural capital or Structural Capital Efficiency (SCE) is amounting to 0.9382, and value added from efficiency of capital utilization or Capital Employed Efficiency (CEE) is amounting to 0.7150. Human capital Efficiency has minimum value by -2.7799 and maximum value by 42.7167, also standard deviation or distribution rate of data by 4.4328 among the other research variables.

**Table 3.** Statistic Descriptive Analysis Result over Research Variables

<b>Information</b>	<b>ROA</b>	<b>HCE</b>	<b>SCE</b>	<b>CEE</b>
<i>Mean</i>	0.0043	3.0705	0.9382	0.7150
<i>Median</i>	0.0253	2.3106	0.6141	0.5055
<i>Minimum Value</i>	-1.5837	-2.7799	-1.6086	-0.0710
<i>Maximum Value</i>	1.1197	42.7167	21.3436	2.9693
<i>Standard Deviation</i>	0.2556	4.4328	2.1724	0.6707

### 3.2. Choosing the estimation model of panel data regression

The result of Chow Test on Table 4 shows that cross section chi-square is having probability value by 0.0000. As the probability value is less than significance level by 0.05 ( $\alpha=5\%$ ), so the estimation model of panel data chosen is fixed effect. Next is Hausman Test needed to conducted to determine whether the fixed effect model is better than random effect as the best model in estimating panel data regression.

**Table 4.** Chow Test Result

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.947581	(35,69)	0.0000
Cross-section Chi-square	135.595528	35	0.0000

The result of Hausman Test on Table 5 shows that cross-section random is having probability value by 0.2160. As the probability value is greater than significance level by 0.05 ( $\alpha=5\%$ ), hence the best model for estimating panel data regression is random effect.

**Table 5.** Hausman Test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	4.458893	3	0.2160

### 3.3. Classic Assumption Test

The result of multicollinearity test the highest VIF value is amounting to 1.040 which less than 0.05 ( $\alpha=5\%$ ). Hence the panel data used in this research is not having multicollinearity problem. The result of Glejser Test shows the lowest significance amount is amounting to 0.124 which greater than 0.05 ( $\alpha=5\%$ ). Therefore the panel data used in this research is not having heteroskedasticity problem.

### 3.4. Regression Model of Random Effect Panel Data

**Table 6.** Regression Result of Random Effect Panel Data

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.156518	0.043925	-3.563266	0.0006
CEE	0.094615	0.042335	2.234931	0.0276
HCE	0.029974	0.003809	7.868538	0.0000
SCE	0.001216	0.007782	0.156259	0.8761
R-squared	0.460678	F-statistic		29.61160
Adjusted R-squared	0.445121	Prob(F-statistic)		0.000000

On Table 6 about regression result of random effect panel data using multiple linear regression can be derived the equation as follow:

$$\text{ROA} = -0.156518 + 0.029974 \text{ HCE} + 0.001216 \text{ SCE} + 0.094615 \text{ CEE}$$

### 3.5. Statistical Hypotheses Testing

a. t Test

Table 6 shows that Capital Employed Efficiency is positively affected as the coefficient amounting to 0.094615 and probability value amounting to 0.0276. The same thing occurs to Human Capital Efficiency which is positively affected as the coefficient amounting to 0.029974 and probability value amounting to 0.0000. Both variables have significant influence due to the each probability value is less than 0.05 ( $\alpha=5\%$ ). Meanwhile Structural Capital Efficiency is not significantly affected as the probability value is amounting to 0.8761 which greater than 0.05.

b. F Test

Table 6 shows the probability value of F Test is amounting to 0.000000 which less than 0.05 ( $\alpha=5\%$ ). Therefore, Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), and Capital Employed Efficiency (CEE) are together significantly affected to Firm's Profitability.

c. Coefficient determination (R-squared)

Table 6 shows the value of R-squared in this research is amounting to 0.460678. This indicates that 46.07% variation of Firm's Profitability as dependent variable can be explained by Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), and Capital Employed Efficiency (CEE) as the independent variables. Meanwhile 53.93% variation of Firm's Profitability can be explained by another independent variables which are not tested in this research.

### 3.6. Discussion

From analysis result, proven that Human Capital Efficiency (HCE) is positively affected to firm's profitability. This means trading companies earn value added from efficiency for every investment in human resources to improve their profitability. The investment can be a training, workshop, or even employee exchange in overseas. With the investment, employees are equipped with bundle of knowledges and gain deeper insights for the companies in increasing their profitability.

In line with Theory of Resource Based View, Intellectual Capital, and Firm's Profitability that the value creation of knowledge, information, and insights are intangible assets which can be utilized as source of competitive advantage to compete with competitors. Instead of that, the companies also have close relationships with suppliers, consumers, and vendors which can reduce operational cost and improve its profitability.

Some examples of the companies which already applied the efficiency of investment in human resources are PT Bintang Mitra Semestaraya Tbk., PT Indoritel Makmur Internasional Tbk., and PT Northcliff Citranusa Indonesia Tbk. Its implication is the firms will gain more knowledge and insights about business strategies in the future along with technological update and consumer's consumption patterns. Beside that, the companies also have important asset, such the relationships among business partner to overcome what consumer's needed. This research is in line with previous researches which already conducted by [21], [23], [48], [20], and [49].

From analysis result, proven that Structural Capital Efficiency (SCE) is not affected to firm's profitability. It means by overall, the trading companies are still not able to establish organizational structure and operational system to support their employees while working. The current facilities may not be accommodate enough the firm as a solid structure.

Beside that, this is also shows that mostly trading companies is not yet optimize transforming knowledge into structural capital as supporting factor of employees. The knowledge transformation is changes form of knowledge into one organized system in a firm. Its implication for a better onwards is the companies shall construct organizational structure and operational system well, also management for systematically knowledge transformation among employees into one solid form. This analysis result is in line with previous researches which already conducted by [20] and [49].

From analysis result, proven that Capital Employed Efficiency (CEE) is positively affected to firm's profitability. This means the effectiveness of choosing capital, both physical and financial, is very important to reduce the cost and compose the efficiency. Overall, the trading companies in Indonesia has succeed in gaining value added from the efficiency for every utilized capital to improve firm's profitability with low cost.

The influence of CEE to increase profitability can also be reflected in efficiency of capital used through adaptation on economic condition by the companies, such unit business transformation to conform with consumer's need, especially the changes in consumption pattern from offline to online. This is suite with the relationship between Stakeholder Theory, Intellectual Capital, and Firm's Profitability that firms must be smart thinking in discovering alternative solutions while reporting their performance into all stakeholders.

Some examples of companies which have efficiency of choosing capital are PT Fast Food Indonesia Tbk., PT Matahari Department Store Tbk., and PT Midi Utama Indonesia Tbk. Its implication is the company's management shall be thorough while analysing sources of capital tailored to current economic changes and situation. Beside that, the reputation management with stakeholders is also important to enhance the efficiency and effectiveness of capital to achieve their goals. This analysis result is inline with previous researches which already conducted by [50], [51], [20], [52], [49], and [22].

From analysis result, proven that Capital Employed Efficiency (CEE), Human Capital Efficiency (HCE), and Structural Capital Efficiency (SCE) is simultaneously affected to firm's profitability. This is relate to Stakeholder Theory, Resource Based View Theory, Intellectual Capital, and Firm's Profitability that the performance will be better if there is whole and synchronization between value creation among physical capital, financial capital, invested capital on human resources, structural capital, organizational structure, and operational system.

The implication of value creation for all three components of Intellectual Capital in together can notify the trading companies to be more careful and understand the characteristics of consumer's needs with changes of time, economic condition, changes of pattern consumption, and technology improvement. If those aspects are maintained and managed well, so the companies can be easier improving their profitability for current and onwards. This analysis result is in line with previous researches which already conducted by [21], [23], [51] [20], [52], [49], and [53].

Naturally, Intellectual Capital is a kind of intangible assets which can be used as competitive advantage to determines business strategy when competing. That resource which derived from value creation arise from efficiency of capital employed, human capital, and structural capital. Based on analysis result, proven that Intellectual Capital has fulfilled the unique characteristics according to Resource Based View Theory which needed to be

managed and maintained to enhance the going concern and performance improvement of a firm.

The companies shall need to evaluate and communicate their performance to stakeholders. According to Stakeholder Theory, the stakeholders entitle to know the performance of the companies as their contributors, hence they keep interest to stay in touch. It is possible that they can attract more parties for joining, so the companies' resources will become more various. Beside that, the good relationship between the companies and stakeholders can lead to a information and insight exchange of which very useful for the firms when determining the business strategy. Therefore, the companies will be much easier to increase their profitability performance through the efficiency and effectiveness utilization of various resources.

#### **4. Conclusion and Implications**

Intellectual Capital measured by Value Added Intellectual Coefficient (VAIC) is proven can enhance firm's profitability, especially to Capital Employed Efficiency and Human Capital Efficiency. If those aspect maintained and managed well, it can improve profitability. So, there will be needed systematic and timely planning, executing, and controlling over Intellectual Capital to ensure it keeps on track and relevant with business strategy and goal on the current economic changes.

Through Resource Based View Theory, Intellectual Capital is one of unique resources with VRIN characteristics to be maintained and developed to improve the profitability performance. Those resources can also be source of competitive advantage and useful for determining business strategy when competing with competitors. Then, through Stakeholder Theory as supporting, Intellectual Capital plays significant role in managing good relationships and communication the firm's performance to their stakeholders, so the other parties will be interested to cooperate with the firm. Knowledges owned by employee are also useful while brainstorming with stakeholders to enrich the information, so the companies will be easy to construct the business strategy, decrease the cost, and increase the profit.

The limitation of this research is only subjected to trading firms, but there are still another sectors in Indonesia Stock Exchange (IDX). The period of analysis is only 3 years, from 2016 to 2018.

To overcome them, the next analysis may use another sectors, are service and manufacture with various segment, i.e. agricultural, basic industry and chemical, banking and insurance, infrastructure and transportation, or even mining. Therefore, conclusion can be more generalized. The period of analysis can longer to gain more long-term figure and more accurate when making decision. The Value Added method can use another model, like [54] or [26]. Next analysis also may include more independent variables, such as firm's size, capital structure, activity ratio, and another independent variables to get bigger R-squared result in explaining how powerful the impact of independent variables toward dependent variable.

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