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**ACADEMIC PAPER**

# The Nexus of High-Performance Work Systems and Employee Perceived Innovation Performance: Unveiling the Mediating Role of Human Capital – A Study of Banking Industry in Compliance with SDGs (2023)

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## ABSTRACT

This research endeavors to investigate into the complex dynamics within the banking industry, specifically focusing on the interrelationships among Human Capital Management (HCM), High-Performance Work Systems (HPWS), and the Perceived Innovative Performance of Employees (PIPE), in compliance with Sustainable Development Goals (SDGs). This study employs a quantitative research approach to investigate the complex relationships between HPWS, HCM, and PIPE within the banking industry. The population under scrutiny were individuals within the banking sector in Karachi, Pakistan; a sample size of 398 respondents ensures a robust and representative dataset. The study leverages advanced statistical techniques, particularly Partial Least Squares-Structural Equation Modeling (PLS-SEM). Findings show the complex relationship between HPWS, HCM, and PIPE in the banking industry. It is observed that the mediation effect of HCM influences the relationship between HPWS and organisational effectiveness. Comprehensive statistical analysis shows that HCM mediates between HPWS and performance.

## KEYWORDS

Human Capital Management (HCM), High-Performance Work Systems (HPWS), HRM, Perceived Innovative Performance of Employees (PIPE), Organizational dynamics, Sustainable Development Goals (SDG).

## INTRODUCTION

Globally, the banking sector generates economic growth and shapes international trade. International business is impacted by the sector. The industry's scale and impact are evident in the market's substantial value, which grew from 201.71 billion dollars in 2022 to 213 billion dollars in 2023 at an annual growth rate of 5.6% (Buz, 2023). F Mahboob, Dahri, Kazouz, Qureshi, and Qureshi (2021) describe financial concerns

and corporate misconduct in today's fast-paced global business climate. Farhan Mahboob (2022) and Farhan Mahboob (2020) show firms' complexity through financial disasters and corporate scams. According to Khan, Rasheed, Rashid, Abbas, and Mahboob (2022), organisations are improving their perceived innovation. Companies innovate to stay ahead in changing marketplaces. Khan et al. (2022) highlight organisation innovation. Companies innovate to thrive in the turbulent and competitive global commercial climate. These activities help organisations handle financial issues, avoid corporate wrongdoing, and position themselves for long-term success through innovation (Abdul Basit, Kuhn, & Cantner, 2022; Carvache-Franco, Carvache-Franco, Carvache-Franco, & Bustamante-Ubilla, 2022; Damanpour & Schneider, 2009). The banking industry in Pakistan not only holds significant influence over the country's economic growth and development but also plays a vital role in shaping global economic progress.

Within this global business landscape, the Pakistani banking sector assumes a pivotal role by advocating for environmentally sustainable and socially responsible practices, gravitating closer to Sustainable Development Goals (SDGs). In line with the imperative of sustainable development goals on a global scale, the Pakistani banking industry integrates initiatives focused on waste reduction, efficient resource utilization, and resource reutilization (Bravo, 2022), and focus on technology (Luo et al., 2022) conducive to small and medium sized enterprises. By embracing these practices, the sector contributes to the broader goal of achieving sustainability and further solidifies its position as a key player in the international banking market, seeking alignment with SDGs Weiland, Hickmann, Lederer, Marquardt, and Schwindenhammer (2021). The Karachi banking industry is well-known for its fiercely competitive and rapidly evolving landscape, where innovation plays a pivotal role in ensuring business competitiveness and long-term viability. However, there remains a notable gap in research regarding the interplay between high-performance work systems (HPWS), human capital management (HCM), and 'employees' perceived innovative performance, specifically within the banking industry, which is a key component of SDG 8 and 9 (Weiland et al., 2021). To address this research gap, this study endeavors to examine the correlation between HPWS, HCM, and 'employees' perceived innovative performance within the banking industry.

Zhang, Peng, and Chen (2023) found HPWS boost organisational creativity. HPWS boosts employee skills, motivation, and engagement in creative workplaces. Huselid (2023) argues employee-focused organisations affect HPWS and employee perceptions. A compassionate, trustworthy, respectful, and growing culture links the firm's high-performance work approaches to workers' perspectives and experiences. (Alzahmi, 2016; Bowen & Ostroff, 2004); Diatmono and Mariam (2020), and Carvache-Franco et al. (2022) advocate employee-focused culture and organisational agility. Weiland et al. (2021) suggest HR practices align with sustainable goals. The study seeks to examine the relationship between HPWS and employees' outcomes (job performance, organizational citizenship behavior, and innovative work behavior) by considering the mediating role of work engagement. Work engagement is an important construct that has received limited attention in academic settings, despite its significance (Kalyani & Priyanath, 2023). Furthermore, our research contributes to the field of industrial research by examining the role of high-performance work systems (HPWS) in industrial settings. It is crucial to understand how the implementation of HPWS can have a positive impact on employee engagement and performance in dynamic industrial contexts (Amjad et al., 2021; D. E. Guest, 2011; S. Guest & Spence, 2003). The study is centered on small and medium-sized enterprises (SMEs) in the Landhi Association of Trade and Industry (LATI) in Karachi, recognizing their significant role in the country's economy.

## LITERATURE REVIEW

### High-Performance Work System (HPWS)

High-Performance Work System (HPWS) refers to a cohesive set of integrated human resource management practices designed to enhance employee performance and productivity (Al Hosani, Jabeen, Paul, & Stachowicz-Stanusch, 2020). HPWS theory posits that individual employee performance significantly influences firm-level outcomes, establishing a distinctive and challenging-to-replicate competitive advantage. Huselid and Becker (1995) described strategic human resource integration to improve employee skills, motivation, and opportunity. This integrated approach may improve

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organisational performance through direct, system, and interaction effects. HPWS encourage both individual and collective staff growth to improve organisation. SDT says employee self-determination mediates HPWS and organisational performance. SDT shows HPWS builds a talented, inventive workforce. HPWS's encouragement of autonomy, competence, and relatedness inspires, enables, and innovates employees, boosting organisational performance, according to a previous study.

Al Hosani et al. (2020) state HPWS is a comprehensive HR management practise that improves employee performance and productivity. These practices include training, self-managed teams, decentralised decision-making, well-designed pay systems, flexible work assignments, and good communication. These techniques are blended and integrated to boost organisational performance by improving effectiveness and efficiency. HPWS improves banking productivity, staff well-being, and job satisfaction. As Herzberg suggests, Vroom's Expectancy Theory boosts performance, rewards, and motivation. This suggests workers seek valuable incentives. Performance-driven culture, banking incentive systems, and staff-organizational alignment depend on this relationship. These theories promote HPWS techniques including performance-based reward systems, which boost job satisfaction and motivation. HPWS improves pleasure and motivation with Herzberg's cleanliness and performance rewards. Banking companies can use Maslow's Hierarchy of Needs, Herzberg's Two-Factor Theory, and Vroom's Expectancy Theory to create a supportive, motivating, and engaging workplace. Prioritising employee well-being, satisfaction, and motivation may help companies adapt, develop, and stay competitive as the industry changes.

## Human Capital Management (HCM)

Human Capital Theory says skills create goods and services. This theory states that staff knowledge, skills, and competences boost organisational efficiency. Human capital is a manufacturing input like labour and physical capital. This idea states that education, training, and skill development boost GDP, human capital, and productivity. According to Human Capital Theory, education and learning increase economic and organisational performance. Therefore, companies and society should generate human capital to improve workforce potential and long-term success. The effective utilization of this resource yields profitable outcomes not only for the individuals themselves but also for the organization and society as a whole.

Building upon this, the theoretical literature underscores the critical link between employee behavior within organizations and overall organizational performance. Human resource management practices are identified as influential factors shaping individual employee performance through their impact on skills and motivation, as well as through the establishment of organizational structures that facilitate continuous improvement in job execution (Huselid, 1995). HCM aims to cultivate an environment conducive to innovation. Through strategic investments in human capital, organizations aspire to create a culture that nurtures innovation and empowers employees to generate and implement novel ideas.

## Perceived Innovative Performance of Employee (PIPE)

Two hypotheses explain individual and organisational performance dynamics in the model. People naturally associate with shared features in Social Identity Theory. Categorization promotes belonging, fun, and activity confidence. Thus, this psychological benefit boosts individual and organisational performance. An emphasis on individual Ability (A), Motivation (M), and external Opportunities (O) strengthens Social Identity Theory. A previous study explains various performance aspects. AMO gives a sophisticated view of how human talents, motivation, and external circumstances affect performance by appreciating their interconnection. These must match HR management for organisation performance.

Social Identity Integration Theory and AMO allow complete analysis and performance enhancement of individuals and organisations. Social identity shows a positive workplace that fosters belonging, collaboration, and identity. The AMO framework prioritises ability, motivation, and external opportunity to organise performance. Integrated models assess organisational social processes and people. The concept uses psychological and organisational views to help businesses capitalise on

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individuals' strengths and match goals to wants and skills. Finally, Social Identity Theory and the AMO theoretical framework are used to study individual and organisational performance dynamics. Businesses seeking workforce and performance optimisation might benefit from this holistic strategy that examines societal and human variables.

Perceived Innovative Performance has numerous organisational traits, state Delaney and Huselid (1996). Paais and Pattiruhu (2020) say corporate culture, leadership support, resource availability, and successful HCM practises like HPWS affect Perceived Innovative Performance. They impact company creativity and staff innovation. Understanding the complicated links between AMO (Ability, Motivation, and Opportunities) and Perceived Innovative Performance may increase performance. Organisational innovation dynamics can be assessed using AMO—Ability, Motivation, and External Opportunities. Creating an innovative culture requires understanding how these traits affect organisational goals and strategy. AMO and PIP help firms discover strengths and weaknesses. Giving people the skills, motivation, and chance to innovate boosts company innovation. Companies innovate, optimise HR, and implement focused initiatives with deep insight. Finally, culture, leadership, and HR policies affect PIP. The AMO framework link analysis can boost organisational innovation and performance Delaney and Huselid (1996); (Paais & Pattiruhu, 2020).

## Relationship between HPWS and HCM

HPWS and organisational performance have been extensively studied. HCM HPWS boost staff productivity (Al Hosani et al., 2020; Wahyuni & Syamsir, 2020). Training, self-managed teams, and decentralised decision-making boost organisational outcomes, including perceived innovation (Nwosu, Okoh, & Goodluck, 2020). This study shows strategic HR policies affect company performance. According to studies, high-involvement or high-performance work systems are becoming more significant in Human Capital Management (HCM) practices associated to organisational success. HPWS combines HCM control with commitment (Shahriari & Allameh, 2020). HPWS solutions include self-managed teams, training, staffing, decentralised decision-making, remuneration, flexible work assignments, and communication. HPWS' versatility lets organisations change essential components without affecting performance.

The literature emphasises HPWS synergy. Complementary HPWS solutions boost organisational efficiency (Toh, Morgeson, & Campion, 2008). These interrelated actions increase organisational performance more than their individual contributions. HPWS synergies must be included in HR management strategies. High-success Work systems determine corporate success, says research. Strategic HRM enhances results through training, self-managed teams, and decentralised decision-making. Human Capital Management is constantly changing, yet HPWS solutions may be modified and still work well. Riaz, Townsend, and Woods (2021) discuss two methods HCM fosters employee creativity and innovation. Selection, development, and inspiration for new ideas. Strategic objectives include hiring top talent, educating and advising, and creating motivating reward systems and communication channels (Janssen, 2000). Diversity fosters creativity and innovation in an organisation. Second, High-Performance Work Systems (HPWS) encourage employee inventiveness. HPWS' HRM encourages employee creativity (Phuong, 2022; Tran Huy, 2023). Companies can improve creativity and execution by integrating HRM with HPWS.

The impact of HPWS on organisational success has been studied extensively. The interactive approach examines how a few actions affect outcomes, while the system approach examines all activities (Jiang, Lepak, Han, et al., 2012). Collaboration takes into account firms' ecosystems and HR practises for external relationships. The commitment-oriented strategy promotes HR policies for employee development and training, investing in staff growth and competency. These methods demonstrate HPWS's versatility and potential impact on organisational and individual outcomes. HR methods at HPWS affect company performance and employee satisfaction. The study examines macro and micro outcomes to understand HPWS and organisational success. Understanding these complexities is crucial to creating HRM strategies that encourage creativity, innovation, and long-term success in a competitive setting.



**Hypothesis 1***: There is a connection between having a high-performance work system (HPWS) in place and efficiently managing human capital (HCM) in the organization.*

## Relationship between HCM and PIPE

Organisational performance depends on PIPE, which assesses employees' innovation and improvement of products, processes, and services (Miller & Miller, 2020). Innovation is strategic with HRM. HCM prioritises attracting, developing, and retaining exceptional persons by investing in their knowledge, skills, and capabilities to boost performance and creativity (Knezović, Bušatlić, & Riđić, 2020). Training and development increase employee innovation (Witasari & Gustomo, 2020). These methods emphasise constant learning and skill development, supporting HCM's assertion that human capital investment may enhance innovation. Organisations enhance knowledge and abilities to innovate. HCM enhances employees' creativity by improving their knowledge, skills, and capacities (Chen, Leung, & Evans, 2016). Well-equipped and engaged people drive organisational innovation, says the strategic alignment. HCM and PIPE demonstrate how human capital development and organisational innovation are related, emphasising employees' importance to success. In a fast-changing corporate environment, HCM practices must be integrated to attract and retain top staff and encourage innovation and adaptation.

HPWS improve organisational performance by increasing staff productivity and performance with HCM initiatives (Appelbaum, 2000). According to Zhang et al. (2023), HCM influences the intricate relationship between HPWS and employee perceived innovative performance. HPWS trains and educates staff. Capital investments in people create innovation. HPWS initiatives teach employees new skills, enhancing creativity and innovation. Wang, Zhang, and Wan (2022) suggest HCM mediates HPWS' indirect effect on perceived originality. HPWS activities affect perceived innovation directly and indirectly HCM. HPWS HCM strengthens employee performance and human capital, fostering innovation. This shows how HPWS and HR practises link and how HCM helps understand employee creativity.

HCM affects HPWS and employee innovation perception (Jiang, Lepak, Hu, & Baer, 2012). Research shows HPWS improved HCM training and development. HCM increased employee innovation, per Diatmono and Mariam (2020). The study indicated that HCM impacts HPWS's originality. Research demonstrates HCM boosts employee innovation perception. HPWS HCM improves employee knowledge, skills, and competencies, boosting innovation and success. Therefore, creative workplaces need human capital development. Companies can improve employee innovation initiatives with HCM's HPWS-PIPE mediation. These linkages demonstrate the necessity for a holistic talent management approach, where HPWS may improve human capital to create a highly skilled workforce that boosts creativity and performance.

**Hypothesis 2***: Organisational human capital management (HCM) affects employee perception of innovative performance.*

## Relationship between HPWS and PIPE

We believe HCM mediates HPWS-employee innovative performance. This hypothesis states that high-performance work systems boost HCM and employee creativity. HPWS boosts staff productivity with HCM (Kloutsiniotis, Mihail, & Gounioti, 2023). Self-managed teams, training, and decentralised decision-making increase HPWS employees' human capital. The initiatives improve employees' skills and knowledge. HPWS human capital investments foster organisational innovation (Laursen & Foss, 2003; Nguyen, Nguyen, Duong, & Doan, 2022). Skill development, cooperation, and decentralised decision-making help HPWS build a skilled and creative staff. This suggests that well-trained workers are more creative. Strategic HCM develops human capital, which HPWS says promotes innovation. Innovation and organisational performance in dynamic marketplaces depend on HCM's HPWS-PIPE mediation. HPWS improve HCM, which impacts employee innovation (Imran & Atiya, 2020). HCM boosts employees' human capital, moderating HPWS' positive effect on PIPE (Ma, Ma, Liu, & Lassleben, 2020). Training and development courses in HCM help people gain new skills and generate

new ideas (Fu, Flood, Bosak, Morris, & O'Regan, 2015). HPWS empirically benefits HCM (Al-Chawishli & Mahdi, 2022). HPWS enhances HCM training and development, according to studies. This boosts staff innovation (Diatmono & Mariam, 2020).

HR practices in employee development and innovation. HPWS-implemented organisations generate human capital, which boosts employee innovation perception, according to Aremu (2020). This implies that HPWS' holistic human capital development approach fosters innovation. High-performance work practices promote employee development and organisational creativity, the study revealed. The literature consistently reveals that HPWS improves HCM, which affects employees' perceived innovation. HCM mediates HPWS's good impact on organisational innovation, emphasising the relevance of human capital development practises including training and development.

HCM connects HPWS and employee creativity. Companies can use employees' talents and knowledge to innovate with strategic HCM (Nguyen et al., 2022). This mediation reveals that HPWS boosts human capital and employees' perceived inventive performance (Fan, Liu, & Zou, 2018). HCM helps organisations innovate by creating and using employee human capital. HCM is needed to link HPWS to employees' perceived innovation, according to the mediation effect. Investment in HCM practises helps employees innovate and learn. The intermediary position of HCM may explain HPWS' good impact on employee innovation. Promoting human capital development and use boosts HPWS and perceived innovation. Human capital enhancement mediates HPWS' favourable influence on employee inventiveness. To foster innovation, strategic HCM expenditures must build and use employees' skills and expertise (Al-Chawishli & Mahdi, 2022; Aremu, 2020; Diatmono & Mariam, 2020; Fan et al., 2018; Fu et al., 2015; Kloutsiniotis et al., 2023; Nguyen et al., 2022).

**Hypothesis 3:** *HCM mediates the relationship between a high-performance work system (HPWS) and employee perception of innovation.*

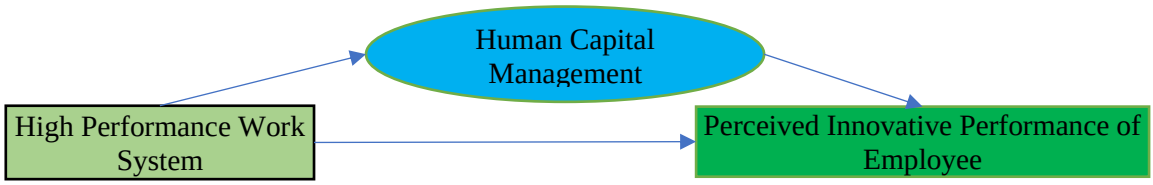


**Figure 1:** Conceptual Framework of the Study.

## RESEARCH METHODOLOGY

This quantitative study examined the impact of High-Performance Work Systems (HPWS) on perceived innovative performance in Karachi's banking sector. Numerical data was collected through surveys administered to banking workers. The research aimed to hypothesize a positive relationship between HPWS and perceived innovative performance, with the mediating role of human capital, and was conducted as a cross-sectional study. The research design was descriptive, and a sample size of 398 respondents was selected through non-probability convenient sampling, while the research population consisted of banking workers based in the Landhi Association of Trade and Industry (LATI)—the research instrument incorporated constructs derived from prior studies, employing a 5-point Likert scale for measurement. The constructs for variables were taken from 1) PIPE nine items were taken from Scott and Bruce (1994) , while eight items for HPWS were taken from (Jensen, Patel, & Messersmith, 2013) and HCM 8 items were taken from (Budhwar, Pereira, Mellahi, & Singh, 2019). The data analysis was conducted utilizing PLS-SEM, encompassing reliability and validity assessments, correlation analyses, and regression analyses.

## RESULTS

This study carried out descriptive analysis of 398 respondents, tabulating the frequency and percentage of 'respondents' age, gender, education, and designation. The primary data set compiled, verified and analyzed was a fairly balanced and diversified demographic distribution, designed to mitigate the

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potential latent bias of any strata of the firms involved. It is observed that 58.5% of the respondents are male. A higher percentage of 35.3% was found related to senior management. Furthermore, 36.5% of the respondents have experience of more than 20 years. Additionally, 34.8% of the respondents are 31 to 40 years old. Master's degree holders are higher in percentage which is 37.6%.

Partial Least Squares-Structural Equation Modelling (PLS-SEM) is employed in this study which is a statistical technique extensively utilised in social sciences studies (Hair Jr, Howard, & Nitzl, 2020; Tajeddini et al., 2022). PLS-SEM is well-suited for research in the current nature of study, in contrast to classical SEM. This methodology seeks to optimise the amount of variance accounted for in the dependent variables by breaking them down into underlying constructs. This enables researchers to evaluate both the measurement and structural models at the same time. It is based on measurement model and structural model.

Results of measurement model are reported in Table 1 and Table 2. This process was carried out to examine the reliability and validity. To check the individual item's reliability, factor loadings were examined which are shown in Table 1. All the values are higher than 0.5. Construct reliability is examined through composite reliability (CR) in which the values are higher than 0.7. Additionally, convergent validity is confirmed through average variance extracted (AVE) which is higher than 0.5. Finally, discriminant validity was examined through heterotrait-monotrait ratio (HTMT) as shown in Table 2. R-square value is 0.542 which highlighted that all the variables are expected to bring 54.2% change in perceived innovative performance of employees in banking industry.

**Table 1:** Factor Laodings, Composite rEliability and Average Varaience Extracted.

| Variable | Items | Loadings | Alpha | CR | AVE |
|---|---|---|---|---|---|
| High Performance Work System | HPWS1 | 0.716 | 0.92 | 0.879 | 0.503 |
| | HPWS2 | 0.923 | | | |
| | HPWS3 | 0.665 | | | |
| | HPWS4 | 0.887 | | | |
| | HPWS5 | 0.665 | | | |
| | HPWS6 | 0.506 | | | |
| | HPWS7 | 0.505 | | | |
| | HPWS8 | 0.928 | | | |
| Perceived Innovative Performance of Employee | PIPE1 | 0.944 | 0.862 | 0.897 | 0.542 |
| | PIPE2 | 0.973 | | | |
| | PIPE3 | 0.558 | | | |
| | PIPE4 | 0.568 | | | |
| | PIPE5 | 0.751 | | | |
| | PIPE6 | 0.881 | | | |
| | PIPE7 | 0.948 | | | |
| | PIPE8 | 0.852 | | | |
| | PIPE9 | 0.913 | | | |
| Human Capital Management | HCM1 | 0.697 | 0.869 | 0.899 | 0.543 |
| | HCM2 | 0.566 | | | |
| | HCM2 | 0.874 | | | |
| | HCM4 | 0.88 | | | |
| | HCM5 | 0.587 | | | |
| | HCM6 | 0.892 | | | |
| | HCM7 | 0.899 | | | |
| | HCM8 | 0.55 | | | |

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**Table 2:** Discriminant Validity (HTMT).

| | HCM | HPWS | PIPE |
|---|---|---|---|
| Human Capital Management | | | |
| High Performance Work System | 0.789 | | |
| Perceived Innovative Performance of Employee | 0.678 | 0.745 | |

Hypotheses are tested by using PLS structural model. The PLS structural model is an essential element of PLS-SEM, a statistical tool employed to describe intricate connections between latent variables. The primary objective is to evaluate the connections between underlying concepts, enabling researchers to analyse both the direct and indirect impacts within the suggested (Hair, Black, Babin, Anderson, & Tatham, 2006; Hair, Black, Babin, Anderson, & Tatham, 2010). The tool's adaptability and effectiveness make it a significant asset for academics investigating complex connections in many domains. In this study, t-value was used to examine the significance of the relationship. As shown in Table 3 and Figure 2, all the hypotheses are significant because the t-value is higher than 1.96 and p-value is less than 0.05. Additionally, beta value highlighted the positive relationship between variables. Hence, both the direct and indirect effect are supported.

**Table 3:** Results.

| | Original Sample | Mean | SD | t-value |
|---|---|---|---|---|
| HPWS -> HCM | 0.916 | 0.91 | 0.127 | 7.216 |
| HPWS -> PIPE | 0.961 | 0.962 | 0.006 | 173.307 |
| HCM -> PIPE | 0.021 | 0.28 | 0.135 | 0.157 |

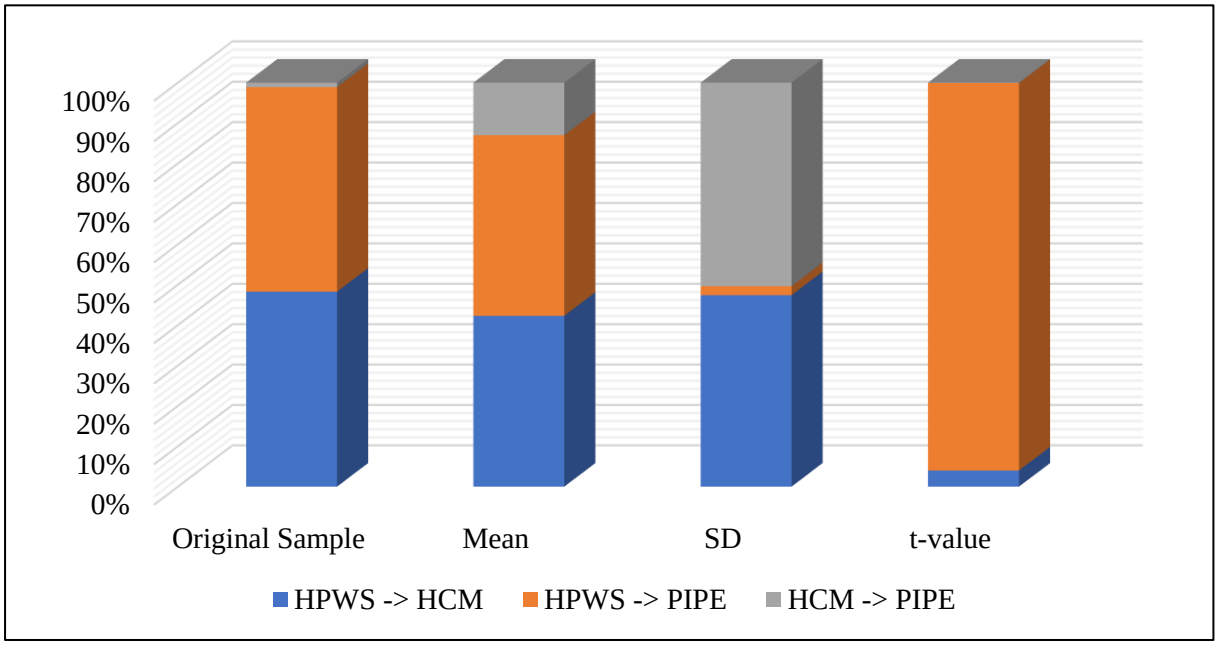


**Figure 2:** Results.

The hypothesis testing in the structural model explores the relationships between the latent constructs, shedding light on the key associations within the conceptual framework. Utilizing Smart PLS and employing a bootstrap procedure with 1000 resampling rounds, the results presented in Table 5 provide insights into the statistical significance and magnitude of the path coefficients. The mediation analysis supports the hypothesis that Human Capital Management (HCM) acts as a mediator in the relationship between High-Performance Work Systems (HPWS) and Perceived Innovative Performance of Employees (PIPE). The initial direct effect of HPWS on PIPE becomes non-significant when considering the influence of HCM, indicating that HCM plays a mediating role in this relationship. In conclusion, the hypothesis testing in Table 3 affirms the significance of the relationships proposed in

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the structural model, providing valuable insights into the dynamics of Human Capital Management, High-Performance Work Systems, and Perceived Innovative Performance of Employees. These findings contribute to the robustness of the research model and pave the way for a nuanced understanding of organizational dynamics.

## DISCUSSION

The results suggest that Human Capital Management acts as a mediator in the relationship between High-Performance Work Systems and Performance. The direct impact of HPWS on Performance is not strongly supported, but its influence on performance is significantly channeled through its positive effect on Human Capital Management. This underscores the importance of considering the mediating role of HCM in understanding the overall impact of HPWS on organizational performance.

In the original sample analysis, the examination of the association between Human Capital Management (HCM) and Performance (PIPE) yielded a noteworthy coefficient of 0.916. This coefficient indicates a robust and statistically significant relationship, suggesting a substantial impact of HCM on PIPE within the organizational context. Considering the central tendency, the sample mean of 0.910 affirms the presence of a positive average influence of HCM on PIPE. This observation is indicative of a consistently favorable effect across the sample, contributing to the overall positive impact of Human Capital Management on organizational performance. The introduction of variability is discerned through the standard deviation of 0.127. This metric underscores the heterogeneity in the impact of HCM on PIPE across the sample, acknowledging the diverse organizational responses to human capital management practices. Statistical significance is emphatically established with a T-statistics value of 7.216. This implies a high level of confidence in the observed relationship, further affirming that the impact of HCM on PIPE is not a result of random variation but holds genuine significance. In essence, the robust and statistically significant nature of the observed relationship between HCM and PIPE underscores the direct and positive impact that Human Capital Management experts have on organizational performance. This finding contributes valuable insights into the nuanced dynamics of organizational success, affirming the salience of strategic human capital management in fostering enhanced performance within the studied context.

In the examination of the original sample, the correlation between High-Performance Work Systems (HPWS) and Human Capital Management (HCM) reveals an exceptionally robust relationship, underscored by a coefficient of 0.961. This coefficient signifies a notable and statistically significant association, indicating a substantial and positive influence of High-Performance Work Systems on Human Capital Management within the organizational framework. Delving into central tendencies, the sample mean of 0.962 signifies a considerable average impact of HPWS on HCM. This observation emphasizes a consistently high effect across the sample, reflecting the pervasive influence of High-Performance Work Systems on the efficacy of Human Capital Management practices. Noteworthy is the low standard deviation of 0.006, indicative of minimal variability in the impact of HPWS on HCM across the sample. This implies a high level of uniformity in the perceived effectiveness of High-Performance Work Systems in shaping Human Capital Management practices among the studied entities. The statistical underpinning of this relationship is profound, as evidenced by the remarkably high T-statistics value of 173.307. This exceptionally elevated statistic confirms an extraordinary level of significance, attesting to the robustness and reliability of the observed positive relationship between HPWS and HCM. In elucidation, the exceptionally high T-statistics value serves as a compelling indicator of the profoundly significant and strong positive relationship between High-Performance Work Systems and Human Capital Management. This outcome substantiates the notion that the strategic implementation of High-Performance Work Systems significantly augments the effectiveness of Human Capital Management practices, affirming the critical interplay between organizational systems and human capital dynamics.

In scrutinizing the original sample, the discerned relationship between HPWS and PIPE manifests with a relatively modest coefficient of 0.021. This coefficient denotes a discernibly low level of association,

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suggesting a limited direct impact of HPWS on PIPE within the studied context. Examining central tendencies, the sample mean of 0.028 implies a modest average effect of HPWS on PIPE. This observation indicates a restrained influence across the sample, depicting a moderate overall impact of HPWS on PIPE. The variability in the impact of HPWS on PIPE is apparent through the standard deviation of 0.135. This metric signifies a degree of diversity in the observed effects across the sample, highlighting the heterogeneous responses of organizations to HPWS. The value 0.157 T-statistics are inadequate in results. A little may make the HPWS-PIPE relationship irrelevant. HCM may impact HPWS. Low T-statistics may distinguish HPWS from PIPE. Understanding complicated organisational performance dynamics is key. Complexity and HCM dynamics may affect HPWS performance. Explaining organisational performance needs understanding these intricate links. Mediators are studied because low T-statistics values indicate complex organisational functioning. Complex organisational relationships need performance enhancement. Understanding mediating variables like HCM may show how high-performance work practices boost creativity. Low T-statistics doubt PIPE-HPWS direct link. Deeper knowledge includes mediating variables like HCM. Organisational performance dynamics are complex and require further mediating variable research.

## CONCLUSION

Our research indicates HPWS, HCM, and PIPE's complex interaction. Through focused HR and work system implementations, our strategic counsel helps leaders improve performance. These proposals align organisational aims with SDGs, which argued by Weiland et al. (2021). Though context-specific, the study is enlightening. Sample and organisation limit findings and ideas' generalizability. The study encourages organisational dynamics research. To comprehend HPWS, HCM, and PIPE in different businesses, future study can focus on diverse contexts and industries. This study's strengths and drawbacks can help organisational researchers and practitioners target and contextualise research. Leaders need rigorous theories and tools from organisational dynamics research to increase performance, innovate, and align with SDGs. The journey toward understanding the optimal intersection of human capital and work systems continues, with these findings serving as a valuable starting point for future research and strategic decision-making in organizational settings, especially as 2030 approaches with the noble SDGs pleading for constructive initiative and action.

### Study Recommendations

Organisations should improve performance via SDG-aligned human capital and work systems management. Human Capital Management should be prioritised like Huselid (2023). HCM is statistically linked to organisational performance, therefore training, skill development, and talent management should be adjusted. PIPE and SDG alignment should improve with strategic HCM. The paper praises tailored high-performance work systems. Strategic alignment of work processes, employee engagement, and technology helps improve human capital dynamics since HPWS and HCM are closely correlated. SDG 8 (Decent Work and Economic Growth) and SDG 9 (Industry, Innovation, and Infrastructure) necessitate these attributes (Weiland et al., 2021). PIPE enhances HPWS deployment, HCM, and organisational performance. Strategic alignment supports global goals by improving performance, sustainability, and social well-being. The report emphasises SDG-driven organisational strategies. HR and work process management can boost SDG performance and society. SDG-based firm plans promote ethical and sustainable business practices that benefit the community and bottom line. Report recommendations include prioritising HCM and integrating HPWS with SDGs. It helps companies innovate, grow human capital, and improve society. Organisations may boost performance and benefit employees and communities by adopting these strategic imperatives.

### Limitations and Future Directions

The study offers modest but important limitations and suggesions. Study sample and organisation may be affected results. Complicated organisational dynamics make generalising to other firms or contexts hazardous. The study's conclusions may not apply elsewhere, making extrapolation problematic. Cause is hard to prove in cross-sectional studies. HPWS, HCM, and organisational performance are examined.

Cause cannot be ascertained without time sequence. This constraint emphasises the need to carefully analyse data and understand that correlations do not indicate causality. Given these constraints, the article advises longitudinal research. In longitudinal investigations, HPWS, HCM, and organisational performance are shown. HPWS and HCM's impact on organisational performance is studied using time-series data. The method would explain causality and connections. Although context-specific and cross-sectional, the study provides significant insights and strategies. These limitations need caution when generalising the findings and longitudinal research to understand the study's associations' temporal dynamics.

Human Capital Management should study HPWS' intricate link with organisational effectiveness. Researchers and practitioners can learn how HCM employs HPWS to succeed. Scholars advise organisations seeking performance improvement through strategic human capital and work systems management by examining factors. These linkages' temporal dynamics can be described by longitudinal studies. Understanding how these relationships change may show HPWS and HCM's long-term impact on organisational success. Organisational processes and connections change over time, according to research. Studies may explore banking industry factors. Farhan Mahboob (2022) believe shariah compliance may offer a fresh viewpoint on industrial operations as the nation moves towards an interest-free economy. These additions aid overall organisational performance understanding. Finally, future research should explain how HCM mediates HPWS and organisational success. Shariah compliance, deviant corporate behaviour, and longitudinal research may help academia and industry understand banking dynamics.

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