

## **Human Capital Strategy in Enhancing Business Performance: The Moderating Role of External Environment**

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### ***Abstract***

This study aims to examine the influence of Human Capital on Business Performance and the moderating role of the External Environment in private banks in Jambi. The research method used is a quantitative approach with a survey as the main instrument. The research respondents were private bank employees selected based on the criteria of having worked for at least one year and being directly involved in operational activities related to achieving business performance. The collected data were analyzed using Structural Equation Modeling based on Partial Least Squares (SEM-PLS), which allows for simultaneous testing of relationships between latent variables. The results show that human capital plays a significant role in improving bank business performance. Good human resource quality, reflected in employee competence, skills, motivation, and professionalism, contributes to increased operational efficiency, customer service quality, and bank competitiveness. This study also found that the external environment acts as a moderating variable that strengthens the relationship between human capital and business performance. When external conditions are supportive, such as economic stability, conducive banking regulations, and market competition that encourages innovation, the contribution of human capital to business performance becomes greater. This study emphasizes the importance of human resource management strategies that are integrated with the dynamics of the external environment. Practically, these findings provide direction for private bank management to not only focus on developing employee quality, but also be adaptive to changes in the business environment in order to achieve sustainable performance.

**Keywords:** Human Capital Strategy, Business Performance, External Environment

### ***Abstrak***

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## **INTRODUCTION**

Changes in the global business environment and the development of digital technology require companies, particularly in the banking sector, to have quality human resources. In the knowledge-based

economy, competitive advantage no longer relies solely on physical assets or financial capital, but rather on an organization's ability to manage human capital. Superior human capital enables organizations to innovate, increase efficiency, and maintain business sustainability amidst increasingly fierce competition (Badhon et al., 2024).

The private banking sector faces major challenges in the form of strict regulations, interbank competition, and disruption from digital financial services. The quality of human capital is a key factor in determining the successful implementation of business strategies. However, the effectiveness of human capital cannot be separated from the influence of the dynamic external environment. Changes in economic conditions, government policies, and customer preferences can strengthen or weaken the influence of human capital on business performance (Purwanti et al., 2023). Therefore, research on the relationship between human capital and business performance, considering the external environment as a moderating variable, is highly relevant, especially for private banks in regions like Jambi.

Human capital has long been recognized as a strategic asset for organizations. Investments in training, competency development, and talent management have been shown to positively impact productivity, innovation, and overall business performance. Research by Chandra et al. (2022) shows that human capital, along with social capital, contributes significantly to a company's competitive advantage. Meanwhile, research by Badhon et al. (2024) confirms that human capital serves as a catalyst for improving organizational performance through the implementation of targeted business analytics and human resource strategies. Therefore, strengthening human capital is a crucial strategy for achieving sustainable business growth.

In addition to internal factors, external environmental variables also play a crucial role as a moderating context for human capital effectiveness. According to Ndegwa et al. (2020), market competition drives organizations to more effectively utilize internal resources, including human capital, to increase profitability and business sustainability. Huynh (2018) adds that external environmental uncertainty influences managerial decision-making processes, so human capital-based strategies must always be aligned with external dynamics. In the banking industry, which is heavily influenced by macroeconomic and regulatory conditions, this variable is key to understanding how human capital can truly contribute to business performance.

Previous literature consistently emphasizes the positive relationship between human capital and organizational performance. However, most research has been conducted in the manufacturing, technology, or entrepreneurship sectors, while the financial services sector, particularly private banking in regional areas, remains rarely explored (Dar & Mishra, 2019; Tjahjadi et al., 2024). This is despite the unique characteristics of banking, such as strict regulations, complex competition, and high dependence on public trust. This creates a significant research gap, particularly in understanding how human capital operates in the local banking context. From a theoretical perspective, most research still refers to the resource-based view (RBV), which views human capital as a primary internal resource for organizations. However, this perspective tends to ignore the external dynamics that influence human

capital utilization. Contingency and dynamic capabilities theories emphasize that organizational excellence is highly dependent on the ability to adapt to changing environments (Otache & Mahmood, 2015). Therefore, there is a theoretical gap in explaining how human capital interacts with external factors to influence business performance.

This research attempts to address this gap by integrating the RBV and dynamic capabilities frameworks. Thus, human capital is viewed not only as a static resource but also as a dynamic capability that can be developed and adapted to external conditions. In the context of private banks, the quality of human resources will be tested to determine their ability to respond to regulatory changes, competition, and evolving customer needs.

Furthermore, this study positions the external environment as a moderating variable, clarifying the relationship between human capital and business performance. Findings from Yasa et al. (2018) indicate that a supportive external environment can strengthen the implementation of resource-based strategies, resulting in improved performance. Conversely, unfavorable external conditions can be a barrier, even if an organization possesses strong human capital. Thus, this mechanism allows the study to provide a more comprehensive picture of the internal and external factors that influence banking performance.

Jambi Province is a region with economic growth driven by the plantation, trade, and service sectors. Private banks in Jambi play a vital role in supporting local economic activity, both in lending and providing digital banking services. However, they also face challenges such as limited resources, intense competition from national banks and state-owned enterprises, and customer demands for faster and more innovative services.

In this situation, the ability of private banks in Jambi to utilize human capital is a determining factor in competitiveness. The fluctuating external environment, such as changes in fiscal and monetary policies, regional economic conditions, and digitalization trends, further emphasizes the need for this research. By taking the local context of Jambi, this study is expected to provide relevant empirical contributions and practical solutions for private banks in managing human capital to improve business performance. This study aims to analyze the influence of human capital on business performance in private banks in Jambi and examine the role of the external environment as a moderating variable in this relationship. Specifically, this study seeks to answer the questions: to what extent can human capital improve business performance, and how its influence changes when the external environment is taken into account.

The contribution of this research is divided into two aspects. First, from an academic perspective, this research enriches the literature by integrating the RBV and dynamic capabilities in explaining the relationship between human capital, the external environment, and business performance, particularly in the regional banking sector. Second, from a practical perspective, the results of this study provide strategic recommendations for private bank management in Jambi in managing human capital more effectively, while also considering external factors that can strengthen or weaken its impact on business

performance. Thus, this research is expected to make a significant contribution in bridging the gap between banking management theory and practice.

### ***Human Capital and Business Performance***

Human capital is a strategic resource that determines an organization's competitiveness. In the context of a knowledge-based economy, the quality of human resources is a catalyst for innovation, strategic growth, and increased organizational productivity (Badhon et al., 2024). Organizations that invest in human capital, particularly through training and development, tend to reap significant benefits in the form of improved performance and competitive advantage (Chandra et al., 2022). These findings confirm that human capital functions not only as a supporting factor but also as a key driver of organizational success.

Previous literature reinforces the direct link between human capital and business performance. Gabrielsson and Politis (2012) demonstrated that work experience is a crucial asset for entrepreneurs in generating innovative business ideas that impact performance improvement. Furthermore, Dar and Mishra (2019) emphasized the importance of aligning human capital measurements with organizational goals, which can improve a company's internationalization performance. In other words, employee education, skills, and experience play a direct role in improving an organization's output and operational efficiency.

However, several studies highlight the complexity of this relationship. Tjahjadi et al. (2024) found that human capital readiness does not always have a direct impact on business performance, but rather a stronger influence on business sustainability. This finding suggests that while the direct impact may vary, human capital still has a significant contribution to long-term strategic success. Furthermore, research by Zhang et al. (2010) emphasized that human capital dimensions can differ in relevance across industry sectors, for example, between high-tech and traditional sectors. Thus, the flexibility of human capital across contexts underscores its role as a critical factor in cross-industry business performance. Synthesizing, it can be concluded that the higher the quality of human capital within an organization, the greater the potential for improved business performance. This applies to both short-term benefits in the form of efficiency and productivity, as well as long-term benefits in the form of sustainability and competitive advantage.

### **Hypothesis 1: Human capital has a positive effect on business performance.**

#### *External Environment Plays a Role as a Moderating Variable in the Relationship Between Human Capital and Business Performance: A Study of Private Banks*

Although human capital is a key factor in improving business performance, its effectiveness is not always linear. Its influence can be strengthened or weakened by the external environment in which an organization operates. The external environment encompasses economic, political, social, technological, and regulatory factors that influence an organization's strategy and performance (Ting, 2012). In the banking industry, which is highly sensitive to macroeconomic dynamics and policy

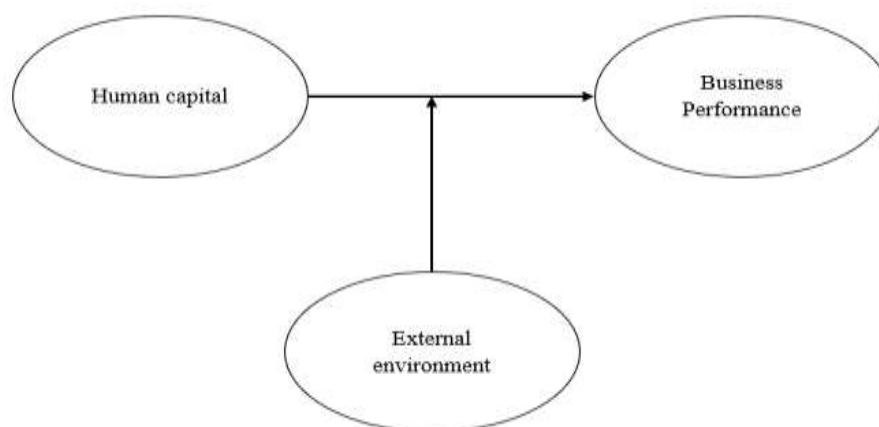
changes, the external environment plays a crucial role in determining the extent to which human capital can be optimized to achieve business objectives.

Several studies confirm that external uncertainty influences how organizations utilize internal resources. Huynh (2018) explains that environmental uncertainty encourages executives to focus more on performance metrics to make effective strategic decisions. Ndegwa et al. (2020) also emphasize that market competition requires companies to manage human capital more efficiently to achieve high profitability. In the post-COVID-19 pandemic context, Purwanti et al. (2023) found that external factors such as the need for digital adaptation and customer safety influence banks' strategies in managing human capital.

Furthermore, a study by Yasa et al. (2018) showed that a positive external environment can strengthen the implementation of resource-based strategies, resulting in more optimal performance. Conversely, unfavorable external conditions can hinder the contribution of human capital, even if the organization has high-quality human resources. This is in line with Otache and Mahmood (2015), who stated that the external environment has a dual role: as a determining factor in strategy and as a moderating variable that influences the effectiveness of human capital management.

Thus, it can be concluded that the relationship between human capital and business performance in private banks is significantly influenced by the dynamics of the external environment. When the external environment is supportive, the positive influence of human capital on business performance will be even stronger. However, under unfavorable external conditions, the contribution of human capital can be hampered.

**Hypothesis 2: The external environment moderates the relationship between human capital and business performance.**



**Figure 1.** Conceptual Framework

## **METHOD**

This study employed a quantitative method with a survey as the primary data collection instrument. The survey was conducted through questionnaires distributed both in person and online to

200 respondents, employees of private banks in Jambi. Respondents were selected using a purposive sampling method, with inclusion criteria being individuals who had worked at a private bank for at least one year and were involved in operational activities directly related to achieving business performance. This technique was chosen to ensure the selected respondents were relevant to the research context. Data collection was conducted using a questionnaire containing structured statements. Participation was voluntary, and respondent confidentiality was guaranteed to encourage honesty in answering questions. Each indicator in this study was measured using a 5-point Likert scale, ranging from "strongly disagree" to "strongly agree." The variables measured included Human Capital, Business Performance, and the External Environment as a moderating variable. Data analysis was performed using Structural Equation Modeling (SEM) based on Partial Least Squares (PLS). This method was chosen because it is capable of analyzing relationships between latent variables simultaneously and is suitable for use in research with complex models and relatively moderate sample sizes. The analysis process is carried out in two stages, namely evaluation of the measurement model to ensure the validity and reliability of the construct, and evaluation of the structural model to test the relationship between variables according to the research hypothesis.

## RESULTS AND DISCUSSION

**Table 1.** Characteristics of participants

Characteristics	Category	Number (n)	Percentage (%)
Gender	Man	112	56
	Woman	88	44
Age	18–25 years	42	21
	26–35 years	79	39.5
	36–45 years	53	26.5
	> 45 years	26	13
Education	SENIOR HIGH SCHOOL	48	24
	Diploma	39	19.5
	Bachelor degree)	96	48
	Postgraduate (S2/S3)	17	8.5
	Private employees	68	34
Work	Government employees	41	20.5
	Businessman	52	26
	Others (students, etc.)	39	19.5
Length of Time as a Customer	< 1 year	27	13.5
	1–3 years	63	31.5
	3–5 years	55	27.5
	> 5 years	55	27.5

The respondents in this study were 200 private bank customers in Jambi with quite diverse characteristics. In terms of gender, 112 respondents were male (56%) and 88 were female (44%). Based on age, the largest group was in the 26–35 year range with 79 people (39.5%), followed by 36–45 year olds with 53 people (26.5%), 18–25 year olds with 42 people (21%), and over 45 years old with 26 people (13%). The majority of respondents' education level was undergraduate (96 people (48%)), followed by high school (48 people) with 48 people (24%), diploma (39 people) with 19.5%), and

postgraduate (17 people) with 17 people (8.5%). In terms of occupation, the majority of respondents were private employees (68 people (34%)), followed by entrepreneurs (52 people (26%)), civil servants (41 people (20.5%)), and other categories such as students (39 people) with 39 people (19.5%). Meanwhile, based on length of service as customers, 63 people (31.5%) had used banking services for 1–3 years, 55 people (27.5%) for 3–5 years, 55 people (27.5%) for more than 5 years, and 27 people (13.5%) had been customers for less than 1 year. These results indicate that respondents in the study had a representative distribution in terms of both their demographics and their experience as private bank customers.

**Table 2.** Assessment of PLSSEM

Variables	Items	Loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Human capital	HC1	0.905	0.934	0.953	0.835
	HC2	0.909			
	HC3	0.909			
	HC4	0.931			
External environment	EE1	0.922	0.939	0.95	0.793
	EE2	0.873			
	EE3	0.896			
	EE4	0.883			
	EE5	0.879			
Business Performance	BP1	0.923	0.938	0.954	0.837
	BP2	0.947			
	BP3	0.892			
	BP4	0.898			

The results of the measurement model testing using PLS-SEM indicate that all constructs in this study meet the validity and reliability criteria. In the Human Capital variable, all indicators (HC1–HC4) have high loading values above 0.90, with a Cronbach's Alpha of 0.934, Composite Reliability of 0.953, and Average Variance Extracted (AVE) of 0.835, which confirms excellent internal consistency and convergent validity. The External Environment variable also shows similar results, where all indicators (EE1–EE5) have loading values ranging from 0.873–0.922, with a Cronbach's Alpha of 0.939, Composite Reliability of 0.950, and AVE of 0.793, so it can be concluded that it is reliable and valid. Meanwhile, the Business Performance variable also met the testing criteria with indicator loading values (BP1–BP4) between 0.892–0.947, Cronbach's Alpha of 0.938, Composite Reliability of 0.954, and AVE of 0.837. Overall, these results prove that all research constructs have strong, valid, and reliable indicators for use in subsequent structural model analysis.

**Table 3.** Predictive relevance analysis of Purchase Intention

	R Square	Q2
Business Performance	0.638	0.854

The results of the predictive analysis show that the Business Performance variable has an R-Square value of 0.638, which means that 63.8% of the variation in business performance can be explained by the constructs in the research model, while the remaining 36.2% is influenced by other

factors outside the model. This value is included in the moderate to strong category, so it can be concluded that the model has quite good explanatory power. In addition, the  $Q^2$  value of 0.854 indicates very high predictive relevance, which means this research model is able to predict the Business Performance variable with a good level of accuracy. Overall, these results confirm that the developed model has both explanatory power and solid predictive ability for business performance.

**Table 4.** Path Coefficient and Hypotheses Testing

Path	Original Sample	Standard Deviation	T Statistic	P Values
Human capital->Business Performance	0.180	0.054	3,302	0.001
External environment* Human capital->Business Performance	0.096	0.041	2,368	0.018

The results of the hypothesis testing show that Human Capital has a positive and significant effect on Business Performance in private banks in Jambi, with an original sample value of 0.180, a T-statistic of 3.302, and a p-value of 0.001. This finding indicates that the better the quality of human resources, the higher the business performance that can be achieved, both in terms of operational efficiency, customer service, and bank competitiveness.

Furthermore, the test results also show that the External Environment plays a significant moderating role in strengthening the relationship between Human Capital and Business Performance. This is indicated by the original sample value of 0.096, a T-statistic of 2.368, and a p-value of 0.018. This means that the contribution of Human Capital to improving business performance will be stronger when external environmental conditions are supportive, such as regional economic stability, conducive banking regulations, and a level of market competition that encourages innovation. Thus, this study emphasizes the importance of quality Human Capital management while still paying attention to the dynamics of the external environment so that private banks in Jambi can survive and develop sustainably.

Research results show that human capital has a positive impact on business performance. This finding aligns with the view that human capital is a strategic resource that drives innovation, growth, and increased organizational productivity (Badhon et al., 2024). Investments in training, skills development, and competency alignment with organizational strategy can yield significant benefits in the form of increased efficiency and competitive advantage (Chandra et al., 2022). Thus, human capital functions not only as a supporting factor but also as a key driver of organizational success.

Previous literature also supports these findings. Gabrielsson and Politis (2012) explain that work experience is a crucial asset in generating innovative ideas that improve business performance. Other research emphasizes the importance of aligning human capital measurements with organizational goals to support internationalization performance (Dar & Mishra, 2019). This demonstrates that employee education, skills, and work experience can increase organizational output and strengthen operational



efficiency. High-quality human capital ultimately becomes a key asset for organizations in achieving optimal performance.

However, research also shows that the relationship between human capital and business performance is not always simple. Tjahjadi et al. (2024) found that human capital readiness does not always have a direct impact on performance, but rather significantly influences business sustainability. Meanwhile, Zhang et al. (2010) emphasized that human capital dimensions can differ in relevance across industrial sectors, for example, between high-tech and traditional sectors. This demonstrates the complexity of human capital's role, although its overall contribution to long-term success cannot be ignored.

This study also emphasizes the importance of the external environment as a moderating variable. A conducive external environment can strengthen the influence of human capital on business performance, while an uncertain environment can weaken it. Ting (2012) stated that external factors, whether economic, social, technological, or regulatory, significantly influence organizational strategy. This is supported by Huynh (2018), who showed that environmental uncertainty encourages management to focus more on performance, and Ndegwa et al. (2020), who emphasized that market competition necessitates more efficient human capital management. Other studies emphasize that digital adaptation and customer safety factors have become new demands post-pandemic (Purwanti et al., 2023), while Yasa et al. (2018) and Otache & Mahmood (2015) state that the external environment plays a dual role, both as a strategy determinant and a moderator. Therefore, it can be concluded that the effectiveness of human capital is strongly influenced by external support, which under certain conditions can strengthen or weaken its contribution to business performance.

## **CONCLUSION**

This study shows that customer loyalty does not significantly influence human capital strategy in private banks in Yogyakarta. This indicates that customer loyalty, although important for business continuity, does not necessarily form the basis for management in designing HR management strategies. Furthermore, corporate image has a positive but insignificant effect on human capital strategy, meaning that corporate image does tend to influence HR strategy, but not strongly enough to be a dominant factor. Therefore, it can be concluded that human resource management strategies in private banks are more influenced by internal factors, such as management policies, regulations, and organizational efficiency needs, than by external customer perceptions. For future research, it is recommended to add other variables that have the potential to have a greater influence on human capital strategy, such as employee satisfaction, employee engagement, organizational culture, and digital transformation, which are increasingly relevant in the banking sector. Future research could also use a mixed methods approach, for example, combining surveys with in-depth interviews, to gain a more comprehensive understanding. Furthermore, comparative studies between private and state-owned banks in various regions could provide a broader picture of the differences in the determinants of HR strategy. Therefore,

the results of future research are expected to enrich the literature and provide practical contributions to banking management.

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