

# THE INFLUENCE OF INTELLECTUAL CAPITAL ON UNIVERSITY PERFORMANCE: THE MEDIATING ROLE OF GOOD UNIVERSITY GOVERNANCE IN INDONESIAN PRIVATE UNIVERSITIES

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## Abstract

**Purpose:** This research was conducted based on the conditions of intellectual capital and university governance that were not yet ideal in assisting institutions in Indonesia to achieve their projected performance. It examines how intellectual capital influences university performance by applying Good University Governance (GUG) mediation in private universities. **Design/methodology/approach:** This study used a survey method by distributing questionnaires to top management who played a role in policymaking in private universities in the LLDIKTI (The Higher Education Service Institute) area 2. The data in this study were analyzed using structural equation Modeling (SEM) with the partial least squares (PLS) approach. **Findings:** The research findings showed that intellectual capital positively affected Good University Governance (GUG), but it did not directly impact university performance. This result contradicted some previous studies in which intellectual capital affected university performance. Another finding was that GUG played a significant mediating role in the relationship between intellectual capital and university performance. **Research limitations/implications:** The findings of this study may not be generalizable to quasi-public organizations in other countries, especially Western countries, due to differences in academic culture, performance, and the ability and competence of educational resources that may not meet the competencies and qualifications required for the position or role held. **Practical implications:** To improve performance and business sustainability, leaders of Private Higher Education (PTS) can use this research as material for study and consideration. **Originality/value:** This study develops a model of the influence of exogenous intellectual capital variables on university performance by including Good University Governance as a mediating variable. The research object was a quasi-public organization, with private universities taken as a sample, whereas previous researchers took samples only from public universities in Indonesia.

**Keywords:** Intellectual Capital, Good University Governance (GUG), University Performance, Private Universities, Quasi-Public Organizations, Indonesia.

## INTRODUCTION

An ideal college should have an excellent track record, as evidenced by its reputation and rankings. Accreditation is a measure of good governance. To ensure the development of higher education, managers must implement Good University Governance (GUG), which can provide long-term viability for institutions (Sari, 2012).

In 2020, the Directorate General of Higher Education team at the Ministry of Education and Culture reported a shift and decrease in the quality of university clustering results in each cluster compared with the previous year. The exception was Cluster 1, in which the number of universities increased from 13 to 15. In 2017, the Ministry of Research, Technology, and Higher Education discontinued 25 universities and placed 102 universities under supervision (Aminullah, 2017). In 2019, 11 universities were closed because of management failures

(Samsuri, 2020). In 2012, the Ministry of Education and Culture released approximately 1,600 private universities with fewer than 500 students and threatened to merge with 336 private universities because they had no students (Caesaria, 2021).

Intellectual capital (IC) plays a critical role in higher education. Higher education institutions generate knowledge through scientific or technical research (e.g., surveys and publications) or instruction (Ulum, Malik, & Sofyani, 2019). The most valuable resources of a university include its lecturers, educators, student activists, and organizational relationships and practices (K. H. Leitner, Curaj, A., Elena-Perez, S., Fazlagic, J., Kalemis, K., Martinaitis, Z., Secundo, G., Sicilia, M.-A., & Zaksa, K, 2014). According to data released by the Global Innovation Index (GII, 2020), Indonesia ranked 85th among the 131 countries worldwide. This ranking has remained unchanged since 2018 and is lower than that of other ASEAN countries, such as Malaysia (33rd), Thailand (44th), Vietnam (42nd), and Singapore (8th). To help universities become world-class institutions (WCU), the Indonesian government has set performance goals. However, several metrics, such as graduate reputation and number of article citations, are still too low for Indonesian universities to make them into the top 100 WCUs (QS Ranking, 2020).

Researchers suspect that Good University Governance (GUG) can increase the impact of intellectual capital on university performance. Intellectual capital is essential for universities to improve their organizational performance. Researchers also believe that the role of intellectual capital is significant if a university has an excellent organizational governance system. This study specifically examines whether intellectual capital affects university performance and whether GUG mediates the relationship between intellectual capital and university performance in private universities. However, previous studies have not consistently confirmed this relationship.

In the current era of a knowledge-based economy, intellectual capital (IC) plays a crucial role as a value driver for companies (Edvinsson, 2013). However, Maditinos, Chatzoudes, Tsairidis, and Theriou (2011) find no significant association between IC, as evaluated by the value-added intellectual coefficient, and three financial performance metrics: return on equity (Gagné et al.), return on assets (Romero et al.), and income growth. Similarly, Firer Firer and Williams (2003) could not establish a link between IC and firm success as evaluated by ROA and ROE. In the context of higher education, this form of knowledge increase is called the transfer of technology (Vinig & Lips, 2015). Several attempts have been made in the past 20 years to implement the IC model in higher education and research institutes, particularly in European countries (K. H. Leitner, Curaj, A., Elena-Perez, S., Fazlagic, J., Kalemis, K., Martinaitis, Z., Secundo, G., Sicilia, M.-A., & Zaksa, K, 2014); Ramirez and Gordillo (2014); (Veltri & Silvestri, 2015). IC constitutes the highest educational asset (Sánchez, Elena, & Castrillo, 2008); (Secundo, De Beer, Schutte, & Passiante, 2017), and the competitiveness of individuals, companies, and regions increases directly with their ability to manage these factors (Schiuma & Lerro, 2010). Chatterji and Kiran (2017), Cricelli et al. Cricelli, Greco, Grimaldi, and Llanes Dueñas (2018), Lu (2012), and (Yudianto, Mulyani, Fahmi, & Winarningsih, 2021). Confirmed that IC directly affected university performance.

Research on Good University Governance (GUG) is relatively new and inconclusive. Even within the contingency framework, studies on the influence of GUG on performance in the public sector, especially in universities, are rare (Boezerooij, 2006); (Muhi, 2010). Kim (2008) linked management with GUG in terms of management/quality control and accountability. Gupta and Sharma (2014) found that certain governance principles, such as corporate culture, transparency, and openness, affect long-term performance. However, Meznar and Johnson Jr (2005) did not find a clear relationship between governance structure and routines. In contrast, (Yarbrough & Yarbrough, 1999), Kyriakopoulos, Meulenbergh, and Nilsson (2004), Chang, Lu, Su, Lin, and Chang (2010), Gupta and Sharma (2014), Martínez-Campillo and Fernández-Gago (2011), and Nofianti and Suseno (2014) demonstrated the direct impact of governance on performance. In the context of higher education, Brown Jr (2001) (Hanum & Bukit, 2021). (<https://pontas.id/2021/09/13/pphn-penting-dan-urgen-untuk-indonesia/>) and Muktiyanto, Hermawan, and Hadiwidjaja (2020), Raharjo, Djalil, Syahputra, Muslim, and Adam (2019) and (Yudianto et al., 2021). (<https://pontas.id/2021/09/13/pphn-penting-dan-urgen-untuk-indonesia/>) found that GUG has a positive effect on university performance. According to Ganescu (2012), coincidental internal and external variables affect organizational performance in terms of importance and direction (positive or negative).

Previous researchers expressed hope that similar research will contribute to public sector accounting studies Muktiyanto et al. (2020) Raharjo et al. (2019); (Yudianto et al., 2021) on the impact of intellectual capital on university performance mediated by Good University Governance (GUG). This study focuses on private universities. Although previous studies in the public sector are still few, especially in universities whose samples are state universities, private higher education is classified as a quasi-public organization. As a quasi-public business, the boundaries between the private and public sectors are unclear. According to (Francis, 2001), quasi-public organizations are private companies that run for the benefit of the general public. Because their businesses involve the interests and livelihoods of many people, the government intensively regulates quasi-public companies. However, in terms of providing incentives, they must be more independent so that employees do not receive incentives from the government. If the government cannot manage it correctly, there will be problems with the survival of higher education organizations. In practical terms, leaders of private higher education institutions can use this research as material for study and consideration to improve their business performance and sustainability.

## LITERATURE REVIEW

In organizations, stewardship theory posits that cooperative behavior has higher utility than individualistic behavior. As a result, managers will increase their competence in human resources, including intellectual capital (IC), to streamline existing resources and create a sound and robust organizational culture. Organizational commitment supports the production of good governance, which improves the organization's performance, especially at the university level. Intellectual capital is the driving force behind all corporate values (Stewart Stewart (1997), and knowledge management is a central issue for organizations (Nonaka & Takeuchi, 1996). Organizational knowledge is paramount for continued

competition and performance. Intellectual capital encompasses all the knowledge, information, intellectual property, and experience possessed by an organization Stewart (1997), and is one of the most critical components for managing and evaluating internal and external organizational processes (Bukh & Marr, 2005); (Khaliq, Hina, Ramayah, & Shaari, 2020); (VIDRAȘCU, Iacob, Volintiru, & Cristea, 2016). Universities with robust IC can improve their performance (Cricelli et al., 2018).

Empirical research on intellectual capital has begun to focus on higher education and research centers, especially in several European countries (K. H. Leitner, Curaj, A., Elena-Perez, S., Fazlagic, J., Kalemis, K., Martinaitis, Z., Secundo, G., Sicilia, M.-A., & Zaksa, K, 2014); Ramírez & Gordillo, 2014;(Veltri & Silvestri, 2015) . The most visible assets of higher education are intangible assets and intellectual capital (IC) (Canibano & Paloma Sánchez, 2009); Secundo et al., 2010, 2017). Individuals, groups, and regions that are more competitive have better IC control abilities (Schiuma & Lerro, 2010). Universities use the term ‘transfer of higher education abilities’ to describe this type of knowledge gain (Vinig & Lips, 2015). Chatterji and Kiran (2017), and Cricelli et al. (2018); Lu (2012), and (Yudianto et al., 2021). (<https://pontas.id/2021/09/13/pphn-penting-dan-urgen-untuk-indonesia/>)nfaftfaffects s a university’s performance. Thus, it can be concluded that intellectual capital affects university performance.

H1: Intellectual capital has a positive impact on university achievement.

Intellectual capital is critical in higher education because it is both a product and input. Universities generate knowledge through science and technology research (e.g., survey results and publications) and education (Ulum et al., 2019). Intellectual capital is at the heart of a university’s value creation and competitive advantage (Barney, 1991), as well as its purpose and reason for being (Safieddine, Jamali, & Noureddine, 2009).

Only a few studies have investigated the link between intellectual capital (IC) and Good University Governance (GUG). Wahyudi and Puspita (2020) provided empirical evidence that IC affects corporate governance. Safieddine et al. (2009) conclude that IC and corporate governance in educational institutions have interrelated influences. Further research has revealed that IC is a hidden force that can help an organization recruit additional IC. As a result, researchers may deduce that intellectual capital affects GUG.

H2: Intellectual capital positively affects university governance (GUG).

Accounting research in the public sector, particularly in government organizations, has applied stewardship theory (Haliah., 2015), Van Slyke (2007), and other non-profit organizations (Caers et al., 2006); (Li et al., 2011)., 2011; (West & Zech, 2007); (Yudianti, 2015). Stewardship theory postulates that cooperative behavior is more valuable than individualistic behavior. As a result, managers increase their talents’ ability to effectively exercise internal control and build a solid organizational culture that excels. Corporate governance in the public and private industrial sectors, non-profit organizations, and other organizations have different characteristics (Quyên, 2014).

Additionally, Raharjo et al. (2019), various adjustments based on implementing the principles of “good governance” in the system and process of university administration can be considered Good University Governance (GUG) in higher education and other general education. Effective university governance can prevent institutions from committing fraud and manage fraud control (Susanto, 2015). Kim (2008) stated that GUG variables influence leadership, quality control, and organizational performance. This statement is reinforced by Raharjo et al. (2019), who found that GUG in universities significantly affects organizational performance.

According to empirical evidence from Gupta and Sharma (2014), certain governance concepts, such as company culture, transparency, and openness, impact long-term success. However, Meznar and Johnson Jr (2005) did not find a clear relationship between governance structure and performance. In contrast, (Yarbrough & Yarbrough, 1999), Kyriakopoulos et al. (2004), and (Chang et al., 2010), Gupta and Sharma (2014), Martínez-Campillo and Fernández-Gago (2011), and Nofianti and Suseno (2014) supported their findings. Research on Higher Education by Brown Jr (2001) (Hanum & Bukit, 2021). (<https://pontas.id/2021/09/13/pphn-penting-dan-urgen-untuk-indonesia/>) and Muktiyanto et al. (2020), Raharjo et al. (2019), a ((Yudianto et al., 2021). (<https://pontas.id/2021/09/13/pphn-penting-dan-urgen-untuk-indonesia/>) demonstrated that Good University Governance (GUG) has a positive effect on university performance. Therefore, GUG will affect a university’s performance.

H3: Good university governance (GUG) positively affects university performance.

In contingency theory, managers must interact with all components within and outside the organization to exercise reasonable control over any problem. Contingency theory is a set of behavioral theories that stipulate that there is no single or best way to organize and lead organizations in management settings. A leader or manager is appointed to make decisions based on the relative situations and conditions. This theory suggests that variables such as leadership style, job design, participation in decision making, and organizational structure are critical to understanding what leads to a good overall managerial outcome (Shepard and Hougland, 1978).

Intellectual capital is a critical component of organizational success and performance, and its value is growing in the commercial world (Barney, 1991); (Nick Bontis, 2001); (Keenan, 2001); (Saint-Onge, 1996). According to the literature, inadequate governance systems primarily link to IC migration (Safieddine et al., 2009). Meanwhile, Fahy and Smithee (1999) state that company resources can provide a competitive advantage with tangible, intangible, and human resource capacity characteristics. The future and prospects of a company depend on how management can take advantage of the value of intangible assets that are not visible (Wahyudi & Puspita, 2020).

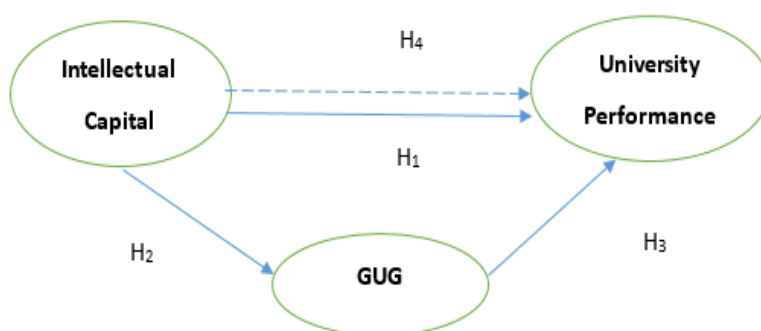
Intellectual capital is critical in higher education because it is both a product and input. Universities generate knowledge through science and technology research (e.g., survey results and publications) and education (Ulum et al., 2019). Intellectual capital is at the heart of a university’s value creation and competitive advantage as well as its purpose and reason (Safieddine et al., 2009).

Only a few studies have investigated the link between intellectual capital (IC) and Good University Governance (GUG). Wahyudi and Puspita (2020) provided empirical evidence that IC affects corporate governance. Safieddine et al. (2009) concluded that IC and corporate governance have interrelated influences on educational institutions. Further research suggests that IC is a latent force that can improve an organization's potential to recruit more IC. However, Safieddine et al. (2009) found a weak relationship between the IC and corporate governance.

GUG was an excellent mediating variable. Additionally, Raharjo et al. (2019), GUG strengthens the association between identity strength and organizational citizenship behavior (OCB) on university success. Then, hypothetically, it states that

H4: good university governance (GUG) mediates the influence of intellectual capital on university performance.

Figure 1 presents the research hypothesis model



**Figure 1: Research Model**

## RESEARCH METHODOLOGY

This research is a quantitative descriptive study that uses a questionnaire survey method to measure a specific topic and statistically determine the relationships among variables (Creswell, 2014). The population of this study consisted of 199 top leaders of private universities in LLDIKTI Region 2 Indonesia, which covers the provinces of Lampung, South Sumatra, Bengkulu, and Bangka Belitung. This region was chosen because it has the best private university management in 2021. The sample collection method used random probability sampling, where each member of the population had an equal opportunity to be included in the sample. The researchers used primary random sampling as a sampling technique because the members or elements of the population were homogeneous, particularly senior leadership in private colleges, who have a role in policymaking. This study selected private universities (PTS) in Indonesia as the research object. This is because university management in Indonesia is carried out not only by the government but also by the community in the form of foundations and associations, in accordance with the provisions of legislation and not for profit.

## Variable Operational Definition

In this study, the researchers analyzed variables based on exogenous variables, namely intellectual capital and good university governance, as mediating variables, and endogenous variables, namely university performance. Intellectual capital (IC) was described as intangible assets possessed by the university in the form of knowledge, information, intellectual property, experience, and human, structural, and relational capital. In college or university settings, IC components evolve in various ways. Researchers have used a tripartite classification dimension as described in the literature (Canibano & Paloma Sánchez, 2009); (K.-H. Leitner, 2004); Sanchez et al., 2009b; (Paloma Sánchez & Elena, 2006); (Secundo, Margherita, Elia, & Passiante, 2010). However, they developed and used IC consisting of four essential and interrelated elements (N Bontis & KNOW, 2000); (Khalique et al., 2020); Ramirez and Gordillo (2014); (Yudianto et al., 2021): human capital, structural capital, relational capital, and technology capital. Good University Governance (GUG) is an effort to apply the basic principles of the concept and system of “good governance” to the university governance process with various adjustments based on the values that the university administration must maintain. Its principles (Indrajit & Djokopranoto, 2006); (Hénard & Mitterle, 2010); Quyên (2014); Salmi (2009); (<https://doi.org/10.1177/183335838901900104>, 2014) include: (1) compelling vision, mission, and goals; (2) values, ethics, and academic morals; (3) governance structure; (4) credibility; (5) transparency; (6) accountability (<https://repository.unej.ac.id/handle/123456789/67813?show=full>) responsiveness; (8) fairness; and (9) autonomy. The level of achievement of university institutions in carrying out activities that optimize the accomplishment of the organization's vision, mission, and goals by measuring academic service quality, student performance, research performance, HR performance, financial performance, and university performance. (Indrajit & Djokopranoto, 2006); (Fielden, 2008).

Respondents judged how the organization's situation was related to each statement indicator in the questionnaire using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) to show the rate of implementation (Sekaran & Bougie, 2017).

## Data analysis technique

This study used structural equation model (SEM) analysis with the partial least squares (PLS) approach to evaluate the hypothesis utilizing confirmatory analysis. There are two stages in analyzing and interpreting the data using the PLS model: (1) the measurement model (outer model), which depicts the link between the construct and indicators, and evaluates the measurement model's reliability and validity. (2) Structural model (inner model) depicts the path relationship between constructions and represents the construct (Hair Jr, Hult, Ringle, & Sarstedt, 2021); (Sekaran & Bougie, 2017)

The SEM–PLS model (outside measurement) is a reflective measurement assessed using validity and reliability. There are two criteria for validity measurement: construct validity is achieved by calculating the convergent and discriminant validity. Convergent validity is the set of indicators (items) representing one latent variable (unobserved). To determine the

convergent validity value, the researchers used the loading factor for each item. If an instrument's weight is more significant than 0.7, it meets the criteria for evaluating convergent validity (Hair Jr et al., 2021); (Sekaran & Bougie, 2017).

This study used a cross-loading table to assess the discriminant validity. According to the SEM-PLS criterion, if the correlation between a latent variable and each item (manifest variable) is more significant than the correlation between other latent variables, the latent variable can predict the item better than the other latent variables. Based on the test results, all the items that measure the variable produce a value greater than the values of the other variables. Thus, the latent measurement variable corresponded to each item.

The researchers used the value of discriminant reliability, Cronbach's alpha, and composite reliability to quantify PLS construct reliability. If the value of discriminant reliability (AVE) was greater than 0.5, composite reliability (CR) was greater than 0.7, and Cronbach's alpha was greater than 0.6, the construct was deemed trustworthy (Hair Jr et al., 2021) (Sekaran & Bougie, 2017).

The researchers evaluated the structural model to predict causal relationships between variables or test the hypotheses (Hair Jr et al., 2021). They assessed the structural model or inner model with PLS by examining the percentage of variance carried out with approaches including a) R-Square (R<sup>2</sup>) or the coefficient of determination; b) Q-Square Predictive Relevance (Q<sup>2</sup>) obtained through the PLS Blinfolding process with criteria  $Q^2 > 0$ ; and c) the stability of the estimate using a t-test through the bootstrapping process for evaluation. For each relationship path used to test the hypothesis, the bootstrapping technique generated t-statistical values. Researchers compared the value of the t-statistic to the t-table value. The t-table is 1.96 when the degree of precision or limit of inaccuracy ( $\alpha$ ) = 5% = 0.05, and the confidence level is 95 percent. If the t-statistic is less than the t-table value ( $t\text{-statistic} < 1.96$ ),  $H_0$  is accepted and  $H_a$  is rejected. If the t-statistic value is greater than or equal to the t-table ( $t\text{-statistic} > 1.96$ ),  $H_0$  is rejected and  $H_a$  is accepted (Ghozali, 2014).

## RESULT AND DISCUSSION

Research respondents are top leaders of private universities in The Higher Education Service Institute Region 2 because leaders play a significant role in increasing an organization's quality (Permendiknas 67, 2008).

The online survey collected 145 people from 199 questionnaires distributed to private universities in Lampung, South Sumatra, Bengkulu, and Bangka Belitung. After selection, only 106 met the criteria requirements for the process because the rest of the questionnaire was incomplete. Most respondents were male, with women accounting for 71% of the rest.

The results of the accreditation of private universities based on data from respondents who entered 68,87% were accredited well © and accredited very well (B) only 31.13%. The results are presented in Table 1.



**Table 1: Institutional Accreditation**

Number	Accreditation	Total	Persentase
1	Excellent (A)	0	0%
2	Very Good (B)	33	31,13%
3	Good (C)	73	68,87%

Based on Table 2, most of them are in the form of academies (32.08%), universities (31.13%), and higher institutes (28.30 %); the rest are in the form of polytechnics (6.60 %) and institutes (1.89 %).

**Table 2: Organization Form**

Number	Institusi	Total	Persentase
1	University	33	31,13%
2	Higher Institute	30	28,30%
3	Polytechnic	7	6,60%
4	Academy	34	32,08%
5	Institute	2	1,89%

### Measurement Model Analysis

Because the value of their external loadings is greater than 0.7, most indicators have strong convergent validity. (See Table 3). The discriminant validity test showed a significant difference in the value of loading on the indicator for the latent variable compared with the other variables. In other words, all indicators met the discriminant validity requirements.

**Table 3: SEM-PLS Outer Loading Factor Results**

INDICATOR	GUG	IC	UP
GUG1	0.812		
GUG2	0.959		
GUG3	0.932		
GUG4	0.930		
GUG7	0.941		
GUG8	0.853		
GUG9	0.716		
GUG10	0.942		
GUG11	0.888		
GUG12	0.909		
GUG14	0.900		
GUG15	0.901		
GUG16	0.884		
GUG17	0.887		
GUG18	0.974		
GUG19	0.936		
GUG21	0.729		
GUG22	0.798		
GUG23	0.938		
GUG25	0.906		
GUG26	0.917		
GUG28	0.838		
GUG29	0.868		

GUG30	0.913		
GUG31	0.877		
MI1		0.848	
MI2		0.859	
MI3		0.789	
MI4		0.814	
MI5		0.716	
MI6		0.883	
MI7		0.864	
MI8		0.912	
MI9		0.901	
MI10		0.906	
MI11		0.880	
MI12		0.759	
MI13		0.832	
MI14		0.779	
MI15		0.873	
UP1			0.939
UP3			0.722
UP4			0.848
UP6			0.952
UP7			0.918
UP8			0.885
UP10			0.878
UP11			0.784

Source: Output of Smart PLS 3.0

Furthermore, it was concluded that each value of the constructed variable met the specified threshold criteria, namely  $AVE > 0.5$ ,  $CR > 0.7$ , and  $> 0.6$ . All items are declared reliable and can indicate significant accuracy, consistency, and precision of the instrument in measuring latent variables. The results of the calculation of the item weights (loading factor), discriminant reliability (AVE), convergent validity, Cronbach's alpha, and composite reliability are shown in Table 4.

**Table 4: PLS-SEM results of construct validity and reliability**

Variable	Cronbach's Alpha	Rho_A	Reliability Composite	AVE
GUG	0.989	0.990	0.989	0.789
IC	0.971	0.974	0.973	0.711
UP	0.952	0.959	0.961	0.755

Source: Output of Smart PLS 3.0

### Structural Model Analysis

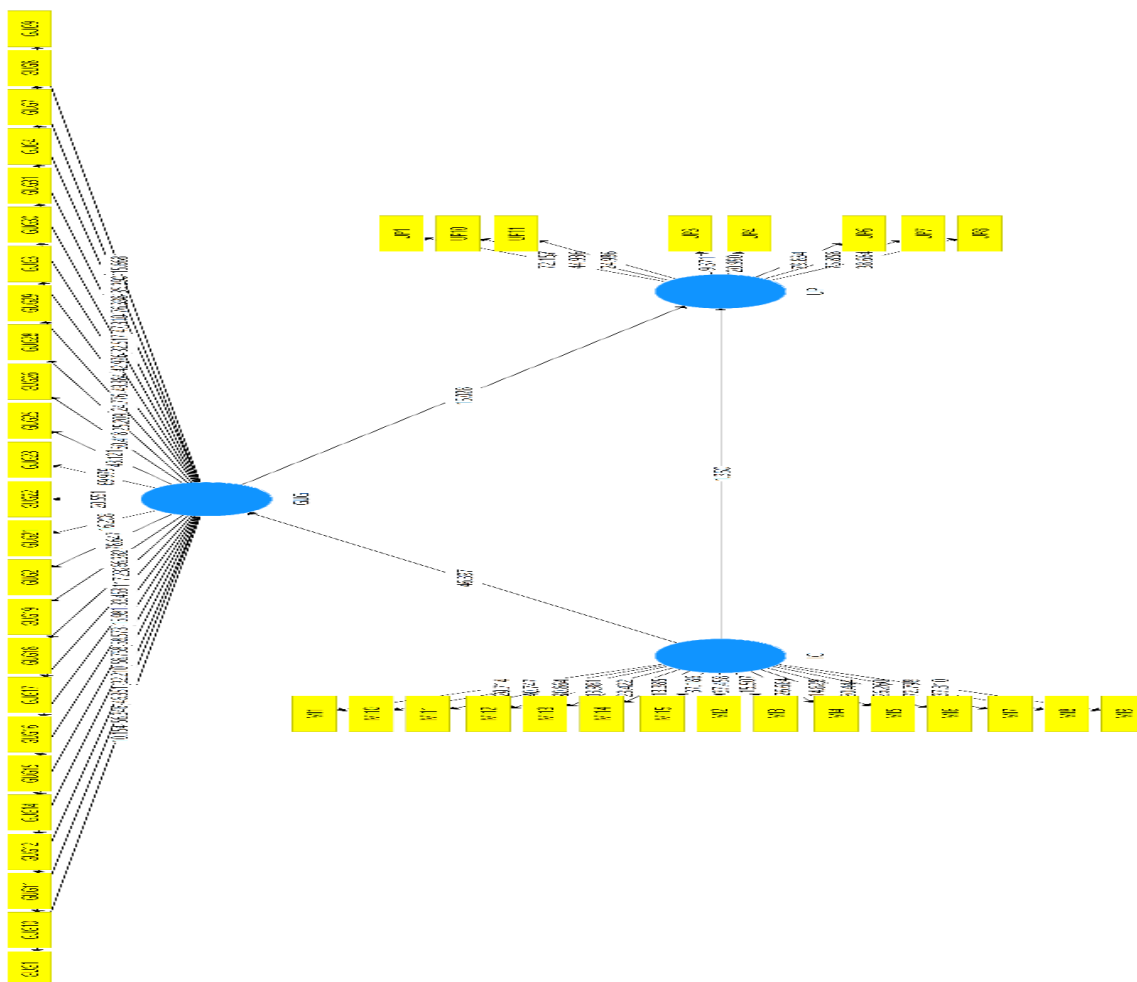
The measurement results show that the R-squared value of the endogenous variable, namely university performance, was 0.929. Intellectual capital and good university governance (GUG) explained 92.9% of the diversity of university performance variables. This study did not raise the remaining 7.1% of the influence of the other variables. In Table 5, the overall model in terms of R-Square (R<sup>2</sup>), it was sufficient; Q-Square Predictive Relevance (Q<sup>2</sup>>0) meets the existing provisions.

**Table 5: Overall Model Test**

Construct	R Square	Q2
GUG	0.771	0.586
UP	0.929	0.689

Source: Output from Smart PLS 3.0

Structural models were evaluated by estimating and testing the hypotheses on the causal links between the exogenous and endogenous variables provided in the path diagram. SmartPLS was used to estimate the standard errors and test the statistics for key parameters using the bootstrapping option (Hair Jr et al., 2021). Bootstrapping was performed using the computer software program Smart PLS 3.0. In this study, the t-table value at the 95% confidence level ( $\alpha < 5\%$ ) is 1.98. Figure 2 (attached) and Table 6 present the hypothesis testing for each latent-variable relationship.



**Figure 2: SEM-PLS Model Test Results**

Source: Output of Smart PLS 3.0

The coefficient value (original sample estimate) of the intellectual capital variable was positive at 0.089, based on structural model testing, indicating that the greater the increase in the intellectual capital variable, the better the university's performance. However, the t-count result (1.350) was lower than the t-table value (1.98), and the p-value (0.088) was higher than 0.05 (NS), indicating that intellectual capital did not affect the university performance variable. Consequently, H1 was not accepted.

Furthermore, the coefficient value of the intellectual capital variable was positive, indicating that the greater the increase in intellectual capital, the greater the GUG. The t-count value (46.397) was higher than the t-table value (1.98), and the p-value was less than 0.05 (\*\*), indicating that the intellectual capital variable had a significant effect on the GUG variable. Thus, H2 was supported.

In the final direct influence test, the coefficient value of good university governance (GUG) was positive at 0.884, indicating that the greater the increase in GUG, the better the institution's performance. The GUG variable had a significant effect on the university performance variable since the t-count result (15.028) was higher than the t-table value (1.98), and the p-value was less than 0.05 (\*\*). Thus, H3 was accepted.

The following hypothesis investigates the role of GUG in moderating the relationship between e-CRM intellectual capital and university performance. According to the findings, the coefficient of the mediation path variable was positive at 0.777, indicating that the greater the increase in intellectual capital, the greater the increase in GUG and university performance. The t-count value (15.312) was higher than the t-table value (1.98), and the p-value was less than 0.05 (\*\*), according to the mediation analysis results. GUG could be a complete mediator between intellectual capital and university performance in an indirect relationship. Thus, H4 was supported. In the following section, we discuss ways to justify our research findings.

**Table 6: Hypotheses Test**

Variable	Coefficient	Mean	SD	T Statistics	P Values	Description
GUG -> UP	0.884	0.887	0.059	15.028	0.000	**
IC -> GUG	0.878	0.881	0.019	46.397	0.000	**
IC -> UP	0.089	0.086	0.066	1.350	0.088	NS
IC -> GUG -> UP	0.777	0.781	0.051	15.089	0.000	**
Description: Sig *a<0,005; **a<0,01; NS: not significant						

Source: Output of Smart PLS 3.0

## DISCUSSION

According to the test results, partially exogenous variables have a significant and insignificant effect on endogenous variables. Three of the four proposed theories were accepted, whereas one was not. Furthermore, the findings revealed that the indirect relationship between the components had a full mediating effect.

Judging from the coefficient value of each predictor, the positive relationship between good university governance (GUG) and university performance had the highest estimate or dominant

influence. This indicates that the governance factor GUG greatly determines the success of a university's management, quality control, and performance.

In the first hypothesis, the test results showed that the intellectual capital construct did not have a significant impact on university performance. This result contrasts with those of several previous studies (Chatterji & Kiran, 2017); (Cricelli et al., 2018); Lu (2012); (Yudianto et al., 2021). This contradiction may be because, while intellectual capital is the initial capital and driving force of any organization, other variables are still required to improve a business or university's success. Intellectual capital is a hidden power that can help an organization recruit more intellectual capital. Tewart (1997) concludes that intellectual capital is the driving force of all firm values.

The second hypothesis in the analysis test showed that the intellectual capital construct was a significant predictor of GUG in private universities. This finding is consistent with those of previous studies (Wahyudi & Puspita, 2020). In the future, the prospects of the institution will depend on the ability of management to utilize the invisible value of intangible assets or what is known as intellectual capital.

The third hypothesis described a positive and significant relationship between GUG and university performance. These results strengthen those of several previous studies (Brown Jr (2001); Hanum and Bukit (2021). in 2021; Muktiyanto et al. (2020); Raharjo et al. (2019); (Yudianto et al., 2021)., 2021) in which university performance was an antecedent of GUG. Universities with good organizational governance will automatically increase their performance because the GUG is a factor that significantly determines the success of management, quality control, and organizational performance.

The last hypothesis showed that GUG completely mediated the indirect correlation between intellectual capital and university performance. The mediation path was positive, meaning that the more significant the increase in the intellectual capital variable, the greater the increase in GUG and university performance. The role of intellectual capital is crucial for a university, and even becomes the heart of an organization engaged in education. However, this is not sufficient to improve a university's performance. In other words, university performance first requires other mediating factors, such as good governance.

## CONCLUSION

Among the four proposed hypotheses, three were accepted and one was not accepted. The research findings showed that intellectual capital positively affected GUG, but did not directly affect university performance. This result contradicted some previous studies in which intellectual capital affected university performance. Another finding was that GUG played a significant mediating role in the relationship between intellectual capital and university performance.

These results have implications for the practical aspects of good public sector organizational governance practices, especially in quasi-public organizations, such as private universities. Particularly in private universities, tested causality can assist leaders in identifying predictors

of intellectual capital, good university governance (GUG), and university success. These findings enrich the study of governance in public organizations in the context of quasi-public organizations such as private universities, which are still relatively under-researched comprehensively in Indonesia. The significant influence of the constructs of GUG on university performance also strengthens the results of previous research on various objects. In addition, the perfect mediating effect of the GUG construct can complement and explain the insignificant relationship between the intellectual capital construct and university performance.

This study has several limitations. First, the intellectual capital construct cannot directly create university performance, so subsequent research could add or adapt new items. Second, the scope of the research sample was not sufficiently representative of the respondents, impacting the justification for private higher education performance itself. Therefore, further research could expand the sample size and use more sophisticated methods or techniques for quantitative analysis. Finally, considering that the concept of GUG in the context of quasi-public organizations is very broad and involves multidisciplinary research areas, future researchers could explore new variables (e.g., behavioral aspects, organizational citizenship behavior (OCB), quality of information technology, or user stakeholder attitudes) that have not been tested before for a more holistic understanding.

#### References

- 1) Aminullah, A., Kurniawati, E. (2017). *Tidak Memenuhi Standar, Kemenko PKM Mendukung Penutupan 25 PTS*. Tempo.Com. <https://nasional.tempo.co/read/1024678/tidak-memenuhi-standar-kemenko-pmk-mendukung-penutupan-25-pts>
- 2) Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- 3) Beth V, Y., & Robert M, Y. (1999). Governance Structures, Insider Status, and Boundary Maintenance. *Journal of Bioeconomics*, 1(3), 289–310. <https://doi.org/10.1023/A:1010058113016>
- 4) Boezerooij, P. (2006). *E-learning strategies of higher education institutions: An exploratory study into the influence of integrating e-learning in their education delivery and support process*.
- 5) Bontis, N. (1998). Intellectual capital: An exploratory study that develops measures and models. *Management Decision*, 36(2), 63–76. <https://doi.org/10.1108/00251749810204142>
- 6) Bontis, N., William Chua Chong, K., & Richardson, S. (2000). Intellectual capital and business performance in Malaysian industries. *Journal of Intellectual Capital*, 1(1), 85–100. <https://doi.org/10.1108/14691930010324188>
- 7) Bounfour, A., & Edvinsson, L. (2005). A Public Policy Perspective on Intellectual Capital. In *Perspectives on Intellectual Capital*. Bernard Marr. <https://doi.org/10.1016/b978-0-7506-7799-8.50017-6>
- 8) Brown, W. O. (2001). Faculty participation in university governance and the effects on university performance. *Journal of Economic Behavior and Organization*, 44(2), 129–143. [https://doi.org/10.1016/s0167-2681\(00\)00136-0](https://doi.org/10.1016/s0167-2681(00)00136-0)
- 9) Caers, R., Bois, C. du, Jegers, M., Gieter, S. de, Schepers, C., & Pepermans, R. (2009). Principal-Agent Relationships on the Stewardship-Agency Axis. *Nonprofit Management and Leadership*, 17(1), 25–47. <https://doi.org/https://doi.org/10.1002/nml.129>

- 10) Caesaria, S. D., & Kasih, A. P. (2021, April 30). *Kemendikbudristek Ada 336 Kampus Swasta Terancam Merger*. Www.Kompas.Com.
- 11) Cañibano, L., & Paloma Sánchez, M. (2009a). Intangibles in universities: current challenges for measuring and reporting. *Journal of Human Resource Costing & Accounting*, 13(2), 93–104. <https://doi.org/10.1108/14013380910968610>
- 12) Chang, W.-L., Lu, L.-C., Su, H.-J., Lin, T. A., & Chang, K.-Y. (2010). The mediating effect of role stressors on market orientation and organizational commitment. *Social Behavior and Personality – An International Journal*, 38(<https://doi.org/10.1177/183335838901900104>), 1431–1440. <https://doi.org/https://doi.org/10.2224/sbp.2010.38.10.1431>
- 13) Chatterji, N., & Kiran, R. (2017). Relationship between university performance and dimensions of intellectual capital: An empirical investigation. *Egitim Arastirmalari - Eurasian Journal of Educational Research*, 2017(71), 215–231. <https://doi.org/10.14689/ejer.2017.71.12>
- 14) Corinna, & Francis, B. (2001). Quasi-Public , Quasi-Private Trends in Emerging Market Economies : The Case of China. *Comparative Politics*, 33(3), 275–294.
- 15) Creswell, J. W. (<https://doi.org/10.1177/183335838901900104>). *Reseach Design, Qualitative, Quantitative and Mixed Methods Approacches* (4th ed.). SAGE Publishing.
- 16) Cricelli, L., Greco, M., Grimaldi, M., & Llanes Dueñas, L. P. (2018). Intellectual capital and university performance in emerging countries: Evidence from Colombian public universities. *Journal of Intellectual Capital*, 19(1), 71–95. <https://doi.org/10.1108/JIC-02-2017-0037>
- 17) Djokopranoto, R., & Indrajit, R. E. (2006). *Manajemen Perguruan Tinggi Modern*. Andi.
- 18) Edvinsson, L. (2013). IC 21: Reflections from 21 years of IC practice and theory. *Journal of Intellectual Capital*, 14(1), 163–172. <https://doi.org/10.1108/14691931311289075>
- 19) Fahy, J., & Smithee, A. (1999). Strategic Marketing and Resource Based View of the Firm. *Academy of Marketing Science Review*, 1999(<https://doi.org/10.1177/183335838901900104>), 71–88. Henley Business School ARC Online
- 20) Fielden, J. (2008). Global Trends in University Governance by John Fielden. *Education Working Paper Series*, 9, 1–70.
- 21) Firer, S., & Mitchell Williams, S. (2003). Intellectual capital and traditional measures of corporate performance. *Journal of Intellectual Capital*, 4(3), 348–360. <https://doi.org/10.1108/14691930310487806>
- 22) Ganescu, M. C. (2012). Assessing Corporate Social Performance from a Contingency Theory Perspective. *Procedia Economics and Finance*, 3(12), 999–1004. [https://doi.org/10.1016/s2212-5671\(12\)00264-x](https://doi.org/10.1016/s2212-5671(12)00264-x)
- 23) Ghozali, I. (<https://doi.org/10.1177/183335838901900104>). *Structural Equation Modeling, Metode Alternatif dengan Partial Least Square (PLS)* (4, Ed.). Badan Penerbit Universitas Diponegoro.
- 24) GII. (2020). *Ini Peringkat Indonesia di Indeks Inovasi Global 2020*. Indek Inovasi Global. <https://money.kompas.com/read/2020/09/03/190000126/ini-peringkat-indonesia-di-indeks-inovasi-global-2020>
- 25) Gupta, P., & Sharma, A. M. (<https://doi.org/10.1177/183335838901900104>). A Study of the Impact of Corporate Governance Practices on Firm Performance in Indian and South Korean Companies. *Procedia - Social and Behavioral Sciences*, 133, 4–11. <https://doi.org/10.1016/j.sbspro.2014.04.163>
- 26) Hair, J. H., M.Hult, G. T., Ringle, C., & SarstedtMarco. (<https://doi.org/10.1177/183335838901900104>). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. SAGE Publishing. <https://digitalcommons.kennesaw.edu/facbooks2014/39/>

- 27) Haliah. (2015). Quality of report: Is there a management and information technology role?. Empirical Evidence from West Sulawesi Province, Indonesia. *International Journal of Economic Research*, 12(1), 177–193.
- 28) Hanum, Z., Bukit, R., Utara, U. S., Hanum, Z., & Bukit, R. (<https://pontas.id/2021/09/13/pphn-penting-dan-urgen-untuk-indonesia/>). The Effect of Organizational Commitment on Performance through Good University Governance in Private Universities in Medan City. *PalArch's Journal of Archaeology of Egypt / Egyptology*, 18(4), 5182–5199.
- 29) Henard, F., & Mitterle, M. (2012). *Governance And Quality Guidelines In Higher Education*. OECD.
- 30) Keenan, J., & Aggestam, M. (2001). Corporate Governance and Intellectual Capital: Some Conceptualisations. *Empirical Research Based and Theory Building Paper*, 9(4), 259–275. <https://doi.org/10.1007/s10551-010-0692-x>
- 31) Khalique, M., Hina, K., Ramayah, T., & Shaari, J. A. N. bin. (2020). Intellectual capital in tourism SMEs in Azad Jammu and Kashmir, Pakistan. *Journal of Intellectual Capital*, 21(3), 333–355. <https://doi.org/10.1108/JIC-11-2018-0206>
- 32) Kim, T. (2008). Changing university governance and management in the UK and elsewhere under market conditions: Issues of quality assurance and accountability. *Intellectual Economics*, 8011(2), 35–42.
- 33) Kyriakopoulos, K., Meulenberg, M., & Nilsson, J. ([https://jdih.bappenas.go.id/data/abstrak/UU\\_Nomor\\_25\\_Tahun\\_2004.pdf](https://jdih.bappenas.go.id/data/abstrak/UU_Nomor_25_Tahun_2004.pdf)). The impact of cooperative structure and firm culture on market orientation and performance. *Agribusiness*, 20(4), 379–396. <https://doi.org/10.1002/agr.20021>
- 34) Leitner, K. H. ([https://jdih.bappenas.go.id/data/abstrak/UU\\_Nomor\\_25\\_Tahun\\_2004.pdf](https://jdih.bappenas.go.id/data/abstrak/UU_Nomor_25_Tahun_2004.pdf)). Intellectual capital reporting for universities: conceptual background and application for Austrian universities. *Research Evaluation*, 13(2), 129–140. <https://doi.org/10.2139/ssrn.2016026>
- 35) Leitner, K. H., Curaj, A., Elena-Perez, S., Fazlagic, J., Kalemis, K., Martinaitis, Z., Secundo, G., Sicilia, M.-A., & Zaksa, K. (<https://doi.org/10.1177/183335838901900104>). A Strategic Approach for Intellectual Capital Management in European Universities. Guidelines for Implementation. *A Strategic Approach for Intellectual Capital Management in European Universities*, 1, 1–94.
- 36) Lu, W. M. (2012). Intellectual capital and university performance in Taiwan. *Economic Modelling*, 29(4), 1081–1089. <https://doi.org/10.1016/j.econmod.2012.03.021>
- 37) fs, D., Chatzoudes, D., Tsairidis, C., & Theriou, G. (2011). The impact of intellectual capital on firms' market value and financial performance. *Journal of Intellectual Capital*, 12(1), 132–151. <https://doi.org/10.1108/14691931111097944>
- 38) Martínez-Campillo, A., & Fernández-Gago, R. (2011). Diversification strategy, CEO management style and firm performance: An application of Heckman's two-stage method. *Quality and Quantity*, 45(1), 59–73. <https://doi.org/10.1007/s11135-009-9290-3>
- 39) Meznar, M. B., & Johnson, J. H. (2005). Business-government relations within a contingency theory framework: Strategy, structure, fit, and performance. *Business and Society*, 44(2), 119–143. <https://doi.org/10.1177/0007650305275305>
- 40) Muhi, A. H. (2010). *Implementasi Nilai-Nilai Good Governance di Perguruan Tinggi*. Disertasi. Sekolah Pascasarjana UPI.
- 41) Muktiyanto, A., Hermawan, A. A., & Hadiwidjaja, R. D. (2020). The role of management control systems in the performance of higher education through good university governance. *International Journal of Trade and Global Markets*, 13(3), 288–310. <https://doi.org/10.1504/IJTG.2020.108777>



- 42) Munawir, Raharjo, K., Djalil, M. A., Syahputra, H., Muslim, B., & Adam, M. (2019). Dimensions of identity strength and organizational citizenship behavior (OCB) in establishing good university governance and performance of religious ideology-based higher educations. *Journal of Applied Research in Higher Education*, 11(2), 250–272. <https://doi.org/10.1108/JARHE-07-2018-0115>
- 43) Nofianti, L., & Suseno, N. S. (<https://doi.org/10.1177/183335838901900104>). Factors Affecting Implementation of Good Government Governance (GGG) and their Implications towards Performance Accountability. *Procedia - Social and Behavioral Sciences*, 164(August), 98–105. <https://doi.org/10.1016/j.sbspro.2014.11.056>
- 44) Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press. <https://books.google.co.id/books?id=tmziBwAAQBAJ>
- 45) QS Ranking. (2020). *QS World University Rankings*. <https://www.Topuniversities.Com/University-Rankings/World-University-Rankings/2020>. <https://www.topuniversities.com/university-rankings/world-university-rankings/2020>
- 46) Quyên, Đ. T. N. (<https://doi.org/10.1177/183335838901900104>). Developing University Governance Indicators and their Weighting System Using a Modified Delphi Method. *Procedia - Social and Behavioral Sciences*, 141, 828–833. <https://doi.org/10.1016/j.sbspro.2014.05.144>
- 47) Ramirez, Y., & Gordillo, S. (<https://doi.org/10.1177/183335838901900104>). Recognition and measurement of intellectual capital in Spanish universities. *Journal of Intellectual Capital*, 15(1), 173–188.
- 48) Safieddine, A., Jamali, D., & Noureddine, S. (2009). Corporate governance and intellectual capital: Evidence from an academic institution. *Corporate Governance*, 9(2), 146–157. <https://doi.org/10.1108/14720700910946596>
- 49) Saint-Onge, H. (1996). Tacit knowledge: the key to the strategic alignment of intellectual capital. *Planning Review*, 24(2), 10–14. <https://doi.org/10.1177/153851320200100311>
- 50) Sakaran, U., & Bougie, R. (2017). *Metode Penelitian untuk Bisnis: Pendekatan Pengembangan-Keahlian* (6th ed.). Salemba Empat.
- 51) Salmi, J. (2009). The growing accountability agenda in tertiary education: progress or mixed blessing? *World Bank Education Working Paper Series*, 16(January), 1–29.
- 52) Samsuri. (2020, February 6). *11 Kampus Swasta di Jakarta Tutup karena Gagal Kelola*. [www.Cnnindonesia.Com](http://www.Cnnindonesia.Com).
- 53) Sanchez, M. P., & Elena, S. (2006). *Intellectual capital in universities Improving transparency and internal management* (pp. 529–548). *Journal of Intellectual Capital*.
- 54) Sanchez, M. P., Elena, S., & Castrillo, R. (2009a). Intellectual capital dynamics in universities: A reporting model. *Journal of Intellectual Capital*, 10(2), 307–324. <https://doi.org/10.1108/14691930910952687>
- 55) Schiuma, G., & Lerro, A. (2010). Knowledge-based dynamics of regional development: The intellectual capital innovation capacity model. *International Journal of Knowledge-Based Development*, 1(1–2), 39–52. <https://doi.org/10.1504/IJKBD.2010.032585>
- 56) Secundo, G., de Beer, C., Schutte, C. S. L., & Passiante, G. (2017). Mobilising intellectual capital to improve European universities' competitiveness: The technology transfer offices' role. *Journal of Intellectual Capital*, 18(3), 607–624. <https://doi.org/10.1108/JIC-12-2016-0139>
- 57) Secundo, G., Margherita, A., Elia, G., & Passiante, G. (2010). Intangible assets in higher education and research: Mission, performance or both? *Journal of Intellectual Capital*, 11(2), 140–157. <https://doi.org/10.1108/14691931011039651>

- 58) Stewart, T. A. (1997). *Intellectual capital: the new wealth of organizations*. Doubleday. <https://dl.acm.org/doi/10.5555/266020>
- 59) Sukirman, & Sari, M. P. (2012). Peran Internal Audit Dalam Upaya Mewujudkan Good University Governance Di Unnes. *Jurnal Dinamika Akuntansi*, 4(1), 64–71. <https://doi.org/10.15294/jda.v4i1.1961>
- 60) Susanto, A. (2015). Influence The Quality Of Accounting Information On The Implementation Good Study Program Governance. *Influence The Quality Of Accounting Information On The Implementation Good Study Program Governance*, 4(12), 326–335.
- 61) Ulum, I., Malik, M., & Sofyani, H. (2019). Analisis pengungkapan modal intelektual: Perbandingan antara universitas di Indonesia dan Malaysia. *Jurnal Ekonomi Dan Bisnis*, 22(1), 163–182. <https://doi.org/10.24914/jeb.v22i1.2343>
- 62) UNDP. (<https://doi.org/10.1177/183335838901900104>). Discussion paper. In *Governance for Sustainable Development Integrating* (<https://doi.org/10.1177/183335838901900104>). UNDP Policy Paper. <https://doi.org/10.1177/183335838901900104>
- 63) Van Slyke, D. M. (2007). Agents or stewards: Using theory to understand the government-nonprofit social service contracting relationship. *Journal of Public Administration Research and Theory*, 17(2), 157–187. <https://doi.org/10.1093/jopart/mul012>
- 64) Veltri, S., & Silvestri, A. (2017). The free state university integrated reporting: a critical consideration. *Journal of Intellectual Capital*, 16(2), 443–462.
- 65) Vidrascu, P.-A., Iacob, O. C., Volintiru, A.-M., & Cristea, A. (2016). Gender Equality, Chances Equality and Intangible Assets in the Knowledge Society. *Scientific Papers: Management, Economic Engineering in Agriculture & Rural Development*, 16(3), 361–365. <http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=119643186&site=ehost-live>
- 66) Vinig, T., & Lips, D. (2015). Measuring the performance of university technology transfer using meta data approach: the case of Dutch universities. *Journal of Technology Transfer*, 40(6), 1034–1049. <https://doi.org/10.1007/s10961-014-9389-0>
- 67) Wahyudi, T., & Puspita, G. (2020). Pengaruh Intellectual Capital terhadap Penerapan Corporate Governance. *Jurnal Riset Akuntansi Terpadu*, 13(1), 79. <https://doi.org/10.35448/jrat.v13i1.8037>
- 68) West, R., & Zech, C. (1983). Internal financial controls in the U.S. catholic church. *Texas Medicine*, 79(<https://repository.unej.ac.id/handle/123456789/67813?show=full>), 43–44.
- 69) Yudianti, Fr. N., & Suryandari, I. H. (2015). Internal Control and Risk Management in Ensuring Good University Governance. *Journal of Education and Vocational Research*, 6(2), 6–12. <https://doi.org/10.22610/jevr.v6i2.183>
- 70) Yudianto, I., Mulyani, S., Fahmi, M., & Winarningsih, S. (<https://pontas.id/2021/09/13/pphn-penting-dan-urgen-untuk-indonesia/>). The influence of good university governance and intellectual capital on university performance in Indonesia. *Academic Journal of Interdisciplinary Studies*, 10(1), 57–70. <https://doi.org/10.36941/ajis-2021-0006>
- 71) 2001, U.-U. N. T. j. U.-U. N. T. tentang Pemberantasan Tindak Pidana Korupsi.
- 72) Aminullah, A., Kurniawati, E. . (2017). Tidak Memenuhi Standar, Kemenko PKM Mendukung Penutupan 25 PTS.
- 73) Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of management*, 17(1), 99–120. doi:10.1177/014920639101700108

- 74) Boezerooij, P. (2006). E-learning strategies of higher education institutions: An exploratory study into the influence of environment contingencies on strategies choices of higher education institutions with respect to integrating e-learning in their education delivery and support processes. Retrieved March 1, 2013.
- 75) Bontis, N. (2001). Assessing knowledge assets: a review of the models used to measure intellectual capital. *International journal of management reviews*, 3(1), 41-60.
- 76) Bontis, N., & KNOW, W. (2000). CH. y RICHARDSON, S., " Intellectual capital and business performance in Malaysian industries. *Journal of Intellectual Capital*, 1(1).
- 77) Brown Jr, W. O. (2001). Faculty participation in university governance and the effects on university performance. *Journal of Economic Behavior & Organization*, 44(2), 129-143.
- 78) Bukh, P. N., & Marr, B. (2005). A reporting perspective on intellectual capital. *Perspectives on intellectual capital*, 69.
- 79) Caers, R., Bois, C. d., Jegers, M., Gieter, S. d., Schepers, C., & Pepermans, R. (2006). Principal-agent relationships on the stewardship-agency axis. *Nonprofit Management and Leadership*, 17(1), 25-47.
- 80) Caesaria, S. (2021). Kemendikbudristek: Ada 336 Kampus Swasta Terancam Merger: Kompas. Com. <https://www.kompas.com/edu/read/2021/04/30/144119871> ....
- 81) Canibano, L., & Paloma Sánchez, M. (2009). Intangibles in universities: current challenges for measuring and reporting. *Journal of Human Resource Costing & Accounting*, 13(2), 93-104.
- 82) Chang, W.-L., Lu, L.-C., Su, H.-J., Lin, T. A., & Chang, K.-Y. (2010). The mediating effect of role stressors on market orientation and organizational commitment. *Social Behavior and Personality: an international journal*, 38(10), 1431-1440.
- 83) Chatterji, N., & Kiran, R. (2017). Relationship between university performance and dimensions of intellectual capital: an empirical investigation. *Eurasian Journal of Educational Research*, 17(71), 215-232.
- 84) Creswell, J. W. (2014). *Research Design, Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.).
- 85) Cricelli, L., Greco, M., Grimaldi, M., & Llanes Dueñas, L. P. (2018). Intellectual capital and university performance in emerging countries: Evidence from Colombian public universities. *Journal of Intellectual Capital*, 19(1), 71-95.
- 86) Edvinsson, L. (2013). IC 21: reflections from 21 years of IC practice and theory. *Journal of Intellectual Capital*, 14(1), 163-172.
- 87) Fahy, J., & Smithee, A. (1999). Strategic marketing and the resource based view of the firm. *Academy of marketing science review*, 10(1), 1-21.
- 88) Fielden, J. (2008). Global trends in university governance. *Education working paper series*, 9, 278200-1099079877269.
- 89) Firer, S., & Williams, S. M. (2003). Intellectual capital and traditional measures of corporate performance. *Journal of Intellectual Capital*, 4(3), 348-360.
- 90) Francis, C.-B. (2001). Quasi-public, quasi-private trends in emerging market economies: The case of China. *Comparative Politics*, 275-294.
- 91) Gagné, M., Forest, J., Vansteenkiste, M., Crevier-Braud, L., Van den Broeck, A., Aspel, A. K., . . . Güntert, S. T. (2015). The Multidimensional Work Motivation Scale: Validation evidence in seven languages and nine countries. *European Journal of Work and Organizational Psychology*, 24(2), 178-196.
- 92) Ganescu, M. C. (2012). Assessing corporate social performance from a contingency theory perspective. *Procedia Economics and Finance*, 3, 999-1004.

- 93) Ghozali, I. (2014). SEM metode alternatif dengan menggunakan Partial Least Squares (PLS). *Semarang: Badan Penerbit Universitas Diponegoro*.
- 94) GII. (2020). Ini Peringkat Indonesia di Indeks Inovasi Global 2020.
- 95) Gupta, P., & Sharma, A. M. (2014). A study of the impact of corporate governance practices on firm performance in Indian and South Korean companies. *Procedia-Social and Behavioral Sciences, 133*, 4-11.
- 96) Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)*: Sage publications.
- 97) Haliah. (2015). Empirical evidence from West Sulawesi Province, Indonesia. .
- 98) Hanum, Z., & Bukit, R. (2021). The Effect of Organizational Commitment on Performance through Good University Governance in Private Universities in Medan City. *PalArch's Journal of Archaeology of Egypt/Egyptology, 18(4)*, 5182-5199.
- 99) Hénard, F., & Mitterle, A. (2010). Governance and quality guidelines in Higher Education. *A review of governance arrangements and quality assurance*. Berlin: OECD.
- 100) <https://doi.org/10.1177/183335838901900104>, U. D. p. I. G. f. S. D. I. I. M. U. P. P. (2014). Discussion paper. In *Governance for Sustainable Development Integrating*.
- 101) [https://jdih.bappenas.go.id/data/abstrak/UU\\_Nomor\\_25\\_Tahun\\_2004.pdf](https://jdih.bappenas.go.id/data/abstrak/UU_Nomor_25_Tahun_2004.pdf). diakses pada tanggal 5 September 2022.
- 102) <https://pontas.id/2021/09/13/pphn-penting-dan-urgen-untuk-indonesia/>. di akses pada tanggal 5 September 2022.
- 103) <https://repository.unej.ac.id/handle/123456789/67813?show=full>. akses pada tanggal 5 September 2022.
- 104) Indrajit, R. E., & Djokopranoto, R. (2006). *Manajemen perguruan tinggi modern*: Andi.
- 105) Keenan, J., & Aggestam, M. (2001). Corporate Governance and Intellectual Capital: Some Conceptualisations.
- 106) Khalique, M., Hina, K., Ramayah, T., & Shaari, J. A. N. b. (2020). Intellectual capital in tourism SMEs in Azad Jammu and Kashmir, Pakistan. *Journal of Intellectual Capital, 21(3)*, 333-355.
- 107) Kim, T. (2008). Changing university governance and management in the UK and elsewhere under market conditions: Issues of quality assurance and accountability.
- 108) Kyriakopoulos, K., Meulenber, M., & Nilsson, J. (2004). The impact of cooperative structure and firm culture on market orientation and performance. *Agribusiness: An International Journal, 20(4)*, 379-396.
- 109) Leitner, K.-H. (2004). Intellectual capital reporting for universities: conceptual background and application for Austrian universities. *Research evaluation, 13(2)*, 129-140.
- 110) Leitner, K. H., Curaj, A., Elena-Perez, S., Fazlagic, J., Kalemis, K., Martinaitis, Z., Secundo, G., Sicilia, M.-A., & Zaksa, K. (2014). A Strategic Approach for Intellectual Capital Management in European Universities. .
- 111) Li, X., Nan, Z., Cheng, G., Ding, Y., Wu, L., Wang, L., . . . Pan, X. (2011). Toward an improved data stewardship and service for environmental and ecological science data in West China. *International Journal of Digital Earth, 4(4)*, 347-359.
- 112) Lu, W.-M. (2012). Intellectual capital and university performance in Taiwan. *Economic Modelling, 29(4)*, 1081-1089.
- 113) Maditinos, D., Chatzoudes, D., Tsairidis, C., & Theriou, G. (2011). The impact of intellectual capital on firms' market value and financial performance. *Journal of Intellectual Capital, 12(1)*, 132-151.

- 114) Martínez-Campillo, A., & Fernández-Gago, R. (2011). Diversification strategy, CEO management style and firm performance: an application of Heckman's two-stage method. *Quality & quantity*, 45, 59-73.
- 115) Meznar, M. B., & Johnson Jr, J. H. (2005). Business-government relations within a contingency theory framework: Strategy, structure, fit, and performance. *Business & Society*, 44(2), 119-143.
- 116) Muhi, A. H. (2010). *Implementasi Nilai-Nilai Good Governance Di Perguruan Tinggi: Studi Deskriptif Analitik tentang Pengaruh Transparansi, Akuntabilitas dan Responsiveness terhadap Budaya Akademik dan Prakarsa serta Dampaknya pada Mutu Layanan Akademik di Perguruan Tinggi Badan Hukum Milik Negara*. Universitas Pendidikan Indonesia.
- 117) Muktiyanto, A., Hermawan, A. A., & Hadiwidjaja, R. D. (2020). The role of management control systems in the performance of higher education through good university governance. *International Journal of Trade and Global Markets*, 13(3), 288-310.
- 118) Nofianti, L., & Suseno, N. S. (2014). Factors affecting implementation of good government governance (GGG) and their implications towards performance accountability. *Procedia-Social and Behavioral Sciences*, 164, 98-105.
- 119) Nonaka, I., & Takeuchi, H. (1996). The knowledge-creating company: How Japanese companies create the dynamics of innovation. *Long range planning*, 29(4), 592.
- 120) Paloma Sánchez, M., & Elena, S. (2006). Intellectual capital in universities: Improving transparency and internal management. *Journal of Intellectual Capital*, 7(4), 529-548.
- 121) Quyên, Đ. T. N. (2014). Developing university governance indicators and their weighting system using a modified Delphi method. *Procedia-Social and Behavioral Sciences*, 141, 828-833.
- 122) Raharjo, K., Djalil, M. A., Syahputra, H., Muslim, B., & Adam, M. (2019). Dimensions of identity strength and organizational citizenship behavior (OCB) in establishing good university governance and performance of religious ideology-based higher educations. *Journal of Applied Research in Higher Education*, 11(2), 250-272.
- 123) Ramirez, Y., & Gordillo, S. (2014). Recognition and measurement of intellectual capital in Spanish universities. *Journal of Intellectual Capital*, 15(1), 173-188.
- 124) Romero, I., Téllez, J., Suárez, Y., Cardona, M., Figueroa, R., Zelazny, A., & Gore Saravia, N. (2010). Viability and burden of Leishmania in extralesional sites during human dermal leishmaniasis. *PLoS neglected tropical diseases*, 4(9), e819.
- 125) Safieddine, A., Jamali, D., & Noureddine, S. (2009). Corporate governance and intellectual capital: evidence from an academic institution. *Corporate Governance: The international journal of business in society*, 9(2), 146-157.
- 126) Saint-Onge, H. (1996). Tacit knowledge: the key to the strategic alignment of intellectual capital. .
- 127) Salmi, J. (2009). The growing accountability agenda in tertiary education: progress or mixed blessing?
- 128) Samsuri. (2020). 11 Kampus Swasta di Jakarta Tutup karena Gagal Kelola.
- 129) Sánchez, M., Elena, S., & Castrillo, R. (2008). Discussing the dynamics in Intellectual Capital in Universities. A model for reporting. *Journal of Intellectual Capital*, próxima aparición.
- 130) Sari, M. P. (2012). Peran internal audit dalam upaya mewujudkan Good University Governance di UNNES. *Jurnal Dinamika Akuntansi*, 4(1).
- 131) Schiuma, G., & Lerro, A. (2010). Knowledge-based dynamics of regional development: the intellectual capital innovation capacity model. *International journal of Knowledge-based Development*, 1(1-2), 39-52.

- 132) Secundo, G., De Beer, C., Schutte, C. S., & Passiante, G. (2017). Mobilising intellectual capital to improve European universities' competitiveness: The technology transfer offices' role. *Journal of Intellectual Capital*, 18(3), 607-624.
- 133) Secundo, G., Margherita, A., Elia, G., & Passiante, G. (2010). Intangible assets in higher education and research: mission, performance or both? *Journal of Intellectual Capital*, 11(2), 140-157.
- 134) Sekaran, U., & Bougie, R. (2017). Metode Penelitian Untuk Bisnis: Pendekatan Pengembangan Keahlian Edisi 6 Buku 1.
- 135) Stewart, T. (1997). *The New Wealth of Organizations*, Doubleday: New York, NY.
- 136) Susanto, A. (2015). Influence the quality of accounting information on the implementation good study program governance. *International journal of scientific & technology research*, 4(12), 326-335.
- 137) Ulum, I., Malik, M., & Sofyani, H. (2019). Analisis pengungkapan modal intelektual: Perbandingan antara universitas di Indonesia dan Malaysia. *Jurnal Ekonomi Dan Bisnis*, 22(1), 163-182.
- 138) Van Slyke, D. M. (2007). Agents or stewards: Using theory to understand the government-nonprofit social service contracting relationship. *Journal of public administration research and theory*, 17(2), 157-187.
- 139) Veltri, S., & Silvestri, A. (2015). The Free State University integrated reporting: a critical consideration. *Journal of Intellectual Capital*, 16(2), 443-462.
- 140) VIDRAȘCU, P.-A., Iacob, O. C., Volintiru, A.-M., & Cristea, A. (2016). Gender Equality, Chances Equality and Intangible Assets in the Knowledge Society. *Scientific Papers: Management, Economic Engineering in Agriculture & Rural Development*, 16(3).
- 141) Vinig, T., & Lips, D. (2015). Measuring the performance of university technology transfer using meta data approach: the case of Dutch universities. *The Journal of Technology Transfer*, 40, 1034-1049.
- 142) Wahyudi, T., & Puspita, G. (2020). Pengaruh Intellectual Capital terhadap Penerapan Corporate Governance. *Jurnal Riset Akuntansi Terpadu*, 13(1), 79-92.
- 143) West, R., & Zech, C. (2007). Internal financial controls in the US Catholic Church. *Journal of forensic accounting: JFA*, 129-155.
- 144) Yarbrough, B. V., & Yarbrough, R. M. (1999). Governance structures, insider status, and boundary maintenance. *Journal of Bioeconomics*, 1, 289-310.
- 145) Yudianti, F. N. (2015). Internal control and risk management in ensuring good university governance. *Journal of Education and Vocational Research*, 6(2), 6-12.
- 146) Yudianto, I., Mulyani, S., Fahmi, M., & Winarningsih, S. (2021). The influence of good university governance and intellectual capital on university performance in Indonesia. *Academic Journal of Interdisciplinary Studies*, 10(1), 57-70.