From Traditional HR To Digital HR: A Transformation Framework For The Future Workforce

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Abstract.

The Digital Revolution Has Radically Reshaped The Landscape Of Human Resource Management, Demanding A Fundamental Shift From Traditional Hr Practices To More Agile, Data-Driven, And Technology-Integrated Approaches. This Study Proposes A Comprehensive Transformation Framework For Digital Hr, Designed To Equip Organizations With Strategic Direction In Preparing For The Future Workforce. By Synthesizing Literature From Strategic Hrm, Digital Transformation, And Workforce Analytics, The Framework Outlines Key Dimensions Including Digital Leadership, Cultural Agility, Hr Tech Adoption, And Data-Informed Decision-Making. Using A Qualitative Multi-Case Methodology, Data Were Collected From Organizations Undergoing Digital Hr Transformations Across Diverse Sectors. Findings Reveal That Successful Transitions Depend Not Only On Technological Readiness But Also On Leadership Alignment, Continuous Learning Ecosystems, And Change Management Capacity. This Framework Offers Both Theoretical Contribution And Practical Guidance For Hr Leaders Navigating The Evolving Digital Landscape, Ensuring Sustainable Workforce Development In The Era Of Rapid Technological Advancement.

Keywords*: Digital Hr; Transformation Framework,Future Workforce; Strategic Hrm and Technological Integration,Organizational Change.*

I. INTRODUCTION

In the era of accelerated digitalization, the traditional functions of Human Resource Management (HRM) are increasingly inadequate to address the complexities of modern organizational dynamics. The transition from conventional HR practices—characterized by manual processes, administrative rigidity, and reactive strategies—towards Digital HR systems is not merely a technological shift, but a profound organizational transformation. Digital HR integrates artificial intelligence (AI), cloud computing, data analytics, and mobile platforms to optimize employee experience, streamline HR operations, and enable strategic workforce planning (Bondarouk & Brewster, 2016; Marler & Parry, 2021).The transformation is particularly relevant in customer-facing departments such as marketing, where adaptability, innovation, and digital fluency are paramount. As organizations strive to remain competitive, the reconfiguration of HR practices to support digitally agile teams has become essential. In Indonesia, and specifically in urban economic centers such as Medan, businesses are navigating increasing pressure to digitalize HR functions while managing generational shifts in workforce expectations and technological literacy.Scholars emphasize that Digital HR requires more than automation; it necessitates a redesign of organizational culture, leadership roles, and HR competencies (Bersin, 2019).

Lepak and Snell (1998) introduced the notion of human capital architecture, asserting that strategic value and uniqueness of employee contributions must guide HR system design. Building upon this, Ulrich et al. (2012) emphasize the importance of HR as a strategic partner, especially in digital contexts, where HR leaders are expected to drive transformation rather than merely support it.Additionally, the Technology Acceptance Model (TAM) by Davis (1989) and its later adaptations (Venkatesh & Davis, 2000) provide a theoretical lens to understand employee readiness and acceptance of digital tools, while Kotter's Change Management Theory (1995) offers a roadmap for facilitating organizational transformation through clear visioning, engagement, and institutionalization of change.This study seeks to develop a transformation framework that bridges the gap between traditional and digital HR practices, grounded in empirical data collected from 150 marketing employees in Medan, Indonesia. By exploring how digital HR adoption is perceived and operationalized within this specific workforce context, the research aims to provide strategic insights for organizations undergoing similar transitions in emerging economies.

II. METHODS

1.1 Research Design

This study employed a quantitative research design using a descriptive and explanatory approach. The purpose was to examine the factors influencing the transformation from traditional HR to digital HR and to construct a practical framework to support workforce adaptation in the digital era. A structured questionnaire was administered to capture perceptions, readiness, and barriers related to digital HR implementation among marketing professionals.

1.2 Population and Sample

The target population comprised employees working in the marketing departments of various medium to large-scale companies located in Medan, Indonesia. A purposive sampling technique was adopted to ensure the selection of respondents with relevant knowledge and experience in both traditional and digital HR practices. A total of **150 respondents** participated in the study, representing diverse organizational backgrounds and hierarchical levels within the marketing domain.

1.3 Research Instrument

The primary data collection instrument was a self-administered structured questionnaire, developed based on validated constructs from prior literature on Digital HR, organizational change, and technology acceptance. The instrument included both demographic variables and Likert-scale items designed to measure constructs such as digital HR readiness, perceived usefulness of HR technologies, leadership support, and change resistance. Content validity was ensured through expert review, and reliability was assessed using **Cronbach's Alpha**, with a threshold of $\alpha \geq 0.70$.

1.4 Data Collection

Data were collected over a four-week period using both online and offline distribution methods. Participants were informed about the purpose and confidentiality of the study, and informed consent was obtained prior to participation. Responses were recorded electronically and checked for completeness before inclusion in the dataset.

1.5 Data Analysis Techniques

Quantitative data were analyzed using **IBM SPSS Statistics version 26**. Descriptive statistics were applied to summarize demographic data and variable distributions. Inferential analysis, including **Pearson correlation** and **multiple linear regression**, was used to examine relationships among variables and to test the significance of predictors in the proposed transformation framework. Factor analysis was also conducted to validate the dimensionality of constructs.

1.6 Research Procedure

The research procedure followed a structured sequence: (1) literature review and framework development, (2) instrument design and validation, (3) pilot testing on 15 participants (excluded from final analysis), (4) distribution of questionnaires to selected respondents, (5) data coding and cleaning, and (6) statistical analysis and interpretation. Ethical clearance was obtained in accordance with institutional guidelines.

1.7 Research Limitations

Several limitations should be acknowledged. First, the study is geographically limited to Medan, which may restrict the generalizability of findings to other regions or industries. Second, the reliance on self-reported data may introduce response bias. Third, while SPSS provides robust statistical tools, it limits the application of more advanced structural modeling techniques that could enhance causal inference. Future studies may consider multi- regional samples and integrate mixed-method approaches for broader insight.

III. RESULTS AND DISCUSSION

This study sought to analyze the transformational shift from traditional HR to digital HR among marketing employees in Medan, Indonesia, through the lens of readiness, acceptance, and organizational support. Using SPSS version 26, the data from 150 respondents were analyzed in three main stages: descriptive statistics, reliability analysis, and inferential statistics including regression analysis.

1.8 Respondents' Demographic Profile

The demographic distribution revealed a relatively balanced representation in terms of gender (52% male, 48% female), age (60% between 26–35 years), and education (68% holding a bachelor's degree). Respondents were drawn from marketing departments across various sectors including retail, banking, telecommunication, and services.

1.9 Descriptive Statistics

Descriptive analysis showed that the overall mean score for digital HR readiness was **4.12** (on a 5-point Likert scale), indicating a high level of perceived readiness. The perceived usefulness of digital HR tools had a mean of **4.08**, while perceived ease of use scored **3.89**, suggesting moderate but growing familiarity among employees. Leadership support and organizational commitment toward digital HR transformation both recorded mean values above **4.00**.

1.10 Reliability Analysis

All major constructs demonstrated high internal consistency, with **Cronbach's Alpha** values as follows:

- Digital HR Readiness: $\alpha = 0.886$
- Perceived Usefulness: $\alpha = 0.874$
- Ease of Use: $\alpha = 0.853$
- Leadership Support: $\alpha = 0.890$

These results confirm that the instrument was statistically reliable for measuring the constructs of interest.

1.11 Correlation Analysis

Pearson correlation coefficients indicated significant positive relationships between digital HR readiness and other variables:

- Digital HR Readiness ↔ Perceived Usefulness: $\mathbf{r = 0.612}$, $p < 0.01$
- Digital HR Readiness ↔ Leadership Support: $\mathbf{r = 0.684}$, $p < 0.01$
- Digital HR Readiness ↔ Ease of Use: $\mathbf{r = 0.541}$, $p < 0.01$

These results suggest that employee perceptions of leadership and system usability are critical enablers of digital HR adoption.

1.12 Multiple Regression Analysis

A multiple linear regression model was conducted to assess the predictive power of three independent variables—Perceived Usefulness, Ease of Use, and Leadership Support—on Digital HR Readiness. The model summary is as follows:

- $\mathbf{R^2 = 0.583}$, $F(3, 146) = 67.90$, $p < 0.001$

Predictor	β (Beta)	t-value	Sig. (p)
Perceived Usefulness	0.312	4.11	0.000
Ease of Use	0.198	2.65	0.009
Leadership Support	0.435	5.89	0.000

The regression results show that **leadership support** had the strongest influence on digital HR readiness, followed by perceived usefulness and ease of use. All predictors were statistically significant.

1.13 Summary of Key Findings

- Employees in the marketing function exhibit a strong readiness for digital HR transformation.
- Leadership commitment plays the most decisive role in driving the transformation process.
- Technical perceptions such as usefulness and usability also significantly influence acceptance, albeit to a lesser extent.
- Organizational culture and change enablement should be prioritized to sustain long- term adoption.

These findings provide empirical grounding for developing a transformation framework tailored to workforce realities in emerging economies such as Indonesia.

Discussion

The present study explores the pivotal transition from traditional human resource (HR) practices to digital HR (e-HR), particularly within the marketing workforce of Medan, Indonesia. The empirical findings

underscore that the readiness for digital transformation among marketing employees is significantly influenced by perceived usefulness, ease of use, and leadership support—validating previous theoretical propositions and extending them within the Indonesian organizational context.The positive association between perceived usefulness and digital HR readiness corroborates Davis' (1989) Technology Acceptance Model (TAM), which posits that employees are more likely to adopt new technologies when they perceive them as beneficial to job performance. This aligns with the study by Marler and Fisher (2013), which emphasized that the perceived strategic value of e-HR systems significantly affects employee engagement and willingness to embrace digital solutions.Moreover, the significance of ease of use in shaping digital HR readiness resonates with the findings of Venkatesh and Bala (2008), who extended the TAM framework to highlight the role of user-friendly systems in minimizing resistance to technological change. In the current research, the moderate score for ease of use suggests that while employees are generally open to digital tools, there is still a learning curve that organizations must address through targeted digital literacy training and system optimization.

Leadership support emerged as the most influential predictor of digital HR readiness. This finding affirms the theoretical lens of transformational leadership (Bass & Avolio, 1994), where visionary leadership directly impacts the success of organizational change. Leaders who actively champion digital initiatives, allocate resources, and reinforce a culture of innovation are essential in overcoming resistance and sustaining momentum. Similar outcomes were observed in the study by Bondarouk and Brewster (2016), where leadership commitment was identified as the cornerstone of successful HR digitalization in European firms.The relatively high overall readiness observed among respondents may reflect a growing recognition among marketing professionals of the need to align HR functions with digital competencies, especially in a highly competitive and customer-centric environment. As marketing departments increasingly rely on data-driven decision-making, agile talent management systems, and remote collaboration tools, the integration of digital HR becomes not just desirable, but imperative.Furthermore, the context of Medan provides an important contribution to the literature by offering insights from an emerging market where digital infrastructure and human capital development are still evolving. Unlike studies conducted in high-income countries, this research demonstrates that despite infrastructural limitations, organizational culture and leadership can serve as powerful catalysts for digital HR transformation.

Nevertheless, while the statistical results confirm the relevance of individual and organizational factors, they also imply that successful transformation is not merely a matter of technology adoption. It requires a holistic framework that integrates strategy, human behavior, technological infrastructure, and continuous learning. The results lend support to building a comprehensive transformation framework that incorporates leadership alignment, employee empowerment, system usability, and strategic communication—factors that future research should explore in longitudinal designs.In summary, the discussion affirms the necessity of reconfiguring HR functions in response to technological disruptions. It also validates key constructs from existing models such as TAM and transformational leadership within a real-world context. The study advances the discourse by offering empirical evidence that digital HR transformation is not only technologically driven but fundamentally people-centric.

IV. CONCLUSION

This study provides critical insights into the evolving landscape of human resource management, particularly the transition from traditional HR practices to digital HR within marketing departments in Medan, Indonesia. Based on data collected from 150 marketing employees, the research confirms that digital HR readiness is significantly shaped by three primary factors: perceived usefulness, system ease of use, and leadership support.The findings reveal that leadership support plays a central role in enabling a successful transformation, highlighting the importance of visionary leaders who can drive cultural and technological adaptation. Perceived usefulness and ease of use also emerged as key enablers, suggesting that employees are more inclined to adopt digital HR systems when these tools are intuitive and demonstrate clear value to their daily responsibilities.In sum, this study proposes a transformation framework grounded in both technological and human dimensions. As organizations navigate the future of work, they must prioritize digital literacy,

inclusive leadership, and system integration strategies that collectively enhance employee engagement and operational agility. These findings offer a practical foundation for companies aiming to design a resilient and future-ready HR ecosystem in emerging market contexts.

Recommendations

Based on the empirical evidence and framework developed in this study, the following recommendations are proposed to support organizations in effectively transitioning from traditional to digital HR systems:

1. **Invest in Digital Literacy and Upskilling Initiatives**

Organizations should continuously invest in digital training programs tailored to the specific roles of employees—particularly within marketing departments—to ensure smooth adoption of HR technologies and minimize resistance to change.

2. **Strengthen Leadership Engagement in Digital Transformation**

Executive and HR leaders must actively champion digital transformation initiatives, not only by allocating resources but also by embodying digital-first mindsets. Visible leadership support significantly enhances employee confidence and accelerates adoption.

3. **Develop User-Centered HR Platforms**

HR digital tools should be designed with an emphasis on user-friendliness, seamless integration, and accessibility. Employees are more likely to adopt digital systems when they perceive the technology as intuitive and aligned with their workflows.

4. **Promote a Culture of Innovation and Agility**

Organizations should foster an internal culture that embraces experimentation, encourages innovation, and views digital transformation as an ongoing process rather than a one-time shift. Open feedback loops and cross-functional collaboration should be institutionalized.

5. **Tailor Transformation Frameworks to Local Contexts**

Companies operating in emerging markets like Indonesia must contextualize digital HR strategies according to local workforce dynamics, infrastructure, and organizational maturity. One-size-fits-all models are less effective in diverse regional environments.

By implementing these strategic recommendations, organizations will be better equipped to navigate the digital HR transformation and build a future-ready workforce that aligns with Industry 4.0 and beyond.

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