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Digital HR Analytics Capability and Talent Retention: The Mediating Role of Employee Trust in Technology in the Cellular Phone Industry

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Abstract: The cellular phone industry is characterized by rapid technological innovation, intense competition, and continuous digital transformation. In early 2026, the global smartphone market was dominated by flagship models such as the Apple iPhone 17, Samsung Galaxy S25 Ultra, and Google Pixel 10, while premium performance devices including the OnePlus 15 and Samsung Galaxy Z Fold 7 led in advanced technological capability. In the mid-range and entry-level segments, devices such as Redmi 15C, TECNO Spark 40 Pro+, and Samsung Galaxy A07 gained significant market attention. This dynamic environment requires organizations within the cellular phone industry to strengthen digital human resource strategies to retain high-performing talent. This study examines the effect of Digital HR Analytics Capability on Talent Retention, with Employee Trust in Technology positioned as a mediating variable. This research adopts a quantitative explanatory design using a survey of employees working in companies engaged in the development, production, and distribution of leading smartphone brands in early 2026. Structural Equation Modeling (SEM) was employed to test the direct and indirect relationships among Digital HR Analytics Capability, Employee Trust in Technology, and Talent Retention. The findings indicate that Digital HR Analytics Capability has a positive and significant effect on Employee Trust in Technology. Employee Trust in Technology significantly influences Talent Retention, and Digital HR Analytics Capability also directly affects Talent Retention. Furthermore, Employee Trust in Technology partially mediates the relationship between Digital HR Analytics Capability and Talent Retention. These results suggest that data-driven HR decision-making systems, predictive workforce analytics, and transparent digital performance management enhance employee confidence in technological systems, which in turn strengthens retention intentions. This study contributes to strategic human resource management literature by extending digital capability frameworks into high-technology manufacturing industries. Practically, the findings highlight that companies in the cellular phone industry must not only invest in advanced HR analytics systems but also build employee trust in digital technologies to sustain competitive human capital advantages.

Keywords: Digital HR Analytics Capability, Employee Trust In Technology, Talent Retention, Cellular Phone Industry, Strategic HRM.

INTRODUCTION

The global cellular phone industry in early 2026 continues to be defined by rapid technological advancement, heightened competition, and shifting consumer preferences. According to market analyses, flagship devices such as Apple iPhone 17, Samsung Galaxy S25 Ultra, and Google Pixel 10 dominate global market share in terms of innovation and consumer visibility, while premium performance models like OnePlus 15 and Samsung Galaxy Z Fold 7 lead in performance segmentation. In the mid-range and entry-level segments, devices such as Redmi 15C, TECNO Spark 40 Pro+, and Samsung Galaxy A07 are among the most recommended, reflecting growing demand for affordable yet capable smartphones (IDC, 2026; Canalys, 2026). This dynamic competitive environment has significant implications for human resource strategies, particularly concerning the attraction and retention of top talent in high-technology manufacturing and product development.

In the context of the cellular phone industry, talent retention has become a critical strategic priority because employee turnover can lead to substantial operational disruptions, loss of institutional knowledge, and increased recruitment costs. The Institute for Corporate Productivity (i4cp, 2025) reported that organizations with high retention rates outperform their peers in innovation outcomes and market responsiveness. These findings underscore that in industries driven by innovation cycles measured in months rather than years, such as smartphone manufacturing, maintaining a stable and motivated workforce is essential for sustaining competitive advantage.

At the same time, digital transformation has reshaped how human resource management (HRM) operates within advanced manufacturing and technology firms. Digital HR Analytics refers to the use of data-driven systems to collect, analyze, and interpret HR-related data to support strategic decision-making, talent forecasting, and performance optimization (Angrave et al., 2016; Marler & Boudreau, 2017). In the cellular phone industry, where product cycles, skill requirements, and labor market competition evolve rapidly, the capability to leverage HR analytics for predictive insights into workforce dynamics can be a differentiator in employee engagement and retention strategies.

Despite the increasing adoption of digital HR systems, evidence from organizational research suggests that technological capability alone may not be sufficient to yield optimal outcomes if employees do not trust the technology being deployed. Employee Trust in Technology has been conceptualized as a key psychological antecedent shaping user acceptance, engagement, and sustained utilization of digital systems (McKnight et al., 2011; Li et al., 2021). In HR contexts, trust in analytics systems influences employees' willingness to accept algorithm-based decisions and analytics-informed HR practices, which in turn affects their perception of fairness, transparency, and their intention to remain within the organization. The integration of trust into HR analytics frameworks has been highlighted as critical in recent human resource management research, particularly in technologically advanced sectors (Shin et al., 2020; Tarafdar et al., 2021).

While prior studies have explored the direct relationships among HR analytics adoption, employee attitudes, and organizational outcomes, there remains a gap in understanding how digital HR analytics capability influences talent retention, and specifically, the role of employee trust in technology as a mediating factor. This gap is particularly salient in high-velocity industries such as the cellular phone sector, where the interplay between technology deployment and human psychological responses is central to long-term workforce stability.

Therefore, this study aims to examine the influence of Digital HR Analytics Capability on Talent Retention, with Employee Trust in Technology as a mediating variable, in firms producing and marketing leading smartphone models in early 2026. By integrating digital capability frameworks with organizational behavior perspectives, the study seeks to contribute to strategic HRM literature while providing actionable insights for HR practitioners operating within the rapidly evolving cellular phone industry.

METHOD

Research Design

This study employed a quantitative explanatory research design to examine the effect of Digital HR Analytics Capability on Talent Retention, with Employee Trust in Technology as a mediating variable. Structural Equation Modeling (SEM) was utilized as the primary analytical technique, as it enables simultaneous testing of complex relationships among latent constructs and is suitable for mediation analysis (Hair et al., 2019).

Research Setting

The research was conducted in three of the largest mobile phone retail centers in Bandung, Indonesia: Bandung Electronic Center (BEC), Dukonsel, and Jaya Plaza Kosambi. These locations were selected because they represent major retail hubs for flagship and mid-range smartphone brands, including Samsung, Apple (iPhone), and other leading manufacturers.

Data collection was carried out through official brand outlets located within these retail centers. Specifically, questionnaires were distributed in:

1. 3 Samsung official stores
2. 3 iPhone official stores
3. 3 official outlets of other major smartphone brands

These nine outlets are distributed across the three major retail centers mentioned above, ensuring representation of different product segments and customer engagement environments.

Population and Sampling Technique

The population in this study consists of employees working in official smartphone outlets located in the three selected retail centers. Because the exact number of employees across all outlets was not formally documented and therefore unknown, the study adopted a non-probability sampling approach.

A convenience sampling technique was used. Questionnaires were entrusted to outlet supervisors and distributed to employees who met the following criteria:

1. Actively working in the store for at least one year
2. Directly involved in sales, customer service, or operational functions
3. Familiar with digital systems used for performance monitoring, reporting, or HR-related processes

This approach was chosen due to the practical constraints of accessing formal workforce records and to ensure feasible data collection in retail environments.

Sample Size Determination

The sample size was determined based on SEM methodological guidelines. According to Hair et al. (2019), the minimum sample size for SEM analysis should be at least five times the number of measurement indicators.

The research model consists of 51 indicators. Therefore, the minimum required sample size was calculated as:

$$51 \text{ indicators} \times 5 = 255 \text{ respondents}$$

To ensure statistical robustness and compensate for incomplete responses, 270 questionnaires were distributed. After screening for completeness and response consistency, 255 valid questionnaires were retained for analysis.

Data Collection Procedure

Primary data were collected using structured questionnaires. The instruments were physically distributed and collected at the nine official outlets. Participation was voluntary, and respondents were assured of confidentiality and anonymity to minimize response bias.

All items were measured using a five-point Likert scale ranging from:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

Measurement of Variables

Digital HR Analytics Capability was measured through indicators reflecting data-driven HR decision-making, predictive workforce analysis, digital performance tracking, and integration of analytics systems in HR processes.

Employee Trust in Technology was measured using indicators related to perceived reliability, fairness, transparency, and security of digital HR systems.

Talent Retention was measured using indicators reflecting intention to stay, organizational commitment, reduced turnover intention, and perceived career sustainability within the organization.

All measurement items were adapted from established HR analytics, technology trust, and retention frameworks to ensure content validity.

Data Analysis Technique

Data analysis was conducted in two stages. First, the measurement model was evaluated to assess construct validity and reliability using standardized factor loadings, composite reliability (CR), and Average Variance Extracted (AVE). Second, the structural model was tested to examine direct and indirect relationships among variables.

Bootstrapping with 5,000 resamples was employed to evaluate the significance of mediation effects and to confirm the mediating role of Employee Trust in Technology.

Ethical Considerations

Participation was voluntary, and no personal identifying information was collected. Data were used exclusively for academic research purposes, and respondents were informed of their right to withdraw at any time.

RESULT AND DISCUSSION

Results

Descriptive Analysis

A total of 255 valid responses were analyzed from employees working at official Samsung, iPhone, and other smartphone brand outlets located in BEC, Dukomsel, and Jaya Plaza Kosambi in Bandung. Of the respondents, 46% were sales associates, 32% customer service staff, and 22% store supervisors or operational coordinators. In terms of tenure, 39% had worked between 1–3 years, 44% between 4–7 years, and 17% more than 7 years.

Descriptive statistics indicate that Digital HR Analytics Capability recorded a mean score of 3.91 (SD = 0.61), suggesting that respondents generally perceive the HR systems used in

their organizations as data-driven and technologically integrated. Employee Trust in Technology recorded a mean of 3.84 (SD = 0.65), reflecting relatively high confidence in the reliability and fairness of digital HR systems. Talent Retention recorded a mean score of 3.88 (SD = 0.63), indicating a strong intention among employees to remain in their organizations.

These findings suggest that digital HR systems are perceived positively and may contribute to stable workforce conditions within the cellular phone retail sector.

Measurement Model Evaluation

All measurement indicators demonstrated standardized factor loadings above 0.70, confirming indicator reliability. Composite reliability values ranged between 0.91 and 0.95, exceeding the recommended threshold of 0.70. Average Variance Extracted (AVE) values ranged from 0.64 to 0.76, confirming convergent validity. Discriminant validity was established, as the square root of AVE for each construct exceeded the inter-construct correlations.

These results confirm that the constructs meet the reliability and validity requirements for structural analysis.

Structural Model and Hypothesis Testing

The structural model was tested using SEM with bootstrapping (5,000 resamples). The results are presented in Table 1.

Table 1. Hypothesis Testing Results

Hypothesis	Path Relationship	Standardized β	t-value	p-value	Result
H1	Digital HR Analytics Capability → Employee Trust in Technology	0.67	10.12	<0.001	Supported
H2	Employee Trust in Technology → Talent Retention	0.53	8.45	<0.001	Supported
H3	Digital HR Analytics Capability → Talent Retention	0.29	4.36	<0.001	Supported
H4	Digital HR Analytics Capability → Employee Trust → Talent Retention	0.36	6.02	<0.001	Supported

The coefficient of determination shows that Digital HR Analytics Capability explains 45% of the variance in Employee Trust in Technology ($R^2 = 0.45$). Meanwhile, Digital HR Analytics Capability and Employee Trust in Technology jointly explain 64% of the variance in Talent Retention ($R^2 = 0.64$), indicating strong explanatory power for organizational behavior research.

The first hypothesis (H1) reveals a strong positive relationship between Digital HR Analytics Capability and Employee Trust in Technology ($\beta = 0.67$; $t = 10.12$). This indicates that when HR systems are perceived as data-driven, accurate, and systematically integrated, employees are more likely to trust the technology used in HR processes. The high t-value confirms that this relationship is statistically robust. Practically, this means that transparent and well-implemented HR analytics systems significantly strengthen employees' confidence in digital decision-making processes.

The second hypothesis (H2) shows that Employee Trust in Technology significantly influences Talent Retention ($\beta = 0.53$; $t = 8.45$). The magnitude of this coefficient suggests that trust is a strong psychological predictor of employees' intention to remain in the organization. Employees who perceive digital HR systems as fair, reliable, and secure are more likely to feel organizational stability and commit long-term. This finding underscores the importance of psychological acceptance of technology in shaping retention behavior.

The third hypothesis (H3) confirms that Digital HR Analytics Capability also has a direct positive effect on Talent Retention ($\beta = 0.29$; $t = 4.36$). Although the effect size is smaller than the mediated pathway, it remains statistically significant. This suggests that beyond trust, the existence of advanced HR analytics systems contributes directly to employees' perception of organizational professionalism and future career sustainability.

The mediation analysis (H4) demonstrates a significant indirect effect ($\beta = 0.36$; $t = 6.02$), indicating partial mediation. This means that Digital HR Analytics Capability influences Talent Retention both directly and indirectly through Employee Trust in Technology. The indirect effect (0.36) is larger than the direct effect (0.29), suggesting that trust plays a central mechanism in translating technological capability into retention outcomes.

Discussion

The findings of this study demonstrate that Digital HR Analytics Capability significantly enhances Employee Trust in Technology within the cellular phone retail industry. The strong standardized coefficient ($\beta = 0.67$) indicates that employees perceive HR systems as credible and reliable when they are structured around data-driven processes, predictive analytics, and transparent performance tracking mechanisms. This result aligns with contemporary extensions of the Resource-Based View (RBV), which argue that digital capabilities embedded within organizational processes function as strategic assets that generate internal legitimacy and competitive advantage. In high-velocity industries such as smartphone retail—where flagship models like iPhone 17, Galaxy S25 Ultra, and other premium devices dominate intense market cycles—organizational credibility is partially constructed through internal system sophistication. The result is further reinforced by Dynamic Capabilities Theory, which posits that organizations capable of integrating digital systems into decision-making processes foster adaptability and internal confidence. From a technology perspective, updated Technology Acceptance and Trust in IT frameworks emphasize that system reliability, transparency, and explainability strengthen user trust. Algorithmic Management literature (post-2020) similarly highlights that employees' trust in automated systems increases when digital processes are perceived as fair and non-arbitrary. Additionally, High-Performance Work System (HPWS) research suggests that digitally supported HR systems enhance perceptions of procedural justice. Collectively, these theoretical perspectives explain why HR analytics capability significantly predicts employee trust in technology.

The significant effect of Employee Trust in Technology on Talent Retention ($\beta = 0.53$) confirms that psychological confidence in digital systems plays a central role in shaping employees' long-term organizational commitment. This finding is strongly supported by Social Exchange Theory in its modern organizational applications, which proposes that when employees perceive fairness and reliability in organizational systems, they reciprocate through loyalty and sustained commitment. Organizational Commitment Theory further explains that trust strengthens affective attachment, which directly reduces turnover intention. In technology-intensive environments, trust mitigates uncertainty associated with performance monitoring and digital evaluation systems. Psychological Contract Theory also provides explanatory depth, suggesting that employees interpret transparent HR technologies as signals that the organization honors implicit obligations related to fairness and career development. Moreover, contemporary Human–Technology Interaction research demonstrates that trust in

workplace technology enhances job satisfaction and reduces resistance to digital transformation, both of which are associated with stronger retention outcomes. Finally, extensions of the Job Demands–Resources (JD-R) model highlight that trusted digital systems function as organizational resources that buffer job stress and enhance engagement, ultimately supporting retention. The convergence of these theoretical streams reinforces the empirical finding that trust in technology is a powerful predictor of employee retention.

The direct influence of Digital HR Analytics Capability on Talent Retention ($\beta = 0.29$) indicates that digital capability contributes to workforce stability even beyond the mediating role of trust. This direct pathway is consistent with Strategic Human Resource Management (SHRM) theory, which argues that structured, data-informed HR practices improve alignment between performance expectations and reward systems, thereby reducing turnover. Dynamic Capability Theory also explains that firms capable of leveraging analytics for workforce planning signal organizational adaptability and long-term viability, increasing employees' perception of career sustainability. Furthermore, High-Performance Work Systems (HPWS) research suggests that systematic and technology-enabled HR practices directly enhance organizational attractiveness and reduce voluntary turnover. Algorithmic Management frameworks add that even in the absence of strong psychological mediation, the structural presence of advanced digital HR systems may signal professionalism and operational maturity. In addition, Digital Governance Theory emphasizes that organizations that institutionalize transparent digital systems strengthen internal legitimacy, which influences retention decisions. These theoretical perspectives clarify why HR analytics capability exerts both structural and behavioral influence on employee retention in the competitive smartphone retail context.

The mediation analysis reveals that Employee Trust in Technology partially mediates the relationship between Digital HR Analytics Capability and Talent Retention, with the indirect effect ($\beta = 0.36$) exceeding the direct effect ($\beta = 0.29$). This finding suggests that while digital capability independently influences retention, its strongest impact occurs through psychological trust formation. Multi-Level Organizational Theory supports this mechanism by explaining that structural systems influence behavioral outcomes through cognitive and affective processes. Integrated Digital HR Frameworks developed in recent digital transformation research similarly argue that technological sophistication must be internalized through user trust before producing sustainable organizational outcomes. Algorithmic Transparency Theory reinforces the importance of perceived fairness as a mediating pathway between digital system design and employee behavioral responses. Social Exchange Theory also complements this explanation, as digital capability enhances perceived organizational support, which strengthens trust and subsequently promotes retention. Finally, contemporary Organizational Resilience literature suggests that trust in internal systems enhances stability and reduces uncertainty in rapidly changing industries, strengthening employees' willingness to remain. The mediation result therefore confirms that trust is not merely an accompanying variable but a central mechanism translating digital HR capability into sustainable talent retention.

Overall, the findings extend digital HR analytics literature by demonstrating that technological capability alone is insufficient to ensure retention outcomes; rather, its effectiveness depends substantially on employee trust formation. In highly competitive retail environments such as BEC, Dukonsel, and Jaya Plaza Kosambi—where smartphone innovation cycles are rapid and performance expectations are high—organizations must combine advanced HR analytics systems with transparent communication and fairness-oriented implementation strategies. The substantial explanatory power of the model ($R^2 = 0.64$) confirms that digital HR capability and trust jointly account for a significant proportion of retention behavior. The study therefore contributes theoretically by integrating capability-

based theory, trust-based organizational psychology, and strategic HRM within a unified mediation framework, and practically by highlighting that building trust in HR technology is a strategic imperative for sustaining human capital advantage in the cellular phone industry.

CONCLUSION

This study concludes that Digital HR Analytics Capability plays a strategic and multidimensional role in strengthening Talent Retention within the cellular phone retail industry. The empirical findings confirm that digital HR analytics systems not only directly enhance retention intentions but also exert a stronger indirect influence through the formation of Employee Trust in Technology. This dual-path mechanism demonstrates that technological sophistication must be accompanied by psychological acceptance to produce sustainable organizational outcomes.

The results indicate that when HR analytics systems are perceived as reliable, transparent, and data-driven, employees develop greater trust in technology-based HR processes. Such trust significantly increases their intention to remain within the organization. In highly competitive smartphone retail environments—where flagship products such as iPhone 17, Samsung Galaxy S25 Ultra, and other premium devices drive rapid operational cycles—organizational stability depends not only on product innovation but also on workforce continuity. Digital HR capability, when integrated effectively and perceived as fair, strengthens internal legitimacy and enhances employee commitment.

The mediation analysis confirms that Employee Trust in Technology functions as a critical psychological mechanism linking HR analytics capability to retention outcomes. This finding contributes to strategic human resource management literature by integrating capability-based theory with trust-based organizational behavior perspectives in a high-technology retail context. The study extends digital HR analytics research beyond system adoption toward understanding how technological capability translates into sustainable human capital advantage.

Practically, the findings suggest that organizations in the cellular phone industry should not treat HR analytics merely as operational tools. Instead, they must ensure transparency, fairness, and communication in the implementation of digital HR systems to foster employee trust. Investment in advanced analytics without parallel trust-building efforts may limit retention benefits. By aligning technological capability with employee-centered implementation strategies, firms can strengthen long-term talent stability and maintain competitive advantage in dynamic market conditions.

Overall, this research underscores that digital transformation in human resource management becomes strategically valuable when technological capability and employee trust operate synergistically to support sustainable talent retention.

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