

The role of competitive advantage and the strength of good corporate governance in supporting the influence of knowledge management on company performance

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Abstract: This study investigates the role of competitive advantage and the moderating effect of good corporate governance (GCG) in enhancing the impact of knowledge management on organizational performance within PT Angkasa Pura II, a state-owned airport enterprise in Indonesia. Guided by the Resource-Based View (RBV) framework, this research adopts a quantitative explanatory design. Data were collected from 198 senior leaders and managers across 20 airports operated by PT Angkasa Pura II and analyzed using Structural Equation Modeling (SEM). The findings reveal that knowledge management exerts a positive yet insignificant influence on competitive advantage, while competitive advantage significantly improves organizational performance. Furthermore, GCG strengthens the relationship between competitive advantage and organizational performance, demonstrating its strategic role in enhancing sustainable performance outcomes. The study highlights the critical integration of knowledge management and governance practices in building and sustaining organizational competitiveness. The results provide practical insights for managers and policymakers in state-owned enterprises to align knowledge management strategies with good governance principles for long-term organizational success.

Keywords: *Competitive advantage, Good corporate governance, Knowledge management, Organisational performance, Resource-Based View, State-owned enterprises.*

1. Introduction

PT Angkasa Pura (Persero) is a state-owned enterprise operating in Indonesia's airport sector. Established in 1962, the company has undergone several name changes before becoming PT Angkasa Pura II, which currently manages 20 airports across the country [1]. Although PT Angkasa Pura II records the highest flight traffic in Indonesia, its overall performance has shown fluctuations. Operating profits declined sharply from IDR 3,966,455 in 2021 to IDR 808,536 in 2022, before rebounding to IDR 4,171,045 in 2023 [2]. Passenger traffic also varied during this period, while operational expenses remained high, as reflected in a BOPO ratio of 75.7% in 2023. This figure indicates persistent challenges in cost management that have constrained investment in critical infrastructure development [3].

Competition within the aviation industry primarily occurs among airline operators across airport hubs, where service quality serves as a key differentiator. The relatively high operating costs compared to revenue have hindered capital investment, which in turn affects visitor experience and service standards. This situation underscores the complex challenge faced by PT Angkasa Pura II in balancing operational efficiency, cost control, and maintaining competitive service quality within Indonesia's airport industry [3].

In response to intensifying competition, PT Angkasa Pura II has established the Airport Learning Center, an institutional platform for research and human capital development. This center functions as a

repository for organizational knowledge, innovation, and continuous improvement. By positioning knowledge as a strategic asset, the company seeks to strengthen its competitive advantage and sustain innovation in a rapidly evolving market environment [4]. This initiative reflects the principles of the Resource-Based View (RBV), which asserts that competitive advantage arises from valuable, rare, inimitable, and non-substitutable internal resources that enable firms to achieve superior performance [5]. Empirical findings from Weinzimmer et al. [6], Wongsansukcharoen and Thaweepaiboonwong [7], Mikalauskiene and Atkočiūnienė [8], and Bashir et al. [9] further affirm the strategic role of effective knowledge management in generating and sustaining competitive advantage in highly competitive sectors.

Within the RBV framework, knowledge is regarded as a critical intangible resource that must be cultivated among individuals to enhance their competencies and career trajectories [10, 11]. Effective knowledge management allows organizations to maintain stable performance amid environmental uncertainty, whereas weak knowledge management can lead to organizational instability [9]. To fully leverage the potential of the Airport Learning Center as a knowledge management hub, PT Angkasa Pura II must also reinforce the implementation of good corporate governance (GCG). The intersection between RBV and governance theory underscores the need for a balanced approach in which human capital development is integrated with governance mechanisms that align corporate strategies with stakeholder expectations, ensuring accountability and optimal resource utilization [12]. Moreover, Mulyani [13] highlights that good corporate governance serves as a moderating mechanism supporting the formulation and execution of competitive strategies, thereby reinforcing its essential role in sustaining organizational performance and long-term competitive advantage.

2. Theoretical Framework

2.1. Resource-Based View (RBV) Theory

The Resource-Based View (RBV) has emerged as one of the most influential theoretical frameworks in the field of strategic management and has been increasingly extended to related disciplines such as operations, marketing, human resource management, and entrepreneurship. Historically, industrial economists were initially reluctant to adopt RBV because it diverges from the traditional assumption that firms within an industry remain relatively homogeneous over time. Instead, RBV asserts that firms differ fundamentally due to the unique bundles of resources and capabilities they possess and control [6, 14, 15]. Through its resource-centered lens, RBV explains how organizations attain sustainable competitive advantage and superior long-term performance by effectively acquiring, developing, and leveraging their internal resources. At the core of this theoretical perspective lies the concept of distinctive core competencies, which enable firms to deliver products or services that offer greater value and unique characteristics compared to those of their competitors [14, 16].

2.2. Managerial Rents Model Theory

Managerial resources encompassing the knowledge, skills, and capabilities possessed by managers represent a critical component of a firm's overall resource base and a major determinant of its profitability. Castanias and Helfat [12] expand upon earlier conceptualizations by presenting a detailed classification of managerial resources and associating them with the fundamental attributes of the Resource-Based View (RBV), namely value, rarity, inimitability, and substitutability. Their framework underscores how these managerial attributes contribute to the generation of economic rents and the achievement of sustainable competitive advantage. In addition, Castanias and Helfat [12], examine the empirical implications of their model by addressing key contingency factors and synthesizing contemporary empirical evidence. Ultimately, they advocate for an expanded conceptualization of the RBV that integrates managerial cognition and social capital as essential dimensions, thereby deepening the theoretical understanding of how managerial capabilities shape firm performance and strategic outcomes.

2.3. Organizational Performance

Organizational performance refers to the extent to which individuals, teams, or entire entities successfully achieve predetermined strategic objectives while exhibiting the expected behavioral standards. Mudiaronso et al. [17] define performance as the organization's capacity to attain its goals through the effective and efficient utilization of resources, which encompass human capital, assets, capabilities, processes, corporate characteristics, information, and organizational knowledge. Similarly, Barney et al. [18] emphasize that performance represents the degree of success achieved in executing organizational activities, programs, and policies by leveraging available resources to accomplish targeted outcomes. Hence, achieving optimal performance outcomes necessitates the systematic management and strategic deployment of these resources.

According to Wajdi and Arsiah [19], five principal factors influence organizational performance: leadership style and organizational environment, organizational culture, job design, motivation systems, and human resource management policies. In the present study, the indicators used to assess organizational performance follow the framework proposed by Bezerra and Gomes [20], who identified eight key dimensions for evaluation, including:

2.3.1. Efficiency-Productivity

This indicator is articulated through statement items that form the basis for instrument compilation, which include:

1. Efficiency and productivity have been maximally implemented.
2. The number of passengers and airlines served aligns with the number of employees (efficient).

2.3.2. Service, Safety, and Security

This indicator is expressed through statement items that serve as the foundation for instrument compilation, which include:

3. The quality of service (Level of Service) complies with regulatory standards, if not exceeding them.
4. No workplace accidents or incidents have occurred in the past year.
5. There has been no loss of goods (theft, robbery) in the past year.

2.3.3. Commercial

This indicator is articulated through statement items that form the basis for instrument compilation, which include:

6. The commercialization rate of production equipment consistently increases annually (idle assets/idle capacity decreases).
7. Concession revenues consistently rise each year.

2.3.4. Competition

This indicator is expressed through statement items that serve as the foundation for instrument compilation, which include:

8. The airport's market share consistently grows each year.
9. The number of routes consistently increases annually.
10. Airlines consistently compete to maintain service on existing routes for their passengers.

2.3.5. Economic/Financial Factors

This indicator is articulated through statement items that form the basis for instrument compilation, which include:

11. The cost and expense analysis ratio is continually monitored, with decision-making executed optimally.

12. The profitability ratio experiences consistent growth each year.

2.3.6. Operational

This indicator is expressed through statement items that serve as the foundation for instrument compilation, which include:

13. To mitigate the risk of potential passenger congestion, parking stands are consistently implemented during peak hours.
14. There have been no delays (flight delay/baggage delay) attributable to airport operators.

2.3.7. Social

This indicator is articulated through statement items that form the basis for instrument compilation, which include:

15. Continuous contributions to job creation, both directly and indirectly.
16. Ongoing contributions to the local community (e.g., Corporate Social Responsibility / CSR).

2.3.8. Environmental

This indicator is expressed through statement items that serve as the foundation for instrument compilation, which include:

17. Measures to reduce water consumption are implemented through recycling.
18. The utilisation of renewable energy has been initiated and progressively developed year on year.
19. Comprehensive waste management practices have been established.

2.4. Good Corporate Governance

Good Corporate Governance (GCG) refers to the set of processes, principles, and policies adopted by an organization to regulate, manage, and oversee its operations effectively. It serves as a regulatory and control mechanism that defines the relationships among key parties involved in the company's management and decision-making processes. As a governance system, GCG ensures that shareholders' rights are protected through the provision of accurate, transparent, and timely information. It also requires that all relevant data pertaining to the company's performance, ownership structure, and stakeholder interests be disclosed promptly and precisely [21, 22]. In this study, Good Corporate Governance is evaluated using the framework proposed by Frederick [23], which identifies five principal dimensions for assessing GCG performance, including:

2.4.1. Transparency

This indicator is articulated through statement item elements that serve as the foundation for compiling the instrument. These items include:

1. Decision-making is consistently conducted through consultations involving employees.
2. Reports are presented transparently and with accuracy.

2.4.2. Accountability

This indicator is expressed through statement item elements that form the basis for compiling the instrument. These items include:

1. Internal audit practices are conducted at least once annually.
2. Reports are consistently prepared by qualified and independent external auditors each year.
3. Authorities, rights, obligations, and responsibilities are clearly delineated.

2.4.3. *Compliance*

This indicator is conveyed through statement item elements that underpin the compilation of the instrument. These items include:

1. There is unwavering adherence to government regulations and applicable laws.
2. Initiatives often encounter challenges, hindered by existing internal company policies.

2.4.4. *Responsibility (Accountability)*

This indicator is represented by statement item elements that constitute the basis for compiling the instrument. These items include:

1. The internal control system has been effectively implemented.
2. The quality of policies that promote business ethics and prevent corruption is consistently upheld and continually improved.

2.4.5. *Fairness*

This indicator is reflected in statement item elements that serve as the foundation for compiling the instrument. These items include:

1. Employee placement is always aligned with competence, education, and expertise.
2. Sanctions for any violations are consistently enforced.
3. Awards are routinely bestowed upon outstanding employees.

2.5. *Competitive Advantage*

A company's success in a competitive marketplace is largely determined by its ability to sustain a distinctive competitive advantage. Kosiol et al. [24] define competitive advantage as an organization's capability to generate value that competitors find difficult to imitate. This advantage is fundamental in contemporary business environments, as it originates from the superior value or benefits a company provides to customers beyond its production costs. Buyers are willing to pay for this added value, which can be achieved either by offering lower prices for comparable benefits or by delivering enhanced benefits that justify a higher price [8, 25, 26].

Competitive advantage emerges from multiple facets of a company's operations, including design, production, marketing, distribution, and post-sale support, rather than from any single functional area. Theoretical perspectives consistently emphasize that competitive advantage constitutes the core of a firm's strategic approach to strengthening its market position [7, 27]. In this study, the measurement of competitive advantage follows Park's [28] framework, which identifies four principal indicators:

2.5.1. *Spatial Factors*

This indicator is articulated through statement item elements that serve as the foundation for instrument compilation. These items include:

1. The development of the area surrounding the airport continues to expand year on year (e.g., trade centres, logistics hubs, aviation-related industrial complexes, and other facilities).
2. Communication with regional stakeholders is consistently maintained to ensure effective coordination.

2.5.2. *Facility Factors*

This indicator is articulated through statement item elements that serve as the foundation for instrument compilation. These items include:

1. Airport facilities are continually developed in accordance with capacity requirements.
2. Evaluations are consistently conducted based on developmental needs and facility specifications.

2.5.3. Demand Factors

This indicator is articulated through statement item elements that serve as the foundation for instrument compilation. These items include:

1. Hub-and-spoke networks are perpetually developed to enhance demand.
2. Initiatives to secure new routes, maintain, or extend flight schedules on existing routes are consistently undertaken.

2.5.4. Managerial Factors

This indicator is articulated through statement item elements that serve as the foundation for instrument compilation. These items include:

1. The capability to manage an airport is genuinely adept at generating revenue that surpasses its operational costs.
2. There is a continuous commitment to listening to complaints and feedback from service users, with the ability to resolve these issues effectively.

2.6. Knowledge Management

Knowledge serves as a foundational element of efficient and competitive business operations. Nevertheless, organizations face the risk of losing valuable tacit knowledge when employees resign or move to competing firms, which can substantially undermine organizational performance. To prevent such losses, the implementation of effective knowledge management (KM) systems has become essential across industries to safeguard, organize, and utilize organizational knowledge resources optimally [11, 29].

Knowledge management operates on two distinct but complementary levels. The operational dimension focuses on the development, sharing, and application of knowledge within day-to-day activities, whereas the strategic dimension aims to transform the organization into a knowledge-driven enterprise capable of continuous learning and innovation [9, 30]. In this study, knowledge management is evaluated using the framework proposed by Huysman and De Wit [31], which identifies three principal indicators for assessment, including:

2.6.1. Knowledge Acquisition

This indicator is articulated through statement item elements that serve as the foundation for instrument compilation. These items encompass:

1. The implementation of information technology infrastructure support to facilitate the storage and documentation of explicit knowledge (e.g., SOPs, regulatory documentation, etc.).
2. The organization consistently demonstrates agility in adopting the knowledge essential for maintaining operational efficiency.
3. Training and development initiatives aimed at enhancing employee competencies are continuously conducted with the objective of knowledge advancement.

2.6.2. Knowledge Reuse

This indicator is expressed through statement item elements that constitute the basis for instrument compilation. These items include:

1. The annual increase in knowledge reuse is consistently achieved through investments in education.
2. The organisational hierarchy is continually adjusted to align with strategic objectives.

2.6.3. Creation of Knowledge

This indicator is conveyed through statement item elements that form the basis for instrument compilation. These items include:

1. Knowledge sharing and transfer are routinely facilitated among parties across different departments or units.
2. Tacit knowledge, acquired through personal experience, is accessible to all members of the organization.
3. Research and innovation are conducted annually, both individually and collaboratively.

In light of the aforementioned problem background and the theoretical framework provided, the analytical model presented in this research is:

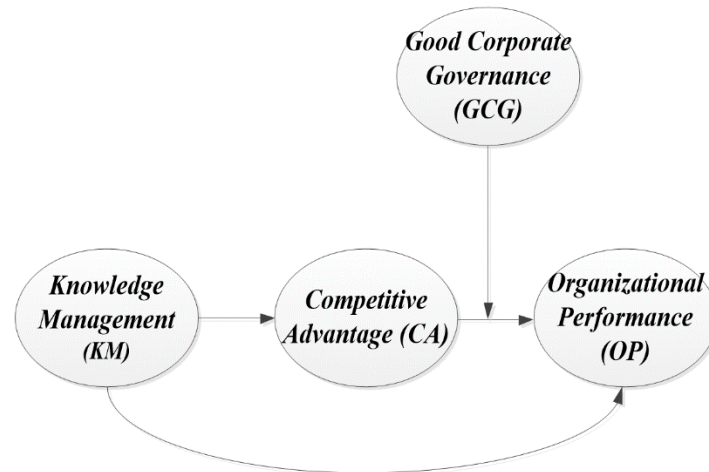


Figure 1.
Analysis Model.
Source: Compilation of Previous Research (2024).

Examining the research analysis model above, the author also presents the construction of the development of the hypothesis that will be tested in this research, in full, as follows:

2.7. The Influence of Knowledge Management and Organizational Performance

Knowledge management primarily aims to preserve organizational knowledge and prevent its dissipation, making it essential to first understand the nature and concept of “knowledge” itself. Scholars such as Chatterjee and MOUSUMI [32], Khan [33], Yaw [34], and Zhicheng et al. [29] describe knowledge as information that is integrated with understanding and skill, residing within the human mind and enabling individuals to make predictions through pattern recognition. Ortiz-Barrera [35] further distinguishes between two types of knowledge: tacit knowledge, which is deeply personal, experience-based, and difficult to articulate, and explicit knowledge, which is codified, transferable, and easily shared [36, 37].

Within organizational contexts, effective knowledge management enhances both individual and collective performance through structured processes and the integration of personal insights [8, 38, 39]. Consistent with the Resource-Based View (RBV), this perspective positions competence as a key strategic asset that drives superior business performance. As noted by Barney [5], valuable resources enable firms to achieve higher sales, reduce costs, and improve profit margins, thereby enhancing overall firm value. Empirical evidence supports this view, demonstrating that knowledge management significantly contributes to improved organizational performance [33, 38, 40], providing the rationale for the formulation of the second hypothesis.

H₁: Knowledge Management (KM) has a positive and significant effect on Organizational Performance (OP)

2.8. *The Influence of Knowledge Management and Competitive Advantage*

In the contemporary era, characterized by intense competition and rapid transformation, knowledge management (KM) has emerged as a critical enabler for organizations striving to utilize both tangible and intangible resources more effectively than their rivals [29]. KM encompasses a systematic process of identifying, capturing, assessing, and disseminating knowledge assets to support strategic objectives and enhance organizational competitiveness [41]. This concept aligns closely with the Resource-Based View (RBV), which posits that an organization's sustained competitive advantage derives from resources that are valuable, rare, inimitable, and non-substitutable, particularly those embedded within its culture, innovation capacity, and social complexity [8, 42].

As the RBV framework has evolved, knowledge management has been increasingly recognized as a strategic resource that ensures timely access to relevant knowledge and its transformation into actionable insights capable of driving superior performance. Furthermore, intellectual capital, which consists of structural, human, and social dimensions, serves as a reinforcing mechanism that amplifies this advantage. Elements such as brand identity and social capital, though non-economic in nature, contribute significant strategic value by fostering trust, collaboration, and reputational strength [6].

Empirical evidence further supports these theoretical claims. Studies conducted by Elprisdar et al. [40], Khan [33], Mohaghegh et al. [38], Gürlek and Çemberci [43], Isa and Rahmah [44] and Bashir et al. [9] consistently demonstrate that effective KM implementation positively influences competitive advantage. Grounded in this theoretical reasoning and supported by prior empirical findings, the following hypothesis is therefore proposed:

H₂: Knowledge Management (KM) has a positive and significant effect on Competitive Advantage (CA)

2.9. *The Influence of Competitive Advantage and Organizational Performance*

Competitive advantage embodies an organization's capability to generate superior economic value compared to its competitors and has been empirically demonstrated to exert a positive influence on organizational performance [45-47]. Within the globalized business landscape characterized by rapid technological advancement and intensifying competition, maintaining sustainable performance necessitates the strategic utilization of internal strengths, particularly human resources (HR), as a core asset [48].

Through effective HR management, organizations are able to optimize employee potential, wherein even a relatively small cohort of highly skilled and competent personnel can significantly enhance overall performance outcomes. Human capital, encompassing employees' skills, knowledge, experience, and learning capacity, thus serves as a fundamental determinant of long-term organizational success [49]. Grounded in the Resource-Based View (RBV) framework, these competencies are regarded as valuable, rare, and inimitable resources that constitute the foundation for achieving and sustaining a competitive advantage [6, 50]. Empirical findings further substantiate this theoretical proposition. Studies by Munizu [51] and Christian [52] confirm that organizations with stronger competitive positioning consistently demonstrate superior performance levels compared to their counterparts.

H₃: Competitive Advantage (CA) has a positive and significant effect on Organizational Performance (OP)

2.10. *The Role of Competitive Advantage in Mediating the Influence of Knowledge Management on Organizational Performance*

In recent years, knowledge management (KM) has gained recognition as a pivotal driver of competitive advantage, providing a structured mechanism for identifying, managing, and utilising organisational knowledge assets effectively [41]. Organisations that focus on nurturing distinctive core competencies, particularly those difficult to replicate due to elements such as strategic positioning, intellectual property, or socially embedded attributes like trust and reputation, tend to achieve higher levels of performance [42]. Within the theoretical framework of the Resource-Based View (RBV), KM is

conceptualized as a strategic resource inherently tied to the structural, human, and social dimensions of intellectual capital. These dimensions collectively contribute to value creation by fostering distinctiveness and irreplaceability [6]. The RBV further emphasizes that organizational resources evolve into dynamic capabilities, which in turn sustain long-term competitive advantage, enabling firms to outperform their rivals through robust, well-integrated internal systems [6, 50]. Empirical evidence supports this theoretical assertion. Studies by Munizu [51] and Christian [52] consistently demonstrate that competitive advantage exerts a substantial positive impact on organizational performance, underscoring KM's strategic importance in strengthening business outcomes.

H₄: Competitive Advantage is able to mediate the influence of Knowledge Management on Organizational Performance.

Good Corporate Governance (GCG) refers to a structured system of principles, regulations, and organizational practices designed to guide and control company operations. It ensures that shareholders' rights are safeguarded and that all relevant information regarding performance, ownership, and stakeholder relations is disclosed accurately, transparently, and in a timely manner [21, 22]. According to the Resource-Based View (RBV) theory proposed by Barney et al. [53], firms achieve success by optimally utilising resources that are valuable, rare, and difficult to imitate, including various forms of intellectual capital such as human, structural, and employed capital [54, 55]. Effective management of these internal assets, particularly intellectual capital, has been empirically shown to enhance financial performance and, consequently, strengthen a firm's competitive advantage [56]. Moreover, Antoro et al. [57] emphasize the significance of human resources actively engaging in organizational objectives and daily operations to improve overall performance. In this context, good corporate governance functions as a supporting mechanism that enables the efficient management and coordination of resources, thereby reinforcing the relationship between competitive advantage and organizational performance.

H₅: Good Corporate Governance positively moderates the relationship between Competitive Advantage and Organizational Performance, such that the relationship is stronger when GCG is effectively implemented.

3. Research Methods

This study examines the senior leadership across multiple airports operated by PT Angkasa Pura II to assess how innovation and knowledge management influence organizational performance through competitive advantage, facilitated by effective corporate governance. Adopting an explanatory quantitative approach, the research population comprises 304 senior leaders, managers, and department heads from 20 airports and supporting divisions, including Soekarno-Hatta (Tangerang), Halim Perdanakusuma (Jakarta), Sultan Mahmud Badaruddin II (Palembang), and Kualanamu (Deli Serdang), among others [58]. A total of 198 senior leaders and managers were selected as the study sample, representing key decision-makers within their respective airports and organizational units. Primary data were collected through structured questionnaires distributed electronically via Google Docs [58]. Structural Equation Modeling (SEM) using AMOS software was employed for data analysis, as the moderate sample size of 198 respondents relative to the 42 indicator items was considered more suitable for covariance-based SEM. Using Partial Least Squares (PLS) in such conditions could lead to potential deviations and reduced model reliability [59].

4. Result Analysis and Discussion

Based on the results of distributing the questionnaire, the following information was obtained regarding the demographic characteristics of the respondents:

Table 1.
Respondent Demographic Characteristics.

Characteristics	Frequency	Total	Percentage
Gender			
Man	169	198	85.4%
Woman	29		14.6%
Age			
26 - 30 years	7	198	3.5%
31 - 40 years	73		36.9%
41 - 50 years	79		39.9%
> 50 years	39		19.7%
Education			
SENIOR HIGH SCHOOL	14	198	7.1%
Diploma	8		4.0%
S1 / Equivalent	123		62.1%
S2	52		26.3%
S3	1		0.5%
Length of work			
< 5 years	2	198	1.0%
5 - 10 years	17		8.6%
> 10 years	179		90.4%
Position			
Leader	93	198	47.0%
Middle Leader	75		37.9%
Senior Leader	30		15.2%

Source: Primary Data, 2024.

Based on the frequency table, most respondents are male (169), with 29 females. The dominant age group ranges from 41 to over 50 years, comprising 79 respondents. Employees show strong commitment, as the majority have served more than six years. Educational backgrounds vary, with 123 holding bachelor's degrees (S1), 52 master's degrees (S2), 8 diplomas, and 14 high school or equivalent qualifications.

The primary data collected through the questionnaire will be tested for outliers. Outliers are data points that significantly deviate from others, showing extreme values across variables [60]. This study employs the Mahalanobis distance criterion for multivariate outlier detection at a significance level of $p < 0.01$. The Mahalanobis distance is compared against a Chi-Square distribution [X^2] with degrees of freedom equal to the number of independent variables ($df = 198$). Observations exceeding the critical value of 60.001 are deemed multivariate outliers. The following table summarizes the Multivariate Outlier Test results:

Table 2.
Outlier Test Results.

Residuals Statistics ^a					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	26.04	201.21	99.50	29.241	198
Std. Predicted Value	-2.512	3.478	0.000	1.000	198
Standard Error of Predicted Value	7.939	57.048	27.454	9.218	198
Adjusted Predicted Value	-71.76	227.85	99.35	35.601	198
Residual	-82.745	86.616	0.000	49.279	198
Std. Residual	-1.801	1.869	0.000	0.864	198
Stud. Residual	-2.267	2.273	-0.001	0.991	198
Deleted Residual	-83.275	87.640	-0.067	66.337	198
Stud. Deleted Residual	-2.299	2.306	-0.001	0.997	198
Expensive. Distance	2.821	46.005	49.747	31.242	198
Cook's Distance	0.000	0.091	0.007	0.012	198
Centered Leverage Value	0.014	0.995	0.253	0.159	198

Note: a. Dependent Variable: NO.

Source: Data Processing Results (2024).

Based on the table above, the maximum Mahalanobis Distance (MD) value is 46.005, which is less than the threshold of 60.001. Therefore, this study concludes that there are no outliers in the data. Following the outlier test, the next step is to assess data normality. The normality test is conducted using the kurtosis value, typically presented in descriptive statistics. The test statistic used is the Z value; if the Z value exceeds the critical value, the data distribution is considered non-normal. The critical value is determined at a 0.01 significance level (1%), which corresponds to ± 2.58 . The results of the normality test in this study are presented in the following table:

Table 3.
Normality Test Results.

Assessment of normality (Group number 1)				
Variable	Min.	Max.	Kurtosis	Cr
Int_CAGCG	-1.878	8.138	7.098	20.389
GCG112	2.000	5.000	-0.003	-0.009
GCG111	2.000	5.000	-0.213	-0.612
GCG110	1.000	5.000	1.233	3.542
GCG19	2.000	5.000	-0.293	-0.841
GCG18	1.000	5.000	1.000	2.874
GCG17	2.000	5.000	-0.285	-0.818
GCG16	2.000	5.000	0.209	0.599
GCG15	1.000	5.000	0.209	0.601
GCG14	1.000	5.000	0.643	1.846
GCG13	1.000	5.000	0.804	2.309
GCG12	1.000	5.000	-0.165	-0.474
GCG11	2.000	5.000	0.017	0.048
OP119	1.000	5.000	0.077	0.221
OP118	2.000	5.000	-0.474	-1.362
OP117	2.000	5.000	-0.343	-0.985
OP116	2.000	5.000	0.465	1.335
OP115	2.000	5.000	0.204	0.585
OP114	2.000	5.000	0.983	2.824
OP113	2.000	5.000	0.138	0.397
OP112	2.000	5.000	-0.213	-0.612
OP111	2.000	5.000	-0.248	-0.711
OP110	1.000	5.000	1.753	5.036
OP19	1.000	5.000	0.541	1.554
OP18	1.000	5.000	0.356	1.022
OP17	1.000	5.000	0.647	1.858
OP16	1.000	5.000	0.379	1.088
OP15	1.000	5.000	0.546	1.567
OP14	2.000	5.000	-0.229	-0.656
OP13	3.000	5.000	-0.804	-2.308
OP12	1.000	5.000	0.672	1.931
OP11	2.000	5.000	0.377	1.082
CA11	1.000	5.000	1.336	3.837
CA12	2.000	5.000	-0.032	-0.091
CA13	2.000	5.000	0.525	1.507
CA14	2.000	5.000	1.065	3.058
CA15	2.000	5.000	-0.316	-0.908
CA16	2.000	5.000	0.375	1.077
CA17	2.000	5.000	0.272	0.783
CA18	2.000	5.000	1.286	3.694
KM11	2.000	5.000	-0.704	-2.021
KM12	2.000	5.000	-0.379	-1.090
KM13	2.000	5.000	-0.338	-0.970
KM14	1.000	5.000	0.572	1.643
KM15	2.000	5.000	0.047	0.134
KM16	2.000	5.000	-0.456	-1.309

Assessment of normality (Group number 1)				
Variable	Min.	Max.	Kurtosis	Cr
KM17	1.000	5.000	-0.059	-0.169
KM18	1.000	5.000	0.112	0.321
Multivariate			789.427	80.167

Source: Data Processing Results (2024).

The test results reveal that the multivariate kurtosis value (80.167) exceeds the critical threshold of ± 2.58 , indicating a violation of the normality assumption. However, this is not considered critical, as Bentler and Chou [61] state that Structural Equation Modeling (SEM) using maximum likelihood estimation (MLE) can still produce reliable parameter estimates despite non-normal data. Thus, the data remains suitable for further analysis. Additionally, multicollinearity and singularity were assessed by examining the determinant of the covariance matrix. According to Tabachnick and Fidell [62], a determinant close to zero signals multicollinearity or singularity issues. The determinant value obtained via AMOS 22.0 was 377.662, confirming no such problems and satisfying these assumptions. To ensure data quality, validity, and reliability tests were also conducted, as detailed below.

Table 4.

Validity & Reliability Test Results.

Standardize Loading Factors and Constructs with Confirmatory Factor Analysis

Contract	Indicator	Loading Factor			
		1	2	3	4
Organizational Performance (OP)	OP11	0.833			
	OP12	0.548			
	OP13	0.781			
	OP14	0.753			
	OP15	0.698			
	OP16	0.833			
	OP17	0.817			
	OP18	0.797			
	OP19	0.853			
	OP110	0.816			
	OP111	0.747			
	OP112	0.871			
	OP113	0.728			
	OP114	0.508			
	OP115	0.809			
	OP116	0.836			
	OP117	0.844			
	OP118	0.833			
	OP119	0.832			
Good Corporate Governance (GCG)	GCG11		0.964		
	GCG12		0.688		
	GCG13		0.823		
	GCG14		0.611		
	GCG15		0.590		
	GCG16		0.826		
	GCG17		0.856		
	GCG18		0.838		
	GCG19		0.838		
	GCG110		0.760		
	GCG111		0.889		
	GCG112		0.884		
Competitive Advantage (CA)	CA11			0.835	
	CA12			0.890	
	CA13			0.899	
	CA14			0.899	
	CA15			0.882	
	CA16			0.798	
	CA17			0.905	
	CA18			0.926	
Knowledge Management (KM)	KM11				0.647
	KM12				0.884
	KM13				0.804
	KM14				0.898
	KM15				0.863
	KM16				0.894
	KM17				0.785
	KM18				0.868

Source: Data Processing Results (2024).

Based on the results of the confirmatory factor analysis, it can be seen that the factor loadings of each question item that form each construct are all ≥ 0.5 . Thus, the instrument items of each construct can be

stated to have good validity. The next data quality test is the reliability test, which will be described as follows:

Table 5.

Internal Consistency Reliability Test Results.

Contract	Indicator	Item to Total Correlation	Cronbach's Alpha
Organizational Performance (OP)	OP11	0.747	0.952
	OP12	0.674	
	OP13	0.689	
	OP14	0.663	
	OP15	0.636	
	OP16	0.763	
	OP17	0.751	
	OP18	0.723	
	OP19	0.796	
	OP110	0.729	
	OP111	0.668	
	OP112	0.800	
	OP113	0.643	
	OP114	0.625	
	OP115	0.757	
	OP116	0.778	
	OP117	0.784	
	OP118	0.767	
	OP119	0.761	
Good Corporate Governance (GCG)	GCG11	0.764	0.936
	GCG12	0.710	
	GCG13	0.736	
	GCG14	0.567	
	GCG15	0.555	
	GCG16	0.766	
	GCG17	0.781	
	GCG18	0.755	
	GCG19	0.771	
	GCG110	0.690	
	GCG111	0.786	
	GCG112	0.775	
Competitive Advantage (CA)	CA11	0.743	0.944
	CA12	0.817	
	CA13	0.847	
	CA14	0.835	
	CA15	0.790	
	CA16	0.696	
	CA17	0.839	
Knowledge Management (KM)	CA18	0.814	0.941
	KM11	0.736	
	KM12	0.803	
	KM13	0.806	
	KM14	0.847	
	KM15	0.784	
	KM16	0.829	
	KM17	0.706	
	KM18	0.815	

Source: Data Processing Results (2024).

The reliability of each scale (observed variable or indicator) was evaluated using Cronbach's Alpha. Concurrently, item-to-total correlations were analyzed to enhance measurement quality by eliminating items with correlations below 0.5 as suggested by Sugiyono [63]. Since all items had item-to-total correlations of 0.5 or higher, no items were removed. Removed items would have been excluded from the Cronbach's Alpha calculation. Following this screening, Cronbach's Alpha values for all constructs met the acceptable threshold of 0.7 [60]. Additionally, construct reliability and average variance extracted (AVE) were assessed to confirm that indicators consistently measured their intended constructs. Detailed results are provided below.

Table 6.
Construct Reliability & Variance Extracted Test Results.

Contract	Indicator	Loading Factor	SFL Square	error	Construct Reliability	Variance Extracted
Organizational Performance (OP)	OP11	0.833	0.694	0.306	0.967	0.611
	OP12	0.548	0.300	0.700		
	OP13	0.781	0.610	0.390		
	OP14	0.753	0.567	0.433		
	OP15	0.698	0.487	0.513		
	OP16	0.833	0.694	0.306		
	OP17	0.817	0.667	0.333		
	OP18	0.797	0.635	0.365		
	OP19	0.853	0.728	0.272		
	OP110	0.816	0.666	0.334		
	OP111	0.747	0.558	0.442		
	OP112	0.871	0.759	0.241		
	OP113	0.728	0.530	0.470		
	OP114	0.508	0.258	0.742		
	OP115	0.809	0.654	0.346		
	OP116	0.836	0.699	0.301		
	OP117	0.844	0.712	0.288		
	OP118	0.833	0.694	0.306		
	OP119	0.832	0.692	0.308		
	Σ Loading Factor	14.737	11.605	7.395		
	Σ Loading Factor ²	217.179169	224.574	19.000		
Good Corporate Governance (GCG)	GCG11	0.964	0.929	0.071	0.956	0.648
	GCG12	0.688	0.473	0.527		
	GCG13	0.823	0.677	0.323		
	GCG14	0.611	0.373	0.627		
	GCG15	0.59	0.348	0.652		
	GCG16	0.826	0.682	0.318		
	GCG17	0.856	0.733	0.267		
	GCG18	0.838	0.702	0.298		
	GCG19	0.838	0.702	0.298		
	GCG110	0.76	0.578	0.422		
	GCG111	0.889	0.790	0.210		
	GCG112	0.884	0.781	0.219		
	Σ Loading Factor	9.567	7.770267	4.229733		
	Σ Loading Factor ²	91.527489	95.757	12.000		
Competitive Advantage (CA)	CA11	0.835	0.697	0.303	0.965	0.775
	CA12	0.89	0.792	0.208		
	CA13	0.899	0.808	0.192		
	CA14	0.899	0.808	0.192		
	CA15	0.882	0.778	0.222		
	CA16	0.798	0.637	0.363		
	CA17	0.905	0.819	0.181		

Knowledge Management (KM)	CA18	0.926	0.857	0.143	0.948	0.696
	Σ Loading Factor	7.034	6.196956	1.803044		
	Σ Loading Factor ²	49.477156	51.280	8.000		
	KM11	0.647	0.419	0.581		
	KM12	0.884	0.781	0.219		
	KM13	0.804	0.646	0.354		
	KM14	0.898	0.806	0.194		
	KM15	0.863	0.745	0.255		
	KM16	0.894	0.799	0.201		
	KM17	0.785	0.616	0.384		
	KM18	0.868	0.753	0.247		
	Σ Loading Factor	6.643	5.566539	2.433461		
	Σ Loading Factor ²	44.129449	46.56291	8.0000		

Source: Data Processing Results (2024).

The reliability test results, based on construct reliability and average variance extracted (AVE), show values meeting the minimum thresholds of 0.7 for construct reliability and 0.5 for AVE. Values below 0.7 may still be acceptable in exploratory research with strong empirical justification. After confirming data quality, the next step is causality testing. In Structural Equation Modeling (SEM), measurement and structural model parameters are estimated simultaneously using the One-Step Approach. This approach is suitable when the model is theoretically sound and the data are valid and reliable [60]. The estimation results and model fit obtained with AMOS 22.0 are presented in the following figure.

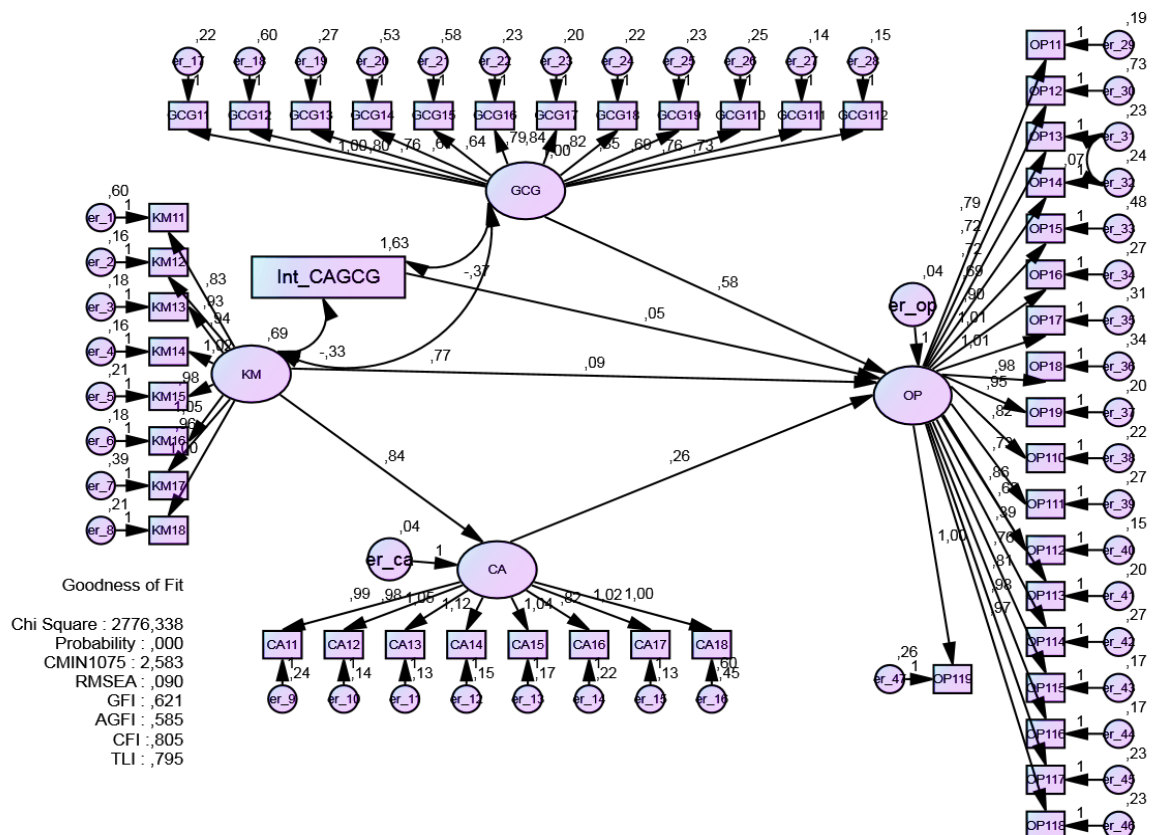


Figure 2.
One Step Base Model.

Table 7.
Goodness of Fit.

Criteria	Results	Critical Value	Model Evaluation
Cmin/DF	2.508	≤ 2.00	Not Fit
Significance	0.000	≥ 0.05	Not Fit
RMSEA	0.087	≤ 0.08	Not Fit
GFI	0.625	≥ 0.90	Not Fit
AGFI	0.589	≥ 0.90	Not Fit
TLI	0.805	≥ 0.95	Moderate
CFI	0.814	≥ 0.94	Moderate

Source: Data Processing Results (2024).

From the evaluation results of the *one-step base model*, it turns out that, from all the goodness-of-fit criteria used, not all of them show good model evaluation results, meaning that the model is not in accordance with the data. This indicates that the conceptual model developed and based on theory is not fully supported by facts; therefore, the following modifications need to be made. The modification commands from Amos are as follows:

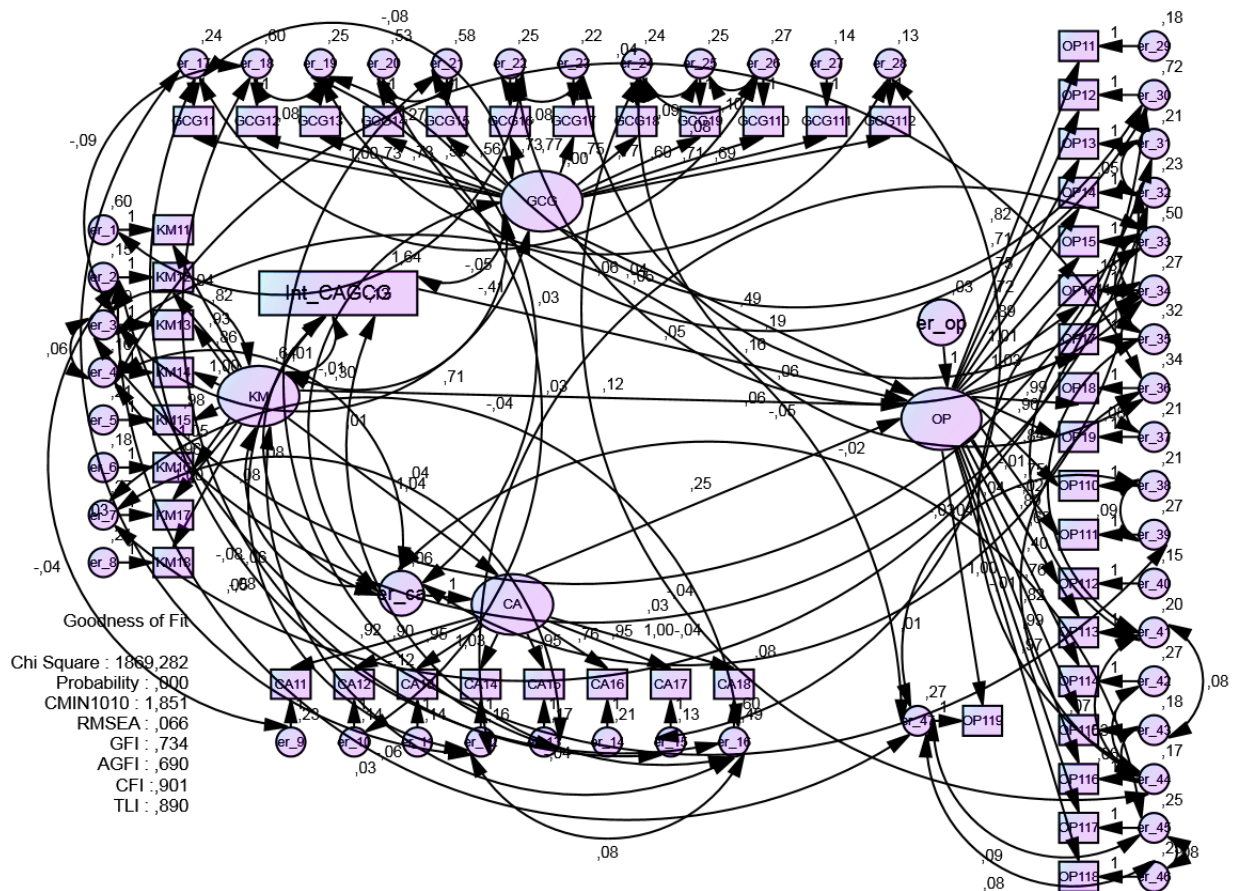


Figure 3.
One Step Base Model – Modification.

Table 8.
Goodness of Fit.

Criteria	Results	Critical Value	Model Evaluation
Cmin/DF	1.851	≤ 2.00	Fit
Probability	0.000	≥ 0.05	Not Fit
RMSEA	0.066	≤ 0.08	Fit
GFI	0.734	≥ 0.90	Moderate
AGFI	0.690	≥ 0.90	Moderate
TLI	0.901	≥ 0.95	Moderate
CFI	0.890	≥ 0.94	Moderate

Source: Data Processing Results (2024).

From the evaluation results of *the one-step modification model*, it turns out that, from all the *goodness-of-fit criteria* used, most of them show good model evaluation results, meaning that the model is in accordance with the data. This indicates that the conceptual model developed and based on theory has been fully supported by facts. Therefore, this model is the best to explain the relationship between variables in this study. Based on this model, the following causality results were obtained:

Table 8.
Causality Test Results

Regression Weights			Ustad Estimate	Std Estimate	Prob.
Factor	$\Rightarrow$	Factor			
Knowledge Management (KM)	$\Rightarrow$	Competitive Advantage (CA)	0.238	1.041	0.000
Knowledge Management (KM)	$\Rightarrow$	Organizational Performance (OP)	0.122	0.126	0.265
Competitive Advantage (CA)	$\Rightarrow$	Organizational Performance (OP)	0.253	0.261	0.049
Competitive Advantage (CA)*Good Corporate Governance (GCG)	$\Rightarrow$	Organizational Performance (Z)	0.051	0.085	0.003
Limits of Significance					≤ 0.05

Source: Data Processing Results (2024).

Judging from the level of probability of the direction of the causal relationship, the hypothesis states that:

1. The Knowledge Management (KM) variable has a positive and significant effect on Competitive Advantage (CA), which is acceptable (causal probability $0.000 \leq 0.05$, indicating significance).
2. The Knowledge Management (KM) variable has a positive but insignificant effect on the Organizational Performance (OP) variable, which is acceptable (the causal probability is $0.265 \geq 0.05$, indicating it is not significant).
3. The Competitive Advantage (CA) variable has a positive and significant effect on Organizational Performance (OP), which is acceptable (the causal probability is $0.049 \leq 0.05$, indicating significance).
4. The Good Corporate Governance variable is proven to strengthen the influence of Competitive Advantage (CA) on Organizational Performance (OP), with an acceptable causal probability of 0.003.

Hypothesis Test 4, related to the role of the Competitive Advantage (CA) variable as a mediating variable, is calculated using the Sobel calculator, as follows:

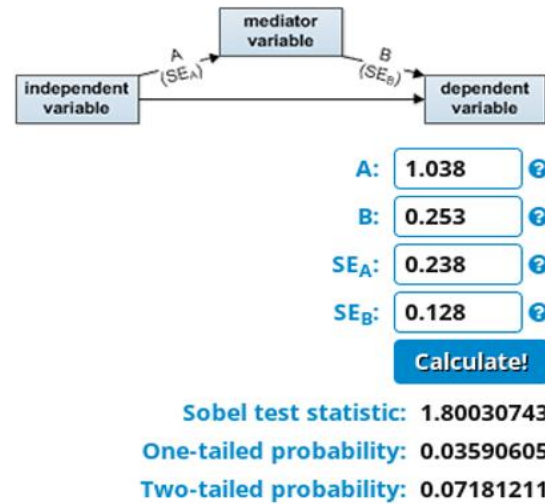


Figure 4.
Competitive Advantage Mediation Test Output Based On the Sobel Test Calculation.
Source: Data Processing Results (2024).

Based on the calculation using the Sobel calculator above, it can be seen that the one-tailed probability value is below 0.05, but the two-tailed probability value is above the specified critical value of 0.05, so it can be interpreted as significant at one tail. Therefore, competitive advantage is considered capable of acting as a mediating variable in the influence between knowledge management and organizational performance. Each of these results can be discussed as follows:

4.1. The Influence of Knowledge Management (KM) on Organizational Performance (OP)

The study's results indicate that Knowledge Management (KM) does not have a significant impact on Organizational Performance at Angkasa Pura II. Although there is agreement that information technology infrastructure supports knowledge storage and documentation, KM itself has not proven to be a driver of improved company performance. This finding suggests that implementing KM is a complex, ongoing developmental process, and its benefits may only become apparent in the long term. Therefore, KM's current influence on performance appears limited.

At its core, KM focuses on managing existing knowledge to prevent its loss within the organization. To fully understand KM, it is important to grasp the concept of knowledge itself. As explained by Chatterjee and MOUSUMI [32], Khan [33], Yaw [34], and Zhicheng et al. [29], knowledge is information combined with understanding and capability, residing in human intellect and enabling predictive insight through pattern recognition. Ortiz-Barrera [35] further distinguishes between tacit knowledge, personal, experience-based, and difficult to share, and explicit knowledge, which is documented and easily communicated [36, 37].

When properly applied, KM can enhance organizational performance by improving work processes and leveraging employees' personal knowledge [8, 38, 39]. This aligns with the Resource-Based View (RBV) theory, which highlights that valuable resources such as knowledge and competence enable firms to achieve superior sales, reduce costs, increase profit margins, and ultimately improve financial performance value [5]. Supporting this, Elprisdad et al. [40], Khan [33], and Mohaghegh et al. [38] found positive effects of KM on organizational performance. However, some studies, like Darmawan et al. [64], emphasize that effective KM and personal knowledge mobilization are essential for reaching corporate goals and adapting to environmental changes, ultimately stabilizing performance [9].

4.2. *The Relationship between Knowledge Management (KM) and Competitive Advantage (CA)*

The study reveals that the implementation of Knowledge Management (KM) strengthens the competitive advantage at Angkasa Pura II. Effective KM is crucial for gaining this advantage, as it involves continuous employee training and development to enhance knowledge, alongside active communication with regional stakeholders to maintain coordination. In today's highly competitive and rapidly changing business environment, KM helps organizations optimize both tangible and intangible resources better than their rivals [29]. Thus, companies need to leverage their knowledge strategically to boost their market competitiveness. Many management scholars recognize KM as a vital discipline that integrates identifying, capturing, evaluating, and sharing valuable company information to build competitive capabilities [41].

This view aligns with the Resource-Based View (RBV) theory, which emphasizes that an organization's success depends heavily on its internal resources. Competitive advantage arises from a company's strengths, supported by a well-integrated and strategically managed resource system. Innovation and a positive work culture are key activities for maintaining this advantage [8]. Firms that develop unique, hard-to-copy competencies tend to perform better. These core competencies are protected from imitation through strategic actions such as copyrights and by building socially complex resources like trust and reputation, which require time and investment to replicate [42].

RBV theory now incorporates KM as a strategic factor. KM is designed to deliver the right knowledge to the right people at the right time, promoting sharing and effective use of information to improve organizational performance. It involves structured processes and tools that enhance intellectual capital's structural, human, and social components. Non-economic resources like brand identity and social capital further strengthen competitiveness [6].

Numerous studies support these conclusions, showing that KM significantly boosts competitive advantage [9, 33, 38, 40, 43, 44]. Additional research emphasizes that in highly competitive markets, effective knowledge management leads to competitive advantages through resources that are valuable, rare, and difficult to imitate [6, 8, 65, 66].

Therefore, organizations must skillfully manage knowledge, including understanding customer expectations, as this knowledge is a critical asset. Employees should develop and master knowledge and skills to advance their careers, supported by systematic KM systems. Though not new, KM remains essential in organizations today [44]. This view is echoed by Darmawan et al. [64], who argue that effective KM and personal knowledge mobilization are key to achieving corporate goals.

4.3. *The Influence of Competitive Advantage (CA) on Organizational Performance (OP)*

The results of the study indicate that the implementation of competitive advantage significantly strengthens organizational performance at Angkasa Pura II. The quality of competitive advantage is a critical factor in enhancing company performance, as leaders actively listen to complaints and feedback from service users and effectively resolve problems. This proactive leadership also extends to contributing to local communities through initiatives such as corporate social responsibility (CSR). Competitive advantage is defined as an organization's ability to achieve economic benefits that surpass those of its competitors. Several prior studies have demonstrated a positive impact of competitive advantage on organizational performance [45, 46]. It is widely acknowledged as a vital element for organizations to outperform competitors and thereby improve performance [47].

In today's era of globalization, companies strive to sustain operations amid increasing competition, escalating challenges, and rapid technological advancements, which pose threats to sustainable organizational performance [48]. Organizations that manage Human Resources (HR) effectively and efficiently hold greater potential to achieve their goals and maintain sustainable performance. Organizational failures often stem from underutilized HR potential rather than capital limitations. Competent HR can develop the potential of approximately 3-5% of the entire workforce, and HR potential

comprising various competencies, experiences, knowledge, intelligence, and qualifications is the primary driver for improving and sustaining organizational performance [49].

The Resource-Based View (RBV) theory posits that organizational resources are the foundation of capabilities, and these capabilities form the basis of competitive advantage. This implies that company resources must be robust, resilient against competition, sustainable, well-distributed, internalized within the organization, and effectively managed. In strategic management, RBV focuses on the resources and capabilities that enable firms to obtain and maintain sustainable competitive advantages, which is the core objective of this approach [6, 50]. Supporting this perspective, Munizu [51] found that competitive advantage has a stronger influence on organizational performance. Likewise, Christian [52] confirmed the positive relationship between competitive advantage and organizational performance.

4.4. The Influence of Competitive Advantage (CA) as a Mediator of Knowledge Management (KM) on Organizational Performance (OP)

The findings of this study reveal that competitive advantage plays a significant mediating role between innovation and organizational performance. This effect is largely due to the company's capability to rapidly adopt the necessary knowledge to maintain operational efficiency, coupled with continuous communication with regional stakeholders to ensure effective coordination. Consequently, cost and expenditure analyses are consistently monitored, allowing for precise and well-informed decision-making processes.

Contemporary scholars in management and organizational theory widely recognize knowledge management as a fundamental driver of competitive advantage. It involves the systematic identification, capture, evaluation, and dissemination of informational assets to support strategic decision-making. Organizations that effectively harness knowledge tend to strengthen their core competencies through innovative and efficient utilization of resources. Competencies that are difficult to replicate, such as those safeguarded by strategic positioning, intellectual property rights, or embedded within socially complex resources like reputation and trust, are closely linked to sustained organizational performance and require substantial investment to imitate.

Within the Resource-Based View (RBV) framework, Knowledge Management (KM) has become a critical strategic element that ensures the right knowledge reaches the right individuals at the right time, thereby facilitating actions that enhance performance. KM is regarded as a deliberate design process involving tools and structures that enable the development, sharing, and optimal use of knowledge across the structural, human, and social dimensions of intellectual capital. Intangible assets such as brand identity and social capital, although non-economic, significantly bolster competitive advantage. According to RBV, sustainable competitive advantage arises when a company's resources are valuable, rare, and inimitable.

The RBV theory further asserts that organizational resources form the foundation of capabilities, which subsequently underpin competitive advantage. For this advantage to be sustained, resources must be robust, resilient, sustainable, well-integrated, and effectively deployed within the organization. Strategic management grounded in RBV emphasizes the leverage of internal resources and capabilities to secure and maintain long-term competitive superiority. Empirical research substantiates this view: Munizu [51] demonstrated that competitive advantage exerts a stronger influence on organizational performance compared to other factors, while Christian [52] affirmed the positive correlation between competitive advantage and improved performance outcomes.

4.5. The influence of Good Corporate Governance (GCG) moderates the influence of Competitive Advantage (CA) on Organizational Performance (OP)

The results of the study suggest that robust support from Competitive Advantage can indirectly enhance Organizational Performance, especially when the implementation of Good Corporate

Governance (GCG) is progressively refined at Angkasa Pura II. The enactment of GCG is a complex endeavor; companies must cultivate competitive advantages while remaining mindful of their available resources and ensuring they do not fall behind competitors. This dynamic is driven by leadership committed to consistently adhering to government regulations, applicable laws, and internal corporate policies, coupled with the activation of an effective internal control system that together culminate in optimal company performance.

Good Corporate Governance encompasses the processes, customs, and institutional policies that govern a company's management, conduct, and oversight of its activities. Serving as a regulatory and control framework, GCG delineates and supervises the relationships among the parties responsible for company management. As a system, GCG guarantees that shareholders' rights are respected, ensuring they receive accurate and timely information. It also mandates transparent disclosure of all relevant information concerning company performance, ownership, and stakeholders [21, 22].

Grounded in Barney et al. [53] Resource-Based View (RBV) theory, a company is understood as a framework prioritizing the identification of sources of sustainable competitive advantage. Resources confer such an advantage if they possess value, rarity, and authenticity. These resources include intellectual capital, which comprises employed capital, human capital, and structural capital [54, 55]. The theory further explains that optimal financial performance is attainable when a company effectively utilizes these resources. Hence, effective management of intellectual capital is critical to fostering a competitive advantage.

Supporting this notion, Antoro et al. [57] emphasize the central role of human resource engagement in operational activities, particularly when employees participate in setting company objectives and daily operations. According to RBV, intellectual capital is a key source of capital capable of generating added value for the company through enhanced profitability. Therefore, adept development and utilization of intellectual capital not only serve as benchmarks for improving financial performance but also enable the company to achieve a competitive advantage, facilitating effective competition within the market [56].

5. Conclusion

Upon evaluating the results of data analysis and discussions pertaining to Knowledge Management, Competitive Advantage, Organizational Performance, and Good Corporate Governance (GCG) at PT Angkasa Pura II, the following conclusions can be drawn:

1. The implementation of Knowledge Management does not enhance organizational performance. This is evidenced by the company's failure to enable access to tacit knowledge (knowledge acquired through experience) for all employees, which contradicts the established theories of Knowledge Management that assert its potential to improve organizational performance. Indeed, Knowledge Management within this organization has not been effective in supporting initiatives aimed at reducing water consumption through recycling efforts.
2. The implementation of Knowledge Management can foster a competitive advantage. This is achieved through the training and development programmes provided by the company, aimed at enhancing employee capabilities. These initiatives are consistently aligned with developmental needs and the requirements of the facilities, ensuring rigorous evaluations are conducted.
3. The application of competitive advantage can lead to improved organizational performance. This is realized through leadership that actively listens to feedback and concerns from service users, effectively addressing issues and thereby enhancing the quality of service levels (Level of Service) in accordance with regulatory standards or even surpassing them.
4. The application of Knowledge Management can exert an indirect influence on Organizational Performance through the mediation of Competitive Advantage. This is demonstrated by findings indicating that managerial factors significantly impact the relationship between Knowledge Management and Organizational Performance.

5. The implementation of competitive advantage can also enhance organizational performance indirectly through the moderation of good corporate governance. This is evidenced by the effective application of good corporate governance, which moderates the influence of competitive advantage on organizational performance at PT Angkasa Pura II. The findings suggest that internal audit practices are conducted at least annually, thereby promoting managerial factors that enhance competitive advantage and significantly improve the organization's potential.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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References

- [1] A. P. Widodo, B. Budiyo, and S. Suhermin, "The effect of perceived organizational support, psychological empowerment and structural empowerment on employee engagement and job performance at PT. Angkasa Pura I (Persero)," *Asian Journal of Management Analytics*, vol. 2, no. 1, pp. 45–60, 2023. <https://doi.org/10.55927/ajma.v2i1.2613>
- [2] Angkasapura II, *Angkasa Pura II management report (2021–2023)*. Jakarta, Indonesia: PT. Angkasa Pura II, 2023.
- [3] M. W. Nugroho, G. N. L. Siregar, and I. Machmiyana, "The influence of facilities, services, and security at airports on customer satisfaction levels," *Multidisciplinary Journal of Science Warehouse*, vol. 2, no. 7, pp. 251–253, 2024.
- [4] W. Nikmah, A. Mukarromah, D. Widyansyah, and M. Anshori, "The use of technology in human resource development," *Mutiara: Journal of Research and Scientific Work*, vol. 1, no. 5, pp. 366–386, 2023.
- [5] J. Barney, "Firm resources and sustained competitive advantage," *Journal of Management*, vol. 17, no. 1, pp. 99–120, 1991. <https://doi.org/10.1177/014920639101700108>
- [6] L. Weinzimmer, C. A. Esken, E. J. Michel, W. C. McDowell, and R. V. Mahto, "The differential impact of strategic aggressiveness on firm performance: The role of firm size," *Journal of Business Research*, vol. 158, p. 113623, 2023. <https://doi.org/10.1016/j.jbusres.2022.113623>
- [7] J. Wongsansukcharoen and J. Thaweepaiboonwong, "Effect of innovations in human resource practices, innovation capabilities, and competitive advantage on small and medium enterprises' performance in Thailand," *European Research on Management And Business Economics*, vol. 29, no. 1, p. 100210, 2023. <https://doi.org/10.1016/j.iemeen.2022.100210>
- [8] A. Mikalauskienė and Z. O. Atkočiūnienė, "Knowledge management impact on sustainable development," *Montenegrin Journal of Economics*, vol. 15, no. 4, pp. 149–160, 2019. <https://doi.org/10.14254/1800-5845/2019.15-4.11>
- [9] M. Bashir, R. Farooq, and M. M. Naqshbandi, "The impact of business model innovation and knowledge management on firm performance: An emerging markets perspective," *Business Process Management Journal*, vol. 30, no. 7, pp. 2401–2426, 2024. <https://doi.org/10.1108/BPMJ-08-2023-0670>
- [10] K. R. Novianti, "Achieving competitive advantage through knowledge management practices: Knowledge-based view (KBV) strategy on Indonesia electricity sector," *APMBA (Asia Pacific Management and Business Application)*, vol. 7, no. 3, pp. 163–176, 2019. <https://doi.org/10.21776/ub.apmba.2019.007.03.3>
- [11] N. G. Theriou, V. Aggelidis, and G. N. Theriou, "A theoretical framework contrasting the resource-based perspective and the knowledge-based view," *European Research Studies*, vol. 3, no. 1, pp. 24–25, 2019.
- [12] R. P. Castanias and C. E. Helfat, "The managerial rents model: Theory and empirical analysis," *Journal of Management*, vol. 27, no. 6, pp. 661–678, 2001. <https://doi.org/10.1177/014920630102700604>
- [13] Y. Mulyani, "Unraveling the relationship between business strategy and shareholder value maximization," *Advances in Applied Accounting Research*, vol. 1, no. 3, pp. 170–183, 2023. <https://doi.org/10.60079/aaar.v1i3.212>
- [14] D. J. Collis and B. N. Anand, *The limitations of dynamic capabilities*. Cambridge, MA, USA: Harvard Business School, 2019.

- [15] S. Salsabila, R. Radhiana, J. Juwita, and P. Mauliza, "Challenges of the resource-based view approach in improving business organizational performance," in *Proceedings of International Conference on Multidisciplinary Research (Vol. 5, No. 2, pp. 120-125)*. Universitas Serambi Mekkah, 2022.
- [16] I. Arief, A. Hasan, N. T. Putri, and H. Rahman, "Literature reviews of RBV and KBV theories reimaged-a technological approach using text analysis and power BI visualization," *JOIV: International Journal on Informatics Visualization*, vol. 7, no. 4, pp. 2532-2542, 2023.
- [17] M. Mudiaronso, N. Sulaksana, and B. Muljana, "The influence of open selection and official competence in filling primary high leadership positions on the organizational performance of regional apparatus in East Belitung regency," *Budapest International Research and Critics Institute-Journal*, vol. 4, no. 2, pp. 1894-1902, 2021. <https://doi.org/10.33258/birci.v4i2.1875>
- [18] J. B. Barney, D. J. Ketchen Jr, and M. Wright, "Resource-based theory and the value creation framework," *Journal of Management*, vol. 47, no. 7, pp. 1936-1955, 2021. <https://doi.org/10.1177/01492063211021>
- [19] F. Wajdi and R. J. Arsiah, "The influence of organizational capabilities, strategic management accounting on organizational performance mediated by competitive advantage in companies in Indonesia," *Research Journal of Finance and Accounting*, vol. 10, no. 22, pp. 141-151, 2019. <https://doi.org/10.7176/RJFA/10-22-17>
- [20] G. C. Bezerra and C. F. Gomes, "Performance measurement practices in airports: Multidimensionality and utilization patterns," *Journal of Air Transport Management*, vol. 70, pp. 113-125, 2018. <https://doi.org/10.1016/j.jairtraman.2018.05.006>
- [21] A. Hormati, N. Nurdin, R. Syahdan, and I. Buamonabot, "An empirical study on good corporate governance (GCG) and financial governance: Firm size as control variable," *Society*, vol. 10, no. 1, pp. 32-44, 2022. <https://doi.org/10.33019/society.v10i1.257>
- [22] B. Tjahjadi, N. Soewarno, and F. Mustikaningtiyas, "Good corporate governance and corporate sustainability performance in Indonesia: A triple bottom line approach," *Heliyon*, vol. 7, no. 3, p. e06453, 2021. <https://doi.org/10.1016/j.heliyon.2021.e06453>
- [23] R. Frederick, *OECD principles of corporate governance. For Official Use Ad Hoc Task Force on Corporate Governance*. Paris, France: OECD, 1999.
- [24] J. Kosiol, L. Fraser, A. Fitzgerald, and K. Radford, "Resource-based view: A new strategic perspective for public health service managers," *Asia Pacific Journal of Health Management*, vol. 18, no. 1, pp. 8-19, 2023. <https://doi.org/10.24083/apjhm.v18i1.2053>
- [25] R. Azizi, M. Maleki, M. Moradi-Moghadam, and V. Cruz-Machado, "The impact of knowledge management practices on supply chain quality management and competitive advantages," *Management and Production Engineering Review*, vol. 7, no. 1, pp. 4-12, 2016.
- [26] J. Widiatmoko, M. G. K. Indarti, and I. D. Pamungkas, "Corporate governance on intellectual capital disclosure and market capitalization," *Cogent Business & Management*, vol. 7, no. 1, p. 1750332, 2020. <https://doi.org/10.1080/23311975.2020.1750332>
- [27] S. Lee and J. Yoo, "Determinants of a firm's sustainable competitive advantages: Focused on Korean small enterprises," *Sustainability*, vol. 13, no. 1, p. 346, 2021. <https://doi.org/10.3390/su13010346>
- [28] Y. Park, "An analysis for the competitive strength of Asian major airports," *Journal of Air Transport Management*, vol. 9, no. 6, pp. 353-360, 2003. [https://doi.org/10.1016/S0969-6997\(03\)00041-3](https://doi.org/10.1016/S0969-6997(03)00041-3)
- [29] L. Zhicheng, C. Zhuoer, L. T. T. Shing, and C. S. K. Wah, "The impact of intellectual capital on companies' performances: A study based on MAKE award winners and non-MAKE award winner companies," *Procedia Computer Science*, vol. 99, pp. 181-194, 2016. <https://doi.org/10.1016/j.procs.2016.09.110>
- [30] V. Limsangpet, B. Phayaphrom, S. Siripipatthanakul, and P. Limna, "Modelling knowledge management on business performance through mediating role of organisational innovation among IT staff in Bangkok, Thailand," *International Journal of Behavioral Analytics*, vol. 2, no. 2, pp. 1-17, 2022.
- [31] M. Huysman and D. De Wit, "Practices of managing knowledge sharing: Towards a second wave of knowledge management," *Knowledge and Process Management*, vol. 11, no. 2, pp. 81-92, 2004. <https://doi.org/10.1002/kpm.192>
- [32] S. Chatterjee and S. MOUSUMI, "Knowledge Management: A tool and technology for organizational success," *Journal of Research, Innovation and Technologies*, vol. 2, no. 1, p. 3, 2023.
- [33] T. N. Khan, "Using knowledge management to enhance organizational performance and effectiveness," *International Journal of Advanced Engineering, Management and Science*, vol. 9, no. 11, pp. 01-17, 2023.
- [34] K. R. Yaw, "Organizational knowledge management practices and their impact on organizational focus — Assessing the case of the service industry in Ghana," *Open Journal of Business and Management*, vol. 11, no. 2, pp. 704-717, 2023. <https://doi.org/10.4236/ojbm.2023.112038>

- [35] M. A. Ortiz-Barrera, "Tacit and explicit knowledge: Drivers of the competitiveness of universities," *Mercados y Negocios*, vol. 50, pp. 51–70, 2023. <https://doi.org/10.32870/myn.vi50.7708>
- [36] W. Kucharska and G. S. Erickson, "Tacit knowledge acquisition & sharing, and its influence on innovations: A Polish/US cross-country study," *International Journal of Information Management*, vol. 71, p. 102647, 2023. <https://doi.org/10.1016/j.ijinfomgt.2023.102647>
- [37] J. Pudjowati, S. T. Wahyuni, and L. Ladi, "The effect of the application of tacit knowledge and explicit knowledge on improving employee performance with learning organization as an intervening variable (Study at Regional Office II of Surabaya State Civil Service Agency)," in *Proceedings of the 1st International Conference on Business & Social Sciences (ICOBUSS)* (pp. 655–669). Surabaya: ICOBUSS, 2020.
- [38] F. Mohaghegh, H. Zaim, V. Dzenopoljac, A. Dzenopoljac, and N. Bontis, "Analyzing the effects of knowledge management on organizational performance through knowledge utilization and sustainability," *Knowledge and Process Management*, vol. 31, no. 3, pp. 261–272, 2024. <https://doi.org/10.1002/kpm.1777>
- [39] H. Soesanto and R. T. Handalani, "Bibliometric analysis of research trends on knowledge management based on author affiliations from Indonesia," *Andragogi: Journal of Technical Education & Religious Training*, vol. 11, no. 1, pp. 1–10, 2023.
- [40] Elprisdad, Suharto, and I. Subagja, "The effect of knowledge management and innovation on organizational performance through competitive advantages of company Tvri Jakarta," *Journal of Humanities and Social Science Research*, vol. 1, no. 1, pp. 19–33, 2022.
- [41] T. Rochendi, R. Rita, and I. D. Dhyanasari Dewi, "The importance of financial literacy for society," *Kompleksitas: Jurnal Ilmiah Manajemen, Organisasi Dan Bisnis*, vol. 11, no. 1, pp. 27–35, 2022. <https://doi.org/10.56486/kompleksitas.vol11no1.200>
- [42] A. F. Anvari, I. Soltani, and M. Rafiee, "Providing the applicable model of performance management with competencies oriented," *Procedia-Social and Behavioral Sciences*, vol. 230, pp. 190–197, 2016. <https://doi.org/10.1016/j.sbspro.2016.09.024>
- [43] M. Gürlek and M. Çemberci, "Understanding the relationships among knowledge-oriented leadership, knowledge management capacity, innovation performance and organizational performance: A serial mediation analysis," *Kybernetes*, vol. 49, no. 11, pp. 2819–2846, 2020. <https://doi.org/10.1108/K-09-2019-0632>
- [44] M. Isa and F. A. Rahmah, "Knowledge management and organizational performance: The mediating role of dynamic capabilities," *JBTI: Jurnal Bisnis: Teori Dan Implementasi*, vol. 14, no. 3, pp. 478–492, 2023. <https://doi.org/10.18196/jbti.v14i3.20404>
- [45] L. A. Al-Hakim and S. Hassan, "Core requirements of knowledge management implementation, innovation and organizational performance," *Journal of Business Economics and Management*, vol. 17, no. 1, pp. 109–124, 2016. <https://doi.org/10.3846/16111699.2012.720597>
- [46] C. López-Nicolás and Á. L. Meroño-Cerdán, "Strategic knowledge management, innovation and performance," *International journal of information management*, vol. 31, no. 6, pp. 502–509, 2011. <https://doi.org/10.1016/j.ijinfomgt.2011.02.003>
- [47] S. G. Ayinaddis, "The effect of innovation orientation on firm performance: evidence from micro and small manufacturing firms in selected towns of Awi Zone, Ethiopia," *Journal of Innovation and Entrepreneurship*, vol. 12, p. 26, 2023. <https://doi.org/10.1186/s13731-023-00290-3>
- [48] R. Al Aina and T. Atan, "The impact of implementing talent management practices on sustainable organizational performance," *Sustainability*, vol. 12, no. 20, p. 8372, 2020. <https://doi.org/10.3390/su12208372>
- [49] W. Nafei and E. Abdelaal, "The influence of authentic leadership on the psychological contract process in the hotel workplace," *Journal of the Faculty of Tourism & Hotels – University of Sadat City*, vol. 6, no. 2/1, pp. 1–15, 2022.
- [50] D. Sucahyati, I. Harymawan, and M. Nasih, "Corporate social responsibility (CSR) disclosure on politically connected-family firms," *Journal of Accounting and Investment*, vol. 23, no. 2, pp. 281–309, 2022. <https://doi.org/10.18196/jai.v23i2.14865>
- [51] M. Munizu, "The Impact of total quality management practices towards competitive advantage and organizational performance: Case of fishery industry in South Sulawesi Province of Indonesia," *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, vol. 7, no. 1, pp. 184–197, 2013.
- [52] O. S. Christian, "Competitive advantage and organisational performance in selected firms," *International Research Journal of Management, IT and Social Sciences*, vol. 7, no. 5, pp. 1–12, 2020.
- [53] J. Barney, M. Wright, and D. J. Ketchen Jr, "The resource-based view of the firm: Ten years after 1991," *Journal of management*, vol. 27, no. 6, pp. 625–641, 2001. <https://doi.org/10.1177/014920630102700601>

- [54] E. W. Antoro, N. Zuhroh, M. Irfani, J. R. Andrean, and R. Setia, "The role of Intellectual Capital Disclosure (ICD) in creating stock liquidity through market capitalization as an intervening variable (literature mapping and future research agenda)," *Balance Vocation Accounting Journal*, vol. 7, no. 2, pp. 146–160, 2023.
- [55] T. M. Shahwan and M. M. Fathalla, "The mediating role of intellectual capital in corporate governance and the corporate performance relationship," *International Journal of Ethics and Systems*, vol. 36, no. 4, pp. 531–561, 2020. <https://doi.org/10.1108/IJOES-03-2020-0022>
- [56] M. Nadeem, "Does board gender diversity influence voluntary disclosure of intellectual capital in initial public offering prospectuses? Evidence from China," *Corporate Governance: An International Review*, vol. 28, no. 2, pp. 100–118, 2020. <https://doi.org/10.1111/corg.12304>
- [57] E. W. Antoro, N. Zuhroh, S. G. Supriyadi, P. Arisanti, and M. Y. Setiawan, "Disclosure of intellectual capital in the era of the industrial revolution 4.0," *Balance Vocation Accounting Journal*, vol. 7, no. 2, pp. 101–119, 2023.
- [58] J. W. Creswell and J. D. Creswell, *Research design: Qualitative, quantitative, and mixed methods approaches*, 5th ed. Thousand Oaks, CA: Sage Publications, 2018.
- [59] J. F. Hair, J. J. Risher, M. Sarstedt, and C. M. Ringle, "When to use and how to report the results of PLS-SEM," *European Business Review*, vol. 31, no. 1, pp. 2–24, 2019. <https://doi.org/10.1108/EBR-11-2018-0203>
- [60] J. F. Hair Jr, M. L. D. da Silva Gabriel, and V. K. Patel, "Covariance-based structural equation modeling (CB-SEM) with AMOS: Guidance on its application as a marketing research tool," *REMark-Revista Brasileira de Marketing*, vol. 13, no. 2, pp. 44–55, 2014. <https://doi.org/10.5585/remark.v13i2.2718>
- [61] P. M. Bentler and C. P. Chou, "Practical issues in structural modeling," *Sociological Methods & Research*, vol. 16, no. 1, pp. 78–117, 1987. <https://doi.org/10.1177/0049124187016001004>
- [62] B. G. Tabachnick and L. S. Fidell, *Using multivariate statistics*, 4th ed. Boston, MA: Allyn & Bacon, 1998.
- [63] Sugiyono, *Business research methods*. Bandung, Indonesia: Alfabeta, 2017.
- [64] S. Darmawan, N. Agusvina, S. Lusa, and D. Senses, "Knowledge management factors and its impact on organizational performance: A systematic literature review," *International Journal on Informatics Visualization*, vol. 7, no. 1, p. 161, 2023. <https://doi.org/10.30630/ijov.7.1.1644>
- [65] J. Esken, S. Seuring, and S. Gold, "Knowledge management and competitive advantage in supply chains: A systematic review," *Journal of Business Research*, vol. 157, p. 113535, 2023.
- [66] X. Zhang, Y. Li, and Z. Chen, "The role of knowledge management in achieving competitive advantage in emerging markets," *Technological Forecasting and Social Change*, vol. 165, p. 120545, 2021.