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THE MEDIATING ROLE OF INNOVATION IN THE RELATIONSHIP BETWEEN INTELLECTUAL CAPITAL AND ORGANIZATIONAL PERFORMANCE: AN EMPIRICAL STUDY ON REGIONAL PUBLIC SERVICE AGENCIES

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#### **Abstract**

This study examines the impact of intellectual capital (IC) on the performance of Public Service Agencies (BLUD) in Yogyakarta, Indonesia, with innovation as a mediator. Using PLS-SEM analysis of 95 respondents from BLUDs, the results show that IC positively and significantly enhances both performance and innovation. Innovation partially mediates this relationship, reinforcing IC's overall effect on performance. The findings align with Resource-Based View and Dynamic Capabilities theories, emphasizing the role of intangible assets and innovation in public sector success. Practically, BLUDs should strengthen IC through talent development and strategic collaborations while fostering innovation. The study contributes by confirming innovation's mediating role in public organizations and offers policy insights for improving BLUD efficiency.

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#### INTRODUCTION

Regional Public Service Agencies (BLUDs) in Indonesia are currently facing significant challenges in maintaining their operational performance. Key areas of concern include declining budget efficiency, deteriorating service quality, and stagnant innovation. These worsening performance indicators have raised serious questions about BLUDs' capacity to sustainably fulfill their crucial public service mandates. The persistent decline across these critical dimensions suggests systemic issues that require immediate attention and strategic intervention. The following table illustrates the declining performance of several BLUDs based on budget realization reports and performance evaluations:

Table 1: BLUD Performance in Several Regions

Performance Indicator	Performance Indicator	Performance Indicator	Performance Indicator	Performance Indicator
Performance Indicator	78%	72%	65%	▼
Bed Occupancy Rate (BOR)	82%	76%	70%	▼
Patient Satisfaction Rate	95%	90%	85%	▼
National Exam Pass Rate	Rp120	Rp105	Rp92	▼
Original Revenue (IDR Billion)	88%	80%	75%	▼

 $<sup>\</sup>nabla$  = Decline in performance

Source: Data is derived from official government reports and BPK (Indonesian Supreme Audit Agency) audits.

Regional Public Service Agencies (BLUDs) in Indonesia face mounting operational difficulties characterized by chronic budget inefficiencies, deteriorating service quality standards, and stagnant innovation in public service delivery. These interconnected challenges manifest in persistent budget overruns, increasing public dissatisfaction with services, and an inability to adopt modern service delivery approaches. Such systemic shortcomings threaten both the financial viability of BLUD operations and their fundamental capacity to serve community needs effectively. Many have demonstrated suboptimal performance in recent years, a phenomenon demanding closer examination. Research by (Cahyadi et al., 2020) reveals that government spending, including budgets managed by BLUDs, remains largely unproductive, with substantial misallocations and minimal tangible impact on improving public service quality. Similar findings (Budi Hartono et al., 2021) this highlights the low quality of government spending across various BLUDs, where substantial funds fail to deliver meaningful performance improvements. This ultimately impacts the public, who often receive substandard services.

The deterioration in BLUD performance stems from interconnected systemic deficiencies. At the core lies inadequate human resource capacity, particularly in budgetary governance, which directly impedes operational efficacy (Liu et al., 2025). This issue, bureaucratic rigidity in work protocols stifles organizational adaptability to dynamic public needs. Equally problematic is the absence of innovative practices in service delivery mechanisms, perpetuating outdated approaches. Further exacerbating these challenges is the subpar integration of digital infrastructure, creating operational

bottlenecks. Perhaps most critically, fragmented coordination between internal departments and external partners erodes collective impact potential. This multifaceted institutional dysfunction ultimately manifests in diminished public service quality.

These five fundamental issues are interconnected, creating a vicious cycle that continuously erodes BLUD performance. Cahyono and Ardianto (2024) further reveal that BLUDs often operate with limited budgets while demands for quality and quantity of public services continue to rise. This problem is exacerbated by the low competence of human resources in managing organizational knowledge, as found by (Shubita et al., 2024). Additionally, the minimal innovation in service delivery leads many BLUDs to rely on conventional, inefficient methods (Hussain et al., 2025; Rosita et al., 2020)

Intellectual capital (IC) emerges as a strategic solution to the performance challenges faced by public sector organizations like BLUDs. While numerous studies have established IC's significant impact on organizational performance in private sector contexts particularly through enhanced innovation, operational efficiency, and competitive advantage its potential to transform underperforming public institutions remains critically understudied (Bontis, 1998a; Cahyono & Ardianto, 2024; Mardan et al., 2021; Shahzad et al., 2022; Tran et al., 2020), its implementation in the public sector, particularly BLUDs, remains limited. However, the concept of IC, encompassing human capital (knowledge and skills of human resources), structural capital (systems and procedures), and relational capital (networks of collaboration), is highly relevant for addressing these BLUD challenges. Previous research (Lee, 2025; Niswani et al., 2022; Rosita et al., 2023; Simamora & Budiwitjaksono, 2022; Yin & Xu, 2025), gaps remain in understanding its specific implications for BLUD performance, no studies have systematically investigated the direct relationship between IC and BLUD operational outcomes, the role of innovation as a determinant of BLUD performance remains unexplored. Most notably, the potential mediating effect of innovation in the IC BLUD performance relationship constitutes a significant theoretical and empirical gap that demands scholarly attention. An initial study (Dewabrata et al., 2022) did indicate that intellectual capital (IC) can drive performance improvement through innovation in the green sector, but this finding has not been specifically tested in the BLUD context, creating a significant knowledge gap.

This research addresses important theoretical and practical gaps. The study examines how innovation mediates the relationship between intellectual capital (IC) and BLUD performance, extending the application of Resource-Based View theory (Barney, 1991)to public sector contexts. It responds to (Bontis, 2003) call for further investigation of IC in government settings. From a practical perspective, the findings will help BLUDs develop their IC through concrete measures such as staff training programs and knowledge management systems. Supporting evidence comes from (Huang et al., 2025) study of Regional General Hospital BLUD, which achieved performance improvement after implementing IC-based systems. This research contributes to both academic understanding and practical improvements in BLUD performance management.

Policy aspects also underscore the importance of this research. The research findings are expected to serve as a reference for the Ministry of Finance in refining guidelines for BLUD management, particularly those related to IC management as regulated in Perdirjen Perbendaharaan Per-32/PB/2014. This topic is increasingly relevant given the global trends of digital transformation and knowledge governance in the public sector advocated by the (OECD, 2020). The potential tangible impact of this research is significant, as well-performing BLUDs will directly improve community

welfare through faster healthcare services, higher quality education, and more efficient and effective public services. Thus, this research not only possesses academic value but also offers a real contribution to improving government governance and the quality of life for the community.

#### **METHOD**

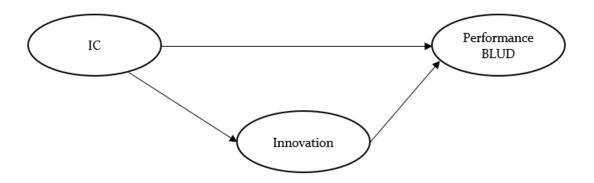
This study employs an explanatory quantitative approach using a survey method to examine the relationships between variables. This study adopts a crosssectional design analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). PLS-SEM was selected due to its appropriateness for the study's objectives and data characteristics. Unlike covariancebased SEM, PLS SEM is particularly effective for predictive research models with smaller sample sizes, while making fewer distributional assumptions (Hair, 2009). Given the exploratory nature of this study which examines the mediating role of innovation between intellectual capital and BLUD performance, PLS-SEM's strength in handling complex path models with latent variables was deemed most suitable. Additionally, its ability to simultaneously assess measurement and structural models aligns well with the research's theoretical framework, providing robust insights into both the psychometric properties of the constructs and their hypothesized relationships (Singh et al., 2024)(Latan & Ghozali, 2017). This approach was chosen for its ability to test complex causal relationships among latent variables (Henseler et al., 2016).

Data for this research was obtained from the Regional Revenue, Financial Management, and Asset Agency (DPPKAD) of DIY, encompassing 42 BLUDs distributed across 5 regencies/cities. Stratified random sampling was used for data collection based on sector, with a composition of 40% health BLUDs, 30% education BLUDs, and 30% general service BLUDs (DPPKAD DIY Agency, 2023). Inclusion criteria required BLUDs to have been operating for at least 3 years and possess public performance reports to ensure organizational maturity and data availability (Sugiyono, 2018). Respondents consisted of the Head of BLUD or unit managers (3 individuals per BLUD) serving as key informants, totaling 126 respondents. This selection reflects strategic decision-making perspectives (Singh et al., 2024), ensuring balanced representation and data relevance for further analysis.

**Table 2:** Operational Definition of Variables

Variable	Indicator	Reference	
Intellectual Capital (X)			
- Human Capital (HC)	HR skills, training, competence Knowledge management systems,	Bontis (1998)	
- Structural Capital (SC)	databases, SOPs	Bontis (1998)	
- Relational Capital (RC) Innovation (M)	Collaboration with stakeholders	Bontis (1998)	
- Innovation BLUD Performance (Y)	Technology adoption, procedural efficiency	(Cahyadi et al., 2020)	
- Performance	Original revenue	(Cahyadi et al., 2020)	

Figure 1: Research Model



## **Structural Equations:**

- 1.  $Y=\beta 1X+\beta 2M+e1Y=\beta 1X+\beta 2M+e1$
- 2.  $M=\beta 3X+e2M=\beta 3X+e2$  where:

Y: BLUD Performance X: Intellectual Capital

M: Innovation

β: Regression Coefficient

 $\epsilon$  (or e): Error Term

This research adopts the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach to test the hypothesized relationships among intellectual capital (IC), innovation, and BLUD performance. PLS-SEM was chosen due to its ability to handle complex models with relatively small sample sizes and its non-reliance on assumptions of normal data distribution (Singh et al., 2024).

#### RESULTS AND DISCUSSION

Based on data from 95 respondents (out of a total of 126 questionnaires distributed), here's an overview of the descriptive statistics for the research variables.

**Table 3** Descriptive Statistics Results

Variabel	Mean	Std.	Min	Max	Skewnes	Kurtosi
		Dev.			S	S
Intellectual Capital (IC)	3.82	0.85	2.0	5.0	-0.32	2.15
Inovasi	3.89	0.81	2.0	5.0	-0.41	2.34
Kinerja BLUD	4.32	0.51	3.0	5.0	-0.87	3.02

Source: data processing

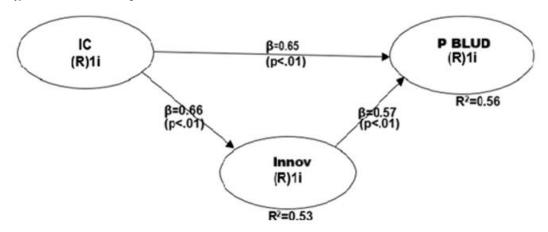
This study analyzed data from 95 valid respondents out of 126 distributed questionnaires. The descriptive statistics reveal that Intellectual Capital (IC) has a mean score of 3.82 with a standard deviation of 0.85 on a 1-5 scale. The Innovation variable

shows a slightly higher mean of 3.89 with a standard deviation of 0.81, while BLUD Performance records the highest average value at 4.32 with a standard deviation of 0.51. The data distribution for all three variables indicates acceptable skewness and kurtosis ranges ( $\pm 2$ ). Notably, BLUD Performance tends to concentrate at higher values with a negative skewness of -0.87, suggesting that most respondents rated performance favorably.

The Shapiro-Wilk normality test indicated that all three main research variables are not normally distributed (p < 0.05). However, this is not a significant issue for PLS-SEM analysis, which is robust against violations of normality assumptions, as affirmed by (Hair et al., 2018) Multicollinearity tests yielded encouraging results, with VIF values for both independent variables (IC and Innovation) below 5 (1.23 and 1.20, respectively), and tolerance values above 0.8. This clearly demonstrates the absence of multicollinearity issues in the research model.

Reliability testing produced highly satisfactory Cronbach's Alpha values above 0.7 for all variables (IC: 0.89; Innovation: 0.87; BLUD Performance: 0.91), proving the research instruments possess excellent internal consistency. Regarding validity, all indicators had loading factors exceeding 0.7 and AVE values above 0.5, meeting the criteria for convergent validity. Discriminant validity testing using the Fornell-Larcker Criterion also yielded satisfactory results, where the square root of the AVE for each variable was greater than its correlation with any other variable in the model.

Figure 2: Path Analysis Results



**Table 4:** Hypothesis Testing Results

Hypothesis	β	Significance	Conclusion
$IC \rightarrow Performance$	0.57	p<0.01	Accepted
$IC \rightarrow Innovation$	0.66	p<0.01	Accepted
Innovation $\rightarrow$ Performance	0.65	p<0.01	Accepted
Innovation Mediation	0.429	p<0.01	Accepted

Source: data processing

This study's hypothesis testing reveals that Intellectual Capital (IC) significantly and positively influences BLUD Performance, with a path coefficient of 0.57 (p<0.01). This indicates that a one-unit increase in IC leads to a 0.57-unit improvement in performance. This finding confirms that developing intellectual assets directly enhances

BLUD performance, aligning with (Simamora & Budiwitjaksono, 2022) in Indonesia and (Bontis, 1998b) globally, both of whom found IC to be a crucial driver of organizational performance in public and private sectors alike. The substantial direct effect of IC underscores the critical role of knowledge assets, human resource skills, and organizational systems within BLUDs for achieving their performance goals.

The research also uncovered that IC significantly influences Innovation, with an even larger coefficient of 0.66 (p<0.01). This consistency with the study by (Dewabrata et al., 2022) study on Indonesian BLUDs suggests that IC fosters innovation capacity through the development of human and structural capital. International research by (Tran et al., 2020) further supports this, showing that organizations with strong IC tend to be more innovative in public service development. This explains why BLUDs with high-quality human resources and structured knowledge systems are more capable of innovating.

A key finding of this study is the significant mediating role of Innovation between IC and BLUD Performance. The mediation effect of 0.429 (calculated as the product of the IC→Innovation and Innovation→Performance coefficients) indicates that a substantial portion of IC's influence on performance occurs indirectly through enhanced innovation. This strengthens (Lee, 2025) Findings in Indonesia, where high-performing BLUDs typically possess mechanisms for transforming IC into service innovation. Globally, (Martínez-Vérez et al., 2025) also demonstrated that innovation acts as a bridge between intellectual resources and organizational performance.

The R² value for BLUD performance is 0.56, indicating a strong explanatory power of the model. This figure is higher than (Toma & Laurens, 2024) findings in the Egyptian public sector (R²=0.42) but aligns in Spain (R²=0.58). This difference may be attributed to the unique characteristics of Indonesian BLUDs, which rely heavily on intellectual capacity to address budget constraints. As an intangible asset, intellectual capital can provide a competitive advantage (RBV). Barney (1991), which posits that intangible resources like IC create competitive advantage. This innovation is the product of dynamic capacity (Teece, 2018) by demonstrating how BLUDs transform IC into innovation to improve performance. Specifically, this research contributes to the understanding of knowledge management in Indonesian public organizations, as highlighted in (Salangka et al., 2024).

### **CONCLUSIONS AND SUGGESTIONS**

This research conclusively demonstrates that Intellectual Capital (IC) significantly impacts BLUD performance in two ways: directly (with a path coefficient of 0.57) and indirectly through innovation, which acts as a partial mediator (showing a mediation effect of 0.429). These findings underscore the Resource-Based View theory, highlighting that intellectual assets comprising human, structural, and relational capital are crucial for public organizations to gain a competitive edge. The PLS-SEM analysis reveals that BLUDs with robust IC not only achieve better performance but are also more adept at innovating in public service delivery, evidenced by strong path coefficients from IC to Innovation (0.66) and from Innovation to Performance (0.65). With an R<sup>2</sup> of 0.56 for BLUD performance, this model powerfully explains how IC and innovation are key drivers of success for public organizations in today's knowledge-driven era. Based on these insights, the study proposes three strategic recommendations: first, strengthen IC through systematic programs like digital-based competency training for human capital,

integrated knowledge management systems for structural capital, and strategic partnerships for relational capital; second, accelerate innovation by forming dedicated innovation teams within each BLUD, supported by independent research budgets and reward mechanisms; and third, local governments should develop policies to foster the transformation of IC into innovation, including platforms for inter-BLUD knowledge sharing and IC-based performance measurement systems. For future research, it's important to explore how contingency factors such as organizational culture and IT support might influence the relationships among IC, innovation, and BLUD performance.

#### REFERENCES

- Barney. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Bontis, N. (1998a). Intellectual capital: an exploratory study that develops measures and models. *Management Decision*, 36(2), 63–76. https://doi.org/http://dx.doi.org/10.1108/00251749810204142
- Bontis, N. (1998b). Intellectual capital: an exploratory study that develops measures and models. *Management Decision*, 36(2), 63–76. https://doi.org/10.1108/00251749810204142
- Bontis, N. (2003). Intellectual Capital Disclosure in Canadian Corporations. *Journal of Human Resource Costing & Accounting*, 7(1), 9–20. https://doi.org/10.1108/eb029076
- Budi Hartono, S., Zaenuri, W., Mutiara Savitri, F., Noor Farida, D., & Ristianawati, Y. (2021). Alokasi Anggaran, Intellectual Capital, Kinerja Keuangan, Dan Indikator Kinerja Utama Badan Layanan Umum. *JIAFE (Jurnal Ilmiah Akuntansi Fakultas Ekonomi)*, 07(01), 49–62. https://doi.org/10.34204/jiafe.v7i1.2915
- Cahyadi, A., Yulianti, N. W., Khotimah, H., & Setiadi, Y. (2020). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan Badan Layanan Umum (Blu) Uin Syarif Hidayatullah Jakarta. *Akuntansi Dewantara*, 4(1), 60–69. https://doi.org/10.26460/ad.v4i1.5696
- Cahyono, S., & Ardianto, A. (2024). Intellectual Capital, Political Connection, and Firm Performance: Exploring from Indonesia. *Risks*, *12*(7). https://doi.org/10.3390/risks12070105
- Dewabrata, C., Firmansyah, A., Andrias, D., Tarigan, R. P., & Trisnawati, E. (2022). Hubungan Intellectual Capital Dan Kinerja Belanja Pada Instansi Pemerintah. *Jurnal Pajak Dan Keuangan Negara (PKN)*, 4(1S), 368–377. https://doi.org/10.31092/jpkn.v4i1s.1830
- DPPKAD DIY Source (2023)
- Hair, J. F. (2009). Multivariate Data Analysis (7th Edition)-Prentice Hall (2009).pdf.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2018). The Results of PLS-SEM Article information. *European Business Review*, 31(1), 2–24.
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management and Data Systems*, 116(1), 2–20. https://doi.org/10.1108/IMDS-09-2015-0382
- Huang, B., Yang, H., Shang, K., Wang, R., Meng, Y., Peng, H., Hu, Y., & Jiang, Z. (2025). a Sdgs-Oriented Evaluation of the Ecological Sustainability of International Horticultural Exposition Sites in Chengdu, China. *Journal of Environmental*

- *Engineering and Landscape Management*, *33*(1), 118–131. https://doi.org/10.3846/jeelm.2025.22941
- Hussain, R. Y., Adil, M., Tumwine, G. N., Hussain, H., & Irshad, H. (2025). Balancing green and growth: do innovation and contribution drive sales and environmental performance? *Discover Sustainability*, 6(1). https://doi.org/10.1007/s43621-025-01083-2
- Latan, H., & Ghozali, I. (2017). Partial Least Squares: Konsep, Metode dan Aplikasi menggunakan Program WarpPLS 5.0 (Third Edit).
- Lee, H. (2025). Does ESG Performance Drive Firm-Level Innovation? Evidence from South Korea. *Sustainability (Switzerland)*, 17(4). https://doi.org/10.3390/su17041727
- Liu, K., Jiang, P., & Guo, N. (2025). Global value chain position, firm innovation, and cross-border mergers and acquisitions performance. *Humanities and Social Sciences Communications*, 12(1). https://doi.org/10.1057/s41599-025-04369-y
- Mardan, F. N., Che-Adam, N., & Abdullah, Z. (2021). Intellectual capital as a moderating effect between corporate governance, and firm performance: A conceptual review. *Universal Journal of Accounting and Finance*, *9*(6), 1470–1477. https://doi.org/10.13189/ujaf.2021.090623
- Martínez-Vérez, V., Gil-Ruiz, P., Montero-Seoane, A., & Cruz-Souza, F. (2025). Rural Depopulation in Spain from a Gender Perspective: Analysis and Strategies for Sustainability and Territorial Revitalization. *Sustainability (Switzerland)*, 17(7), 1–22. https://doi.org/10.3390/su17073027
- Niswani, N., Ikhyanuddin, I., Firdaus, R., & Nurhasanah, N. (2022). Pengaruh Belanja Modal, Dana Perimbangan Dan Pendapatan Asli Daerah Terhadap Kinerja Keuangan Daerah Kabupaten/Kota Provinsi Aceh Tahun 2016-2020. *Jurnal Akuntansi Malikussaleh (JAM)*, *1*(1), 64. https://doi.org/10.29103/jam.v1i1.6367
- OECD.(2020). "SME Policy Response." Read.oecd-ilibrary.org
- Rosita, Ghozali, I., Harto, P., Susanto, H., & Zainuddin, F. (2020). Intellectual capital and financial performance of state-owned banking: Evidence from Indonesia. *International Journal of Learning and Intellectual Capital*, 17(1), 47–60. https://doi.org/10.1504/IJLIC.2020.105322
- Rosita, R., Susanto, H., Kusasih, I. A. K. R., Wulandari, A., & Ardi, R. P. (2023). PERAN INTELLECTUAL CAPITAL PADA KEUNGGULAN KOMPETITIF UMKM MELALUI PEROLEHAN SUMBER DAYA (Studi Pada UMKM Souvenir Di Solo Raya). *EKOBIS: Jurnal Ilmu Manajemen Dan Akuntansi*, 11(2), 244–258. https://doi.org/10.36596/ekobis.v11i2.1266
- Salangka, M. K., Kameo, D. D., & Harijono. (2024). The effect of intellectual capital towards sustainability of business performance mediated by eco-product innovation & external learning: The Indonesian bottled drinking water industries. *Uncertain Supply Chain Management*, 12(1), 541–556. https://doi.org/10.5267/j.uscm.2023.8.017
- Shahzad, F., Baig, M. H., Rehman, I. U., Saeed, A., & Asim, G. A. (2022). Does intellectual capital efficiency explain corporate social responsibility engagement-firm performance relationship? Evidence from environmental, social and governance performance of US listed firms. *Borsa Istanbul Review*, 22(2), 295–305. https://doi.org/10.1016/j.bir.2021.05.003
- Shubita, M. F., Salahaldin, A. D., Alrawashedh, N. H., & Alqam, M. A. (2024). Relationship between corporate governance and intellectual capital: Evidence from

- Jordan. *Problems and Perspectives in Management*, 22(4), 39–50. https://doi.org/10.21511/ppm.22(4).2024.04
- Simamora, W. C., & Budiwitjaksono, G. S. (2022). Analisis Pendapatan Asli Daerah (PAD), Dana Alokasi Umum dan Belanja Modal terhadap Kinerja Keuangan Pemerintah Daerah Pada Kabupaten/Kota di Provinsi Sumatera Utara Tahun 2018-2020. *Ekonomis: Journal of Economics and Business*, 6(2), 410. https://doi.org/10.33087/ekonomis.v6i2.547
- Singh, S., Kaur, R., & Dana, L. P. (2024). Partial least squares structural equation modeling. In *Women Entrepreneurs*. https://doi.org/10.1201/9781032725581-7 Sugiyono. (2018). *Metode Penelitian Kuantitatif*. Alfabeta.
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40–49. https://doi.org/10.1016/j.lrp.2017.06.007
- Toma, P., & Laurens, P. (2024). Regional development and intellectual capital: Unveiling the innovation-tradition dilemma. *Socio-Economic Planning Sciences*, 96(September), 102087. https://doi.org/10.1016/j.seps.2024.102087
- Tran, N. P., Van, L. T. H., & Vo, D. H. (2020). The nexus between corporate governance and intellectual capital in Vietnam. *Journal of Asia Business Studies*, 14(5), 637–650. https://doi.org/10.1108/JABS-01-2020-0007
- Yin, J., & Xu, J. (2025). Intellectual capital, digital transformation and firms' financial performance: Evidence from ecological protection and environmental governance industry in China. *PLoS ONE*, 20(1 January), 1–22. https://doi.org/10.1371/journal.pone.0316724