



## Human Resource Digital Transformation as an Intangible Accounting Asset: A Theoretical Study of GIC Re India

<sup>1</sup>\*Shakirullah Shaik, <sup>2</sup>Jireh H.I. Seow, <sup>3</sup>Christopher Abraham,

<sup>1</sup>DBA Scholar, SP Jain School of Global Management. E-mail: Shakirullah.ds20dba001@spjain.org

<sup>2</sup>Associate Professor, SP Jain School of Global Management. E-mail: jireh.seowhi@spjain.org

<sup>3</sup>Professor, SP Jain School of Global Management. E-mail: chris@spjain.org

### Abstract

The accelerating digital transformation of human resource (HR) functions has reshaped how organizations generate, manage, and communicate human capital value. In knowledge-intensive and risk-oriented institutions such as reinsurance organizations, HR digitalization extends well beyond administrative efficiency and emerges as a strategic mechanism for sustained value creation. This paper conceptualizes Human Resource Digital Transformation (HRDT) as an intangible accounting asset, using the General Insurance Corporation of India (GIC Re) as a theoretical case context. Grounded in human capital theory, the resource-based view, and intangible asset accounting frameworks, the study develops a conceptual model explaining how digital HR systems—including HR analytics, artificial intelligence–enabled talent management, digital learning platforms, and integrated HR information systems—enhance human capital value, organizational capability, and the decision usefulness of accounting information. The paper critically evaluates the limitations of conventional accounting standards in recognizing digitally enabled human capital and proposes a theoretical framework for capturing HRDT-driven value in terms of efficiency gains, knowledge capitalization, governance transparency, and strategic alignment. By positioning HR digital transformation as a measurable intangible asset, the study advances theoretical accounting literature and provides a foundation for future empirical research on human capital valuation in the digital era.

**Keywords:** Human Resource Digital Transformation; Intangible Accounting Assets; Human Capital Accounting; HR Analytics; Digital Governance; GIC Re India; Theoretical Accounting Framework

### 1. Introduction

Digital transformation has fundamentally altered the sources of organizational value, shifting emphasis from physical assets to knowledge-based and technology-enabled capabilities. Among organizational functions, Human Resource (HR) management has experienced a profound transformation through the adoption of digital technologies such as Human Resource Information Systems (HRIS), HR analytics, artificial intelligence (AI), and digital learning platforms. These developments have repositioned HR from a transactional support function to a strategic contributor to organizational performance, governance, and long-term value creation.

Despite this shift, traditional accounting frameworks continue to treat HR-related investments predominantly as period costs rather than value-generating assets. This treatment creates a structural disconnect between financial reporting and the economic realities of contemporary organizations. The limitation is particularly pronounced in knowledge-intensive and risk-driven sectors such as insurance and reinsurance, where actuarial expertise, analytical capability, and institutional knowledge are central to organizational success. In public-sector organizations such as the General Insurance Corporation of India (GIC Re), the absence of accounting recognition for digitally enabled human

capital raises important theoretical, managerial, and policy concerns.

Human Resource Digital Transformation (HRDT) refers to the strategic integration of digital technologies into human capital management processes, encompassing talent acquisition, workforce development, performance management, and governance. From an accounting theory perspective, HRDT exhibits characteristics commonly associated with intangible assets, including the expectation of future economic benefits, organizational control through embedded systems, and strategic relevance. However, prevailing accounting standards provide limited guidance on the recognition and measurement of such internally generated digital HR assets.

This study seeks to conceptualize HRDT as an intangible accounting asset by synthesizing insights from human capital theory, the resource-based view (RBV), and intangible asset accounting literature. Using GIC Re India as a contextual reference, the paper develops a conceptual framework linking HR digital transformation with human capital value creation, organizational capability, and accounting information relevance. In doing so, the study contributes to theoretical accounting research by re-examining human capital recognition in the context of digital transformation.

## 2. Review of Literature

### 2.1 Human Capital Theory and Accounting Constraints

Human capital theory conceptualizes employees' knowledge, skills, competencies, and experience as productive resources that contribute to organizational performance and long-term economic growth. Contemporary research continues to emphasize human capital as a critical determinant of firm value, particularly in knowledge-intensive and service-oriented organizations (Boon et al., 2022; OECD, 2021). Investments in training, reskilling, and digital capabilities are increasingly viewed as strategic rather than operational expenditures.

Despite this recognition, conventional financial accounting frameworks largely exclude human capital from asset recognition. International accounting standards prohibit capitalization of internally generated human capital due to concerns related to measurement reliability, lack of ownership and control, and uncertainty regarding future economic benefits (IASB, 2023). Employees cannot be legally owned, and the economic benefits arising from their knowledge are contingent upon continued employment and performance. Consequently, expenditures on recruitment, training, and capability development are expensed, leading to a systematic undervaluation of firms whose primary value drivers are intangible and human-centered (Lev & Gu, 2023). This accounting constraint widens the gap between market value and book value, particularly in digitally enabled organizations.

### 2.2 Intangible Assets and the Resource-Based View

The resource-based view (RBV) of the firm provides a theoretical lens for understanding how intangible resources contribute to sustainable competitive advantage. According to the RBV, resources that are valuable, rare, inimitable, and embedded within organizational processes can generate superior long-term performance (Barney et al., 2021). Recent empirical studies reaffirm that intangible assets—especially human, structural, and relational capital—play a dominant role in value creation in the digital economy (Corrado et al., 2022).

Digitally enabled human resource systems align closely with the RBV framework by embedding employee knowledge into organizational routines, analytics platforms, and decision-support systems. Through digital codification, analytics, and automation, individual-level knowledge is transformed into organization-specific structural capital that is less mobile and more difficult to imitate (Appelbaum et al., 2022). Although accounting literature increasingly acknowledges intellectual capital and certain categories of identifiable intangibles, internally generated digital HR assets remain largely absent from recognition frameworks (Kronke & Laulitz, 2019; Mouritsen et al., 2021). This disconnect highlights a persistent misalignment between strategic management theory and accounting measurement practices.

### 2.3 Digital Transformation of HR Functions

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The digital transformation of HR functions has significantly expanded the strategic role of HR within organizations. Advances in artificial intelligence, machine learning, and big data analytics have enabled data-driven recruitment, predictive workforce planning, performance management, and continuous learning systems (Marler & Boudreau, 2022). These technologies enhance efficiency, reduce human capital risks, and support evidence-based managerial decision-making.

While the human resource management literature extensively documents the operational and strategic benefits of HR digitalization, its accounting implications remain underexplored. Digital HR systems generate long-term economic benefits by institutionalizing knowledge, improving workforce allocation, and enhancing organizational learning capabilities (Strohmeier, 2020; Vrontis et al., 2022). However, due to the internally generated nature of these systems and their close association with human capital, accounting standards continue to treat related expenditures as period costs. This results in financial statements that fail to reflect the economic substance of digitally transformed HR functions.

### 2.4 Human Capital Disclosure and Digital Governance

Recent advances in integrated reporting and sustainability accounting have emphasized enhanced disclosure of human capital information. Frameworks such as Integrated Reporting (IR) and ESG reporting increasingly recognize human capital as a key driver of long-term value creation (IFRS Foundation, 2023; World Economic Forum, 2020). Stakeholders now demand transparent information regarding workforce skills, training investments, digital competencies, and talent governance.

Digital HR systems facilitate improved human capital disclosure by generating standardized, auditable, and real-time data, thereby strengthening governance transparency and accountability (Manes-Rossi et al., 2020; Dumay et al., 2021). In public-sector and regulated organizations, digital HR governance supports compliance, internal control, and institutional continuity. In organizations such as GIC Re India, digital HR systems enhance traceability of HR decisions, reduce information asymmetry, and reinforce public trust. Nevertheless, despite their governance and reporting benefits, accounting recognition of digitally enabled human capital systems remains limited, underscoring the need for theoretical advancement in accounting treatment of internally generated intangibles.

### 2.5 Research Gap

Existing literature reveals a clear gap in accounting research concerning the conceptualization of HR digital transformation as an intangible asset, particularly within public-sector and reinsurance contexts. This study addresses this gap by proposing a theory-driven accounting framework for HRDT.

### 3. Research Objectives

1. To conceptualize Human Resource Digital Transformation as an intangible accounting asset.
2. To examine the limitations of conventional accounting standards in recognizing digitally enabled human capital.
3. To analyze the contribution of digital HR systems to human capital value creation and organizational capability.
4. To develop a theoretical framework linking HRDT with accounting information relevance and governance transparency.
5. To establish a foundation for future empirical research on digital human capital valuation.

### 4. Research Propositions

- **P1:** Human Resource Digital Transformation satisfies the defining characteristics of an intangible accounting asset.
- **P2:** HRDT enhances human capital value through knowledge creation, capability development, and workforce optimization.
- **P3:** HRDT strengthens organizational capability in line with the resource-based view of the firm.
- **P4:** Recognition and disclosure of HRDT improve the relevance and decision usefulness of accounting information.

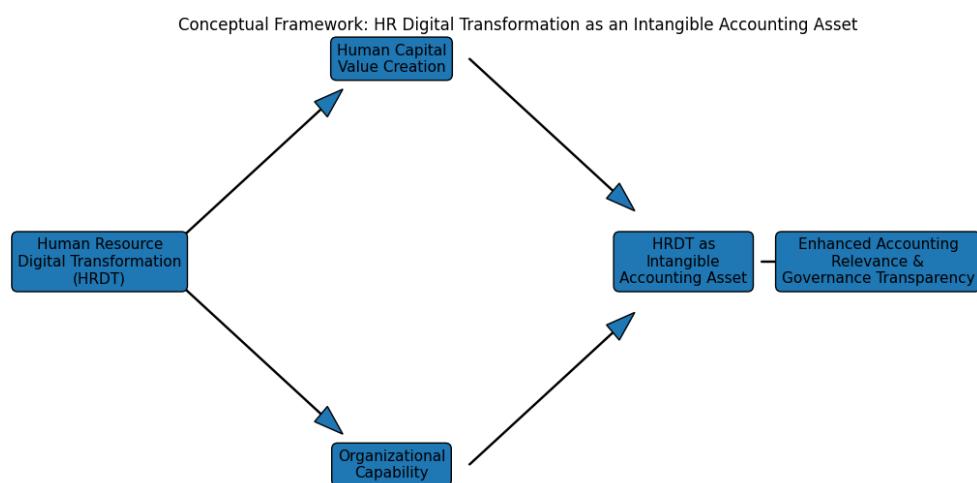
- **P5:** HRDT contributes to enhanced governance transparency and accountability, particularly in public-sector organizations.

### 5. Research Methodology

This study adopts a theoretical and conceptual research design consistent with the scope of the Journal of Theoretical Accounting Research. The methodology is based on a systematic review and synthesis of interdisciplinary literature spanning accounting theory, human capital theory, strategic management, and digital HRM. No primary or secondary empirical data are employed, as the objective is theory development rather than hypothesis testing. GIC Re India is used as a contextual reference to ground the theoretical discussion within a public-sector reinsurance environment.

### 6. Conceptual Framework

The proposed conceptual framework posits that Human Resource Digital Transformation influences human capital value creation and organizational capability, which collectively enable HRDT to be conceptualized as an intangible accounting asset. Recognition of HRDT as an intangible asset enhances accounting information relevance and governance transparency, thereby supporting improved decision-making and accountability.



6.1 Theory Contribution Table

Table 1: Summary of Theoretical Contributions

Theoretical Domain	Existing Literature Focus	Identified Gap	Contribution of the Present Study
Human Capital Accounting	Treats human capital largely as an expense; limited recognition in financial statements	Lack of accounting frameworks for digitally enabled human capital	Re-conceptualizes HR digital transformation as a measurable intangible accounting asset
Intangible Asset Theory	Emphasis on externally acquired intangibles and intellectual capital	Limited attention to internally generated digital HR assets	Extends intangible asset theory to include HR digital systems embedded within organizations
Resource-Based View (RBV)	Focus on strategic resources and competitive advantage	Weak linkage between RBV and accounting recognition	Integrates RBV with accounting theory to explain HRDT-driven value creation

Digital HRM Literature	Managerial and operational orientation	Limited engagement with accounting and disclosure implications	Bridges digital HR practices with accounting relevance and reporting frameworks
Public-Sector Accounting	Emphasis on compliance and financial accountability	Insufficient recognition of di	

## 7. Managerial Implications

The conceptualization of HRDT as an intangible accounting asset encourages managers to view digital HR initiatives as strategic investments rather than operational expenditures. Integrating HR digital metrics into internal reporting and strategic decision-making can improve workforce planning, risk management, and organizational resilience. For public-sector institutions such as GIC Re India, HR digital transformation also supports institutional continuity and effective governance.

## 8. Policy Implications

The findings highlight the need for accounting standard-setters and policymakers to revisit existing approaches to

intangible asset recognition and human capital reporting. Developing supplementary disclosure frameworks for digitally enabled human capital can enhance transparency and accountability, particularly in public-sector and regulated industries. Integrating HRDT indicators into integrated reporting and sustainability frameworks may further improve stakeholder decision usefulness.

## 9. Limitations and Future Research Directions

To enhance transparency and guide future scholarly inquiry, this section outlines the key limitations of the present theoretical study and proposes directions for future research.

Table 2: Limitations and Future Research Directions

Aspect	Limitation of the Present Study	Suggested Future Research Directions
Research Design	The study is purely conceptual and does not include empirical validation	Future studies may empirically test the proposed propositions using surveys, archival data, or in-depth case studies
Measurement of HRDT	Lack of standardized accounting metrics for valuing HR digital transformation	Researchers can develop and validate quantitative measurement models for HRDT as an intangible asset
Contextual Scope	Focuses on GIC Re India as a theoretical public-sector reference	The framework can be extended to private-sector insurers, multinational firms, and other knowledge-intensive industries
Accounting Standards	Limited engagement with formal recognition criteria under IFRS or Ind AS	Future research may explore normative implications for integrating HRDT into existing accounting standards
Time Dimension	Conceptual framework presents a static view of digital transformation	Longitudinal studies could examine how HRDT-driven value evolves over time

## 10. Conclusion

This paper advances accounting theory by conceptualizing Human Resource Digital Transformation as an intangible accounting asset. By integrating human capital theory, the resource-based view, and intangible asset accounting frameworks, the study demonstrates the limitations of conventional accounting standards in capturing digitally enabled human capital value. The proposed conceptual framework contributes to theoretical discourse and provides a foundation for future empirical research and policy development in human capital accounting.

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