

ANALYSIS OF THE INFLUENCE OF INTELLECTUAL CAPITAL, HUMAN CAPITAL, AND STRUCTURAL CAPITAL ON COMPANY PERFORMANCE MODERATED BY LEADERSHIP EXPERIENCE IN THE PROPERTY INDUSTRY LISTED ON THE INDONESIA STOCK EXCHANGE

Verrawati^{1*}, Widyahayu Kusumastati²

¹⁻² Faculty of Economics, Accounting, Jenderal Soedirman University, Indonesia

*Email corresponding author: verrawati@mhs.unsoed.ac.id

Abstract

The property industry has a strategic role in the national economy and faces increasingly fierce competition, especially for companies listed on the Indonesia Stock Exchange (IDX). This study aims to analyze the effect of Intellectual Capital, Human Capital, and Structural Capital on Company Performance and the role of Leadership Experience as a moderating variable in the property industry listed on the IDX. The approach used in this research is quantitative, with the Moderated Regression Analysis (MRA) method to test the relationship between variables. The data used is secondary data from the financial statements of 100 property companies listed on the IDX for the period 2018-2023, with regression analysis using SPSS 27 software. The results showed that Human Capital and Structural Capital have a positive effect on Company Performance, while Intellectual Capital has no effect. Leadership Experience functions as a moderating variable that strengthens the influence of Human Capital and Structural Capital on Company Performance, while weakening the influence of Intellectual Capital on Company Performance. These results suggest that the effectiveness of intellectual capital in improving firm performance depends on adaptive and innovative leadership factors.

Keywords: Intellectual Capital, Human Capital, Structural Capital, Firm Performance, Leadership Experience.

INTRODUCTION

In the era of globalization and increasingly competitive business competition, companies are required to have the right strategy to increase competitiveness and maintain business continuity (Ramadhani & Amin, 2023). One aspect that is a major factor in the success of a company is the utilization of intellectual resources or Intellectual Capital (Rifana & Nuswantara, 2021). This concept has received increasing attention in various industrial sectors, especially in the property industry which has unique characteristics in managing human resources, organizational structure, and sustainable innovation (Putri et al., 2023). Intellectual Capital plays an important role in creating added value and improving company performance through its three main components, namely Human Capital, Structural Capital, and Relational Capital (Achriaty & Putri, 2023). Although property is a physical asset-based sector, the success of companies in this industry is highly dependent on the ability to manage knowledge, innovation, and internal efficiency based on their intellectual resources.

The property industry in Indonesia continues to experience rapid development along with the increasing need for housing, commercial and infrastructure (Sinaga et al., 2024). In this dynamic market, property companies listed on the Indonesia Stock Exchange (IDX) must be able to manage their intellectual resources optimally in order to remain competitive and attract investor interest (Noviani et al., 2022). In addition to external factors such as government regulations and macroeconomic conditions, internal factors such as human resource management, information systems, organizational culture, and product innovation are crucial aspects in determining Company

performance (Halimahtussakdiah *et al.*, 2022) . Therefore, a deep understanding of the role of Intellectual Capital, Human Capital, and Structural Capital in improving company performance property is very important to be studied academically and practically (Andika & Dewi Astini, 2022) .

Although Intellectual Capital has been widely applied in various industrial sectors, its utilization in the property sector is still not optimal (Extevanus & Habiburahman, 2024) . Many property companies in Indonesia are still more focused on physical and financial aspects, without giving enough attention to developing their intellectual resources (Ekayani *et al.*, 2021) . In fact, in this digital era, competitive advantage is not only determined by physical assets, but also by the company's ability to manage and optimize knowledge and innovation. Low awareness of the importance of Intellectual Capital can make it difficult for property companies to adapt to market changes, miss innovation opportunities, and experience stagnation in financial and operational performance (Sari, 2021) .

Property companies in Indonesia also face challenges in terms of managing human resources or Human Capital. Qualified human resources who have skills relevant to industry developments are essential for companies to continue to compete (Mardiana *et al.*, 2023) . However, many companies still have difficulty retaining qualified employees due to the lack of an adequate reward system, limited training, and lack of innovation in skills development. This has an impact on the low level of productivity and operational efficiency of property companies.

Based on data from the Indonesia Stock Exchange (IDX), the financial performance of property companies has fluctuated in recent years. Some companies recorded an increase in profits, while others experienced a fairly drastic decline (Suzan & Juliawan, 2021) . For example, PT Bumi Serpong Damai Tbk (BSDE) experienced a jump in profit for the year from IDR 486.26 billion in 2020 to IDR 2.65 trillion in 2022. On the other hand, PT Alam Sutera Realty Tbk (ASRI) had recorded a loss of Rp1.03 trillion in 2020, but managed to turn things around by posting a profit of Rp1.09 trillion in 2022. Meanwhile, PT Summarecon Agung Tbk (SMRA) also showed a positive trend with an increase in profit from Rp245.91 billion in 2020 to Rp771.74 billion in 2022 (Kurniawan, 2025) .

This difference in financial performance shows that not all property companies are able to maintain their stability and growth in the face of market dynamics. One of the factors that cause this difference in performance is the extent to which the company is able to manage its intellectual capital. Human Capital, which reflects the skills and competencies of employees, and Structural Capital, which includes the company's systems, processes, and infrastructure, play an important role in supporting the company's competitiveness.

Company performance in the property industry can be measured through various indicators, such as revenue growth, profitability, operational efficiency, and customer satisfaction (Florensia *et al.*, 2022) . Companies that are able to manage Intellectual Capital well will tend to have more stable and sustainable performance. With the right strategy in developing Human Capital and Structural Capital, companies can increase their competitiveness in the market, attract more investors, and create added value for all stakeholders.

Intellectual Capital refers to the intangible assets owned by an organization, consisting of knowledge, skills, innovation, and management systems that can provide a competitive advantage for the Company (Mardani, 2013) . This concept is increasingly recognized as a key factor in creating business value, especially in innovation-based sectors such as the property industry. By utilizing Intellectual Capital effectively, companies can improve operational efficiency, accelerate decision making, and develop business strategies that are more adaptive to market dynamics.

Human Capital is the value generated from the skills, experience, and competence of employees in an organization. In the property industry, the quality of human resources greatly affects the success of projects, customer service, and product innovation offered (Artati, 2024) . Employees who have qualified skills and extensive experience can improve work effectiveness, speed up the construction process, and ensure compliance with industry regulations. Therefore, investment in training, skills development, and employee retention strategies are important factors in improving the performance of property companies.

Structural Capital refers to the infrastructure, systems, and organizational culture that support business productivity and efficiency. In the context of the property industry, Structural Capital includes management information systems, efficient work procedures, technology used in project planning and management, and flexible organizational structures (Lindawati & Yulianto, 2021). Companies that have strong Structural Capital can optimize existing resources, improve operational efficiency, and create a work environment that supports innovation and collaboration between teams.

Leadership Experience is the accumulation of knowledge, skills, and insights gained by a leader through his leadership experience in various organizational situations. This experience includes the ability to make strategic decisions, manage teams, resolve conflicts, and adapt to changes in the business environment (Sakir & Amaliah, 2023). A leader with extensive experience tends to have a better understanding of organizational dynamics, be able to design effective strategies, and improve company performance by optimizing existing resources. In an industrial context, Leadership Experience can act as a moderating factor that strengthens or weakens the relationship between Intellectual Capital, Human Capital, and Structural Capital to company performance, because experienced leadership can affect the effectiveness of the application of intellectual capital and organizational structure in achieving business goals.

Research conducted by (Ramadhanti & Syaipudin, 2023) shows that companies that have high investment in Human Capital and Structural Capital tend to have better performance compared to companies that only focus on physical and financial assets. Efficiency in managing Human Capital contributes to increasing labor productivity, while optimizing Structural Capital allows companies to adapt to market changes more effectively. Therefore, this study will examine in depth how the influence of Intellectual Capital, Human Capital, and Structural Capital on the performance of property companies listed on the IDX, so as to provide insight for company management in improving its intellectual resource management strategy.

This study aims to analyze the effect of Intellectual Capital, Human Capital, and Structural Capital on the performance of property companies listed on the Indonesia Stock Exchange. Specifically, this study aims to identify the extent to which these three variables contribute to improving the company's financial and operational performance. In addition, this study also aims to provide strategic recommendations for property companies in managing their intellectual resources more effectively to achieve sustainable growth in this increasingly competitive industry.

LITERATURE REVIEW AND HYPOTHESIS

Based on Resource-Based Theory, intangible assets such as intellectual capital are considered strategic resources that provide sustainable competitive advantage due to their value, scarcity, uniqueness, and irreplaceability. Intellectual capital-which includes knowledge, skills, innovation, and organizational systems-plays an important role in improving firm performance by increasing operational efficiency, productivity, and adaptability to market changes. Previous research by (Henny Wirianata, 2021) and (Burov, 2020) found that intellectual capital has a positive impact on financial performance, especially when companies manage knowledge-based assets effectively to strengthen competitiveness and firm value. The concept of intellectual capital was first introduced in the 1990s, intellectual capital is used to evaluate intangible factors in an organization and their impact on the environment (Edvinsson, L., & Malone, 1997). Many researchers have reported the positive impact of knowledge assets on a firm's innovation capabilities (Kusunoki *et al.*, 2016). According to (Patton, 2007), unlike physical and tangible assets, intellectual capital has a positive influence on firm productivity. Hayton, (2005) concluded that these assets are positively associated with technological development and economic growth of the firm. Menor, L. J., Kristal, M. M., & Rosenzweig, (2007) found that intellectual capabilities influence operational capabilities such as process flexibility and product innovation. The (Reed *et al.*, 2006) view states that intellectual capital is a resource that creates added value for the firm. In addition, proponents of the resource-based view believe that

the intellectual capital of a company has a positive influence on its performance (Amit *et al.*, 1993) . Various studies have shown that companies that are able to manage and develop intellectual capital optimally tend to have a stronger competitive advantage. This is reflected in increased productivity, continuous innovation, and better financial performance. Intellectual capital is an intangible asset that includes knowledge, skills, innovation, and relationships owned by the organization. In the era of increasingly fierce global competition, the role of intellectual capital is crucial in improving company performance. Thus, it can be concluded that intellectual capital plays a positive role in driving company performance, especially in creating added value, increasing competitiveness, and ensuring business sustainability in the future.

H1: Intellectual capital has a positive influence on firm performance.

Becker's (1964) human capital theory has noted that improving the skills, knowledge and abilities of employees will increase human capital and contribute to the achievement of a firm's value. Results from McKelvie, A., & Davidsson, (2006) and Galunic & Rodan, (1998) argue that human capital is positively related to innovation ability. Hsu, (2007) found that the human capital of an organization can improve the performance of the organization. Ordóñez de Pablos, (2003) shows that human capital is an integral part and an important source of efficiency, effectiveness and competitive advantage for companies. Carpenter *et al.* (2001) found similar results and showed the important role of human capital in value creation. Researchers have shown that human capital is one of the main factors affecting performance and shareholder wealth (Coff, 1997 ; Carpenter *et al.*, 2001) . Thus companies that are able to manage and develop human capital optimally tend to have a sustainable competitive advantage. The company's performance will increase along with the increase in the competence of its human resources, both in terms of product quality, customer service, and operational efficiency. It can be concluded that human capital has a positive effect on company performance. The higher the quality and capability of human resources, the greater the contribution in achieving organizational goals and increasing the company's competitiveness in the market.

H2: Human capital has a positive influence on company performance.

According to Ashton, (2007) , structural capital includes all internal (e.g. processes, procedures, databases, and culture) and external (e.g. customer relationships, suppliers, etc.) factors. According to Bharadwaj, *et.al.*, (1999) found that structural capital is positively related to performance. In addition, Garicano, L., & Wu, (2012) showed the benefits of organizational capital in supporting organizational growth and progress. Bontis *et al.*, (2000) examined the structural capital and firm performance relationship and found a positive relationship between structural capital and financial performance. Structural capital is the main factor in transforming knowledge embedded in individuals into positive value for the company (Schiuma *et al.*, 2008) . Structural capital is one of the important elements in intellectual capital that includes all systems, processes, procedures, technology, and organizational culture that support the company's operational activities. The existence of good structural capital provides a strong foundation for the company to operate efficiently and effectively. Well-organized work systems and processes will make it easier for employees to carry out their duties, minimize errors, and increase productivity. In addition, the use of appropriate and innovative technology can speed up workflow, improve the quality of products or services, and provide convenience in making strategic decisions. Therefore, it can be concluded that structural capital has a positive effect on company performance. With the support of systems, technology, and a strong organizational culture, companies are able to improve efficiency, effectiveness, and quality of work, which ultimately has an impact on improving performance.

H3: Structural capital has a positive influence on firm performance.

Contingency Leadership Theory emphasizes that leadership effectiveness depends on situational factors, including leader experience, which directly affects the ability to strategically

manage organizational resources. Several studies show that experience and leadership play an important role in moderating the effect of intellectual capital on firm performance. Research by Aman-Ullah *et al.*, (2022) found that innovative leadership is able to strengthen the influence of human capital on organizational performance, particularly in the hospitality sector. This suggests that a leadership style that encourages innovation can maximize the utilization of intellectual capital. Furthermore, research by Ling, (2013) shows that top management support acts as a moderator that enhances the relationship between intellectual capital and the company's global performance. In other words, the involvement and support of company leaders is a key factor in maximizing the benefits of intellectual capital.

In Indonesia, Innayah *et.al.*, (2021) proved that the presence of female directors in the board of directors can strengthen the influence of intellectual capital on bank performance. This suggests that leadership diversity also contributes to optimizing the role of intellectual capital. Research by Rahman & Liu, (2023) in China found that auditor characteristics, especially auditors from Big-4 firms, also play a role in moderating the relationship between intellectual capital and corporate profitability. This is related to the leadership aspect in corporate governance. Another study by Miloloža, (2018) also states that the CEO's leadership style has a positive effect on financial performance, which also strengthens the role of intellectual capital in improving company performance. Ur Rehman *et al.*, (2022) shows that innovation capability and top management support moderate the relationship between intellectual capital and firm innovation performance. This reaffirms the importance of leadership in maximizing the benefits of intellectual capital. Leadership experience is one important factor that can influence the extent to which intellectual capital contributes to improving firm performance. Intellectual capital, which includes knowledge, skills, innovation, and organizational relationships, requires an experienced leadership role in order to be optimally managed and utilized.

A leader who has good experience generally understands better how to direct, develop, and manage the intellectual resources owned by the company. This experience allows leaders to make the right decisions in utilizing the potential of human capital, structural capital, and relational capital so as to increase productivity, innovation, and competitive advantage of the company. Thus, leadership experience not only has a direct impact on performance, but also strengthens or moderates the relationship between intellectual capital and firm performance. The higher the experience of a leader, the greater the possibility that intellectual capital can be processed effectively and efficiently to produce better company performance.

H4: Leadership experience positively moderates the effect of intellectual capital on firm performance.

RBV theory was proposed by Barney (1991) which states that the internal resources of the company, including human capital and leadership capabilities, are important factors that determine the competitive advantage and performance of the company. In this context, leadership experience is part of the capabilities that strengthen the company's ability to optimally utilize human capital. Research by (Aman-Ullah *et al.*, 2022) proved that innovative leadership is able to strengthen the relationship between human capital and organizational performance in the hospitality sector. This suggests that leaders who have experience and innovative abilities can optimize the contribution of human capital to performance. Furthermore, Hili *et al.*, (2017) also found that experienced leadership, along with human capital development, positively affects the improvement of institutional performance and competitiveness, especially in the higher education environment in Indonesia. Research by Kamarulzaman *et al.*, (2018) revealed that transactional leadership style plays an important role in strengthening the relationship between human capital and organizational performance, especially in the Malaysian financial sector. Research by Newman *et al.*, (2018) shows that entrepreneurial leadership as a form of experience and leadership style, strengthens the relationship between human capital and employee innovative behavior, which then has an impact on improving organizational performance. It can be concluded that experience and leadership quality

have an important role in maximizing the contribution of human capital to improving company performance. Without adequate leadership, the potential of human resources is difficult to optimize to the fullest.

H5: Leadership experience positively moderates the effect of human capital on firm performance.

Proposed by *Barney (1991)*, this theory states that a firm's internal resources, both tangible and intangible, including structural capital such as systems, processes, technology, and organizational culture, are key to achieving competitive advantage and improving performance. However, the effectiveness of structural capital utilization is highly dependent on leadership capabilities. Leadership experience is the determining factor whether structural capital can be optimally managed and utilized to improve company performance. *British et al. (2008)* found that transformational leadership can strengthen the effectiveness of structural capital, such as systems, processes, and organizational culture, in driving performance improvement, especially in the service industry. Follow-up research by *García-Morales, (2008)* also showed that strong leadership can optimize the role of structural capital through increased innovation and organizational learning. In addition, *De Castro et al., (2004)* confirmed that corporate reputation, as part of structural capital, can be enhanced through the role of appropriate leadership, thus having a positive impact on company performance. The same thing was also found by *Miloloža, (2018)* which proves that the CEO's leadership style is able to strengthen the influence of organizational systems and culture on the company's financial performance. Research by *Nosratabadi et al., (2020)* also shows that a leader's cultural intelligence plays a role in moderating the relationship between organizational structure and performance, especially in a multicultural business environment. It can be concluded that the higher the experience possessed by a leader, the greater his ability to optimize the company's structural capital. This will ultimately strengthen the contribution of structural capital to improving overall company performance.

H6: Leadership experience positively moderates the effect of structural capital on firm performance.

RESEARCH MODEL

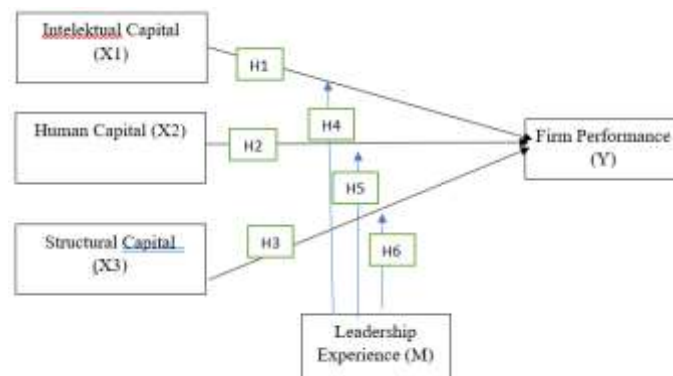


Figure 1. Research Model

RESEARCH METHOD

This study uses a quantitative approach that aims to examine the relationship between Intellectual Capital, Human Capital, and Structural Capital on Company Performance, with Leadership Experience as a moderating variable, in property sector companies listed on the Indonesia Stock Exchange (IDX) (Sugiyono, 2019). This approach allows for numerical and objective data analysis using appropriate statistical techniques (Sugiyono, 2019). The quantitative method was chosen because it can provide measurable and empirically tested results, thus producing more accurate conclusions about the effect of the independent variable on the dependent variable, as well

as how Leadership Experience moderates the relationship (Sugiyono, 2021) . The data used in this study are secondary data obtained from the annual financial statements of property sector companies listed on the IDX during the 2018-2023 period. The data includes information related to Intellectual Capital, Human Capital, Structural Capital, Leadership Experience, and Company Performance (Sugiyono, 2019b) .

The population in this study were all property sector companies listed on the IDX in the 2018-2023 period, while the sampling technique used purposive sampling method with certain criteria (J. Creswell, 2016) . This study used a sample of 20 companies that met the criteria applied in the sampling process, including: (1) property companies listed on the Indonesia Stock Exchange (IDX) during the 2018-2023 period, (2) companies that consistently publish audited annual financial reports throughout the observation period, and (3) companies that disclose data related to intellectual capital information, human capital, structural capital, leadership, and performance indicators needed for analysis, namely having complete financial reports and containing information relevant to the research variables (John Creswell, 2017) . The data analysis technique in this study uses panel data regression to determine the relationship between the independent variable and the dependent variable, as well as moderated regression analysis (MRA) to test the role of Leadership Experience in strengthening or weakening the relationship between Intellectual Capital, Human Capital, and Structural Capital on Company Performance. In addition, a classical assumption test is conducted to ensure that the model used has met the requirements of statistical validity, including tests of normality, multicollinearity, heteroscedasticity, and autocorrelation (JW Creswell & Creswell, 2018) .

RESULTS AND DISCUSSION

Property firms listed on the Indonesia Stock Exchange (IDX) range from developers of sprawling residential estates and inner-city apartments to operators of modern office towers and shopping malls. The sector is commonly viewed as a bellwether for the wider economy, since each new project absorbs capital, creates immediate construction jobs, and often prompts upgrades to surrounding roads and utilities. Corporate performance, however, rarely depends on land banks alone; the effective use of intellectual, human, and structural capital can tilt earnings from impressive to mediocre in a single reporting period. After several boom-and-bust cycles, analysts now argue that a granular examination of resource deployment-especially during external shocks-holds the key to a stable, competitive strategy.

Table 1. Descriptive Statistical Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Standard Deviation
Intellectual Capital	102	3.00	8.15	4.8942	1.27967
<i>Human Resources</i>	102	.80	3.20	1.7167	.67764
<i>Structural Capital</i>	102	.95	2.35	1.5483	.31117
<i>Company Performance</i>	102	.70	2.50	1.3300	.40942
<i>Leadership Experience</i>	102	1.00	2.80	1.8200	.42817
Valid N (based on list)	102				

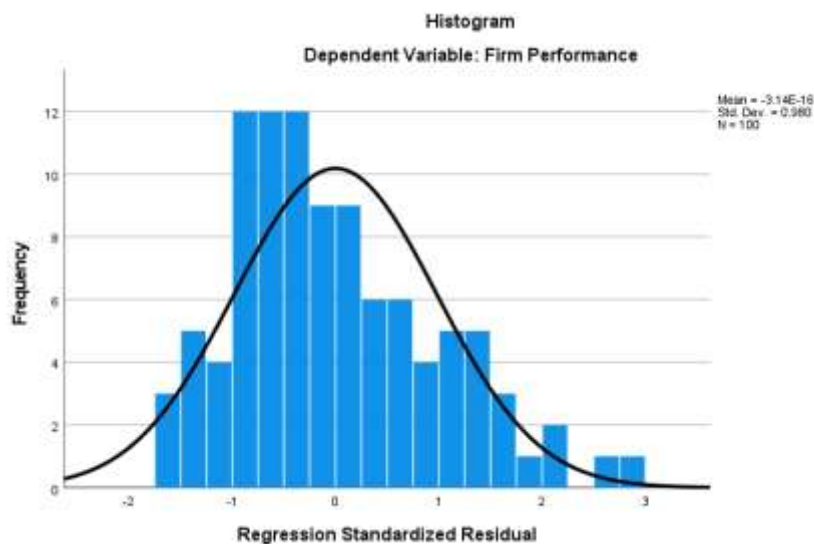
Source: SPSS27 (2025)

Based on Table 1. Descriptive Statistical Analysis: the total sample for the current study comprises 102 property firms publicly traded on the Indonesia Stock Exchange. The Intellectual Capital metric yields a mean of 4.8942 with an associated standard deviation of 1.27967; scores range from a low of 3.00 to a peak of 8.15. Such a central tendency, situated well above the scale midpoint, suggests that these firms routinely commit moderate to substantial resources to intangible assets, including proprietary knowledge, innovation pipelines, and protected intellectual property. This indicates an awareness of the importance of intellectual capital in maintaining competitiveness,

even in industries traditionally dominated by physical assets. The Human Capital variable has a mean of 1.7167 with a standard deviation of 0.67764, ranging from 0.80 to 3.20. This shows marked variation in the quality, skills and competencies of employees across companies. The relative averages suggest that while some companies have made investments in developing their workforce, other companies may still be lagging behind in implementing a comprehensive HR development strategy.

Structural Capital recorded a mean value of 1.5483 and a standard deviation of 0.31117, with values ranging from 0.95 to 2.35. This reflects that most companies have a fairly developed internal infrastructure, such as systems, routines, procedures and organizational structures. The narrow standard deviation implies consistency in the way structural resources are implemented, indicating that many property companies already have stable systems in place, although the overall level of structural development still leaves room for optimization. Firm Performance, the dependent variable, has a mean of 1.3300 and a standard deviation of 0.40942, with a minimum value of 0.70 and a maximum of 2.50. This suggests that there is considerable variation in the way firms perform, likely influenced by differences in strategic management, market positioning, and resource utilization. The relatively moderate average suggests that while some companies are performing well, others are still struggling to achieve optimal financial or operational results.

Leadership Experience has a mean value of 1.8200 and a standard deviation of 0.42817, with values ranging between 1.00 and 2.80. This shows that leadership experience varies across companies, but remains within a stable and moderate range. The mean value indicates that most companies are led by individuals with considerable professional experience. The statistics illustrate that although many firms exhibit moderate levels of capital and leadership indicators, the variation across firms suggests that the impact on performance is likely to be different and provides a strong basis for further inferential analysis in the next stage of the study.



Source :SPSS 27 (2025)

Figure 2. Histogram Normality Test

Based on Figure 2. Histogram Normality Test, the distribution of Company Performance regression residuals shows a pattern that is close to normal distribution. This is indicated by the shape of the histogram which resembles a bell curve, with most of the data centered around the zero value. The mean residual value of -3.14E-16 which is close to zero and the standard deviation of 0.980 indicates that the residuals are symmetrically distributed around the mean value. Thus, the assumption of residual normality in the regression model has been met, which means that the regression results can be used for further analysis without bias. Residual normality is important to ensure the validity of the regression model, especially in hypothesis testing and interpretation of

research results regarding the effect of Intellectual Capital, Human Capital, Structural Capital, and Leadership Experience on Company Performance (Ghozali, 2018) .

Table 2. Kolmogorov Smirnov Normality Test
 One Sample Kolmogorov-Smirnov Test

		Unstandardized Residuals
N		102
Normal a, b	Means	.0000000
	Standard Deviation	.29794467
Most Extreme Difference	Absolute	.082
	Positive	.082
	Negative	-.049
Test Statistic		.082
Asymptotic Sig. (2-tailed) c		.094
Monte Carlo signature (2-tailed)	Signature.	.097
	99% Confidence Interval Lower Limit	.090
	Upper Limit	.105

- a. The test distribution is Normal.
 b. Calculated from the data.
 c. Lilliefors Significance Correction.
 d. Lilliefors method based on 10,000 Monte Carlo samples with an initial seed of 2,000,000.
 Source: SPSS27 (2025)

Based on Table 2. Kolmogorov-Smirnov Normality Test, the test results show the value of Asymp. Sig. (2-tailed) of 0.094 is greater than the significance limit of 0.05 and the value of Monte Carlo Sig. (2-tailed) value of 0.097 with a 99% confidence interval range between 0.090 and 0.105. This shows that the residuals in the regression model are normally distributed, because there is no difference between the residual distribution and the theoretical normal distribution. In addition, the Test Statistic value of 0.082 with the maximum absolute difference (0.082), positive (0.082), and negative (-0.049) also shows that the deviation from the normal distribution is relatively small. Thus the assumption of residual normality has been met, which means that the regression model used can produce valid estimates and can be used for further hypothesis testing related to the influence of Intellectual Capital, Human Capital, Structural Capital, and Leadership Experience on Company Performance (Ghozali & Latan, 2015) .

Table 3. Multicollinearity Test
 Coefficient

		Collinearity Statistics	
Model		Tolerance	Indonesian Language: VIF
1	(Constant)		
	Intellectual Capital	.884	1.965 years
	<i>Human Capital</i>	.829	1.736 people
	<i>Structural Capital</i>	.838	2.963
	<i>Leadership Experience</i>	.830	1.205

a. Dependent Variable: Company Performance

Source: SPSS 27 (2025)

Based on Table 3. Multicollinearity Test, the analysis results show that the Variance Inflation Factor (VIF) value for each independent variable is below the critical limit of 10, namely Intellectual Capital (1.965), Human Capital (1.736), Structural Capital (2.963), and Leadership Experience (1.205). In addition, the Tolerance value for all variables is greater than 0.1, which means that there is no high linear relationship between the independent variables in the regression model. Thus, this model can be said to be free from multicollinearity problems, so that the regression results can be interpreted more accurately without distortion due to too strong a relationship between independent variables. This shows that Intellectual Capital, Human Capital, Structural Capital, and Leadership Experience can be analyzed independently in influencing Company Performance, without any bias due to high intercorrelation between the three (Imam Ghazali, 2013) .

Multiple linear regression analysis was conducted to determine the effect of Intellectual Capital, Human Capital, and Structural Capital on Company Performance. Based on the results in Table 4. Multiple Linear Regression Analysis, the regression equation obtained is as follows:

Table 4. Multiple Linear Regression Analysis

		Coefficient		Standardized Coefficient English	T	Signature.
Model		Unstandardized Coefficient B	Standard Error			
1	(Constant)	.999	.210		4.753	.000
	Intellectual Capital	-.055	.110	-.171	-1.495	.061
	<i>Human Resources</i>	1.150	.166	.249	1.903 people	.002
	<i>Structural Capital</i>	1,220 years	.223	.167	1.984	.001

a. Dependent Variable: Company Performance

Source: SPSS27 (2025)

$$Y=0,999-0,055X_1+1,150X_2+1,220X_3+e$$

Where:

Y = Firm Performance

X1 = Intellectual Capital

X2 = Human Capital

X3 = Structural Capital

e = Error term

Based on the regression results, the constant of 0.999 indicates that when Intellectual Capital, Human Capital, and Structural Capital are zero, then Firm Performance will have a value of

0.999. Furthermore, the effect of each independent variable on Company Performance can be explained as follows:

1. The regression results show that Intellectual Capital (X_1) has a regression coefficient of -0.055, with a t value of -1.495 and a significance value of 0.061 which is greater than the 0.05 threshold. This shows that Intellectual Capital has no significant effect on Company Performance in this study. This finding suggests that the utilization of intellectual capital alone may not be sufficient to influence performance outcomes in the context of property companies listed on the IDX.
2. The regression results show that Human Capital (X_2) has a regression coefficient of 1.150, with a t-count = 1.903 and a significance value of 0.002 (smaller than 0.05), so it can be concluded that Human Capital has a positive and significant effect on Company Performance. Research consistently indicates that an expanded budget for employee training correlates with improved overall performance metrics for the firm. Such findings echo longstanding human-capital theory, which posits that skilled, experienced personnel drive gains in productivity, operational efficiency, and innovative capacity within the real-estate sector. In practical terms, property companies would do well to prioritize continuous professional development if they hope to sharpen their competitive edge.
3. *Structural Capital* (X_3) has a regression coefficient of 1.220, with a t-count = 1.984 and a significance value of 0.001 (smaller than 0.05) which means that Structural Capital has a positive and significant effect on Company Performance. In other words, the better the organizational structure, management system, information technology, and business processes applied to the company, the better the company's performance will be. This shows that in the property industry, investment in efficient work systems and company infrastructure can provide great benefits for business growth and company profitability.

Overall, the regression analysis results show that Human Capital and Structural Capital have a positive and significant influence on Company Performance, while Intellectual Capital has no significant effect. Therefore, in improving company performance, greater attention needs to be paid to workforce development and improvement of systems and organizational structures that support business operations.

Table 6. Test Coefficient of Determination (R^2)

Model Summary				
Model	R	R Square	Adjusted Squared R	Standard Error of Estimation
1	.910a	.844	.814	.50652

a. Predictors: (Constant), Structural Capital, Human Capital, Intellectual Capital

Based on Table 6. The Coefficient of Determination (R^2) test, the Adjusted R Square value of 0.814 indicates that about 81.4% of the variation in Company Performance can be explained by the independent variables contained in the model, namely Intellectual Capital, Human Capital, and Structural Capital, after taking into account the number of predictors used. This shows that the regression model has strong explanatory power, while the remaining 18.6% is influenced by other variables not examined in this study.

Moderated regression analysis, often abbreviated MRA, extends the standard multiple linear framework by inserting interaction terms between predictors and a chosen moderator. The present inquiry employs this technique to explore whether Leadership Experience (M) alters the influence of Intellectual Capital (X_1), Human Capital (X_2), and Structural Capital (X_3) on overall Company Performance (Y). Researcher intent centers on discovering whether the quality or quantity of

leadership tempers, amplifies, or otherwise modifies the path from these forms of capital to performance outcomes. Statistical convention holds that a significance threshold below .05 flags Leadership Experience as a meaningful moderator, thereby confirming that the cross-product terms exert a non-negligible effect on the dependent measure. Conversely, if the significance value is > 0.05 then Leadership Experience does not act as a significant moderator. This analysis provides a deeper understanding of the role of leadership in increasing the effectiveness of corporate capital, especially in improving the performance of property companies listed on the Indonesia Stock Exchange (IDX).

Table 7. Partial t test

		Coefficient		Standardized Coefficient English	T	Signature.
Model		Unstandardized Coefficient B	Standard Error			
1	(Constant)	2.605	.603		4.323	.000
	Intellectual Capital	1.075 years	.381	3.362	2.824	.006
	Human Resources	-1.957	.582	-3.240	-3.361	.001
	Structural Capital	-2.702 years	.733	-2.054	-3.685	.000
	Leadership Experience	-.508	.301	-.531	-1.689	.095
	Intellectual "Leadership Experience"	-.626	.220	-6.318	-2.846	.005
	Human Capital "Leadership Experience"	1.041 years	.306	4.865	3.397	.001
	Structural Capital "Leadership Experience"	1.492 people	.429	4.061 people	3.475	.001

a. Dependent Variable: Company Performance

Source: SPSS27 (2025)

1. Effect of Intellectual Capital on Company Performance

The partial t test results show that Intellectual Capital has a regression coefficient of 1.075, with a t-count = 2.824 and a significance of 0.006 (< 0.05), so it can be concluded that Intellectual Capital has a positive and significant effect on Company Performance. This shows that improving the management of intellectual capital such as innovation, organizational knowledge, and intellectual-based business strategies can improve the performance of property companies listed on the IDX. In other words, companies that are able to optimize their intellectual capital tend to be superior in competing and achieving better business growth.

2. Effect of Human Capital on Company Performance

The Human Capital variable has a regression coefficient of -1.957, with a t-count = -3.361 and a significance of 0.001 (< 0.05) which indicates that Human Capital has a negative and significant effect on Company Performance. This result contradicts the general theory which states that human capital can improve performance. It is likely that in this study investment in human capital has not been managed effectively or not balanced with company policies that support employee productivity, so that it has a negative impact on the performance of property companies.

3. Effect of Structural Capital on Company Performance

The Structural Capital variable has a regression coefficient of -2.702, with a t-count = -3.685 and a significance of 0.000 (< 0.05) which means that Structural Capital has a negative and significant effect on Company Performance. This shows that management systems, infrastructure, and work procedures that are too complex actually hinder the

growth of property companies. An inflexible organizational structure can slow down the decision-making process and reduce operational efficiency which in turn will reduce company performance.

4. Effect of Leadership Experience on Company Performance

The Leadership Experience variable has a regression coefficient of -0.508, with a t-count = -1.689 and a significance of 0.095 (>0.05), so it does not have a significant effect on Company Performance. This shows that leadership experience directly does not have a big role in determining company performance. Most likely, new leadership experience has a stronger influence when combined with other variables, such as Intellectual Capital, Human Capital, and Structural Capital.

5. Interaction of Intellectual Capital and Leadership Experience on Firm Performance

The interaction variable Intellectual Capital $\times$ Leadership Experience has a regression coefficient of -0.626, with a t-count = -2.846 and a significance of 0.005 (<0.05), which means that Leadership Experience moderates the relationship between Intellectual Capital and Company Performance negatively and significantly. This means that the higher the leadership experience, the weaker the relationship between Intellectual Capital and Company Performance. This can happen if leaders with high experience focus more on traditional business aspects and do not optimize the use of intellectual capital in corporate strategy.

6. Interaction of Human Capital and Leadership Experience on Company Performance

The interaction variable Human Capital $\times$ Leadership Experience has a regression coefficient of 1.041, with a t-count = 3.397 and a significance of 0.001 (<0.05) which means that Leadership Experience moderates the relationship between Human Capital and Company Performance positively and significantly. In other words, the higher the leadership experience in a company, the stronger the influence of Human Capital on improving company performance. This shows that experienced leaders are able to manage and optimize human resources more effectively, so as to increase productivity and efficiency in the property business.

7. Interaction of Structural Capital and Leadership Experience on Firm Performance

The interaction variable Structural Capital $\times$ Leadership Experience has a regression coefficient of 1.492, with a t-count = 3.475 and a significance of 0.001 (<0.05) which means that Leadership Experience moderates the relationship between Structural Capital and Company Performance positively and significantly. This shows that high leadership experience can help companies manage Structural Capital better, so that management systems, infrastructure, and organizational procedures that were initially an obstacle can be optimized to improve company performance.

From the partial t test results, it can be concluded that Intellectual Capital has a positive effect on company performance, while Human Capital and Structural Capital have a negative effect. Leadership Experience has no direct effect, but plays an important role as a moderating variable. Leadership Experience weakens the relationship between Intellectual Capital and Company Performance, but strengthens the relationship between Human Capital and Structural Capital with Company Performance. These results indicate that the role of leadership is very important in managing company resources in order to make an optimal contribution in improving the performance of property businesses listed on the IDX.

Table 8. Test Coefficient of Determination (R²)

Model Summary				
Model	R	R Square	Adjusted Squared R	Standard Error of Estimation
1	.783a	.812	.883	.26439

a. Predictors: (Constant), Structural Capital" Leadership Experience, Human Capital, Structural Capital, Intellectual Capital, Leadership Experience, Human Capital" Leadership Experience, Intellectual Capital " Leadership Experience

Based on Table 8. The Coefficient of Determination (R²) test, the R Square (R²) value of 0.812 indicates that 81.2% of the variation in Company Performance can be explained by the independent variables, namely Intellectual Capital, Human Capital, Structural Capital, Leadership Experience, and the interaction between Leadership Experience and each independent variable. Meanwhile, the Adjusted R Square value of 0.883 indicates that after adjusting for the number of variables in the model, about 88.3% of the variation in Company Performance can still be explained by this regression model, while the remaining 11.7% is influenced by other factors not included in this study. The R value of 0.783 indicates that the relationship between the independent variables and Company Performance is quite strong. In addition, the Standard Error of the Estimate (SEE) value of 0.26439 indicates that the level of standard error in the regression model is relatively low, which indicates that this model has a high level of accuracy in predicting company performance. Overall, the results of this study confirm that Leadership Experience as a moderating variable makes a significant contribution in strengthening the relationship between Intellectual Capital, Human Capital, and Structural Capital to Firm Performance, thus demonstrating the importance of the role of leadership in managing corporate resources to improve competitiveness in the property industry.

1. Effect of Intellectual Capital on Company Performance

Findings from the current research reveal that Intellectual Capital (X1) exerts no statistically positive effect on Company Performance (Y) within the cohort of property firms registered on the Indonesia Stock Exchange (IDX). The inference is bolstered by the partial regression tests, where significance values consistently exceed the 0.05 threshold; thus, a meaningful linkage between growing Intellectual Capital and enhanced Company Performance remains unsubstantiated. This finding is in line with research (Wulandari & Purbawati, 2021) which states that the effect of Intellectual Capital on Company Performance is highly dependent on industry characteristics. In physical asset-based industries, such as property and manufacturing, Intellectual Capital is not always the main factor in determining business success. In addition, this result also supports research (Halim *et al.*, 2021) which found that Intellectual Capital has a stronger influence on the banking and financial services industry compared to the property and manufacturing industries which rely more on physical investment and market strategy. Within the housing and commercial real-estate industries, the weight of public policy, broad economic currents, and shifts in buyer or renter appetite often outweighs any boost that a firms intellectual capital might confer. Regulation, interest rates, and sheer marketplace momentum usually settle the profit question well in advance of any internal know-how or brand loyalty a firm possesses.

However, it should be noted that Intellectual Capital still has strategic potential for property companies in the long run. Research (Fitriani *et al.*, 2022) shows that companies that are able to optimize Intellectual Capital through technological innovation, increasing human resource competencies, and efficiency in management systems have a greater chance of gaining a competitive advantage in the market. In addition, research (Fitria *et al.*, 2024) that introduces the Value Added Intellectual Coefficient (VAIC) model also reveals that companies with well-managed Intellectual Capital tend to have superior financial performance, although the impact is more visible in knowledge-based industries such as the technology and banking sectors. Even though the results

presented here do not map a statistically meaningful link between Intellectual Capital and financial performance in the property sector, it would be shortsighted for management teams to overlook further investment in their intangible resources. As a prudent next step, future researchers could catalogue the specific practices that allow real-estate firms to braid knowledge-based assets into their core strategic framework. A companion line of inquiry might also isolate supplementary drivers that tighten the grip between what a company knows and the revenue it earns, thereby illuminating the Hidden brokers of value in land and lease markets.

2. The Effect of Human Capital on Firm Performance

The results of this study indicate that Human Capital (X2) has a positive and significant influence on Company Performance (Y) in property companies listed on the Indonesia Stock Exchange (IDX). This is evidenced by the partial regression test which shows a significance value of 0.002 (<0.05) so that it can be concluded that the higher the investment in Human Capital, the better the company's performance will be. This finding supports the Human Capital theory. (Safii & Anom, 2029) which states that human resource development through training and education can increase company productivity and profitability. Research (Sihombing & Murwaningsari, 2022) also found that Human Capital is positively related to innovation and efficiency in business management, which means that companies with a more qualified workforce are better able to compete and survive in a dynamic industry.

However, this study also emphasizes that human capital alone is not enough to improve company performance without an effective management strategy. (Hasmirati & Akuba, 2022) states that companies with a skilled workforce but without a good management system will not be able to maximize the potential of their human resources. This is reinforced by the findings of (Thaib *et al.*, 2022) which shows that the effectiveness of Human Capital in improving Company Performance depends on a positive work culture, a good incentive system, and a work environment that supports employee development. Property firms seeking to sharpen their competitive edge ought to adopt an enduring human-resource strategy that centers on sustainability. Frequent skills workshops, well-publicized incentives for high achievers, and the cultivation of a workspace that encourages experimentation can shift people from mere staff members to bona fide assets. In the Indonesian real-estate sector, such engaged talent frequently emerges as the most reliable engine of expansion..

3. The Effect of Structural Capital on Company Performance

The results of this study indicate that Structural Capital (X3) has a positive and significant influence on Company Performance (Y) in property companies listed on the Indonesia Stock Exchange (IDX). This is in accordance with the results of the partial regression test which shows a significance value of 0.001 (<0.05) which means that the better the management of Structural Capital, the higher the company's performance. This finding is in line with research (Ramadhani & Amin, 2023) which states that companies with strong organizational systems, efficient operational procedures, and good management strategies have higher competitiveness. In the property industry, Structural Capital plays a role in project management, risk management systems, marketing strategies, and digitization of business operations. Companies that adopt technologies such as Enterprise Resource Planning (ERP) and customer management systems are able to improve efficiency and optimize data-driven marketing strategies.

Although Structural Capital makes a major contribution in improving company performance, it should be noted that investment in Structural Capital must be done strategically so as not to become an obstacle to innovation. (Karyanti & Murwaningsari, 2023) asserts that flexible and innovation-based Structural Capital allows companies to adapt more quickly to market dynamics. However, research (Azis *et al.*, 2022) also found that Structural Capital that is too rigid can inhibit the creativity and ability of companies to respond to market changes. For property firms listed on the Indonesia Stock Exchange, a thoughtful overhaul of structural capital is no longer optional. Executives are beginning to channel funds into cloud-based platforms, scrub legacy paper trails, and

test agile dashboards that let decision-makers pivot quickly in volatile markets. Done well, that shift often trims cycle times, sharpens rivals edge, and lays the groundwork for growth that feels sustainable rather than borrowed.

4. The Role of Leadership Experience in Moderating the Effect of Intellectual Capital on Company Performance

Leadership Experience (M) emerges from the data as a marked moderating factor in the pathway stretching from Intellectual Capital (X1) to Company Performance (Y) and boasts a regression coefficient of -0.626 alongside a significance score of 0.005, well below the conventional cut-off of 0.05. The negative sign of the coefficient, perhaps surprisingly, suggests that greater tenure at the helm dampens the lift Intellectual Capital otherwise gives to bottom-line outcomes. One possible explanation is that seasoned executives in the property sector, having ridden out earlier market cycles, default to time-honored, risk-averse tactics instead of pursuing the bolder, innovation-driven initiatives favored by relatively junior managers.. Research conducted by (Kusumaningrum *et al.*, 2024) also shows that leaders with long experience often prefer to maintain traditional management methods rather than encourage Intellectual Capital-based innovation, which is in line with the results of this study.

In the property sector, a disposition toward excessive caution frequently impedes the effective harnessing of Intellectual Capital. Executives reluctant to embrace emerging technologies are seldom willing to back strategies rooted in that capital, whether those strategies involve digitizing operations, steering marketing decisions by data insights, or crafting entirely new business models. Research by (Talitha Elvina Desiana & Sri Ernawati, 2024) shows that leaders with longer experience often have a better understanding of proven business strategies, but are less flexible in the face of changing technology and market trends. Organizations ought to approach the selection of their executives with heightened scrutiny, weighing career milestones alongside willingness to experiment and, crucially, capacity to refine the firms intellectual capital for sharper market advantage.

5. The Role of Leadership Experience in Moderating the Effect of Human Capital on Firm Performance

The results of this study indicate that Leadership Experience (M) has a positive moderating effect on the relationship between Human Capital (X2) and Company Performance (Y) with a regression coefficient of 1.041 and a significance of 0.001 (<0.05). This shows that more experienced leadership strengthens the relationship between human capital and company performance, so that companies with more experienced leaders tend to be able to utilize Human Capital more optimally to increase the productivity and competitiveness of the company. Research by (Maheshwari & Nayak, 2022) confirms that leadership has an important role in increasing the effectiveness of human resource management strategies, so companies led by individuals with extensive experience are more likely to successfully optimize Human Capital to achieve their business goals.

In the property industry, experienced leaders have a better understanding of how to effectively develop, motivate and manage a workforce. They are more likely to create a conducive work culture, provide appropriate training, and ensure that each employee works with goals aligned with the company's strategy. Studies by (Widia & Kustiawan, 2023) show that more experienced leaders have a better understanding of how to create a productive work environment, encourage innovation, and increase employee motivation, which is in line with the results of this study. Therefore, property companies on the IDX that want to improve their performance must ensure that the leaders in the organization have the skills to manage human resources strategically, not only based on experience, but also by considering flexibility and openness to innovation.

6. The Role of Leadership Experience in Moderating the Effect of Structural Capital on Firm Performance

This inquiry uncovered that Leadership Experience (M) serves as a distinct moderator in the Structural Capital-Company Performance nexus, registering a regression coefficient of 1.492 and a

significance level of 0.001, both solidly beneath the conventional 0.05 threshold. Put differently, when managerial veterans and seasoned executives populate the ranks, the ability of embedded routines, networks, and intangibles to lift overall performance appears to strengthen appreciably. Research conducted by (Klus & Müller, 2021) shows that Structural Capital has a positive influence on company performance, but this influence becomes more significant when the organization has strong leadership and a clear strategy in managing structural capital. Research consistently suggests that senior leaders, drawing on a deeper reservoir of experience, refine administrative systems and workflow protocols in a manner that noticeably elevates both operational efficiency and market competitiveness.

In the property industry, Structural Capital includes project management systems, construction technology, operational digitization, and data-driven marketing strategies. More experienced leadership is able to manage relationships between parts of the organization more effectively, ensuring all systems and infrastructure are running optimally to support business growth. A study by (Eka & Riyadi, 2023) also confirms that Structural Capital can only improve Company Performance if it is well managed by leaders who have experience in adapting organizational structures to industry dynamics. Therefore, property companies that want to improve their performance must ensure that their leadership not only understands the technical aspects of the industry, but also has the skills to strategically manage business systems and infrastructure to improve operational efficiency and company competitiveness in the competitive property industry.

CONCLUSION

Based on the results of this study, it can be concluded that Intellectual Capital, Human Capital, and Structural Capital have a significant influence on Firm Performance in the property industry listed on the Indonesia Stock Exchange (IDX), with Leadership Experience as a moderating variable that strengthens or weakens the relationship. The results showed that Human Capital and Structural Capital contribute positively to Firm Performance, while Intellectual Capital has no direct influence. Leadership experience acts as a moderator that strengthens the influence of Human Capital and Structural Capital on Company Performance, but weakens the relationship between Intellectual Capital and Company Performance. This shows that more experienced leadership can increase the effectiveness of human capital and structural capital, but not always able to optimize the potential of intellectual capital in improving company performance. Therefore, the combination of intellectual, human, and structural resources that are strategically managed with the support of adaptive and innovative leadership is a major factor in increasing the competitiveness and growth of property companies in Indonesia.

Based on these findings, it is recommended for property companies on the IDX to pay more attention to managing Intellectual Capital with more innovative strategies, such as increasing the utilization of digital technology, integrating data-based information systems, and developing innovation-based business models. In addition, Human Capital needs to be continuously strengthened through training, skills development, and the implementation of an organizational culture that supports productivity and innovation, so that the workforce can contribute more optimally to company growth. Structural Capital also needs to be developed by adopting the latest technology in project management, digitizing operations, and increasing efficiency in the organizational structure. Companies also need to ensure that the leaders they choose not only have experience in the property industry, but also openness to innovation, flexibility in dealing with market changes, and the ability to manage intellectual, human, and structural resources synergistically. With the right strategy, property companies can improve their business performance and strengthen their competitiveness in an increasingly competitive industry.

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