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Strategic HR in the Digital Era: Synergising Retention, Inclusion and AI-Driven Practices for Organisational Performance in the IT Industry

Abstract

Purpose - Despite growing recognition of HRM's strategic importance in technology-driven sectors, limited research examines how talent retention, diversity and inclusion (D&I), and technological integration interconnect within emerging markets confronting brain drain, socio-cultural barriers, and weak institutional frameworks. This study investigates how IT firms in Pakistan design and implement these HRM practices and strategies impacting employee engagement and organisational performance.

Design/methodology/approach - Guided by Resource-Based View (RBV), this qualitative multi-site study employed hybrid semi-structured interviews with 16 HR professionals across eight IT organisations of varying sizes in four Pakistani cities. Rigorous thematic analysis revealed how strategic HRM practices function as valuable, rare, inimitable, and non-substitutable (VRIN) resources generating sustainable competitive advantage.

Findings - Three interconnected themes as HRM practices and strategies emerged: talent retention through promotional policies, personalised recognition, and trust-based management addressing turnover and migration; diversity and inclusion via blind recruitment, culturally aware leadership, and cultural celebrations navigating deep-rooted barriers; and technological integration deploying HRIS platforms, AI tools (IBM Watson, HireVue), and predictive analytics whilst prioritising ethical governance. Organisations synergistically integrating all three practices achieved superior outcomes. A proposed framework illustrates synergistic effects enhancing employee engagement and performance.

Originality/value - Addressing critical gaps in emerging market HRM research, this study extends RBV by demonstrating how strategically integrated practices transform talent retention, diversity, and AI technologies into VRIN-based assets despite pervasive brain drain and institutional deficits. The framework breaks new ground by positioning ethical AI governance as a trust-building imperative. HR practitioners gain evidence-based blueprints for turning resource constraints and cultural complexities into strategic advantages through responsible technological transformation.

Keywords Human resource management, talent retention, diversity and inclusion, AI-driven HR practices, Resource-Based View, emerging markets

1. Introduction

The Information Technology (IT) industry is widely recognised for its rapid innovation, driven by continuous technological advancements and intense market competition (Nayebpour and Sehhat, 2024). In such dynamic environments, effective management of human capital represents a critical determinant of organisational success (Roul *et al.*, 2025; Sachdeva *et al.*, 2024). This challenge is

particularly pertinent in Pakistan's growing IT sector, which contributes over \$3.5 billion to national GDP and benefits from a digitally skilled workforce, government incentives, and rising international demand for outsourcing services (Niazi *et al.*, 2024). Human resource management (HRM) practices, encompassing policies and initiatives designed to attract, develop, motivate, and retain employees, are critical in addressing these challenges (Dubey *et al.*, 2024). Strategies such as career development, competitive compensation, equitable recruitment, and culturally responsive leadership are essential for enhancing workforce effectiveness and aligning human capital with organisational success (Pillai and Srivastava, 2024).

Traditional HRM approaches struggle to meet the evolving demands of highly competitive, technology-driven environments (Sousa *et al.*, 2024). Common issues, including high employee turnover, declining engagement, and performance management challenges, are exacerbated by a shortage of experienced professionals and steady 'brain drain' as skilled workers migrate abroad (Ahmad and Allen, 2015; Masood *et al.*, 2023). Although Pakistan produces large numbers of IT graduates annually, retaining experienced professionals remains critical, creating capability gaps, disrupting succession planning, and increasing recruitment and training costs (Ahmad *et al.*, 2019). HRM practices and strategies are also influenced by cultural and institutional factors, wherein traditional workplace norms may conflict with modern, inclusive, or technology-driven approaches (Iqbal *et al.*, 2018). Organisations must navigate not only technological and economic changes but also shifting social expectations and workforce diversity (Burhan *et al.*, 2020). The integration of Artificial Intelligence (AI) and big data is transforming HR by enhancing efficiency and supporting data-driven decisions, yet it raises concerns over employee well-being and reduced human interaction (Gravili *et al.*, 2023; La Sala *et al.*, 2024). The COVID-19 pandemic further underscored difficulties in remote collaboration, mental health management, and sustaining organisational resilience (Sachdeva *et al.*, 2024; Sareminia and Sajedi Haji, 2024).

These overlapping factors highlight the need for strategic, adaptive, and context-specific HRM practices. Although many studies in Pakistan examine individual HRM strategies across sectors, such as retention programmes or technology adoption, few investigate how these strategies interconnect within the IT sector and collectively influence organisational performance (Burhan *et al.*, 2023; Iqbal *et al.*, 2018). Limited research considers the cultural and institutional dynamics, including hierarchical structures, traditional workplace norms, and post-pandemic workforce engagement, that shape the design and effectiveness of these strategies (Ahmad *et al.*, 2019; Riaz *et al.*, 2021). Furthermore, empirical evidence capturing the perspectives of HR professionals who directly implement and manage these strategies remains scarce, particularly regarding their synergistic effects and contextual challenges (Ahmad and Allen, 2015; Burhan *et al.*, 2020). To address these gaps, this study examines HRM practices and strategies within Pakistan's IT industry, investigating how they are developed, implemented, and experienced in practice. The study focuses on exploring the design and implementation of HRM practices in response to organisational and sectoral challenges, and examining their perceived impact on employee

satisfaction, engagement, and organisational performance in a post-pandemic context. The research questions guiding the study are:

- *RQ1*: How do IT firms in Pakistan design and implement HRM practices and strategies in response to evolving business, technological, and workforce challenges?
- *RQ2*: What are the perceived outcomes of HRM practices and strategies on employee engagement, satisfaction, and performance in the Pakistani IT sector?

This study is guided by the Resource-Based View (RBV), which emphasises the strategic role of human capital in achieving sustainable competitive advantage (Barney, 1991). From this perspective, the study aims to develop a conceptual framework illustrating how HRM practices and strategies enhance employee outcomes, creating a synergistic effect that contributes to organisational performance. By adopting a qualitative approach, this research employs in-depth hybrid interviews with HR professionals from diverse IT organisations in Pakistan. The study utilises thematic analysis to identify patterns and themes within the data, providing rich, contextual insights into HRM practices and strategies in Pakistan's IT sector.

This methodological approach contributes to both theory-building in dynamic and culturally complex environments and practical recommendations for HR stakeholders. Theoretically, the study extends RBV to emerging markets facing brain drain and weak institutional frameworks. From a policy perspective, it highlights critical governance gaps in AI ethics and data protection, providing recommendations for regulatory frameworks that balance innovation with employee trust.

The remainder of this manuscript is structured as follows. Section 2 reviews the literature on HRM practices, talent retention, and technology integration in dynamic organisational contexts. Section 3 develops the conceptual framework through the lens of the Resource-Based View (RBV). Section 4 outlines the research methodology, including sampling, data collection, and analysis. Section 5 presents the findings, whilst Section 6 discusses the results in relation to theory and practice. Finally, Section 7 concludes with key contributions, limitations, and directions for future research.

2. Literature Review

2.1 The Role of HRM Practices in the IT Sector

The IT sector operates within a landscape of rapid innovation, digital transformation, and global competition, requiring HRM practices that are strategic, agile, and contextually relevant (Zhao *et al.*, 2024). In this dynamic environment, HRM has evolved from an administrative function to a strategic enabler of organisational resilience (Albrecht *et al.*, 2015). Previous studies have explored aspects such as employee retention (Hughes and Rog, 2008), diversity and inclusion (D&I) (Kulkarni *et al.*, 2016), and technology adoption (Nayebpour and Sehhat, 2024). However, these

themes are often examined in isolation, with limited integration or application to developing economies, particularly within the Pakistani IT industry.

Retention of skilled talent remains a pressing challenge in Pakistan's IT sector, where urban concentration of opportunities, global migration, and high turnover rates disrupt organisational continuity and growth (Jain and Sharma, 2024; Masood *et al.*, 2023). Whilst traditional mechanisms such as remuneration and job security persist, recent research highlights the increasing importance of career development, employee well-being, and flexible work arrangements in promoting long-term commitment (Jaiswal and Dyaram, 2020; Rurkkhum, 2024). These practices have become especially salient in the post-pandemic era, where hybrid and remote work models have reshaped employee expectations and organisational strategies (Keeler *et al.*, 2023; Zapata *et al.*, 2024).

Diversity and inclusion (D&I) are widely recognised as drivers of innovation and collaboration, yet their implementation faces significant obstacles in developing economies (Shivhare and L, 2025). In Pakistan, deep-rooted social norms, hierarchical organisational structures, and gender disparities hinder the adoption of inclusive HR policies (Iqbal *et al.*, 2019). Although certain firms have introduced D&I initiatives, efforts remain fragmented, and empirical evidence of their impact is limited (Ahmad *et al.*, 2019; Burhan *et al.*, 2020). Sustainable progress requires strategic leadership and sensitivity to cultural contexts.

Whilst big data and AI enhance HRM efficiency and decision-making (Gravili *et al.*, 2023; La Sala *et al.*, 2024), ethical aspects and potential risks of AI, including data privacy, algorithmic bias, and reduced human oversight, represent critical considerations underexplored in the literature (Einola and Khoreva, 2023; Jarrahi, 2018). The human-AI symbiosis in organisational decision-making requires careful navigation to balance efficiency gains with ethical considerations and employee well-being (Willcocks, 2024). Uneven adoption and infrastructural challenges in Pakistan further constrain effective implementation (Rafi *et al.*, 2020), highlighting the need for context-sensitive and ethically responsible strategies.

The COVID-19 pandemic exposed limitations of conventional HRM frameworks (Sachdeva *et al.*, 2024). Whereas multinational firms swiftly transitioned to remote and hybrid work models, including experiments with reduced working weeks (La Sala *et al.*, 2024), responses from Pakistani IT firms were inconsistent. Current HRM strategies must address employee well-being, digital upskilling, and engagement in hybrid work settings, with particular attention to adaptability under evolving work paradigms (David *et al.*, 2024; Reiche, 2023; Rurkkhum, 2024). However, local scholarship on these organisational transformations remains sparse.

Overall, whilst HRM practices such as talent retention, D&I, and technology adoption have been studied individually, their combined impact on employee engagement and organisational performance in Pakistan's IT sector remains underexplored. Existing research often centres on multinational corporations or isolated practices, neglecting local socio-cultural, economic, and

digital contexts. This study addresses these gaps by investigating how HR professionals implement and integrate HRM strategies, providing context-driven insights to develop a localised and synergistic framework that enhances employee engagement and sustainable organisational performance.

3. Theoretical Foundations of a Conceptual HRM Framework

3.1 Resource-Based View (RBV) Theory

The Resource-Based View (RBV) is a strategic management perspective emphasising an organisation's internal resources, both tangible and intangible, as central to achieving sustainable competitive advantage (Barney, 1991). RBV proposes that resources which are valuable, rare, inimitable, and non-substitutable (VRIN) provide unique capabilities that competitors cannot easily replicate (Pandita and Ray, 2018). Within HRM, RBV highlights how human, social, and technological resources function as strategic assets that enhance performance and organisational resilience (Niazi *et al.*, 2024). Whilst alternative perspectives, such as Institutional Theory and Human Capital Theory, were considered, they were deemed less appropriate for this study. Institutional Theory focuses primarily on external pressures, including regulatory requirements and cultural expectations (Lewis *et al.*, 2019), whereas Human Capital Theory emphasises the economic returns of employee development (Marginson, 2019). In contrast, RBV provides a more comprehensive lens for examining how internal resources interact synergistically to create competitive advantage.

RBV has been widely applied to understand the strategic role of HRM practices. For instance, Hughes and Rog (2008) examined employee engagement as a resource driving retention, whilst Kossyva *et al.* (2024) highlighted inclusive workplace culture as a strategic asset supporting sustained competitive advantage. Similarly, Gravili *et al.* (2023) and Pandita and Ray (2018) explored technology integration and talent development as VRIN-based resources that strengthen organisational effectiveness.

Despite these extensive applications, previous studies often focus on single HRM practices or multinational contexts, leaving a gap in understanding the synergistic impact of multiple HRM practices in local contexts. In particular, the Pakistani IT sector has been underexplored regarding the integration of talent retention, diversity and inclusion, and technology integration as collective VRIN-based resources.

In the present research, RBV is applied to conceptualise talent retention, diversity and inclusion, and technology integration as VRIN-based resources that interact synergistically. Talent retention acts as a valuable and rare human resource, where career development, competitive remuneration, and flexible work arrangements reduce turnover and stabilise organisational knowledge (Alhajaj and Ahmad, 2024; Jabbour *et al.*, 2011; Pandita and Ray, 2018). Diversity and inclusion (D&I) functions as an inimitable social resource, fostering collaboration, creativity, and belonging, which are non-substitutable in driving employee engagement and organisational cohesion (Jaiswal and

Dyaram, 2020; Kulkarni *et al.*, 2016; Shivhare and L, 2025). Technology integration serves as a VRIN-based technological capability, enabling operational efficiency, data-driven decision-making, and workforce flexibility (Gravili *et al.*, 2023; Roul *et al.*, 2025). Building on the RBV perspective, these strategies not only function individually but also operate synergistically to enhance employee engagement and overall organisational performance. Together, they generate VRIN-based assets that contribute to sustained competitive advantage in Pakistan's IT sector. **Figure 1** illustrates this conceptual framework, depicting the synergistic relationships between talent retention, diversity and inclusion, and technology integration as VRIN-based resources that enhance employee engagement and drive organisational performance in Pakistan's IT sector.

‘[insert figure 1 about here]’

3.2 Talent Retention

Talent retention as an HRM practice is a critical determinant of organisational success in the IT sector, where competition for skilled professionals is intense (Sousa *et al.*, 2024). Core strategies include career development opportunities, competitive compensation and benefits, and work-life balance (Pandita and Ray, 2018; Sareminia and Sajedi Haji, 2024). Organisations that invest in professional growth through continuous training, mentorship, and skill-building programmes report higher employee satisfaction and loyalty (Jabbour *et al.*, 2011). Similarly, attractive remuneration packages reinforce organisational commitment (Aktar and Pangil, 2018). Work-life balance initiatives, including flexible arrangements such as remote and hybrid work models, help reduce turnover and enhance job satisfaction (Alhajaj and Ahmad, 2024; Zapata *et al.*, 2024). When effectively applied, these strategies not only retain talent but also foster employee engagement and overall organisational performance (Al-Twal *et al.*, 2024; Pillai and Srivastava, 2024).

3.3 Diversity and Inclusion

Diversity and inclusion practices are central to enhancing employee engagement, particularly in knowledge-driven sectors such as IT. Key strategies include inclusive recruitment (McVittie *et al.*, 2008), supportive work-life policies (Madera *et al.*, 2023), cultural awareness programmes, and initiatives promoting belonging and empowerment, such as celebrating success stories or organising cultural events (Liu *et al.*, 2019). Inclusive recruitment widens the talent pool by attracting individuals from diverse gender, cultural, and social backgrounds, thereby enhancing collaboration and creativity (Kulkarni *et al.*, 2016). Work-life policies and cultural awareness initiatives address employees' family and cultural needs, fostering trust and inclusion (Shivhare and L, 2025). Recognising contributions from underrepresented groups further strengthens organisational identity and cohesion (Jaiswal and Dyaram, 2020). Whilst global evidence demonstrates that D&I initiatives drive employee engagement, in Pakistan, social norms and hierarchical structures often impede their implementation (Ahmad and Allen, 2015; Iqbal *et al.*, 2018).

3.4 Technology Integration

Technology integration is an increasingly vital HRM practice, boosting operational efficiency and supporting strategic decision-making (Nayebpour and Sehhat, 2024). Two key strategies stand out. First, automation of HR functions through information systems and AI streamlines recruitment, payroll, and performance evaluation, enhancing accuracy and efficiency (Panda *et al.*, 2024; Paramita *et al.*, 2024). Second, data-driven decision-making employs predictive analytics and real-time feedback mechanisms to assess turnover risks, employee satisfaction, and career development needs (Gravili *et al.*, 2023; Peeters *et al.*, 2020). Additionally, HR technologies facilitate personalised development pathways and greater workforce flexibility (Roul *et al.*, 2025). Together, these practices foster employee motivation, commitment, and organisational growth (Dutta and Kannan Poyil, 2024; Rafi *et al.*, 2020).

Integrating talent retention, diversity and inclusion (D&I), and technology adoption generates synergistic effects beyond their individual impact. In Pakistan's IT sector, marked by intense talent competition, rapid technological change, and socio-cultural barriers, this integration is critical for organisational success. Retention strategies stabilise the workforce, D&I practices foster belonging and motivation, and technology integration enhances operational efficiency. Aligned with RBV, these strategies form VRIN-based assets that boost employee engagement, reduce turnover, and sustain competitive advantage.

4. Research Methodology

4.1 Research Design

This study employs a qualitative exploratory design to examine context-specific and complex HRM practices in Pakistan's IT sector, a rapidly growing industry facing high turnover, talent shortages, and evolving workforce expectations shaped by digital transformation and shifting work paradigms (David *et al.*, 2024). Guided by an interpretivist paradigm, the research explores HR professionals' subjective experiences of talent retention, diversity and inclusion, and technological integration, acknowledging the socially constructed nature of HRM practices.

A multi-site qualitative approach was adopted as advocated by Jenkins *et al.* (2018) and Benzer *et al.* (2013), involving data collection from eight IT organisations across four cities to capture diverse organisational contexts. The multi-site design is particularly suited to this study for three reasons: first, it enables examination of how HRM practices vary across organisational sizes (small, medium, large firms), revealing resource-dependent implementation strategies; second, it captures geographic variation across major IT hubs (Karachi, Lahore) and emerging markets (Islamabad, Rawalpindi), illuminating infrastructure and institutional differences; third, it allows identification of both sector-wide patterns and context-specific nuances essential for understanding HRM practice effectiveness in diverse settings (Alagaraja, 2022). In this study, each organisation constitutes a distinct 'site' where HRM practices are shaped by unique combinations of size, resources, culture, and location. This multi-site approach captures rich, context-specific variation

without aiming for statistical generalisation, instead seeking analytical transferability across similar emerging market contexts (Crowley-Henry *et al.*, 2021; Harness, 2009).

To maximise the analytic yield of this multi-site design, the analysis followed a two-stage strategy: (a) rigorous within-site analysis to preserve local and contextual meanings (Martin *et al.*, 2018), followed by (b) systematic cross-site analysis to identify shared patterns and meaningful differences across organisations (Alagaraja, 2022). Within-site analysis involved examining how each organisation's specific characteristics - including size, maturity, and location - shaped HRM practice design and implementation. Cross-site analysis then systematically compared practices across the eight organisations, identifying commonalities reflecting sector-wide challenges (such as brain drain and talent competition) whilst highlighting variations attributable to resource availability, organisational culture, or geographic context. Practical steps included preparing structured site summaries and memos after each site's interviews, developing a shared codebook and analytic decision rules for comparability, and constructing thematic matrices mapping themes, sub-themes, and supporting evidence across all sites. These procedures preserved contextual detail whilst enabling robust cross-site comparison and development of transferable analytic claims applicable to similar IT sectors in emerging markets.

4.2 Sampling Strategy

Purposive sampling (Campbell *et al.*, 2020) was employed to recruit eight IT organisations, representing a spectrum of sizes from small enterprises to large firms. The selection criteria emphasised variation in organisational structure, workforce size, and maturity of HRM practices, ensuring data richness and analytical depth (Kelliher and Perrett, 2001).

In this study, the organisation served as the primary site of data collection, whilst individual HR professionals within each firm acted as key informants. This allowed exploration of organisational-level HRM practices alongside individual-level perspectives on talent retention, diversity, and technological integration. The inclusion of eight firms aligns with commonly accepted methodological guidance. Yin (2018) suggests that qualitative organisational studies benefit from sampling across multiple settings, whilst Creswell and Creswell (2018) note that data collected from six to ten organisational contexts can sufficiently support analytical depth.

Within each organisation, two HR professionals - HR managers, senior executives, or analysts - were purposively selected for their strategic involvement in HRM decision-making, yielding 16 participants. This sample size aligns with qualitative best practices for data saturation (Saunders *et al.*, 2018) and adheres to the principle of 'information power' (Elo *et al.*, 2014).

Participants were recruited from four cities - Karachi, Lahore, Islamabad, and Rawalpindi - to capture variation in IT industry contexts (see **Table 1**). Karachi and Lahore represent major IT hubs with well-established HR practices, whilst Islamabad and Rawalpindi represent emerging IT markets with developing organisational and HR capabilities. This geographic and organisational diversity provided breadth and depth, supporting analytical rather than statistical generalisation

(Emiliussen *et al.*, 2021). To enhance transparency and allow traceability of quotations, participant characteristics such as gender, age, and tenure in role are included in **Table 1**, and each participant has been assigned a unique identifier (P1 to P16). These identifiers are mapped to the quotes throughout the analysis, ensuring clarity in attribution.

‘[insert table 1 about here]’

4.3 Interview Instrument Development

The interview guide was developed based on a comprehensive literature review and the study's conceptual framework, ensuring alignment with contemporary HRM research and Pakistan's IT context. It focused on three key HRM practices - talent retention, diversity and inclusion, and technology integration - and explored strategies under each theme. Open-ended questions enabled participants to provide detailed insights into implementation, effectiveness, and contextual challenges, including career development, compensation and benefits, work-life balance initiatives reflecting emerging work design modes (Reiche, 2023), inclusive recruitment, workplace policies, cultural awareness, AI adoption, and data-driven decision-making supported by people analytics approaches (Peeters *et al.*, 2020).

The instrument was prepared in English, and interviews were conducted in both English and Urdu. Urdu interviews were translated into English and subsequently used for analysis. This approach facilitated rich, nuanced data collection, enabling the research to comprehensively address its research questions (Harness, 2009).

4.4 Data Collection Process

An initial pool of IT firms was identified through industry directories, including the regional Chamber of Commerce and the Small and Medium Enterprise Development Authority (SMEDA) portal, supplemented by professional networks. A total of 18 organisations were approached via formal emails and follow-up calls. Based on predefined criteria relating to organisational size, structure, and HRM maturity, eight firms were selected to ensure variation and analytical depth (Creswell and Creswell, 2018). The remaining organisations were excluded as they did not meet the criteria for diversity in size, HRM maturity, or organisational structure.

Semi-structured interviews served as the primary data collection method, allowing consistency across participants whilst enabling rich contextual elaboration (Saunders *et al.*, 2018). A pilot study with three participants from three IT firms helped refine the interview protocol, enhancing clarity, sequencing, and alignment with research objectives. In total, 16 hybrid interviews were conducted - nine face-to-face and seven via Microsoft Teams - each lasting 30 to 45 minutes. The use of hybrid interview modes reflected the post-pandemic evolution of work practices and participants' preferences for flexibility in engagement (Keeler *et al.*, 2023; Zapata *et al.*, 2024). All interviews were digitally recorded with informed consent, and handwritten notes were taken to capture contextual cues.

Following each site's interviews, the research team produced a site summary and reflexive memo documenting contextual features, notable practices, and researcher observations. These formed a basis for within-site analysis and cross-site comparison.

4.5 Data Analysis

Data were analysed using thematic analysis (Braun and Clarke, 2016). Manual coding was adopted due to practical constraints, ensuring meticulous and transparent analysis (Ozuem *et al.*, 2022). Because the study involved multiple organisational sites experiencing varying levels of digital transformation and automation (Willcocks, 2024), additional steps were incorporated to preserve organisational context before cross-site comparison (Jenkins *et al.*, 2018).

The analysis followed a two-stage multi-site strategy: (a) rigorous within-site analysis to preserve local and contextual meanings, followed by (b) systematic cross-site analysis to identify shared patterns and meaningful differences. Structured site summaries, memos, and thematic matrices were used to map themes across sites and ensure analytic comparability.

The six-step thematic analysis was as follows:

1. *Familiarisation with the Data*: Repeated reading of interview transcripts to understand overall meanings and patterns across all 16 participants from eight IT organisations.
2. *Generating Initial Codes*: Highlighting meaningful segments and assigning short labels (codes). Both inductive (from raw data) and deductive (from literature) coding were applied. Example: from 'People look for companies that care for their development...clear promotion policies, I stay loyal,' the codes 'career growth' and 'promotional policies' were created.
3. *Searching for Sub-Themes*: Related codes were grouped into clusters capturing shared meaning. Example: codes such as 'training programmes,' 'skill enhancement,' 'promotional policies,' and 'employee motivation' were clustered under the sub-theme *Career Development Opportunities*.
4. *Reviewing Themes*: Sub-themes were checked for accuracy and logical fit under overarching themes. Example: *Career Development Opportunities*, *Competitive Compensation and Benefits*, and *Work-Life Balance* were grouped under the main theme *Talent Retention*.
5. *Defining and Naming Themes*: The essence of each theme was refined and labelled. Three main themes emerged: (1) *Talent Retention* comprising three sub-themes (*Career Development Opportunities*, *Competitive Compensation and Benefits*, *Work-Life Balance*); (2) *Diversity and Inclusion* comprising three sub-themes (*Inclusive Recruitment Practices*, *Work-Life Policies and Cultural Awareness*, *Success Stories and Cultural Events*); and (3) *Technological Integration* comprising two sub-themes (*Streamlining HR Functions*, *Data-Driven Decision Making*).
6. *Producing the Report*: Findings were presented as narratives with contextual descriptions and illustrative quotes from all firm sizes (small, medium, large) for each theme and sub-theme.

Cross-case comparative analysis highlighted how implementation and effectiveness varied according to firm size, resources, and culture, forming the basis for discussion and conclusions.

A thematic matrix (see **Table 2**) mapped themes, sub-themes, codes, and supporting quotations across organisations, enhancing analytical transparency. This combined inductive-deductive, within-site and cross-site approach ensured findings were grounded in participants' narratives and informed by theory.

Trustworthiness was maintained through multiple strategies (Nazir *et al.*, 2025): prolonged engagement with participants across multiple organisations; thick description of organisational practices; member checking by sharing transcript summaries with participants; peer debriefing; and maintaining an audit trail to enhance credibility, confirmability, and dependability. Ethical standards were strictly observed, including obtaining informed consent, protecting anonymity, and ensuring participants' right to withdraw without consequences.

5. Findings

The findings present an analysis of the interview data, conducted using the thematic matrix (see **Table 2**), focusing on HR practices within the IT industry across organisations. This section identifies three main themes derived from the analysis: talent retention, diversity and inclusion, and technology integration, along with their respective sub-themes.

‘[insert table 2 about here]’

5.1 Talent Retention

Talent retention remains a critical strategic priority for organisations seeking competitive advantage through their workforce (Pandita and Ray, 2018). Theme one focuses on organisational practices retaining skilled employees by fostering engagement and commitment. It comprises three sub-themes: *career development opportunities*, *competitive remuneration and benefits*, and *work-life balance*. Cross-case analysis shows that whilst these strategies are broadly similar across small, medium, and large firms, implementation and perceived effectiveness vary according to firm size, resources, and culture. Smaller firms adopt personalised approaches, medium firms balance structure with flexibility, and larger firms emphasise formalised practices.

5.1.1 Career Development Opportunities

Career development critically influences talent attraction and retention in IT (Jabbour *et al.*, 2011). Interviews highlighted employees' desire to remain in organisations providing development, promotion, and training opportunities. Career development functions as both a motivational tool and a strategic mechanism for retaining top performers.

At Webex, a small firm, the HR Manager described visible organisational investment in employee development. Without formal career structures, employees emphasise tangible signs their

employer values professional growth. Clear promotion policies and training initiatives directly influence loyalty.

"People look for companies that care for their development. When I find organisations with clear promotion policies, I stay loyal. I value knowing that my hard work will lead to visible progression and that my company invests in my growth through training and upward mobility opportunities." (P01, Site 1)

In smaller organisations, personalised recognition and tangible development opportunities are key retention drivers, though limited resources may restrict formal pathways.

In contrast, at Recruido, a medium-sized firm, the HR Manager emphasised implementing formal skills enhancement and progression programmes. In competitive talent markets, structured support systems demonstrate organisational commitment. Programme absence signals inadequate prioritisation, prompting talented individuals to seek clearer pathways, often internationally.

"These programs are critical. If they are absent, staff quit for better offers. Staff want to see that the company is actively providing opportunities to enhance staff skills and create a pathway for advancement. Without such support, staff often feel undervalued and seek other opportunities that better align with their personal and career goals." (P03, Site 2)

Structured programmes reduce ambiguity, yet retention also depends on perceived fairness and transparency.

Similarly, at IBM Solution, a large organisation, the Senior Executive HR described career development integration into broader strategic frameworks. Rapid technological change demands continuous learning, making advancement essential. The organisation recognises employee skill stagnation risks both individual obsolescence and competitive disadvantage, justifying sophisticated programmes including mentoring, training, and rotational assignments.

"In the IT industry, self-development due to the fast-changing technology is inevitable; as a result, career advancement is vital for us." (P05, Site 3)

However, whilst large organisations offer sophisticated programmes, scale can diminish visibility of individual contributions, requiring balance between structure and personal recognition.

5.1.2 Competitive Compensation and Benefits

Fair remuneration and incentives significantly influence retention. Interviews revealed that whilst competitive pay is critical, perceptions of fairness, consistency, and recognition are equally important.

At Webex, a small firm, the HR Executive described how personalised compensation strengthens loyalty. Tailoring rewards to individual contributions creates personal recognition employees

value. Performance-based bonuses and flexible benefits demonstrate individual acknowledgement, though resource constraints limit competitiveness versus larger firms.

"In our organisation, we try to recognise individual contributions through personalised bonuses and benefits that reflect each person's unique situation and performance. This personal touch makes employees feel valued, even though we cannot always match the salary packages offered by larger companies." (*P02, Site 1*)

In smaller firms, personalised recognition partially offsets compensation limitations, though talented employees may still gravitate towards higher-paying larger organisations.

At Nakissa, a medium-sized firm, the HR Officer explained compensation functioning as both motivator and dissatisfaction source. Employees continuously evaluate remuneration against contributions, colleagues' pay, and market rates. Resource constraints heighten sensitivity to perceived inequities. Compensation dissatisfaction operates as a 'demotivator', eroding engagement and prompting departure, especially amongst high performers.

"Compensation such as remuneration, incentives, bonuses, and other benefits are critical retention tools because they serve as demotivators whenever we feel we are not well compensated. When we believe our pay does not match our contributions or market standards, it leads to dissatisfaction, disengagement, and eventual turnover." (*P07, Site 4*)

Employees compare pay internally and externally, with perceived inequities driving turnover particularly amongst high performers.

At Ibex, a large firm, the HR Business Strategist discussed bonuses and incentives operating within comprehensive rewards frameworks ensuring consistency whilst recognising exceptional contributions. Standardised systems create predictability. Monetary rewards extend beyond economic value to carry symbolic significance, communicating appreciation and strengthening emotional attachment.

"Bonuses and other incentives are not luxuries; they are major retention tools. They convey to us that our hard work and dedication are recognised and appreciated, which strengthens our emotional connection to the organisation." (*P09, Site 5*)

However, whilst standardisation ensures fairness, systems may feel impersonal to employees performing above expectations without proportional recognition.

Cross-case observations indicate whilst all firms recognise compensation as vital, small firms rely on personalisation, medium firms on balance and responsiveness, and large firms on formal structures. Effective communication and transparency ensure employees perceive systems as fair, motivating, and aligned with contributions.

5.1.3 Work-Life Balance

Employee well-being significantly influences retention (Alhajaj and Ahmad, 2024). Firms adopt varying work-life balance approaches shaped by size, culture, and requirements.

At Innovate Technologies, a medium-sized firm, the HR Executive described flexibility woven into organisational culture. Offering tangible flexibility including regular remote working and adjustable schedules accommodates personal responsibilities. Flexibility operates without bureaucratic hurdles, though requires self-management to prevent boundary erosion.

"It is not a mere slogan, but a reality. For example, many of our employees work remotely two days a week and can adjust their start and finish times as needed. These flexible work options are truly embedded into how our company operates, and they make a tangible difference in our daily lives." (P11, Site 6)

Medium-sized firms embed flexibility into culture, though without clear boundaries, it could lead to workload distribution issues or burnout.

At Shukat Khanam IT Industry, a large firm, the HR Officer discussed work-life balance initiatives evolving beyond schedule flexibility to encompass trust, autonomy, and empowerment. Employees value both managing personal activities and the symbolic message that the organisation trusts them without constant supervision. Trust strengthens psychological contracts, boosting satisfaction and commitment.

"We value the liberty of handling our personal activities alongside work, which has boosted satisfaction and commitment. Having the ability to manage tasks at our own pace without being micromanaged empowers us to feel trusted and respected by our employer." (P13, Site 7)

Whilst large organisations emphasise trust and autonomy, effectiveness varies based on workload, team culture, and managerial support.

Across cases, work-life balance initiatives enhance engagement and retention, but effectiveness depends on genuine implementation, cultural support, and adaptability. Policies alone are insufficient; employee perceptions, trust, and empowerment are critical mediating factors.

5.2 Diversity and Inclusion

Diversity and inclusion are vital for creating equitable workplaces, enhancing engagement and performance (Jaiswal and Dyaram, 2020). Theme two comprises three sub-themes: *inclusive recruitment practices*, *work-life policies and cultural awareness*, and *success stories and cultural events*. Across cases, organisations showed variation. Smaller firms implemented inclusive practices informally through managerial discretion, whilst medium and large organisations had structured policies and dedicated HR systems.

5.2.1 Inclusive Recruitment Practices

Diverse recruitment practices are crucial for managing diversity (McVittie *et al.*, 2008). Results showed gender diversity and inclusion are increasing, with organisations using innovative, unbiased hiring practices such as blind recruitment.

At Greyloops, a small firm, the HR Business Strategist described implementing inclusive practices informally through careful attention to diverse candidate pools. Without technological infrastructure for blind recruitment, small firms rely on managerial discretion and conscious bias-avoidance efforts. The organisation advertises positions through diverse channels and ensures interview panels reflect varied perspectives, though formal metrics may be less systematically tracked.

"We make conscious efforts to ensure our recruitment reaches diverse candidates by advertising through multiple channels and encouraging applications from underrepresented groups. During interviews, we focus on candidates' skills and potential rather than making assumptions based on backgrounds. It's about creating an inclusive environment from the very first interaction." (P15, Site 8)

Whilst small firms lack formal blind recruitment systems, deliberate inclusive practices effectively broaden candidate diversity through conscious managerial efforts.

At Nakissa, a medium-sized firm, the Training and Development Specialist discussed diversity recruitment driven by ethical commitments and pragmatic business considerations. Where innovation drives advantage, Nakissa views diversity as a strategic asset. Diverse candidates enrich teams with varied frameworks and insights enriching discussions and driving solutions.

"Candidates from diverse backgrounds bring innovative problem-solving skills and fresh ideas that contribute to company growth." (P08, Site 4)

Medium-sized firms recognise diversity's strategic value, though effectiveness depends heavily on leadership commitment and hiring managers' willingness to prioritise diversity goals.

Similarly, at IBM Solution, a large multinational, the HR Analyst described implementing blind recruitment to eliminate unconscious bias. Traditional approaches perpetuated workforce imbalances. Technology anonymises applications during initial screening, focusing on competencies whilst removing bias based on gender, age, or ethnicity.

"Our blind recruitment process enhances candidate variety and focuses solely on skills, removing bias related to gender, age, or ethnicity." (P06, Site 3)

This requires sophisticated systems and training, though maintaining commitment beyond procedural compliance requires active engagement from hiring managers.

5.2.2 Work-Life Policies and Cultural Awareness

Policies supporting workers are essential for creating inclusive work cultures (Shivhare and L, 2025). Interviewees discussed flexible work arrangements, parental leave, and anti-discrimination policies. Smaller firms offer flexibility ad hoc, whereas medium and large firms have formal policies ensuring equity.

At Webex, a small firm, the HR Executive described supportive work-life policies functioning as foundational elements of inclusive culture. The organisation implemented flexible arrangements, parental leave provisions, and anti-discrimination policies. Policy effectiveness extends beyond formal existence to enactment through leadership behaviours. In smaller organisations, modelling inclusive behaviours by senior leaders becomes crucial.

"For example, I have seen how flexible work arrangements, like remote work and adjustable hours, help our employees balance their personal and professional lives. I also believe that parental leave and strong anti-discrimination policies are key to fostering an inclusive culture." (P02, Site 1)

In small organisations, policy effectiveness depends on both formal rules and leadership modelling.

At Nakissa, a medium-sized organisation, the Training and Development Specialist discussed formal policies supporting diverse employee needs whilst ensuring consistency. The firm implemented structured flexible work policies, comprehensive parental leave, and clear anti-discrimination guidelines. Formalised policies ensure equitable treatment and provide frameworks managers apply consistently.

"Our organisation has established clear policies for flexible working, parental leave, and anti-discrimination that apply to everyone equally. These policies help create a fair environment where all employees, regardless of their background, know their rights and feel supported. We regularly review these policies to ensure they meet the diverse needs of our workforce." (P08, Site 4)

Medium-sized firms balance formalised policies with flexibility, ensuring consistency whilst remaining responsive.

At IBM Solution, the HR Analyst discussed cultural awareness's crucial role amongst leaders designing policies affecting diverse populations. In large organisations operating across multiple contexts, policies must navigate varying expectations about work-life boundaries, parenting responsibilities, religious observances, and professional relationships. When senior leaders demonstrate genuine cultural awareness, it builds trust and enhances collaboration.

"Additionally, I've noticed that when leaders who make policies demonstrate cultural awareness, it builds trust and improves teamwork across diverse groups." (P06, Site 3)

Whilst large organisations develop standardised policies ensuring equity, application across diverse contexts requires continuous adaptation and sensitivity from local managers.

5.2.3 Success Stories and Cultural Events

Celebrating cultural diversity and sharing success stories effectively promote workplace inclusion (Liu *et al.*, 2019). Results highlighted cultural events and diversity success stories positively impact organisational culture.

At Shukat Khanam IT Industry, a large firm, the Employee Relations Specialist described cultural celebration woven into organisational life. Recognising diversity as organisational strength, Shukat Khanam developed practices actively celebrating cultural differences whilst building collective identity. The organisation marks significant cultural and religious events through shared activities, whilst monthly town halls incorporate segments where employees share professional success stories and personal journeys.

"Our cultural events, such as celebrating Eid and Christmas together, as well as practices like sharing employee success stories during monthly town halls, have made a real difference and demonstrated the value of a diverse team. These events give us the opportunity to share our own experiences, celebrate different traditions, and create new connections with colleagues across the organisation." (P14, Site 7)

These practices create spaces for employees to express cultural identities authentically, build cross-cultural understanding, and demonstrate organisational commitment to valuing diversity.

At Greyloops, a small firm, the HR Business Strategist described cultural celebration and diversity storytelling embedded into practices. Small size enables intimate celebrations bringing the entire workforce together through informal gatherings and storytelling sessions. These practices raise awareness, create visible commitment, and generate opportunities for employees to connect.

"Such practices not only enhance awareness but also help to strengthen our organisational culture and the company's sense of togetherness. For example, our annual 'Diversity Day' and storytelling sessions where employees share their journeys have created opportunities for us to bond over shared experiences and learn about one another, which leads to better teamwork and collaboration." (P15, Site 8)

Whilst small firms benefit from intimate engagement, informal celebrations may face consistency challenges, requiring ongoing leadership commitment and integration into routines.

Celebrating cultural festivals and sharing success stories strengthens diversity and inclusion. These practices foster harmony, help employees feel valued, and promote cultural understanding. However, effectiveness depends on consistent application, leadership involvement, and alignment with organisational culture.

5.3 Technological Integration

Technological integration in HR has transformed traditional practices, enabling greater efficiency and strategic capability (Roul *et al.*, 2025). Theme three focuses on technology's role in transforming HR. Two sub-themes emerged: *streamlining HR functions* and *data-driven decision making*. Across cases, variation existed in adoption, scale, and sophistication. Smaller firms used technology selectively due to budget constraints, medium firms implemented standardised tools but faced integration challenges, and large firms leveraged advanced HRIS and AI systems to fully automate processes.

5.3.1 Streamlining HR Functions

Technology adoption in HR has significantly streamlined processes, improved efficiency, and reduced manual workload (Panda *et al.*, 2024). Interviewees highlighted Human Resource Information Systems (HRIS) such as Workday, and AI tools like IBM Watson Talent Insights and HireVue, automating routine tasks including payroll processing, attendance tracking, and candidate screening.

At Greyloops, a small firm, the HR Business Strategist described selective technology adoption addressing immediate operational needs within budget constraints. Unlike larger organisations with comprehensive IT infrastructure, small firms carefully prioritise which HR functions to automate. The organisation implemented basic HRIS tools for essential tasks such as payroll and attendance tracking, whilst maintaining personal oversight in recruitment where human judgement remains critical.

"We have adopted basic HR systems to handle routine administrative tasks like payroll and leave tracking, which has freed up time for more strategic work. However, as a small firm, we must be selective about technology investments and ensure any tool we adopt genuinely adds value without overwhelming our limited IT capacity." (P15, Site 8)

Whilst small firms benefit from automation, resource constraints necessitate careful selection and phased implementation.

At Recruído, a medium-sized firm, the Recruitment Specialist reflected on implementing comprehensive HRIS platforms. Before adopting Workday, HR operations were characterised by manual processes consuming substantial time. Workday implementation automated these processes, fundamentally reshaping operations and enabling the team to redirect focus towards strategic initiatives such as talent development and workforce planning.

"I have seen firsthand how implementing HRIS platforms like Workday has transformed our administrative operations. For example, automating payroll and maintaining employee records has saved countless hours previously spent on manual data entry. This efficiency

allows me and my team to focus on strategic initiatives like talent development and workforce planning, which ultimately drives business growth." (P04, Site 2)

Medium-sized firms can implement comprehensive HRIS systems, though may face limitations integrating complex systems across all functions.

Similarly, at Nakissa, another medium-sized organisation managing high application volumes, the Training and Development Specialist described AI-integrated recruitment tools revolutionising hiring. Individual job postings often attract hundreds or thousands of applications. Prior to adopting AI-powered technologies, manually reviewing applications was overwhelming. Implementing IBM Watson Talent Insights and HireVue transformed this landscape, rapidly processing large volumes whilst applying consistent criteria to identify candidates aligning with requirements and culture.

"I rely heavily on AI-integrated recruitment tools such as IBM Watson Talent Insights and HireVue to manage the influx of applications we receive. These tools quickly sift through thousands of resumes, helping me identify the most qualified candidates in a fraction of the time it used to take. This not only speeds up hiring but also ensures we select candidates who align closely with our organisational goals and culture." (P08, Site 4)

However, algorithms may perpetuate existing biases if trained on discriminatory historical data, and nuanced human qualities may be missed.

In larger organisations, at Shukat Khanam IT Industry, the HR Officer described comprehensive automation and integration characterising technology deployment. Unlike smaller and medium-sized firms, large organisations leverage advanced HRIS and AI systems fully integrated across multiple HR functions including recruitment, performance management, payroll, and learning development. Scale necessitates sophisticated technological infrastructure with dedicated IT support.

"Our organisation has implemented enterprise-level HRIS that integrates all HR functions seamlessly. This comprehensive automation allows us to manage our large workforce efficiently, from recruitment through retirement. However, maintaining these systems requires significant investment in IT infrastructure and ongoing staff training to ensure everyone can utilise the technology effectively." (P13, Site 7)

Large firms deploy fully automated systems with dedicated training teams, though complexity and scale require substantial ongoing investment.

At Innovate Technologies, a medium-sized organisation, the Learning and Development Coordinator discussed the critical importance of training and ethical governance in technology adoption. Despite successfully implementing advanced HRIS platforms and AI-powered tools, technological sophistication alone does not guarantee success. Initially, HR staff lacked

comprehensive understanding of data privacy requirements, cybersecurity protocols, and ethical AI considerations. Recognising these risks, the organisation instituted regular training workshops focused on responsible technology use, data protection compliance, cybersecurity awareness, and ethical AI deployment.

"While these tools have made our work more efficient, we realised that without proper training on data privacy, cybersecurity, and the ethical use of AI, the risk of errors or breaches increases. We now conduct regular workshops to ensure all HR staff understand how to handle sensitive employee data securely and comply with privacy regulations."
(P12, Site 6)

Across small, medium, and large firms, effective governance frameworks and comprehensive staff training are as critical as the technologies themselves.

5.3.2 Data-Driven Decision Making

Technology integration in data management has significantly enhanced HR decision making, providing deeper insights into employee selection, performance, and motivation (Gravili *et al.*, 2023). Evidence-based decision ability varied by organisational scale: smaller firms used basic analytics for immediate operational needs, medium firms applied predictive tools selectively, and large firms leveraged comprehensive analytics platforms across multiple HR functions.

At Ibex, a large organisation, the Talent Acquisition Manager described advanced analytics platforms fundamentally transforming HR decision-making. Prior to implementing sophisticated systems, HR decisions were largely informed by intuition and limited quantitative information. Adopting platforms such as Workday and SAP SuccessFactors provided unprecedented visibility into workforce trends, performance patterns, and engagement dynamics. These systems aggregate and analyse vast employee data, enabling evidence-based decision making including identifying employee segments requiring targeted training, recognising early disengagement warning signs, and evaluating HR programme effectiveness.

"I have witnessed how advanced platforms like Workday and SAP SuccessFactors have revolutionised our decision making. By analysing trends in employee performance and engagement, we can develop targeted training programs and interventions. However, we also prioritise ethical data handling and employee privacy to ensure compliance and trust."
(P10, Site 5)

Ibex approaches data analytics with strong ethical commitments and privacy protections, implementing strict governance protocols.

Similarly, at Nakissa, a medium-sized firm, the HR Officer discussed predictive analytics tools supporting strategic HR interventions. The organisation selectively deployed data analytics capabilities addressing specific organisational challenges such as predicting turnover risks and

identifying training needs. Unlike large firms with comprehensive analytics across all functions, medium-sized organisations strategically focus analytics resources on high-impact areas.

"We use analytics tools to identify patterns that help us make better decisions about retention and development. For instance, analysing employee engagement data helps us predict who might leave and intervene proactively. However, we are careful to use these tools ethically and ensure employees understand how their data is being used to support their success." (P07, Site 4)

Medium-sized firms apply predictive tools selectively, balancing analytical capabilities with resource constraints and ethical considerations, whilst maintaining transparency.

At Greyloops, a small organisation, the Organisational Development Specialist discussed data analytics tools providing capabilities extending beyond traditional HR practices. The organisation deployed analytics platforms including Visier and Power BI, aggregating data from multiple sources to generate workforce intelligence. These tools enable monitoring and analysis impossible using conventional HR methods, allowing tracking of behavioural patterns, identifying engagement score changes, and examining correlations between training participation and performance improvements.

"Using data analytics tools such as Visier and Power BI has given me insights that were previously unavailable. I can track employee behaviour patterns, forecast turnover risks, and evaluate performance initiatives in real time, while always ensuring that sensitive data is protected and used responsibly." (P16, Site 8)

The specialist emphasised responsible data use's critical importance, with the organisation establishing data governance policies and regular reviews, demonstrating ethical frameworks are necessary regardless of organisational size.

Whilst data-driven decision making enhances efficiency, strategic planning, and predictive capability, HR professionals must balance analytics with responsible data use. Across small, medium, and large firms, technology's effectiveness depends not only on system capabilities but also on human expertise, ethical frameworks, and organisational culture.

6. Discussion

This section integrates the thematic findings with existing literature and introduces the proposed conceptual framework (see **Figure 2**). It examines the three core HRM practices - talent retention, diversity and inclusion, and technological integration - situating them within prior research whilst highlighting novel insights identified in this study. This discussion addresses the research questions and illustrates how these practices generate synergistic effects that enhance employee engagement and organisational performance.

‘[insert figure 2 about here]’

Talent Retention - theme one findings highlight career development opportunities, competitive compensation and benefits, and work-life balance as critical retention strategies. Career development emerged as a major driver of loyalty, with organisations offering structured pathways for professional growth, training, and promotion opportunities. These findings support research conducted in developed Western contexts (Jabbour *et al.*, 2011; Sousa *et al.*, 2024), which linked structured training and clear promotion policies with increased commitment.

However, this study reveals a crucial divergence specific to Pakistan's IT sector: the absence of development opportunities directly contributes to international migration, extending the 'brain drain' phenomenon documented in South Asian contexts (Ahmad *et al.*, 2019; Masood *et al.*, 2023). Unlike Western markets where career development serves primarily as a motivational tool, in Pakistan it functions as a strategic retention mechanism addressing both technological obsolescence and international talent flight.

The data revealed that organisations varied in their approaches based on resource constraints, with some relying on personalised recognition and visible investment, others implementing formal structured programmes, and some integrating career development into strategic workforce planning frameworks, demonstrating how organisational resources shape retention strategies across different contexts. Aligned with RBV, these career development practices function as valuable and rare human resources that stabilise organisational knowledge and create competitive advantage (Barney, 1991; Pandita and Ray, 2018).

Competitive compensation and benefits emerged as central to retention, with findings aligning with research from Western and East Asian contexts (Aktar and Pangil, 2018; Pandita and Ray, 2018; Sareminia and Sajedi Haji, 2024). However, this study demonstrates that IT professionals in Pakistan value non-monetary benefits that communicate recognition within a cultural context where hierarchical respect and personal acknowledgement carry significant weight.

Bonuses and perks are perceived as signals that hard work is acknowledged, strengthening emotional connection. This expands the compensation-retention discourse by showing that recognition-based strategies work synergistically with financial packages, particularly in collectivist South Asian cultures where symbolic recognition carries substantial motivational value (Burhan *et al.*, 2020; Iqbal *et al.*, 2018).

Our findings revealed that organisations employed varied compensation strategies shaped by resource availability, with some using personalised bonuses creating emotional connections despite salary limitations, others balancing standardised structures with market responsiveness, and some deploying comprehensive reward frameworks carrying both economic and symbolic significance.

Work-life balance emerged as a decisive retention strategy, with findings consistent with post-pandemic research globally (Alhajaj and Ahmad, 2024; Al-Twal *et al.*, 2024; Keeler *et al.*, 2023;

Zapata *et al.*, 2024). However, this study adds depth by distinguishing between symbolic policies and actively implemented practices within Pakistan's institutional context.

Flexibility embedded in daily operations makes tangible differences to satisfaction and loyalty, with autonomy interpreted as trust and respect, reducing micromanagement and fostering stronger psychological bonds. This is particularly significant in Pakistan's hierarchical organisational culture, where traditional management involves close supervision and limited autonomy (Iqbal *et al.*, 2018; Riaz *et al.*, 2021).

The study data revealed that organisations embedded flexibility into culture through regular remote work without bureaucratic hurdles, whilst emphasising trust and empowerment strengthening psychological contracts. This illustrates that work-life balance initiatives represent a departure from traditional workplace norms, requiring cultural transformation in management approaches rather than merely policy implementation (Reiche, 2023). From an RBV perspective, genuine work-life balance practices represent rare and inimitable resources due to the deep cultural transformation required (Alhajaj and Ahmad, 2024).

Diversity and Inclusion – theme two findings identify inclusive recruitment practices, workplace policies and cultural awareness, and success stories and cultural events as key strategies. Inclusive recruitment, particularly blind recruitment, emerged as highly effective in reducing bias and ensuring equality of opportunity. These findings align with Western research (Kulkarni *et al.*, 2016; McVittie *et al.*, 2008), but this study situates these practices within Pakistan's unique socio-cultural dynamics, where deep-rooted gender disparities, traditional social norms, and hierarchical structures create substantial inclusion barriers (Ahmad and Allen, 2015; Iqbal *et al.*, 2019).

The findings emphasise that unbiased recruitment not only broadens applicant pools but introduces diverse perspectives strengthening creativity and problem-solving, functioning as a strategic tool driving organisational growth. Our findings revealed that organisations implemented inclusive practices through varied approaches shaped by resources and capabilities, with some implementing practices informally through conscious managerial efforts, others viewing diversity as a strategic asset driven by ethical and pragmatic considerations, and some deploying sophisticated blind recruitment technologies.

Unlike Western contexts where diversity initiatives benefit from supportive legal frameworks, Pakistan's IT firms must navigate cultural resistance and institutional constraints, making diversity efforts more challenging yet potentially more transformative (Ahmad *et al.*, 2019; Burhan *et al.*, 2020). Consistent with RBV, diversity and inclusion practices function as inimitable social resources, particularly where cultural barriers exist (Kulkarni *et al.*, 2016; Jaiswal and Dyaram, 2020).

Beyond recruitment, workplace policies and cultural awareness emerged as fundamental to sustaining diversity and inclusion. Key policies identified include parental leave provisions, anti-discrimination frameworks, and flexible work arrangements that accommodate diverse family and

cultural needs. These findings support research from Western and Scandinavian contexts (Liu *et al.*, 2019; Shivhare and L, 2025), but this study underscores the role of culturally aware leadership specific to South Asian contexts characterised by collectivism, power distance, and traditional gender roles. Leaders exhibiting cultural sensitivity build trust and foster cohesive teams, becoming critical determinants of engagement and performance.

The data revealed that organisations varied in policy implementation approaches, with policy effectiveness in some contexts depending heavily on leadership modelling of inclusive behaviours and informal flexibility, others establishing formalised anti-discrimination and parental leave policies ensuring consistent application, and some implementing comprehensive policy frameworks requiring continuous adaptation across diverse employee populations. This highlights that in Pakistan's institutional context where enforcement mechanisms are weak, leadership commitment and cultural sensitivity become critical mediating factors (Burhan *et al.*, 2020; Riaz *et al.*, 2021). This contrasts with Western studies where institutional support ensures implementation, emphasising that diversity in Pakistan requires active cultural transformation led by committed leadership.

Success stories and cultural events emerged as powerful strategies, with findings aligning with multicultural Western research (Jaiswal and Dyaram, 2020; Kulkarni *et al.*, 2016; Madera *et al.*, 2023). However, this study illustrates that in Pakistan's collectivist context, such practices enhance social cohesion and contribute to resilience by fostering bonds across diverse teams. The findings indicate these events reduce silos, create belonging, and strengthen organisational culture.

This study's data revealed that organisations wove celebrations into organisational life through both structured events such as cultural religious celebrations including Eid and Christmas and informal gatherings, with practices ranging from formal town halls to intimate celebrations on Diversity Day for storytelling. This demonstrates that cultural celebrations in Pakistan serve dual purposes: honouring cultural and religious diversity whilst building organisational team identity. Unlike Western contexts where diversity celebrations may be symbolic, in Pakistan they represent substantive efforts to bridge traditional social divisions and create genuinely inclusive workplaces (Ahmad *et al.*, 2019; Iqbal *et al.*, 2019).

Technological Integration - theme three findings demonstrate how HR practices are evolving through technological adoption, with two key strategies emerging: streamlining HR functions and leveraging data-driven decision-making. Streamlining HR functions through HRIS platforms (Workday) and AI-enabled recruitment tools (IBM Watson Talent Insights, HireVue) significantly enhances efficiency and accuracy, with results consistent with research from technologically advanced contexts (Nayebpour and Sehhat, 2024; Panda *et al.*, 2024; Paramita *et al.*, 2024).

However, this study adds contextual nuance by showing that whilst automation enhances efficiency in various administrative tasks, it creates new challenges specific to Pakistan's developing economy, including staff training needs, data protection concerns, and infrastructural

limitations. Our findings revealed substantial variation in technological adoption shaped by resource availability and infrastructure capacity, with organisations adopting technology selectively within resource constraints, implementing comprehensive platforms whilst facing integration challenges, or deploying enterprise-level systems requiring significant ongoing investment (Willcocks, 2024).

This reveals that technological adoption in Pakistan is uneven. Unlike developed contexts where technological infrastructure is well-established, Pakistani firms face substantial barriers necessitating phased, selective implementation (Rafi *et al.*, 2020). Furthermore, the findings emphasise the critical importance of ethical governance, data privacy training, and cybersecurity awareness, reflecting concerns particularly acute in contexts with weak regulatory enforcement (Einola and Khoreva, 2023; Jarrahi, 2018). Aligned with RBV, technology integration serves as a VRIN-based capability that becomes inimitable when combined with ethical governance and staff competencies (Gravili *et al.*, 2023; Roul *et al.*, 2025).

Data-driven decision-making illustrates how analytics transforms HR into a strategic function, with findings aligning with Western research (Gravili *et al.*, 2023; Peeters *et al.*, 2020; Roul *et al.*, 2025). However, this study extends existing research by highlighting the importance of responsible data use in Pakistan, where privacy and security concerns remain prominent due to weak institutional frameworks.

The data revealed that organisations varied in analytical capabilities and implementation approaches. Advanced platforms including Workday and SAP SuccessFactors enabled tracking employee performance and engagement, developing targeted training programmes, and implementing strict governance protocols. Predictive analytics tools addressed specific challenges such as turnover prediction and training needs identification, enabling proactive interventions whilst maintaining transparency. Platforms including Visier and Power BI provided insights into employee behaviour patterns, turnover forecasting, and real-time performance evaluation whilst ensuring data protection through governance policies. These tools enabled workforce intelligence supporting evidence-based interventions.

This reveals that data-driven decision-making in Pakistan requires balancing analytical capabilities with resource constraints, ethical considerations, and employee trust. Unlike Western contexts where analytics adoption benefits from established legal frameworks, Pakistani organisations must proactively build governance frameworks and address employee concerns in environments with limited regulatory enforcement (Rafi *et al.*, 2020). The finding that organisations emphasised ethical data handling suggests responsible data use functions as a trust-building mechanism critical for maintaining engagement where institutional protections are weak.

The three practices collectively enhance organisational performance in Pakistan's IT sector through synergistic effects. Retention strategies ensure workforce stability by addressing domestic

turnover and international migration, diversity and inclusion foster belonging whilst navigating socio-cultural barriers, and technology drives efficiency despite infrastructural constraints.

Together, these create synergistic effects: technology enables flexible work supporting retention, inclusive policies strengthen engagement through equitable treatment, and diverse teams stimulate innovation through varied perspectives. Our findings revealed that organisations integrating all three practices achieved superior outcomes including higher satisfaction, stronger commitment, and greater retention despite external opportunities.

Organisations combining comprehensive programmes demonstrated lower turnover and higher engagement compared to those emphasising only one or two practices, illustrating that integrated approaches deliver stronger results regardless of organisational scale or resource constraints. Consistent with RBV, the synergistic integration of talent retention, diversity and inclusion, and technology integration creates VRIN-based assets that collectively generate sustained competitive advantage through enhanced employee engagement and organisational performance (Barney, 1991; Niazi *et al.*, 2024).

7. Conclusions

This study examined how IT firms in Pakistan design and implement HRM practices in response to evolving business, technological, and workforce challenges, and explored their perceived outcomes on employee engagement, satisfaction, and performance in a post-pandemic context. Guided by the Resource-Based View (RBV), this qualitative study analysed perspectives from 16 HR professionals across eight IT organisations in four Pakistani cities, revealing how strategic HRM practices function as interconnected resources generating competitive advantage.

Synergistic integration of promotional policies, personalised recognition, trust-based management, blind recruitment, culturally aware leadership, cultural celebrations, and AI-driven analytics (Workday, IBM Watson, HireVue, SAP SuccessFactors, Visier, Power BI) creates VRIN-based competitive advantage. Firms mastering this integration achieve superior retention, engagement, and performance despite brain drain, cultural barriers, and institutional voids characterising Pakistan's IT sector.

7.1 Contributions

This study makes several theoretical contributions by extending RBV (Barney, 1991) to emerging markets, demonstrating how talent retention functions as valuable human resources stabilising knowledge (Pandita and Ray, 2018), addressing technological obsolescence and international talent flight (Ahmad *et al.*, 2019; Masood *et al.*, 2023). Compensation combined with recognition creates inimitable resources through cultural embeddedness in collectivist societies (Burhan *et al.*, 2020). Work-life balance represents rare resources requiring cultural transformation from hierarchical supervision to trust-based autonomy (Alhajaj and Ahmad, 2024; Reiche, 2023).

Diversity and inclusion operate as inimitable social resources fostering collaboration despite cultural barriers (Kulkarni *et al.*, 2016). Blind recruitment emerged as a strategic practice removing unconscious bias related to gender, age, and ethnicity, functioning as a valuable resource broadening talent pools in contexts with deep-rooted gender disparities. Unlike Western contexts with supportive frameworks, Pakistan's firms navigate deep-rooted gender disparities and traditional norms, making successful efforts socially complex (Ahmad and Allen, 2015; Iqbal *et al.*, 2019). Culturally aware leadership builds trust in collectivist contexts, functioning as non-substitutable resources (Liu *et al.*, 2019).

Technology integration serves as VRIN-based capabilities enhancing efficiency when combined with ethical governance (Gravili *et al.*, 2023; Roul *et al.*, 2025). The study contributes to the literature by highlighting that whilst AI-enabled recruitment tools including IBM Watson Talent Insights and HireVue streamline candidate screening, algorithms may perpetuate bias if trained on discriminatory data, adoption creates substantial training requirements, and data protection concerns are amplified by limited cybersecurity infrastructure (Einola and Khoreva, 2023; Jarrahi, 2018). Technology alone is insufficient; integration with ethical frameworks, staff training, and transparent communication creates inimitable capabilities. In contexts with weak regulatory enforcement, responsible AI use functions as trust-building mechanisms (Rafi *et al.*, 2020).

Analytics platforms including Workday, SAP SuccessFactors, Visier, and Power BI provide insights into workforce trends, performance patterns, and turnover risks (Peeters *et al.*, 2020). However, this requires careful balancing of analytical capabilities with resource constraints, ethical considerations, and employee trust. Organisations emphasised ethical data handling through explicit communication, consent, anonymisation, and access restrictions.

The framework's distinctive theoretical contribution lies in explicating synergistic mechanisms: technology facilitates flexible work supporting retention (Zapata *et al.*, 2024), inclusive policies create psychological safety enhancing engagement, diverse teams generate innovation, and career development ensures capability building, demonstrating HRM practices as interconnected strategies collectively creating VRIN-based assets (Barney, 1991; Niazi *et al.*, 2024).

Contextually, this study contributes to understanding HRM in developing economies by revealing navigation of unique challenges: brain drain pressures, socio-cultural barriers, weak institutional frameworks, resource constraints, and traditional hierarchical styles, demonstrating universal best practices require local adaptation.

7.2 Practical Implications

HR managers should implement integrated retention through structured career pathways, recognition-based compensation, and embedded flexibility. Inclusive practices require blind recruitment, culturally aware leadership, and celebratory initiatives. Technology adoption requires HRIS platforms and AI tools with robust ethical governance including comprehensive staff training on data privacy, cybersecurity, and ethical AI use; transparent communication about data

collection; phased selective adoption; regular audits to identify algorithmic bias; and data governance policies building trust.

Organisational leaders should model inclusive behaviours, invest in continuous learning, genuinely embed flexibility through outcome-based evaluation, and champion diversity. Leaders must prioritise building digital capabilities and ethical technology governance as strategic imperatives.

Policymakers should strengthen frameworks supporting workplace flexibility, enhance data protection with enforcement mechanisms addressing AI privacy concerns, provide incentives for development and diversity programmes, and address brain drain. Establishing clear regulations on AI use in recruitment can provide institutional safeguards currently lacking.

The Pakistani IT sector must align HRM to unique challenges through integrated retention, inclusive policies navigating barriers through culturally sensitive approaches, and phased technology adoption. Sector-wide collaboration on ethical AI governance, data protection standards, and digital capability building can strengthen global competitiveness.

7.3 Limitations and Future Research

This study, based on interviews with HR professionals from eight IT firms in four Pakistani cities, captures management perspectives on HRM strategy design but not actual implementation outcomes or stakeholder experiences. The Pakistan IT sector focus limits generalisability, though findings may inform similar emerging markets. The cross-sectional design cannot capture practice evolution over time. Future research should employ mixed methods incorporating employee and stakeholder perspectives, apply longitudinal designs tracking HRM practice evolution amid digital transformation, test causal relationships experimentally between HR interventions and performance outcomes, validate the framework quantitatively with larger samples, and apply alternative theoretical lenses such as Social Exchange Theory or Organisational Culture Theory for deeper insights.

References

- Ahmad, M. and Allen, M. (2015), "High performance HRM and establishment performance in Pakistan: an empirical analysis", *Employee Relations*, Vol. 37 No. 5, pp. 506-524, doi: 10.1108/ER-05-2014-0044.
- Ahmad, M., Allen, M.M.C., Raziq, M.M. and ur Rehman, W. (2019), "Converging HRM practices? A comparison of high performance work system practices in MNC subsidiaries and domestic firms in Pakistan", *Employee Relations*, Vol. 41 No. 5, pp. 931-948, doi: 10.1108/ER-01-2018-0021.
- Aktar, A. and Pangil, F. (2018), "Mediating role of organizational commitment in the relationship between human resource management practices and employee engagement:

does black box stage exist?", *International Journal of Sociology and Social Policy*, Vol. 38 No. 7-8, pp. 606-636, doi: 10.1108/IJSSP-08-2017-0097.

- Alagaraja, M. (2022), *Does HR Involvement Matter in Strategy Implementation: A Qualitative Multicase, Multisite Study*, Sage Publications, London.
- Albrecht, S.L., Bakker, A.B., Gruman, J.A., Macey, W.H. and Saks, A.M. (2015), "Employee engagement, human resource management practices and competitive advantage: an integrated approach", *Journal of Organizational Effectiveness: People and Performance*, Vol. 2 No. 1, pp. 7-35, doi: 10.1108/JOEPP-08-2014-0042.
- Alhajaj, W.E. and Ahmad, S.Z. (2024), "The effectiveness of human resource management practices, work engagement and self-efficacy in minimizing talent turnover intention", *International Journal of Productivity and Performance Management*, Vol. 73 No. 8, pp. 2414-2440, doi: 10.1108/IJPPM-02-2023-0090.
- Al-Twal, A., Jarrar, D.M.F., Fakhoury, G. and Aljbour, R. (2024), "HR's hands are tied! Perceptions of the role of HR departments in Jordanian organisations", *International Journal of Organizational Analysis*, Vol. 32 No. 8, pp. 1440-1463, doi: 10.1108/IJOA-02-2023-3656.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120, doi: 10.1177/014920639101700108.
- Benzer, J.K., Beehler, S. and Cramer, I.E. (2013), "Between and within-site variation in qualitative implementation research", *Implementation Science*, Vol. 8 No. 1, p. 4, doi: 10.1186/1748-5908-8-4.
- Braun, V. and Clarke, V. (2016), "(Mis)conceptualising themes, thematic analysis, and other problems with Fugard and Potts' (2015) sample-size tool for thematic analysis", *International Journal of Social Research Methodology*, Vol. 19 No. 6, pp. 739-743, doi: 10.1080/13645579.2016.1195588.
- Burhan, M., Hamdan, O.A., Tariq, H., Hameed, Z. and Naeem, R.M. (2023), "The role of contextual factors in shaping HRM formality in SMEs", *Employee Relations*, Vol. 45 No. 2, pp. 345-365, doi: 10.1108/ER-08-2020-0386.
- Burhan, M., Swailes, S., Hameed, Z. and Ali, I. (2020), "HRM formality differences in Pakistani SMEs: a three-sector comparative study", *Employee Relations*, Vol. 42 No. 6, pp. 1513-1529, doi: 10.1108/ER-11-2019-0440.
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D. and Walker, K. (2020), "Purposive sampling: complex or simple? Research case examples", *Journal of Research in Nursing*, Vol. 25 No. 8, pp. 652-661, doi: 10.1177/1744987120927206.
- Creswell, J.W. and Creswell, J.D. (2018), *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed., Sage, Los Angeles, CA.
- Crowley-Henry, M., O'Connor, E.P. and Suarez-Bilbao, B. (2021), "What goes around comes around: exploring how skilled migrant founder-managers of SMEs recruit and

retain international talent", *Journal of Global Mobility*, Vol. 9 No. 2, pp. 145-165, doi: 10.1108/JGM-01-2021-0003.

- David, S., Zinica, D., Bărbuță-Mișu, N., Savga, L. and Virlanuta, F.O. (2024), "Public administration managers' and employees' perceptions of adaptability to change under 'the future of work' paradigm", *Technological Forecasting and Social Change*, Vol. 199, 123088, doi: 10.1016/j.techfore.2023.123088.
- Dubey N, Bomzon SD, Murti AB, Roychoudhury B (2024), "Soft HRM bundles: a potential toolkit for future crisis management". *International Journal of Organizational Analysis*, Vol. 32 No. 9 pp. 2093–2115, doi: 10.1108/IJOA-04-2023-3706.
- Dutta, D. and Kannan Poyil, A. (2024), "The machine/human agentic impact on practices in learning and development: a study across MSME, NGO and MNC organizations", *Personnel Review*, Vol. 53 No. 3, pp. 791-815, doi: 10.1108/PR-09-2022-0658.
- Einola, K. and Khoreva, V. (2023), "Best friend or broken tool? Exploring the co-existence of humans and artificial intelligence in the workplace ecosystem", *Human Resource Management*, Vol. 62 No. 1, pp. 117-135, doi: 10.1002/hrm.22152.
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K. and Kyngäs, H. (2014), "Qualitative content analysis", *SAGE Open*, Vol. 4 No. 1, doi: 10.1177/2158244014522633.
- Emiliussen, J., Engelsen, S., Christiansen, R. and Klausen, S.H. (2021), "We are all in it! Phenomenological qualitative research and embeddedness", *International Journal of Qualitative Methods*, Vol. 20, doi: 10.1177/1609406921995304.
- Gravili, G., Hassan, R., Avram, A. and Schiavone, F. (2023), "Big data and human resource management: paving the way toward sustainability", *European Journal of Innovation Management*, Vol. 26 No. 7, pp. 552-590, doi: 10.1108/EJIM-01-2023-0048.
- Harness, T. (2009), "Research methods for the empirical study of strategic human resource management", *Qualitative Market Research: An International Journal*, Vol. 12 No. 3, pp. 321-336, doi: 10.1108/13522750910963836.
- Hughes, J.C. and Rog, E. (2008), "Talent management: a strategy for improving employee recruitment, retention and engagement within hospitality organizations", *International Journal of Contemporary Hospitality Management*, Vol. 20 No. 7, pp. 743-757, doi: 10.1108/09596110810899086.
- Iqbal, N., Ahmad, M. and Allen, M.M.C. (2019), "Unveiling the relationship between e-HRM, impersonal trust and employee productivity", *Management Research Review*, Vol. 42 No. 7, pp. 879-899, doi: 10.1108/MRR-02-2018-0094.
- Iqbal, N., Ahmad, M., Allen, M.M.C. and Raziq, M.M. (2018), "Does e-HRM improve labour productivity? A study of commercial bank workplaces in Pakistan", *Employee Relations*, Vol. 40 No. 2, pp. 281-297, doi: 10.1108/ER-01-2017-0018.
- Jabbour, C.J.C., Gordono, F.S., Oliveira, J.H.C.D., Martinez, J.C. and Battistelle, R.A.G. (2011), "Diversity management: challenges, benefits, and the role of human resource

management in Brazilian organizations", *Equality, Diversity and Inclusion: An International Journal*, Vol. 30 No. 1, pp. 58-74, doi: 10.1108/02610151111110072.

- Jain, D. and Sharma, H. (2024), "Snapshot of digital transformation from the perspective of human resource management: a bibliometric approach", *Business Process Management Journal*, Vol. ahead-of-print No. ahead-of-print, doi: 10.1108/BPMJ-06-2023-0458.
- Jaiswal, A. and Dyaram, L. (2020), "Perceived diversity and employee well-being: mediating role of inclusion", *Personnel Review*, Vol. 49 No. 5, pp. 1121-1139, doi: 10.1108/PR-12-2018-0511.
- Jarrahi, M.H. (2018), "Artificial intelligence and the future of work: human-AI symbiosis in organizational decision making", *Business Horizons*, Vol. 61 No. 4, pp. 577-586, doi: 10.1016/j.bushor.2018.03.007.
- Jenkins, E.K., Slemon, A., Haines-Saah, R.J. and Oliffe, J. (2018), "A guide to multisite qualitative analysis", *Qualitative Health Research*, Vol. 28 No. 12, pp. 1969-1977, doi: 10.1177/1049732318786703.
- Keeler, J.B., Scuderi, N.F., Baskin, M.E.B., Jordan, P.C. and Meade, L.M. (2023), "How job resources can shape perspectives that lead to better performance: a remote worker field study", *Journal of Organizational Effectiveness: People and Performance*, Vol. 11 No. 4, pp. 825-846, doi: 10.1108/JOEPP-05-2023-0159.
- Kelliher, C. and Perrett, G. (2001), "Business strategy and approaches to HRM: a case study of new developments in the United Kingdom restaurant industry", *Personnel Review*, Vol. 30 No. 4, pp. 421-437, doi: 10.1108/00483480110393353.
- Kossyva, D., Theriou, G., Aggelidis, V. and Sarigiannidis, L. (2024), "Retaining talent in knowledge-intensive services: enhancing employee engagement through human resource, knowledge and change management", *Journal of Knowledge Management*, Vol. 28 No. 2, pp. 409-439, doi: 10.1108/JKM-03-2022-0174.
- Kulkarni, M., Boehm, S.A. and Basu, S. (2016), "Workplace inclusion of persons with a disability: comparison of Indian and German multinationals", *Equality, Diversity and Inclusion: An International Journal*, Vol. 35 No. 7-8, pp. 397-414, doi: 10.1108/EDI-08-2016-0066.
- La Sala, A., Fuller, R., Riolli, L. and Temperini, V. (2024), "The rise of hybrids: plastic knowledge in human-AI interaction", *Journal of Knowledge Management*, Vol. 28 No. 10 pp. 3023–3045, doi: 10.1108/JKM-10-2023-1024.
- Lewis, A.C., Cardy, R.L. and Huang, L.S.R. (2019), "Institutional theory and HRM: a new look", *Human Resource Management Review*, Vol. 29 No. 3, pp. 316-335, doi: 10.1016/j.hrmr.2018.07.006.
- Liu, Y., Chan, C., Zhao, C. and Liu, C. (2019), "Unpacking knowledge management practices in China: do institution, national and organizational culture matter?", *Journal of Knowledge Management*, Vol. 23 No. 4, pp. 619-643, doi: 10.1108/JKM-07-2017-0260.
- Madera, J.M., Yang, W., Wu, L., Ma, E. and Xu, S. (2023), "Diversity and inclusion in hospitality and tourism: bridging the gap between employee and customer perspectives",

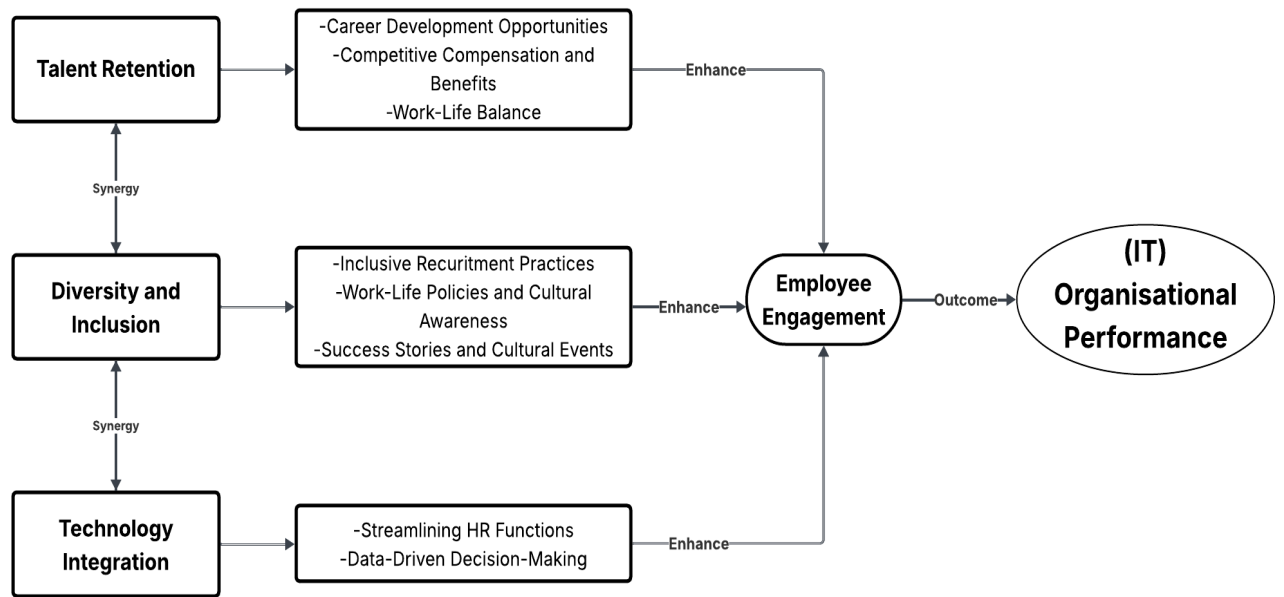
International Journal of Contemporary Hospitality Management, Vol. 36 No. 7, pp. 2185-2204, doi: 10.1108/IJCHM-04-2023-0450.

- Marginson, S. (2019), "Limitations of human capital theory", *Studies in Higher Education*, Vol. 44 No. 2, pp. 287-301, doi: 10.1080/03075079.2017.1359823.
- Martin, G.P., Aveling, E., Campbell, A., Tarrant, C., Pronovost, P., Mitchell, I., Armstrong, N. and Dixon-Woods, M. (2018), "Making soft intelligence hard: a multi-site qualitative study of challenges relating to voice about safety concerns", *BMJ Quality & Safety*, Vol. 27 No. 9, pp. 710-717, doi: 10.1136/bmjqs-2017-007579.
- Masood, A., Salameh, A.A., Khalil, A., Zhang, Q. and Papa, A. (2023), "Synergizing organizational inclusion and IT competencies through resource orchestration: a longitudinal exploration", *Information Technology and People*, Vol. 38 No. 2 pp. 913–936, doi: 10.1108/ITP-01-2023-0052.
- McVittie, C., McKinlay, A. and Widdicombe, S. (2008), "Organizational knowledge and discourse of diversity in employment", *Journal of Organizational Change Management*, Vol. 21 No. 3, pp. 348-366, doi: 10.1108/09534810810874822.
- Nayeypour, H. and Sehhat, S. (2024), "Designing the competency model of human resource managers based on paradox theory (case study: information and communication technology industry)", *International Journal of Organizational Analysis*, Vol. 32 No. 7, pp. 1181-1203, doi: 10.1108/IJOA-02-2023-3645.
- Nazir, M.A., Rizwan, H. and Zhu, X. (2025), "A thematic analysis of factors influencing small and medium enterprise adoption of social media marketing: a TOE framework perspective", *Qualitative Market Research: An International Journal*, Vol. 28 No. 1, pp. 178-204, doi: 10.1108/QMR-10-2023-0143.
- Niazi, A., Qureshi, M.I., Iftikhar, M. and Obaid, A. (2024), "The impact of GHRM practices on employee workplace outcomes and organizational pride: a conservation of resource theory perspective", *Employee Relations*, Vol. 46 No. 2, pp. 383-407, doi: 10.1108/ER-05-2023-0249.
- Ozuem, W., Willis, M. and Howell, K. (2022), "Thematic analysis without paradox: sensemaking and context", *Qualitative Market Research: An International Journal*, Vol. 25 No. 1, pp. 143-157, doi: 10.1108/QMR-07-2021-0092.
- Panda, G., Dash, M.K., Samadhiya, A., Kumar, A. and Mulat-weldemeskel, E. (2024), "Artificial intelligence as an enabler for achieving human resource resiliency: past literature, present debate and future research directions", *International Journal of Industrial Engineering and Operations Management*, Vol. 6 No. 4, pp. 326-347, doi: 10.1108/IJIEOM-05-2023-0047.
- Pandita, D. and Ray, S. (2018), "Talent management and employee engagement – a meta-analysis of their impact on talent retention", *Industrial and Commercial Training*, Vol. 50 No. 4, pp. 185-199, doi: 10.1108/ICT-09-2017-0073.

- Paramita, D., Okwir, S. and Nuur, C. (2024), "Artificial intelligence in talent acquisition: exploring organisational and operational dimensions", *International Journal of Organizational Analysis*, Vol. 32 No. 11, pp. 108-131, doi: 10.1108/IJOA-09-2023-3992.
- Peeters, T., Paauwe, J. and Van De Voorde, K. (2020), "People analytics effectiveness: developing a framework", *Journal of Organizational Effectiveness: People and Performance*, Vol. 7 No. 2, pp. 203-219, doi: 10.1108/JOEPP-04-2020-0071.
- Pillai, R. and Srivastava, K.B.L. (2024), "Smart HRM 4.0 for achieving organizational performance: a dynamic capability view perspective", *International Journal of Productivity and Performance Management*, Vol. 73 No. 2, pp. 476-496, doi: 10.1108/IJPPM-04-2022-0174.
- Rafi, M., JianMing, Z. and Ahmad, K. (2020), "Digital resources integration under the knowledge management model: an analysis based on the structural equation model", *Information Discovery and Delivery*, Vol. 48 No. 4, pp. 237-253, doi: 10.1108/IDD-12-2019-0087.
- Reiche, B.S. (2023), "Between interdependence and autonomy: toward a typology of work design modes in the new world of work", *Human Resource Management Journal*, Vol. 33 No. 4, pp. 1001-1017, doi: 10.1111/1748-8583.12482.
- Riaz, S., Townsend, K. and Woods, P. (2021), "Understanding HRM philosophy for HPWS and employees' perceptions", *Personnel Review*, Vol. 50 No. 3, pp. 812-828, doi: 10.1108/PR-11-2019-0640.
- Roul J, Mohapatra LM, Pradhan AK, Kamesh A (2025), "Analysing the role of modern information technologies in HRM: management perspective and future agenda". *Kybernetes*, Vol. 54 No. 14 pp. 7409–7434, doi: 10.1108/K-11-2023-2512.
- Rurkkhum, S. (2024), "A bundle of human resource practices and employee resilience: the role of employee well-being", *Asia-Pacific Journal of Business Administration*, Vol. 16 No. 3, pp. 716-731, doi: 10.1108/APJBA-01-2022-0050.
- Sachdeva, L., Jena, L.K., Badhotiya, G.K., Baharul Islam, K.M., Mujtaba, B.G. and Pal, S. (2024), "COVID-19 and human resource management: status, trends and research directions", *Employee Relations*, Vol. 46 No. 4 pp. 871–894, doi: 10.1108/ER-11-2023-0582.
- Sareminia, S. and Sajedi Haji, F. (2024), "Enhancing employees' quality of work life and engagement to foster corporate social responsibility: a data mining approach", *Industrial and Commercial Training*, Vol. 56 No. 3, pp. 213-239, doi: 10.1108/ICT-10-2023-0078.
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H. and Jinks, C. (2018), "Saturation in qualitative research: exploring its conceptualization and operationalization", *Quality and Quantity*, Vol. 52 No. 4, pp. 1893-1907, doi: 10.1007/s11135-017-0574-8.
- Shivhare, A. and L, G. (2025), "Beyond diversity: an analysis of gender inclusion within Indian manufacturing organizations". *International Journal of Organizational Analysis*, Vol. 33 No. 4 pp. 763–779, doi: 10.1108/IJOA-01-2024-4165.

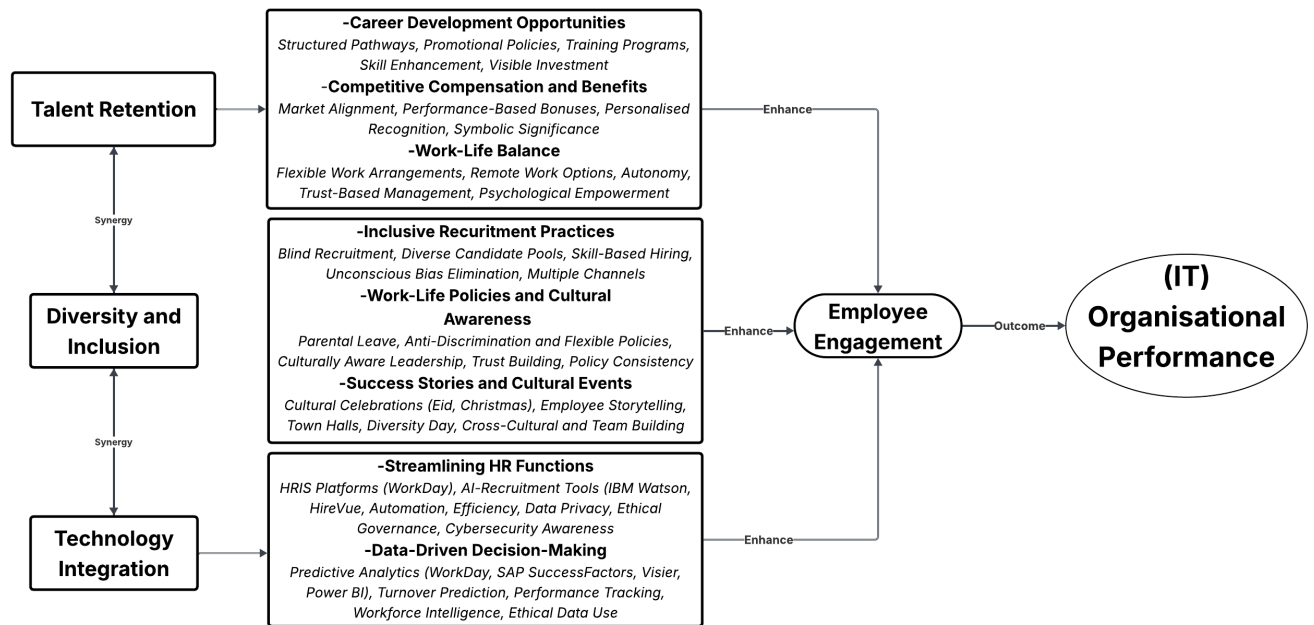
- Sousa, B., Ferreira, J.J.M., Jayantilal, S. and Dabic, M. (2024), "Global talent management – talents, mobility and global experiences – a systematic literature review", *Journal of Global Mobility*, Vol. 12 No. 3 pp. 444–501, doi: 10.1108/JGM-03-2023-0018.
- Willcocks, L.P. (2024), "Automation, digitalization and the future of work: a critical review", *Journal of Electronic Business & Digital Economics*, Vol. 3 No. 2, pp. 184-199, doi: 10.1108/JEBDE-09-2023-0018.
- Yin, R.K. (2018), *Case Study Research and Applications: Design and Methods*, 6th ed., Sage Publications, Thousand Oaks, CA.
- Zapata, L., Ibarra, G. and Blancher, P.H. (2024), "Engaging new ways of work: the relevance of flexibility and digital tools in a post-COVID-19 era", *Journal of Organizational Effectiveness: People and Performance*, Vol. 11 No. 1, pp. 1-17, doi: 10.1108/JOEPP-07-2022-0175.
- Zhao, Y., He, G., Wei, D. and Zhao, S. (2024), "When digitalization meets HRM: developing a HRM value chain model in China", *Chinese Management Studies*, Vol. 18 No. 6 pp. 1775–1799, doi: 10.1108/CMS-07-2023-0317.

Figure 1. HRM Practices and Strategies Working Together to Enhance Employee and Organisational Outcome – Conceptual Framework



Source(s): Authors' own creation

Figure 2: HRM Synergy for Employee and Organisational Outcomes: A Proposed New Conceptual Framework



Source(s): Authors' own creation

Table 1. Profile of Study Participants

Site	Organisation Details (Name, Size and Location) Pseudonymised	ID	Position	Academic Qualification	Experience and Demographics	Interview Mode	Duration (mins)	Interview Date
1	Webex (50) Small Islamabad (Capital)	P01	HR Manager	Master in HR	IT Exp: 14 yrs Age: 42 Male Tenure: 7 years	Face-to-face	42	18-Nov-2024
		P02	HR Executive	Bachelor in Business	IT Exp: 10 yrs Age: 33 Female Tenure: 4 years	Face-to-face	35	18-Nov-2024
2	Recruido (200) Medium Karachi (Sindh)	P03	HR Manager	Master in HR	IT Exp: 8 yrs Age: 38 Male Tenure: 5 years	MS Teams	38	22-Nov-2024
		P04	Recruitment Specialist	Bachelor in IT	IT Exp: 6 yrs Age: 31 Male Tenure: 3 years	MS Teams	33	22-Nov-2024
3	IBM Solution (1500) Large Lahore (Punjab)	P05	Senior Executive HR	Master in HR	IT Exp: 1 yr Age: 29 Female Tenure: 1 year	Face-to-face	30	26-Nov-2024
		P06	HR Analyst	BBA	IT Exp: 2 yrs Age: 27 Female Tenure: 2 years	Face-to-face	32	26-Nov-2024
4	Nakissa (250) Medium Islamabad (Capital)	P07	HR Officer	Master in IT	IT Exp: 4 yrs Age: 35 Male Tenure: 3 years	Face-to-face	40	02-Dec-2024
		P08	Training and Development Specialist	Bachelor in HR	IT Exp: 3 yrs Age: 32 Female Tenure: 2 years	Face-to-face	37	02-Dec-2024

5	Ibex (1000) Large Karachi (Sindh)	P09	HR Business Strategist	MBA	IT Exp: 3 yrs Age: 36 Male Tenure: 3 years	MS Teams	44	06-Dec-2024
		P10	Talent Acquisition Manager	B.Com (Hons)	IT Exp: 2 yrs Age: 30 Male Tenure: 1 year	MS Teams	36	06-Dec-2024
6	Innovate Technologies (280) Medium Rawalpindi (Punjab)	P11	HR Executive	Master in HR	IT Exp: 2 yrs Age: 33 Female Tenure: 1 year	Face-to-face	39	09-Dec-2024
		P12	Learning and Development Coordinator	BBA	IT Exp: 1 yr Age: 29 Female Tenure: 1 year	MS Teams	31	13-Dec-2024
7	Shukat Khanam IT Industry (2000) Large Lahore (Punjab)	P13	HR Officer	Master in HR	IT Exp: 5 yrs Age: 40 Male Tenure: 4 years	Face-to-face	45	08-Jan-2025
		P14	Employee Relations Specialist	Bachelor in IT	IT Exp: 4 yrs Age: 38 Female Tenure: 3 years	Face-to-face	41	08-Jan-2025
8	Greyloops (30) Small Rawalpindi (Punjab)	P15	HR Business Strategist	MBA	IT Exp: 4 yrs Age: 34 Male Tenure: 2 years	Face-to-face	34	13-Jan-2025
		P16	Organisational Development Specialist	Master in HR	IT Exp: 3 yrs Age: 32 Female Tenure: 3 years	MS Teams	38	17-Jan-2025

Note: All organisation names are pseudonyms used to protect confidentiality.

Source(s): Authors' own creation

Table 2. Thematic Matrix of HRM Practices in Pakistan's IT Sector

Theme	Sub-Theme	Codes	Illustrative Quotes/Narratives
Talent Retention	Career Development Opportunities	Career growth, Training programmes, Promotion policies, Skill enhancement, Employee motivation, Personalised recognition, Strategic development, Intellectual capital	Webex (P01): "People look for companies that care for their development. Clear promotion policies build loyalty." Recruído (P03): "These programs are critical. Without them, staff quit for better offers." IBM Solution (P05): "In IT, self-development is inevitable; career advancement is vital."
	Competitive Compensation and Benefits	Salary fairness, Incentives, Bonuses, Employee recognition, Market alignment, Perceived equity, Standardised systems, Emotional connection, Symbolic significance	Webex (P02): "Personalised bonuses reflecting individual performance make employees feel valued." Nakissa (P07): "When pay doesn't match contributions or market standards, it leads to dissatisfaction." Ibex (P09): "Bonuses convey recognition and strengthen our emotional connection to the organisation."
	Work-Life Balance	Flexible work arrangements, Remote work, Adjustable shifts, Autonomy, Employee well-being, Trust, Empowerment, Psychological contract, Self-management, Boundary erosion	Innovate Technologies (P11): "Employees work remotely two days a week and adjust their hours. Flexibility is embedded into operations." Shukat Khanam (P13): "Managing tasks without being micromanaged empowers us to feel trusted and respected."

Diversity and Inclusion	Inclusive Recruitment Practices	Blind recruitment, Gender diversity, Equality, Skill-based hiring, Fresh perspectives, Unconscious bias elimination, Strategic asset, Innovation, Managerial discretion, Diverse channels	Greyloops (P15): "We advertise through multiple channels and focus on candidates' skills rather than backgrounds." Nakissa (P08): "Diverse candidates bring innovative problem-solving skills and fresh ideas." IBM Solution (P06): "Blind recruitment focuses solely on skills, removing bias related to gender, age, or ethnicity."
	Work-Life Policies and Cultural Awareness	Flexible policies, Parental leave, Anti-discrimination, Leadership awareness, Trust building, Cultural sensitivity, Policy enactment, Formalised frameworks, Consistency	Webex (P02): "Flexible work, parental leave, and anti-discrimination policies foster an inclusive culture." Nakissa (P08): "Clear policies apply equally to everyone, creating a fair environment." IBM Solution (P06): "Culturally aware leadership builds trust and improves teamwork across diverse groups."
	Success Stories and Cultural Events	Cultural celebration, Storytelling, Employee recognition, Inclusion, Team bonding, Religious festivals, Authentic expression, Cross-cultural understanding, Informal gatherings, Structured events	Shukat Khanam (P14): "Celebrating Eid and Christmas together and sharing success stories demonstrate the value of diversity." Greyloops (P15): "Our annual 'Diversity Day' and storytelling sessions create bonding opportunities."

Technological Integration	Streamlining HR Functions	HRIS platforms, AI recruitment tools, Automation, Efficiency, Staff training, Workday, IBM Watson, HireVue, Data privacy, Ethical governance, Selective adoption, Comprehensive integration, Phased implementation	Greyloops (P15): "Basic HR systems handle payroll and leave tracking, freeing time for strategic work." Recruído (P04): "Workday transformed operations. Automating payroll saved countless hours." Nakissa (P08): "IBM Watson and HireVue sift through thousands of resumes quickly." Shukat Khanam (P13): "Enterprise-level HRIS integrates all functions efficiently." Innovate Technologies (P12): "Without training on data privacy and ethical AI use, breach risks increase."
	Data-Driven Decision Making	Employee analytics, Performance tracking, Turnover prediction, Ethical data use, Strategic interventions, Workday, SAP SuccessFactors, Visier, Power BI, Evidence-based decisions, Data governance, Predictive tools, Workforce intelligence	Ibex (P10): "Workday and SAP SuccessFactors revolutionised decision making. We prioritise ethical data handling." Nakissa (P07): "Analytics help predict who might leave and intervene proactively." Greyloops (P16): "Visier and Power BI provide insights on behaviour patterns and turnover risks while protecting data."

Source(s): Authors' own creation