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Human Capital Disclosure to Financial Performance: A Conceptual Framework for Indonesian Resource-Based Companies

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Abstract

This study proposes a conceptual framework for examining the relationship between human capital disclosure and financial performance among Indonesian public companies operating in resource-related industries. The framework responds to the growing importance of human capital as a strategic organizational resource while recognizing that information about workforce capabilities, development, talent management, employee welfare, and strategic human capital remains dispersed across corporate reports. To address this issue, the study proposes a Human Capital Disclosure Index (HCDI) as a structured and reproducible measure of the extent to which companies disclose human capital information through annual reports, sustainability reports, and other publicly available corporate disclosures. The proposed framework links HCDI with financial performance measured by return on assets (ROA) and return on equity (ROE), while considering firm size, leverage, growth, and firm age as control variables and ownership status as a comparative dimension. Rather than presenting empirical evidence, the study develops a researchable framework that can be subsequently tested using firm-level panel data. The proposed approach provides a potential bridge between human resource development, corporate transparency, and financial performance by transforming dispersed human capital information into an observable and comparable disclosure measure. The framework is particularly relevant to resource-based companies, where workforce capabilities, technological competence, innovation, safety, and organizational capacity are important for transforming natural-resource assets into sustainable economic value. The study contributes a conceptual basis for future empirical research on human capital disclosure, financial performance, and differences between state-owned and private enterprises.

Keywords: Human Capital Disclosure; Human Resource Development; Human Capital Disclosure Index; Financial Performance; ROA; ROE; Indonesian Public Companies.

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INTRODUCTION

Human resources increasingly represent a strategic source of organizational capability because firms create value not only through physical and financial assets but also through the knowledge, skills, experience, adaptability, and organizational capabilities embodied in their workforce. From a human capital perspective, investment in education, skills, and employee capabilities can enhance the productive capacity of individuals and contribute to organizational value creation (Becker, 1964). This perspective is particularly relevant for resource-based economies, where the ability to transform natural resources into higher-value products depends on technical expertise, managerial capability, innovation, digital competence, and continuous workforce development. The broader development literature likewise recognizes human capital as an important foundation for productivity, economic resilience, and sustainable development (World Bank, 2020; OECD, 2023).

The strategic importance of human capital creates a measurement challenge. Financial statements provide relatively standardized information about assets, liabilities, equity, revenues, and profits, whereas information about employees and their development is often dispersed across annual reports, sustainability reports, and corporate disclosures. Consequently, investors and other stakeholders may have difficulty evaluating the extent to which an organization develops and deploys human capital as a strategic resource. This challenge is particularly relevant because organizational value increasingly depends on intangible resources and knowledge-based capabilities that are not fully represented by conventional financial reporting (Bontis et al., 2000).

Human capital disclosure offers one possible solution. Disclosure can provide information about workforce size and composition, education, training, competency development, talent management, succession planning, employee welfare, and strategic human resource practices. Such information can increase the visibility of human capital to external stakeholders and provide a basis for assessing how organizations communicate their workforce-related resources and priorities. However, disclosure should not be interpreted automatically as evidence of superior human capital. It is more appropriately treated as an observable indicator of the extent to which firms communicate their human capital resources, practices, and priorities to external stakeholders. A systematic disclosure measure can therefore provide a basis for comparing firms and examining whether greater transparency in human capital is associated with organizational and financial outcomes.

The proposed framework also builds on an earlier research program examining organizational values, value-based leadership, strategic alignment, cultural alignment, and employee performance. That research emphasized employee perceptions and organizational capability, providing an organizational-level perspective on how values, leadership, and employee behavior may interact with performance (Samad, 2025). Subsequent work on strategic human capital transformation further emphasized the role of human capital, artificial intelligence, and digital capabilities in developing sustainable competitive advantage (Samad et al., 2026). Related research connecting green economy perspectives with human resource behavior also highlights the importance of integrating human resource considerations into broader sustainability and organizational development agendas (Samad & Setiyadi, 2025). The present framework extends this research direction by shifting the evidence base toward publicly available corporate disclosures and objective financial outcomes.

The central research problem addressed by this study is how human capital disclosure can be systematically conceptualized and measured as a potential bridge between human resource development and financial performance. This issue is particularly relevant for Indonesian resource-based companies because natural-resource advantage does not automatically translate into high-value economic performance. The ability to use technology, manage operations, innovate, develop downstream activities, and convert natural resources into financial value depends partly on organizational and human capital capabilities. From this perspective, human capital development is relevant not only to individual employee capability but also to the broader capacity of firms and economies to adapt to technological, environmental, and economic change (OECD, 2023; World Bank, 2024).

Accordingly, this study proposes a Human Capital Disclosure Index (HCDI) and a conceptual framework for examining its potential relationship with financial performance. The framework considers three principal questions: (1) How can the extent of human capital disclosure among Indonesian public resource-based companies be systematically measured? (2) How can human capital disclosure be conceptually linked to financial performance measured by return on assets (ROA) and return on equity (ROE)? and (3) How might the proposed relationship differ between state-owned and private companies?

The proposed framework contributes in three ways. First, it develops a transparent Human Capital Disclosure Index (HCDI) that can be reproduced from publicly available corporate reports. Second, it provides a conceptual bridge between human resource development information and objective financial outcomes by proposing measurable financial indicators for subsequent empirical testing. Third, it provides a basis for comparing state-owned and private enterprises in sectors where human capital is important for resource transformation, technological upgrading, and sustainable competitiveness. The framework is intended to provide a foundation for future empirical research rather than to claim that the proposed relationships have already been statistically established.

The proposed framework also builds on an earlier research program examining organizational values, value-based leadership, strategic alignment, cultural alignment, and employee performance. That research emphasized employee perceptions and organizational capability, providing an organizational-level perspective on how values, leadership, and employee behavior may interact with performance (Samad, 2025). Subsequent research on strategic human capital transformation further emphasized the role of human capital, artificial intelligence, and digital capabilities in developing sustainable competitive advantage (Samad et al., 2026). Related research connecting green economy perspectives with human resource behavior also highlights the importance of integrating human resource development with sustainability and broader organizational transformation (Samad & Setiyadi, 2025).

LITERATURE REVIEW

2.1 Human Capital as a Strategic Resource

Human capital theory treats employee knowledge, skills, and capabilities as productive resources that can enhance individual and organizational productivity (Becker, 1964). In strategic management, human capital becomes strategically important when firms organize and deploy employee capabilities in ways that create value. The contribution of human capital extends beyond formal education to include accumulated knowledge, experience, competencies, and the capacity to adapt to changing technological and organizational requirements (World Bank, 2020; OECD, 2023). For resource-based industries, this includes technical expertise, engineering capability, operational knowledge, innovation, digital skills, safety competence, project management, and leadership. These capabilities are particularly important where firms seek to transform natural-resource endowments into productive, technology-intensive, and higher-value activities. From this perspective, human capital represents not only an internal resource but also a potential source of organizational value creation.

2.2 Human Capital Development and Organizational Value

Human resource development includes activities through which employees acquire, maintain, and extend competencies. Training, reskilling, career development, leadership development, talent management, and succession planning can strengthen organizational capability. The development of relevant skills is increasingly important for organizational resilience and adaptation to technological, environmental, and economic change (OECD, 2023). Human capital development may contribute to productivity, quality, adaptability,

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innovation, and resource utilization, while broader human-capital development is also associated with economic productivity and long-term development outcomes (World Bank, 2020; World Bank, 2024). However, the organizational value of human capital development may be difficult for external stakeholders to assess when information about these activities is not systematically communicated. This creates a need for observable indicators that can capture how firms develop and communicate their human capital resources.

2.3 Human Capital Disclosure

Human capital disclosure refers to the external communication of information concerning employees and the systems used to develop and manage them. Disclosure can provide stakeholders with greater visibility into workforce characteristics, human capital development, talent management, employee welfare, and strategic human resource practices. This issue is related to the broader recognition that knowledge-based and intangible resources can contribute to organizational value while remaining less visible in conventional financial reporting (Bontis et al., 2000).

Human capital disclosure may therefore provide an additional information layer through which stakeholders can assess how organizations communicate their workforce-related resources and priorities. Nevertheless, disclosure is not identical to human capital quality. A firm may disclose extensive information without necessarily possessing superior human capital capabilities, while another firm may have strong capabilities but provide limited disclosure. Accordingly, the proposed Human Capital Disclosure Index (HCDI) is intended to measure the extent and transparency of human capital reporting rather than the underlying quality of human capital itself. The distinction between disclosure and capability is central to the proposed framework because the index is designed as an observable measure that can subsequently be tested against organizational and financial outcomes.

2.4 Financial Performance

Financial performance represents an observable dimension of organizational outcomes. Return on assets (ROA) reflects the ability of a firm to generate net income from its asset base, while return on equity (ROE) reflects the returns generated on shareholders' equity. The use of both measures provides complementary perspectives on financial performance and allows the proposed framework to consider whether human capital disclosure is associated with the efficiency of assets and the returns generated for equity holders.

The use of financial indicators is particularly relevant to the proposed framework because it provides a measurable outcome against which human capital disclosure can subsequently be examined. The broader intellectual-capital literature provides a basis for considering how intangible and knowledge-related resources may be connected with business performance (Bontis et al., 2000), while the present framework focuses specifically on human capital disclosure as an observable dimension rather than attempting to measure intellectual capital as a whole.

2.5 Human Capital Disclosure and Financial Performance

Human capital disclosure may be conceptually associated with financial performance through several potential mechanisms. Greater transparency may reflect more systematic human resource governance, stronger organizational attention to workforce development, and greater visibility of human capital practices to external stakeholders. Human capital development may also support employee capability, innovation, organizational learning, productivity, and resource utilization, which in turn may have implications for financial performance. The broader literature on intellectual capital provides support for examining the relationship between knowledge-based resources and business performance (Bontis et al., 2000).

However, disclosure itself should not be interpreted as proof that these mechanisms are present or effective. A higher level of disclosure may reflect reporting practices, stakeholder expectations, governance arrangements, or institutional pressures rather than superior human capital capability. The direction and strength of the proposed association therefore remain empirical questions to be examined through subsequent quantitative testing. The proposed framework consequently treats HCDI as an explanatory disclosure measure rather than as a direct measure of human capital productivity or efficiency.

2.6 State-Owned versus Private Enterprises

State-owned and private enterprises may differ in governance structures, strategic mandates, employment systems, reporting practices, and resource allocation. These differences may shape both human capital disclosure practices and financial performance. Ownership status is therefore incorporated into the proposed framework as a comparative dimension through which the relationship between human capital disclosure and financial performance can be examined.

The comparison is particularly relevant in the Indonesian resource-based context, where state-owned enterprises may operate with broader strategic and developmental mandates while private enterprises may face different governance and market incentives. The proposed framework does not assume that either ownership group will exhibit higher disclosure or stronger financial performance. Instead, comparing state-owned and private enterprises may provide additional insight into whether organizational ownership conditions are associated with differences in human capital transparency and its potential relationship with financial outcomes.

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Human capital represents a strategic organizational resource because employee knowledge, skills, behaviors, and capabilities influence how effectively organizations use physical, technological, and financial resources. Recent research also emphasizes strategic human capital transformation as an important foundation for organizational capability and sustainable competitive advantage (Samad et al., 2026). From this perspective, financial sustainability is not produced by financial management alone. It also depends on productivity, innovation, process quality, accountability, and the organization's capacity to adapt.

Human capital becomes financially relevant when employee capabilities affect organizational outputs and resource efficiency. Effective employee performance can support higher productivity, better quality, fewer errors, faster adaptation, and improved coordination. Conversely, weak capability development, poor alignment, and ineffective leadership may create hidden organizational costs through rework, delays, duplication, employee disengagement, and inefficient resource use.

2.2 Organizational Values, Integrity, and Resource Discipline

Organizational values establish principles for employee behavior and decision-making. Values such as integrity, responsibility, transparency, and performance orientation can influence how employees use organizational resources and respond to organizational priorities. When values are understood and consistently practiced, they can strengthen accountability and reduce the gap between formal policy and operational behavior.

2.3 Value-Based Leadership and Human Capital Investment

Leadership is a mechanism through which organizational values become employee behavior. Value-based leaders communicate direction, model integrity, support employee development, and create conditions for accountability and learning. In financial terms, leadership decisions also shape the effectiveness of investment in human capital because training, capability development, and organizational change generate value only when employees are supported to apply new capabilities.

2.4 Strategic Alignment and Resource Allocation

Strategic alignment connects organizational vision, goals, processes, and employee activities. Alignment can improve the efficiency of resource allocation by reducing fragmented activities and helping organizational units work toward common objectives. Employees who understand how their work contributes to organizational goals are better positioned to prioritize tasks and use available resources effectively.

2.5 Cultural Alignment and Organizational Efficiency

Cultural alignment concerns the consistency between organizational

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values, leadership behavior, employee practices, and organizational systems. A persistent gap between stated values and actual practices can weaken coordination and accountability. Conversely, cultural consistency can support reliable work practices, cooperation, learning, and disciplined execution. These mechanisms create a plausible pathway through which culture can influence operational and financial efficiency (Samad, 2025).

2.6 Employee Capability and Performance

Employee performance includes work quality, accuracy, target achievement, timeliness, innovation, improvement of work methods, adaptability, learning, and teamwork. These dimensions are relevant to both human resource management and organizational efficiency. Employee capability is therefore treated in this study as a key mechanism through which organizational values, leadership, and strategic alignment can contribute to sustainable performance.

2.7 From Human Capital Priorities to Financial Efficiency

The central proposition of this study is not that the survey establishes a causal financial model. Rather, it is that organizational capabilities prioritized by employees can identify areas where human resource investment and managerial attention may have the greatest potential to improve organizational efficiency. The conceptual chain is therefore expressed as: organizational values → value-based leadership → strategic alignment → cultural alignment → employee capability and performance → organizational efficiency and financial sustainability.

This framework positions finance as an organizational consequence and managerial concern rather than as a separate disciplinary domain. It also preserves the central role of human resource capacity development, which is consistent with the journal's focus on human resource management and capacity building.

3. Conceptual Framework and Proposed Hypotheses

The proposed framework positions the Human Capital Disclosure Index (HCDI) as the principal explanatory construct and return on assets (ROA) and return on equity (ROE) as financial-performance outcomes. Firm size, leverage, growth, and firm age are included as control variables because these organizational characteristics may also be associated with financial performance. Ownership status is incorporated as a comparative dimension and may subsequently be examined as a moderating factor.

The conceptual relationship is expressed as:

Human Capital Disclosure (HCDI) → Financial Performance (ROA, ROE)

Controls: Firm Size, Leverage, Growth, Firm Age

Comparative/Moderating Dimension: State-Owned vs. Private

The framework proposes that human capital disclosure provides an observable measure of the extent to which firms communicate their human capital resources, practices, and priorities. It does not assume that disclosure is equivalent to human capital capability or that disclosure automatically produces superior financial performance. Rather, the framework provides a basis for testing whether differences in human capital transparency are systematically associated with differences in financial performance.

Based on this conceptual relationship, the following hypotheses are proposed for future empirical testing:

H1. Human Capital Disclosure is positively associated with ROA.

H2. Human Capital Disclosure is positively associated with ROE.

H3. The association between Human Capital Disclosure and financial performance differs between state-owned and private enterprises.

4. Proposed Empirical Design

4.1 Research Design

This study proposes a quantitative explanatory design based on secondary corporate data to provide an empirical pathway for testing the conceptual relationship between human capital disclosure and financial performance. Rather than reporting completed empirical results, the proposed design establishes a reproducible procedure through which human capital disclosure can be measured and subsequently examined in relation to firm-level financial outcomes. The design shifts the evidence base from the survey and NVivo-oriented approach of the earlier research program toward publicly available corporate disclosures and objective financial indicators.

4.2 Population and Sample

The proposed target population comprises Indonesian publicly listed companies operating in resource-related industries, particularly energy, mining, metals and mineral processing, and other sectors materially connected with natural-resource utilization and downstream transformation. The proposed sample is based on purposive selection of companies that provide sufficiently complete annual reports, sustainability reports where applicable, and audited financial statements for the selected observation period.

Companies are considered eligible when they meet three criteria: (1) the company is publicly listed and has identifiable ownership status; (2) the company operates in a sector directly related to natural-resource utilization or resource-based transformation; and (3) annual reports, sustainability reports, and audited financial statements are publicly accessible for the proposed observation period. The framework includes both state-owned and private companies to enable comparative examination of human capital disclosure and financial performance across ownership structures.

The initial company set comprises PT Bukit Asam Tbk (PTBA), PT Aneka Tambang Tbk (ANTM), PT Timah Tbk (TINS), and PT Vale Indonesia Tbk (INCO). PTBA, ANTM, and TINS represent state-owned enterprises operating in coal, energy, and mineral-resource sectors, while INCO represents a private-sector mineral company. Additional energy and mining companies may be incorporated where the availability and consistency of corporate reports satisfy the predefined sampling criteria. The final sample and number of firm-year observations should therefore be established only after verification of document availability and data completeness.

Table 1. Proposed Sample and Data Sources for Empirical Testing

Company	Ownership	Sector	Primary Public Data Sources
PT Bukit Asam Tbk (PTBA)	State-owned	Coal/Energy	Annual Report and Sustainability Report
PT Aneka Tambang Tbk (ANTAM)	State-owned	Mineral	Annual Report and Sustainability Report
PT Timah Tbk (TINS)	State-owned	Tin/Mineral	Annual Report and Sustainability Report
PT Vale Indonesia Tbk (INCO)	Private	Mineral	Annual Report and Sustainability Report
Additional energy companies	State-owned/Private	Energy	Annual Report and Sustainability Report
Additional mining companies	State-owned/Private	Mineral	Annual Report and Sustainability Report

4.3 Data Sources and Data Collection

The proposed empirical data will be obtained exclusively from publicly available corporate disclosures accessed through official company websites and, where applicable, official capital-market disclosure repositories. The principal sources will comprise annual reports, sustainability reports, and audited financial statements. Each observation will represent a firm-year record.

The proposed observation period is five years, from 2020 to 2024. Human capital information will be extracted from sections concerning workforce information, human capital development, talent management, employee welfare, and strategic human capital. Financial information will be obtained from audited financial statements. Each coded observation should be accompanied by the source document, reporting year, page number, and source location to establish an auditable research trail and facilitate independent replication.

To ensure comparability and coding consistency, the proposed research will apply a predefined data-extraction protocol. For each firm-year observation, the research database will record the company identifier, reporting year, ownership status, source document, page number, human capital disclosure indicators, and financial variables. Human capital disclosure will be coded only when the relevant information is explicitly reported in the qualifying corporate documents. An indicator that is not disclosed will be coded as zero, whereas an indicator demonstrably not applicable to a company will be excluded from the denominator of the disclosure index.

Financial variables, including net income, total assets, and total equity, will be extracted from audited financial statements and cross-checked against reported financial-performance information. This procedure is intended to improve measurement transparency, reduce researcher discretion, and make the proposed Human Capital Disclosure Index reproducible across firms and observation years.

4.4 Human Capital Disclosure Index

The proposed Human Capital Disclosure Index (HCDI) is an unweighted disclosure index designed to provide a structured and reproducible measure of the extent to which companies communicate information about their human capital. Each applicable item receives a score of 1 when the relevant information is explicitly disclosed and 0 when it is not disclosed. Items demonstrably not applicable are excluded from the denominator.

HCDI = Σ disclosed items / Σ applicable items

Table 2. Human Capital Disclosure Index Dimensions and Coding Framework

Dimension	Illustrative Indicators	Coding
A. Workforce Information	Total employees; employee growth; workforce composition; gender diversity; education	0/1
B. Human Capital Development	Training; training hours; training expenditure; competency development; career development	0/1
C. Talent Management	Talent management; succession planning; leadership development; high-potential employees	0/1
D. Employee Welfare	Compensation; benefits; health and safety; employee welfare	0/1

E. Strategic Human Capital	Human capital strategy; HR strategy; organizational capability; human capital risk	0/1

The HCDI is intended to measure transparency of human capital disclosure rather than the actual quality or effectiveness of human capital. This distinction is central to the proposed framework because disclosure provides an observable external measure while underlying human capital capability may require additional indicators and empirical validation.

4.5 Proposed Variable Measurement

For subsequent empirical testing, ROA is proposed as net income divided by total assets, while ROE is proposed as net income divided by total equity. Firm size is measured as the natural logarithm of total assets. Leverage is measured as total liabilities divided by total assets. Growth is measured as annual revenue growth, and firm age is measured as the number of years since establishment according to a predefined and consistently applied rule. Ownership is coded according to state control or private status.

4.6 Proposed Panel Regression

The proposed empirical framework specifies the following panel-data models:

$$\text{ROA\_it} = \beta_0 + \beta_1\text{HCDI\_it} + \beta_2\text{SIZE\_it} + \beta_3\text{LEV\_it} + \beta_4\text{GROWTH\_it} + \beta_5\text{AGE\_it} + \mu\_i + \lambda\_t + \varepsilon\_it$$

$$\text{ROE\_it} = \beta_0 + \beta_1\text{HCDI\_it} + \beta_2\text{SIZE\_it} + \beta_3\text{LEV\_it} + \beta_4\text{GROWTH\_it} + \beta_5\text{AGE\_it} + \mu\_i + \lambda\_t + \varepsilon\_it$$

The proposed analysis will compare pooled OLS, fixed-effects, and random-effects specifications using appropriate model-selection tests. Robust standard errors should be employed where appropriate. Ownership status may subsequently be incorporated as an interaction term to examine whether the association between HCDI and financial performance differs between state-owned and private enterprises.

4.7 Proposed Robustness and Coding Reliability

The proposed empirical analysis will include robustness checks using lagged HCDI, alternative sample restrictions, winsorization of extreme financial observations, and alternative estimators where theoretically and statistically justified. A detailed codebook will define each HCDI item and specify the qualifying disclosure criteria. To improve coding reliability, a subset of observations should be independently coded by a second coder, with inter-coder agreement assessed before the final dataset is established.

5. Expected Analytical Results

As a conceptual framework, this study does not present completed empirical results. Instead, this section outlines the analytical results that are expected to emerge when the proposed Human Capital Disclosure Index (HCDI) is applied to firm-level corporate disclosures and linked with financial-performance data. The expected analysis is intended to provide a structured basis for subsequent empirical validation.

5.1 Expected Descriptive Statistics

The empirical application is expected to report the number of firm-year observations, mean, standard deviation, minimum, maximum, and distributional characteristics of HCDI, ROA, ROE, SIZE, LEV, GROWTH, and AGE. These statistics would provide an initial overview of the level and variation of human capital disclosure and financial performance across the selected companies and observation period.

5.2 Expected HCDI Dimension Scores

The proposed analysis is expected to produce an overall HCDI score and scores for the five disclosure dimensions: Workforce Information, Human Capital Development, Talent Management, Employee Welfare, and Strategic Human Capital. Comparing these dimensions may indicate which areas of human capital information are more extensively disclosed and which areas may represent potential disclosure gaps.

5.3 Expected Correlation and Multicollinearity Assessment

The empirical application is expected to examine the correlations among HCDI, financial-performance measures, and control variables using Pearson or Spearman correlation as appropriate. Variance inflation diagnostics would also be examined to assess potential multicollinearity before estimating the proposed regression models.

5.4 Expected Panel Regression Analysis

The proposed panel-data analysis is expected to examine whether variation in HCDI is systematically associated with ROA and ROE after controlling for firm size, leverage, growth, and firm age. The analysis would report coefficient estimates, robust standard errors, confidence intervals, model fit, and relevant firm and year effects. The results would provide empirical evidence for evaluating H1 and H2 rather than assuming that greater disclosure necessarily produces stronger financial performance.

5.5 Expected State-Owned versus Private Comparison

The proposed analysis is expected to compare human capital disclosure and financial-performance characteristics between state-owned and private enterprises. Where the sample size and data structure permit, an HCDI × Ownership interaction may be estimated to examine whether the association between human capital disclosure and financial performance differs according to ownership status. This analysis would provide empirical evidence relevant to H3.

5.6 Expected Robustness Tests

The proposed empirical analysis is expected to include robustness tests using lagged HCDI, alternative sample restrictions, winsorization of extreme financial observations, and alternative estimators where theoretically and statistically justified. These procedures are intended to assess whether the observed association between human capital disclosure and financial performance remains stable under alternative specifications.

DISCUSSION

The proposed framework connects human resource development with financial performance through a measurable disclosure mechanism. HRD research emphasizes learning, capability, talent, and development, while financial research focuses on observable accounting outcomes. The Human Capital Disclosure Index (HCDI) provides a conceptual bridge between these perspectives by transforming dispersed human-capital information into a structured and potentially comparable firm-year measure that can subsequently be examined in relation to ROA and ROE. This approach is consistent with the broader view of human capital as a productive organizational resource and with the recognition that knowledge-based resources can contribute to organizational value creation (Becker, 1964; Bontis et al., 2000).

The framework also extends the organizational-alignment perspective underlying the earlier research program. That research examined organizational values, value-based leadership, strategic alignment, cultural alignment, and employee performance as interconnected organizational dimensions (Samad, 2025). Subsequent research on strategic human capital transformation emphasized the role of human capital, artificial intelligence, and digital capabilities in developing sustainable competitive advantage (Samad et al., 2026), while related work connecting green economy perspectives with human resource behavior highlighted the integration of human resource considerations into broader sustainability and organizational development agendas (Samad & Setiyadi, 2025). The present framework shifts the evidence base from employee perceptions toward observable corporate disclosure and objective financial indicators. This shift does not replace the organizational-capability perspective but provides an additional measurement layer through which human capital can be examined from an external and disclosure-based perspective.

For resource-based industries, this conceptual relationship is particularly relevant. Natural resources create potential economic value, but realizing that potential requires engineering expertise, operational capability, technology, innovation, safety, sustainability, and managerial competence. Human capital development is therefore relevant to the capacity of organizations to respond to technological and economic change and to improve the productive use of human capabilities (OECD, 2023; World Bank, 2020). Human capital disclosure can consequently be viewed as an observable window into the way organizations communicate their workforce resources, development practices, and strategic human-capital priorities. It should not, however, be interpreted as a direct measure of organizational capability or human-capital quality.

Ownership comparison provides an additional dimension of the proposed framework. State-owned and private firms may operate under different governance structures, strategic mandates, employment systems, reporting practices, and resource-allocation conditions. Comparing these groups may therefore provide an opportunity to examine whether human capital disclosure patterns and their potential association with financial performance vary according to ownership structure. The framework does not assume in advance that either ownership group will exhibit higher disclosure or stronger financial performance; rather, ownership is treated as a contextual dimension for subsequent empirical examination.

An important conceptual distinction concerns the difference between disclosure and capability. A firm may disclose extensive human-capital information without necessarily possessing superior human-capital capabilities, while another firm may possess substantial capabilities but disclose relatively limited information. The proposed HCDI therefore measures transparency rather than capability itself. This distinction is important because human capital development encompasses broader dimensions of skills, competencies, adaptability, and organizational capability that cannot be fully captured through disclosure alone (World Bank, 2024). The distinction also prevents the framework from assuming that greater disclosure automatically represents better human capital or superior financial performance.

From an HRD perspective, the framework suggests that human resource development can be considered more strategically when its activities and priorities are connected to organizational objectives and observable organizational outcomes. Training, competency development, talent management, succession planning, employee welfare, and human-capital strategy may become more meaningful as components of organizational capability when their implementation is systematically governed and transparently communicated. This perspective is consistent with the growing importance of skills development, reskilling, and organizational adaptability in changing economic and technological environments (OECD, 2023).

6.1 Practical Implications

The proposed HCDI can serve as a management-oriented checklist for evaluating the completeness and consistency of human-capital reporting. Investors and other stakeholders may use the index as supplementary non-financial information, while HR leaders may use dimension-level scores to identify potential gaps in workforce information, human-capital development, talent management, employee welfare, and strategic human capital. The framework may also encourage greater consistency between human-resource reporting and broader organizational strategy. However, these potential uses should be considered subject to future empirical validation of the index's reliability and usefulness.

6.2 Implications for Human Resource Capacity Development

The framework encourages organizations to view human resource development as a strategic investment connected to organizational capability, productivity, innovation, adaptability, and financial performance rather than solely as a training activity. By organizing human-capital information into measurable dimensions, HCDI may provide a starting point for linking HRD priorities with organizational strategy and for identifying areas requiring further capability development. This is consistent with broader human-capital perspectives that emphasize skills, capabilities, and their contribution to productivity and resilience (World Bank, 2020; OECD, 2023). Empirical validation would nevertheless be necessary to determine whether higher levels of disclosure correspond to stronger human-capital capability or financial outcomes.

6.3 Implications for Resource Transformation

For resource-based firms, human-capital capability is potentially important for movement from resource extraction toward higher-value-added, technology-intensive, and productivity-enhancing activities. Technical expertise, digital competence, innovation capability, operational knowledge, safety competence, and managerial capacity may support such transformation. These capabilities are increasingly relevant as organizations respond to technological change and the transition toward more sustainable and knowledge-intensive economic activities (OECD, 2023; World Bank, 2024). Within this context, HCDI provides a first measurement layer for a broader future Human Capital Readiness framework. Future research could extend the framework beyond disclosure by incorporating direct measures of human-capital capability, organizational productivity, innovation, resource transformation, and financial value creation.

CONCLUSION

This study proposes a conceptual and reproducible framework for examining the potential relationship between human capital disclosure and financial performance among Indonesian resource-based public companies. At the center of the framework is the Human Capital Disclosure Index (HCDI), which is designed to organize publicly disclosed information on workforce characteristics, human capital development, talent management, employee welfare, and strategic human capital into a structured and comparable measure. The framework further proposes the use of ROA and ROE as financial-performance indicators and panel-data analysis as a potential approach for subsequent empirical testing.

The study contributes to human resource development research by connecting human capital transparency with organizational and financial perspectives. Its central contribution is the proposition that dispersed human-capital information can be transformed into a measurable disclosure index that provides a basis for systematic comparison across firms and years. The framework does not assume that greater disclosure represents superior human capital or automatically leads to stronger financial performance. Instead, it provides a researchable mechanism through which the potential association between human capital transparency and financial value creation can be empirically examined.

The framework is particularly relevant to Indonesian resource-based companies, where the transformation of natural resources into sustainable economic value depends on technical expertise, managerial capability, innovation, digital competence, operational knowledge, safety, and continuous human resource development. By incorporating ownership status as a comparative dimension, the framework also creates an opportunity for future research to examine whether the proposed relationship differs between state-owned and private enterprises.

7.1 Limitations

The proposed HCDI measures the extent of human capital disclosure rather than the actual quality, effectiveness, or productivity of human capital. Corporate reporting practices may also differ across firms, industries, and reporting periods, potentially affecting comparability. The proposed framework therefore should not be interpreted as a direct measure of human capital capability or as evidence of a causal relationship between disclosure and financial performance. Further empirical validation is required to establish the reliability, validity, and explanatory value of the proposed index.

7.2 Future Research

Future research can empirically apply and validate the HCDI across Indonesian public companies and extend the observation period to examine changes in human capital disclosure over time. Subsequent studies may also develop HCDI into broader measures of Human Capital Capability and Human Capital Efficiency by combining disclosure indicators with direct measures of workforce capability, productivity, innovation, and organizational performance. Further research could examine Resource Transformation, compare state-owned and private enterprises more extensively, and conduct international benchmarking to assess differences in human capital

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disclosure and capability across institutional and economic contexts. Such extensions could provide the basis for developing a broader Human Capital Readiness framework for resource-based and other strategic industries.

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