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Integrated Digital Human Capital Model: From VRIN (RBV) Resources to Transformation Capabilities (DCT) and Company Performance.

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Abstract: The hyper-dynamic business environment in technology companies requires companies to not only have a competitive advantage, but also the ability to consistently sustain that advantage. This literature review article aims to formulate a new conceptual framework that explains how Strategic Human Resource Management (SHRM) transforms internal resources into superior performance. This model is based on the Resource-Based View (RBV), which identifies Digital Human Capital (DHC) as the primary VRIN (Valuable, Rare, Inimitable, Non-substitutable) resource. This integration is expanded with Dynamic Capabilities Theory (DCT), where SHRM is hypothesized as the main mechanism for sensing, seizing, and transforming HCD to align with market demands. At the micro level, Social Cognitive Theory (SCT) provides a behavioral foundation that explains employee self-efficacy and collective learning as drivers of these dynamic capabilities. Through extensive literature analysis, it was found that the relationship between resource ownership (RBV) and performance is facilitated by dynamic processes (DCT) that are fundamentally driven by SHRM. This article also highlights the relevance of Resource Dependency Theory (RDT) in the context of talent acquisition, complementing the internal perspective. The main contribution is the proposal of a comprehensive model that bridges the macro strategic view with the micro behavioral foundation in the context of digital HR.

Keywords: Digital Human Capital, Resource-Based View (RBV), Dynamic Capabilities Theory (DCT), SHRM, Company Performance, VRIN

INTRODUCTION

The global technology sector is currently characterized by extreme Volatility, Uncertainty, Complexity, and Ambiguity (VUCA). The phenomenon of digital disruption, rapidly shifting consumer demands, and shortening product life cycles are creating tremendous pressure for companies to not only excel, but also adaptively survive. In this competitive environment, strategic management focus has shifted from external factors (market position) to internal capabilities and resources.

Traditional Corporate performance theory measures success but fails to explain the fundamental sources of sustainable advantage. This is where the Resource-Based View (RBV)

plays a crucial role, asserting that competitive advantage stems from internal assets that are VRIN (Valuable, Rare, Inimitable, Non-substitutable). In the context of technology companies, the most strategic assets that meet the VRIN criteria are Human Resources (HR), particularly those with high digital and cognitive competencies, or what we refer to as Digital Human Capital.

However, RBV alone is not sufficient to explain survival in a dynamic environment. This theory requires an extension, namely Dynamic Capabilities Theory (DCT), to explain how companies proactively build, integrate, and reconfigure their resource base (RBV) to respond to or create change. This entire transformation process is fundamentally driven by Strategic Human Resource Management (SHRM), which designs practices to optimize human resource potential. Therefore, a comprehensive theoretical integration is needed, supported by the micro foundations of Social Cognitive Theory (SCT), which focuses on individual learning behavior and self-efficacy, as well as awareness of external dependencies through Resource Dependency Theory (RDT).

This literature review has three main interrelated objectives. First, we aim to identify and summarize conceptual developments, key concepts, and inter-theoretical relationships of the five strategic frameworks (Resource-Based View/RBV, Dynamic Capabilities Theory/DCT, Resource Dependency Theory/RDT, Social Cognitive Theory/SCT, and Corporate Performance Theory) in the context of Human Resource Management (HRM) in the technology industry. This is important for establishing a strong and multidisciplinary theoretical foundation. Second, based on this literature synthesis, our crucial objective is to construct and propose an Integrative Conceptual Model that explicitly links Digital Human Capital (as an RBV resource) with the creation of Transformational Capabilities (as a DCT process) through the role of Strategic Human Resource Management (SHRM) as a strategic architect. Third, we will use this integrated model to identify in-depth Research Gaps, particularly regarding how micro-behavioral foundations (SCT) and external risk mitigation (RDT) facilitate the dynamic capability cycle, while formulating a future research agenda relevant to HR in the digital era.

This article offers significant contributions, both at the theoretical and managerial levels. Theoretically, this study bridges the gap between macro strategic theory and micro-behavioral foundations in the context of human resources. By integrating the Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT) as organizational-level perspectives with Social Cognitive Theory (SCT) as an individual-level foundation we enrich our understanding of the internal mechanisms underlying competitive advantage. Specifically, the proposed model reinforces the role of Strategic Human Resource Management (SHRM) as a strategic architect that connects unique resources (Digital Human Capital RBV) with adaptive organizational actions (Transformative Capabilities DCT). Managerially, these findings provide clear guidance for practitioners and leaders of technology companies. This article emphasizes the importance of shifting the focus of HR from an administrative function to a strategic function that actively designs practices to not only acquire and retain unique human capital (in line with RBV and RDT risk mitigation), but also to foster the cognitive behaviors (SCT) necessary for sensing and seizing opportunities in rapidly changing markets. Thus, this article helps organizations ensure that their HR practices directly support the creation and maintenance of sustainable performance.

Literature Review & Theory Development

Corporate Performance Theory: The Ultimate Goal of Organizations

The evolving theory of corporate performance is now entering an integrative phase by combining the concepts of digital human capital based on the Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT). Over the next five years, the development of this theory will emphasize the use of advanced technologies such as artificial intelligence (AI),

machine learning, and data analytics in performance management to create more objective, real-time, and sustainable evaluations. According to the latest research, performance assessments in the future will shift to continuous, data-driven feedback that enables rapid and adaptive performance improvement (Proxis Group, 2024). In addition, digital transformation requires organizations to develop adaptive capabilities that can anticipate changes in the business environment dynamically, so that corporate performance theory not only assesses end result

s, but also the process of innovation, continuous learning, and effective human resource competency development.

The integration of sustainability and social responsibility aspects into performance measurement is also a key focus so that the ultimate goal of the organization is not solely financial profit, but rather to create long-term value that is inclusive and sustainable socially and environmentally (RTKN, 2025-2029). Thus, the development of corporate performance theory going forward increasingly accommodates the complexity of the digital era and the 5.0 industrial revolution through an adaptive, collaborative, and technology-based performance management approach, so that the ultimate goals of the organization can be achieved optimally and sustainably in an ever-changing global context. In the context of digital transformation, the use of technology is a necessity for companies to optimize their work processes and operational performance (Wulandari et al., 2024).

Internal Strategic Foundation: Resource-Based View (RBV)

The Resource-Based View (RBV) as an internal strategic foundation emphasizes that a company's competitive advantage stems from the management of internal resources that are valuable, rare, difficult to imitate, and non-substitutable (VRIN). RBV examines tangible assets such as capital and location, as well as intangible assets such as knowledge, employee skills, technology, and managerial capabilities, whose integrated combination provides unique value to the company (Lubis, 2023). In addition, RBV encourages companies to focus on developing sustainable internal strategic capabilities in response to the dynamics of global competition, by implementing appropriate strategies so that internal resources can be optimally utilized to maintain long-term competitiveness (Wardani Lubis, 2023; Sianipar et al., 2024).

Therefore, RBV is not only a static theory, but has evolved into a dynamic and adaptive strategic foundation in responding to increasingly complex business environments and advancing technology, including digital transformation that requires companies to have rapid adaptation capabilities and continuous innovation to effectively achieve their ultimate organizational goals. On the other hand, mastery of digital literacy is important for individuals to understand and utilize technology in business activities, such as online marketing, data management, and business performance evaluation (Chandra & Hendayana, 2024).

Adaptive Strategic Foundation: Dynamic Capabilities Theory (DCT)

According to the Dynamic Capabilities Theory (DCT) developed by David Teece and reviewed by a number of researchers until 2025-2030, an organization's dynamic capabilities are key to achieving its future performance and ultimate goals. In the next five years, experts such as Ruspitasari (2024) and Al-Moaid (2024) (Hendayana et al., 2024) believe that organizations must strengthen their dynamic capabilities through innovative approaches such as design thinking and entrepreneurial orientation, which significantly improve the organization's ability to respond to rapid and complex environmental changes. This theory emphasizes three key capabilities, namely sensing, seizing, and reconfiguring, to ensure that companies can recognize opportunities and threats, seize those opportunities, and reconfigure resources to remain competitive. Recent research also links DCT with digital transformation and sustainability, where organizations need to integrate digital technology and sustainable business practices to achieve sustainable competitive advantage by 2030. Therefore, future

DCT will not only focus on adapting to technology and market changes, but also on sustainable innovation and strategic adjustments that are responsive to global social and environmental demands.

Foundations of Microbehavior: Social Cognitive Theory (SCT)

Social Cognitive Theory (SCT), developed by Albert Bandura, emphasizes the dynamic interaction between personal factors, behavior, and the social environment in shaping human behavior. Over the next five years, SCT is projected to evolve with the integration of digital technology and data-driven approaches to improve understanding and prediction of individual behavior in increasingly complex organizational and social contexts. According to recent research (Nursanti, 2025; Egele, 2024), the main focus of SCT development is on increasing self-efficacy through observation-based learning methods supported by technology such as interactive platforms and artificial intelligence, which provide real-time feedback and personalized learning. In addition, strengthening social factors such as family, coworker, and virtual community support is becoming increasingly important in shaping adaptive and productive behavior. The development of SCT theory also integrates more complex aspects of self-regulation and the concept of self-regulated learning to strengthen individuals' capacity to cope with changes in the business and social environment. Thus, future SCT not only explains classic micro behavior but also adopts technological and social developments as a foundation for improving human resource performance and adaptability in the digital era, in line with the transformation needs of companies and society from 2025 to 2030.

External Foundation: Resource Dependency Theory (RDT)

Resource Dependency Theory (RDT) is an external foundation that highlights how organizations depend on resources from the external environment to survive and achieve their goals. Jeffrey Pfeffer and Gerald Salancik, who popularized this theory, emphasize that an organization's dependence on resources owned by external entities shapes the organization's strategy, structure, and governance processes. In the next five years, the development of RDT theory is seen as increasingly important in the context of the digital economy and increasingly complex business networks. Recent research (Pragmantegra, 2025) states that RDT will expand to include the concepts of social networks and business morality as part of modern corporate governance, adapting to the reality of more intensive interdependence among stakeholders.

In addition, this theory has evolved to highlight the importance of stakeholder engagement and relationship management as adaptive strategies to reduce dependence and enhance organizational transformation capabilities in the face of external pressures. This development is in line with the goals of sustainable development and corporate social responsibility, which are key agenda items for the 2025-2030 era. Thus, RDT now focuses not only on traditional resource dependence, but also integrates aspects of social relations, technology, and business ethics as the foundation for improving corporate performance and sustainability in the future.

Integration of Theories: Explaining Organizational Performance

Company performance, especially in the technology sector, cannot be explained by just one theoretical perspective. The integration of the five theories discussed—RBV, DCT, RDT, SCT, and Performance—creates an effective holistic framework.

RBV and Performance (Basics): RBV acts as a prerequisite. Superior performance is only possible if the company has unique and valuable assets (Digital Human Capital/DHC) that cannot be imitated by competitors. RBV answers the question: "What resources do we have?"

RBV and DCT (Dynamic Process): DCT functions as an adaptive mechanism that drives RBV. DCT answers the question: "How do we change and update our assets (HCD) as

the market changes?” This relationship is reciprocal: strong RBV resources (HCD) facilitate Dynamic Capabilities (DCT), and the success of DCT creates new, more relevant RBV resources.

SCT and DCT (Micro Foundations): Social Cognitive Theory provides the micro-behavioral foundation for DCT. The Sensing and Seizing capabilities in DCT cannot occur without Collective Self-Efficacy and a Learning Culture driven by SCT. SCT ensures that individuals have the confidence and willingness to take the risks necessary for innovation and transformation.

RDT and RBV (External Context): RDT serves as a strategic risk context. RDT reminds us that RBV's internal assets are highly dependent on the external environment. SHRM practices must manage dependence on scarce external talent (RDT) through effective talent acquisition strategies to ensure the supply and quality of internal human capital (RBV).

The Role of SHRM (Architect): Strategic Human Resource Management (SHRM) acts as a Strategic Architect that mediates all these relationships. Effective SHRM (e.g., High-Performance Work Systems/HPWS) is an organizational routine that explicitly transforms HCD (RBV) into Dynamic Capabilities (DCT), which ultimately correlates positively with sustainable Company Performance.

METHOD

Research Gap Identification

Micro-Meso Gap in Integrative Models: There is still little research empirically testing the specific mediating or moderating role of SCT cognitive factors (e.g., organizational learning or collective efficacy) in the relationship between SHRM Practices (Meso) and the creation of Dynamic Capabilities (DCT).

RBV & DCT Implementation Gap: There is a lack of detailed studies on the most effective SHRM mechanisms or routines (e.g., job rotation programs or agile HR practices) in transforming HCD resource bundles (RBV) into measurable seizing capabilities in technology companies.

The Dynamic RDT Talent Dependency Gap: Studies on the intersection of RDT and DCT are still limited. There has been little research on how technology companies use their Dynamic Capabilities (DCT) to proactively reduce or mitigate critical dependencies on external talent (RDT) before those dependencies become a threat to internal RBV.

HCD Measurement Gap: The lack of a standardized and multidimensional measurement framework for Human Capital Digital (HCD) that clearly distinguishes its VRIN components, making it difficult to empirically test RBV models based on human resources in the digital era.

Future Research Directions (Proposed Research Agenda)

Testing the Collective Self-Efficacy (SCT) Model: Conducting a quantitative study using Structural Equation Modeling (SEM) to validate the model in which the Collective Self-Efficacy of the Innovation Team (SCT) mediates the influence of High-Performance Work Systems (SHRM) on Sensing Capabilities (DCT) in Indonesian technology companies.

Qualitative Study on SHRM Routines: Conduct an in-depth qualitative case study (e.g., using Grounded Theory) to identify SHRM routines and processes that explicitly facilitate the Transforming Capability (DCT) of HCD resources in the midst of a large re-platforming or digital transformation project.

Modeling Resource Dependency Risk (RDT): Designing a research model that tests how HR Co-optation Strategies (e.g., involving key external experts in internal projects) moderate the relationship between External Resource Scarcity (RDT) and internal Human Capital sustainability (RBV).

Development of the HCD VRIN Scale: Developing and validating a Digital Human Capital measurement scale based on VRIN criteria, enabling more precise measurement of internal resources that are difficult to replicate in the technology industry.

RESULT AND DISCUSSION

Theoretical Implications

The integrated digital human capital model, which combines VRIN (RBV) resources and transformation capabilities (DCT), contributes significantly to the development of management theory, especially in the digital era. This theory expands the strategic management framework by incorporating digitalization as a key resource that supports sustainable competitive advantage through continuous adaptation and innovation. This model emphasizes the importance of integrating human resource management with digital technology to dynamically strengthen organizational capabilities, thereby creating synergy between internal aspects (RBV) and external environmental adaptation (DCT). This requires a new paradigm in human resource management theory that more strongly applies continuous learning, employee engagement, and the use of big data for strategic decision-making.

Practical Implications

In practical terms, this model encourages companies to actively adopt digital technology in their human capital management. The use of digital platforms for regular training, data-driven performance management, and online recruitment systems enables organizations to improve operational efficiency, effectiveness, and flexibility. This digital transformation also requires management to build an adaptive organizational culture that supports innovation, creativity, and cross-functional collaboration. Companies can leverage this model to accelerate learning, strengthen competitiveness in the global market, and increase employee satisfaction and retention by providing a more personalized and responsive work experience tailored to individual needs. In addition, the use of technology in HR management helps reduce operational costs and improve the quality of real-time data-driven decision-making.

CONCLUSION

Summary of Key Findings Review

1. Human Capital Digital (HCD) as a Key Resource (RBV): HCD is an intangible asset that is most likely to meet the VRIN criteria (Valuable, Rare, Inimitable, Non-substitutable) in knowledge-intensive industries. Strategic success begins with an organization's ability to acquire and protect these unique HCD assets.
2. SHRM as a Dynamic Mechanism (DCT): SHRM acts as a transformative mechanism that processes static assets (RBV) into adaptive processes. Through practices such as High-Performance Work Systems (HPWS), SHRM activates the organization's Dynamic Capabilities (DCT) (i.e., Sensing, Seizing, and Transforming) to respond to market changes.
3. Micro-Macro Integration: The success of DCT is determined by the micro foundation of Social Cognitive Theory (SCT), where improvements in Collective Self-Efficacy and Observational Learning of employees directly drive the organization's ability to innovate and adapt.
4. External Risk Context (RDT): The sustainability of internal RBV is always overshadowed by the risk of External Resource Dependency (RDT). Therefore, SHRM must align talent acquisition and partnership strategies to mitigate this risk in order to strengthen the internal resource base.

Limitations of This Review Article

1. **Conceptual Nature:** The proposed integrative model is purely conceptual and theoretical. The interrelationships and strength of causal relationships between variables (e.g., the mediating role of SCT) have not been empirically tested through primary data, but are based solely on a synthesis of existing theoretical literature.
2. **Contextual Limitations:** Although focused on Technology Companies, this review relies on generalizations of theories developed in various industrial contexts. Organizational cultural variations and regulatory differences among global technology companies may affect the validity of this model's generalizations.
3. **Focus on Macro and Meso:** This review pays greater attention to relationships at the organizational level (RBV and DCT) and team level (SHRM), while the micro dimension of SCT, although recognized as important, still requires more detailed operational explanations for empirical testing.

Suggestions for Further Research

1. **Empirical Testing of the Mediation Model:** Quantitative research should be conducted to empirically test the mediating role of Collective Self-Efficacy (CSE) in linking specific SHRM practices (e.g., agile incentive systems) with Sensing and Seizing Capabilities (DCT).
2. **Longitudinal Study on Transforming Capability:** Conduct a longitudinal study to track and measure the effectiveness of specific SHRM interventions (e.g., massive re-skilling programs) in creating Transformative Capability (DCT) over time, particularly after market shocks or the implementation of new disruptive technologies.
3. **RDT and RBV Trade-off Analysis:** Comparative research is needed to analyze the optimal SHRM strategy in balancing external dependence (RDT) versus internal development (RBV) for highly scarce technology talent.

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