

**THE IMPACT OF DIGITAL HUMAN RESOURCE MANAGEMENT ON TALENT
RETENTION IN A CHANGING WORKPLACE: THE MEDIATING ROLE OF
ENTREPRENEURSHIP DEVELOPMENT**

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Abstract

This research paper intends to discuss the implication of Digital Human Resource Management on talent retention within a changing workplace with particular focus on the mediation influence of entrepreneurship development among employees working in Jordanian organizations. The accelerated digitalization and technological changes have altered organizational designs, workforce policies, and human resource practices and brought about the paradigm shift in attracting, developing, and retaining of talent in firms. The study is quantitative in nature and uses the structured questionnaire to be administered to HR professionals and employees who work in various business fields in Jordan. The data obtained were analyzed with the help of Partial Least Squares Structural Equation Modeling (PLS-SEM) in order to evaluate the correlation between DHRM and talent retention and the roles of the entrepreneurship development as the mediator. The three DHRM dimensions, including digital recruitment, e-training and development, and HR analytics, were measured regarding their role in the growth of the entrepreneurship and employee engagement in the long-term. The results show that DHRM has a strong positive impact on talent retention, and development of entrepreneurship mediates this relationship to some extent. The findings also indicate that the use of digital HR systems does not only lead to job satisfaction and engagement but also builds young entrepreneurial skills, which facilitate employees to adjust to the change in an organization and promote innovation and overall success. The given study contributes to the theoretical and practical understanding in the sense that the introduction of DHRM leads to the formation of a digital culture that facilitates sustainability of talent and entrepreneurial orientation in enterprises. The results have strategic implications to the HR managers and policymakers who want to use the concept of digital transformation as a means of developing talents, innovation, and long-term organizational competitiveness in the digital age.

1. INTRODUCTION

Digital technologies have revolutionized the human resource management practice and have redefined the manner in which companies recruit, develop and retain their employees [1]. Due to the high dynamics of digitalization and competitive labor markets, companies have to adopt digital human resource management (DHRM) systems to improve the efficiency of operations and the experience of employees [2]. Digital HRM involves the incorporation of information technologies and cloud-based HR solutions, artificial intelligence (AI), and data analytics into HR practices to assist in making evidence-based decisions, optimising employee performance and maintaining the engagement of the workforce [3]. Digital tools have become the core of talent management in an evolving work environment with the remote working scheme, automation, and shifting employee demands [4]. In the modern dynamic world, companies are finding it harder to retain talented workforce that expects flexibility, autonomy and chances to grow [5]. Talent retention is no longer merely an HR problem, but it has also become a strategic necessity that defines organizational sustainability and competitiveness [6]. The proper DHRM practices in the areas of digital recruitment, online performance management, and e-learning allow the firms to enhance employee satisfaction and commitment and, thus, turnover intentions [7]. Nevertheless, the use of technologies is not enough. In order to attain sustainable talent retention, companies should inculcate entrepreneurship culture that motivates the workers to be innovative, self-driven, and keep enhancing their skills [8]. Development of entrepreneurship in organizations is important to connecting the digital HRM to the employee retention results. The ability to make employees act as entrepreneurs increases organizational flexibility and flexibility to adapt to emerging market and technological environments [9]. Problem-solving, opportunity recognition, and entrepreneurial competencies of creativity are enhanced with the help of digital HR practices offering data-driven insights, individualized learning opportunities, and collaborative virtual spaces [10]. Hence, the development of entrepreneurship is a mediating process by which digital HRM is converted into a long-lasting engagement and loyalty of employees [11]. Despite the recognition of the strategic value of DHRM and entrepreneurship development, there was not much empirical studies to identify the combined influence of both on talent retention especially in the emerging economies Jordan [12]. Most of the organizations within the region remain at the initial levels of digital transformation and have challenges such as insufficient infrastructure, poor digital literacy and organizational resistance to change [13]. These issues make it difficult to align the digital HRM efforts with talent development based on entrepreneurship. This research attempts to fill this gap by evaluating the correlation of DHRM and talent retention in a dynamic workplace with a focus on the mediating factor of entrepreneurship development between Jordanian organizations. By combining the lessons of the digital transformation, HRM innovation, and entrepreneurship theory, the proposed study can contribute to the development of the knowledge on the ways how the organizations can retain talent in digitally facilitated and quickly evolving environments. The results should inform HR professionals, business

executives and policymakers to design strategic interventions that integrates digital HR tools, with the ability of entrepreneurs to build sustainable workforces in the long term.

1.1. Research Problem

Although digital HRM systems can bring efficiency, transparency, and engagement, most organizations have difficulties in achieving these advantages because of incomplete implementation and lack of digital preparedness [14]. The misalignment between the digital HR and employee development programs usually leads to the low motivation rates of employees and increased turnover rates [15]. Besides, the lack of entrepreneurship-based HR practices constrains the innovativeness and adaptability of employees hence lowering their commitment to the organization. Therefore, the difficulty is to unite the practice of DHRM and entrepreneurship development models to establish the environment that will facilitate not only technological progress, but also human ingenuity. The discussion of this matter is needed to enhance retention of talent and organizational agility in the digital age.

1.2. Research Gap

The impact of the digital transformation on HR and the impact of HRM in employee engagement has been discussed widely in existing literature [16]. Nevertheless, there is a paucity of empirical research on the role of entrepreneurship development in the mediation of the relationship between DHRM and talent retention, particularly in the realm of the developing economies [17]. Not many studies have investigated how digital Hr practices can arouse entrepreneurial behavior and the impact of this interaction on the long-term commitment of employees to the organization. Additionally, existing studies tend to view HR digitalization and talent management as two distinct entities, which do not depend on one another and are manifested by an entrepreneurial attitude [18]. By bridging this gap, the current research will help create a holistic picture of how DHRM contributes to sustainable talent retention by developing the entrepreneurial culture as providing valuable practical information to the organizations working in the dynamic and ambiguous work environments.

2. LITERATURE REVIEW

2.1. Relational Digital HRM

Relational Digital Human Resource Management (DHRM) deals with applying digital technologies to encourage communication, collaboration and relationship building between employees and the organization [19]. Relational DHRM facilitates cross-hierarchical interaction and engagement through platforms that are human capital management systems, social intranets and AI-based communication tools. Research shows that employees become less dissatisfied and distrusted when the relationship management is prioritised in digital HR systems within organisations [20]. Relational DHRM enhances the psychological contract between employees and employers by offering feedbacks continually, online recognition schemes as well as real time interaction networks [21]. Such online relation processes create a sense of place, especially in online and distant working situations, which enhances the desire of staff members to remain in the company [22]. Relational digital HR systems play a crucial

role in emerging economies Jordan, as they aim to address the obstacles of the traditional communication and develop a unified digital culture that facilitates long-term retention [23].

2.2. Transformational Digital HRM

Transformational DHRM can be defined as the strategic application of technology in redesigning of HR functions and bringing change to an organization [24]. It goes beyond administrative automation, and it takes digitalization to the HR functional strategic core that boosts innovation, agility, and adaptability. Transformational HRM relies on technologies cloud computing, blockchain, and AI-based decision systems to re-define employee experiences and design data-driven human capital approaches [25]. The literature of recent years focuses on the fact that transformational HRM leads to an increased workforce empowerment, decentralized decision-making, and the development of the culture of the constant learning and innovation [26]. Transformational DHRM enables firms in a dynamic workplace to quickly ensure that HR policies are aligned with changing employee demands, market forces, and digital technologies [27]. With organizations in Jordan shifting to the digital economies, transformational HRM becomes a key facilitator of talent sustainability that facilitates efficiency and inclusiveness within the organizational structures [28].

2.3. HR Analytics

People Analytics also known as HR Analytics is the analysis of information about employees using data to make strategic decisions in HR [29]. HR analytics can deliver insights on the behaviour of workforce, attrition patterns and skills gap through machine learning algorithms, predictive analytics and performance dashboard [30]. This analytical tool helps organizations to predict turnover risks, optimize recruitment, and customize retention [31]. Empirical evidence shows that the HR analytics can be used to dramatically increase employee engagement and company performance when applied on the systems of wider digital HRM systems [32]. Analytics are used to help the HR professionals to determine the main sources of employee satisfaction and create individual development programs that can promote loyalty [33]. When applied in the context of emerging markets, HR analytics can also reduce the biases in decision-making and increase the level of transparency to create a fair and data-driven culture in talent management [34].

2.4. Talent Retention

The retention of talent is now strategic in the digital age, when employees with high skills tend to demand flexible, innovation-based, and growth-oriented work-places [35]. Digitization of HRM solutions such as AI-based career development models to online learning solutions allow organisations to offer custom career paths and lifelong learning [36]. These programs minimize turnover intentions as they help to match the organizational goals with the ambitions of the employees. Research shows that the most effective digital retention strategies are those that are used in conjunction with supportive culture, open communication, and empowerment of entrepreneurs [37]. Talent retention in the Jordanian organizations is one that is closely associated with the incorporation of technology-facilitated HR practices that promote inclusion, independence, and versatility of skills [38]. Therefore, digital HRM has a twofold

purpose of improving operational effectiveness and improving emotional and professional loyalty to the company.

2.5. Entrepreneurship Development

Entrepreneurship development can be defined as the development of entrepreneurial attitude, skills and competencies among the employees to facilitate innovation and adapting [39]. Companies that incorporate entrepreneurial training into their HR strategies motivate their employees to see opportunities, act independently, and make their contributions towards organizational success in a creative manner [40]. This process is supported by the use of digital HRM techniques and tools, such as e-learning and performance analytics, which not only create individualized learning environments but also provide feedback in real-time [41]. The studies focus on the idea that entrepreneurship development is not only important to increase innovativeness but is also directly related to employee retention because it makes someone feel that he or she owns the company and has a mission [42]. When workers are enabled to be entrepreneurial, they feel that their jobs are dynamic, and self-rewarding, and thus enhance their organizational commitment [43]. Therefore, the entrepreneurship development process serves as a mediating process between digital HRM initiatives and continuous talent retention in a highly dynamic working environment.

2.6. Integrating DHRM, Entrepreneurship Development, and Talent Retention

A combination of relational and transformational DHRM practices along with HR analytics creates a holistic model of promoting entrepreneurship and talent retentions. The technological aspect is the digital HR systems, and the behavior or the cognitive aspect is the entrepreneurship development that is required in the long-term commitment [44]. According to previous studies, companies that can combine the digital effectiveness with the ability to empower the entrepreneurial level attain greater innovation and workforce contentment [45]. As experienced in the context of Jordan, where the digital transformation of HR practices is yet to be realized, the said integration is necessary in the context of managing workforce mobility, generational diversity, and post-pandemic work expectations [46]. This conceptual framework highlights how DHRM fails to automate HR functionsBit redefines the nature of work, learning and innovation, eventually leading to the sustainability of the digital economy human capital [47].

3. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

The current research is conceptualized on the basis of the Technology-Organization-Environment (TOE) model, according to which technological innovations can be adopted and diffused within the organization, depending on three situational aspects, including technological capabilities, organizational readiness and environmental dynamism . In the human resource context, the TOE framework can be used to have a holistic view of how digital HRM can change the management of the workforce, improve talent retention, and lead to entrepreneurial behaviour in the dynamic business landscapes. Digital Human Resource Management (DHRM) is a technological enabler available in the context of a changing workplace that involves the incorporation of digital tools into HR functions to enhance decisions impacts, communication and employee development. DHRM can be considered to have three fundamental dimensions: relational DHRM, transformational DHRM, and HR

analytics, which are specifically involved in shaping the results of employee engagement and retention. Simultaneously, the development of entrepreneurship is an organizational process through which these digital changes are directed to the behavior of the employees and long-term commitment. In a world where the rate of technology adoption and workforce transformation is on the rise, the development of entrepreneurship serves as a bridge that relates digital HRM practices to the process of sustainable talent retention.

3.1. Relational Digital HRM and Talent Retention

Relational DHRM focuses on leveraging digital tools to enhance internal communication, collaboration and employee employer relationships [48]. Virtual collaboration systems, digital feedback avenues, and social HR portals enhance inter-person trust and build a sense of belonging among the employees [49]. It has been demonstrated through empirical evidence that better digital relationships will lead to increased employee engagement and organizational loyalty, which minimizes turnover intention [50]. Therefore, the initial hypothesis states:

H1: Relational Digital HRM positively affects Talent Retention.

3.2. Transformational Digital HRM and Talent Retention

Transformational DHRM means reinventing the HR activities by digitalizing the HR processes, matching the technology with the strategic workforce goals [51]. Such kind of HRM fosters innovation, autonomy, and agility in the workers that are closely connected with retention in the evolving workplaces [52]. Digital performance management and AI-assisted career development as well as transformational HR practices allow the staff to increase in strength within the organization, making them more satisfied and committed in the long term [53]. Thus, the second hypothesis is the following:

H2: Transformational Digital HRM positively affects Talent Retention.

3.3. HR Analytics and Talent Retention

The approach to HR analytics allows organizations to make evidence-based HR decisions with the aid of predictive modeling and the use of data visualization against workforce statistics . These analytical findings can help companies predict the risk of turnover, the presence of employees with high potential, and the creation of retention programs based on personal preference . Research has shown that evidence-based HR practices play an important role in employee engagement and maintenance of performance. The third hypothesis is the following:

H3: HR Analytics positively affects Talent Retention.

3.4. Digital HRM and Entrepreneurship Development

DHRM systems are not only efficient, but also create conditions that allow entrepreneurial learning and innovation to occur. Through merging digital learning platforms, e-training programs and real time feedback systems, DHRM will be motivating the employees to pursue new ideas and build entrepreneurial competencies. Transformational and relational DHRM together support self-managed learning and the opportunity recognition, which are the constituents of the entrepreneurship development. Therefore, the fourth hypothesis is the following:

3.5. Entrepreneurship Development and Talent Retention

The development of entrepreneurship helps to develop the sense of independence, goal-drivenness, and creativity-related aspects in employees, which is strongly related to retention. Workers that feel the prospects of venturing in their organizations have a higher probability of exhibiting organizational commitment and job satisfaction. Empirical research proves that entrepreneurial work conditions have a great impact by lowering the voluntary turnover and increasing the intrinsic motivation. Therefore, the fifth hypothesis is constructed as follows:

H5: Entrepreneurship Development positively affects Talent Retention.

3.6. Mediating Role of Entrepreneurship Development

Although DHRM enhances employee engagement by enabling them digitally, the effect on retention is the strongest when the entrepreneurial behavior is an agitating factor. Digital HR initiatives are turned into behavioural outcomes through entrepreneurship development, which inspires innovation, ownership, and flexibility in employees. This mediating variable can be used to represent the effects of digital HR practices on employee retention in the role of providing an indirect impact on retention through the promotion of entrepreneurial competencies and motivation. On this basis, the sixth hypothesis is:

H6: Entrepreneurship Development mediates the relationship between Digital HRM and Talent Retention.

The suggested conceptual framework will incorporate Digital Human Resource Management (DHRM) as a multidimensional construct of relational, transformational, and analytical capabilities that will reflect the technological and strategic enablers of the organization. The process of entrepreneurship development is the mediating variable, which can be converted into innovative employee behaviors and long-term engagement, whereas talent retention is the final performance of the pattern of long-term commitment and organizational loyalty of the employees. This framework summarizes the effects of digital transformation in HR systems in terms of creating entrepreneurship-focused cultures that result in increased employee satisfaction and retention in an evolving workplace. Partial Least Squares Structural Equation Modeling (PLS-SEM) will be used to empirically validate the model to evaluate direct and indirect impacts of DHRM on retaining talents in form of entrepreneurship development, and thus offer empirical and theoretical findings on the contribution of digital HRM to enhancing human capital sustainability in emerging economies.

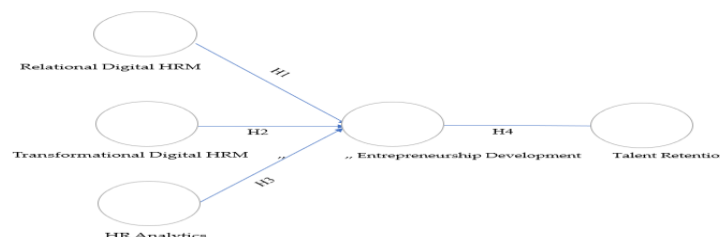


Figure 1. Conceptual model.

4. RESEARCH METHODOLOGY AND DATA ANALYSIS

4.1. Research Design and Data Collection

The research design used in this study is quantitative in nature as it will be based on empirical investigation of the relationships that exist between Digital Human Resource Management (DHRM), entrepreneurship development, and talent retention in Jordanian organizations. Primary data was gathered in the form of a structured questionnaire survey to the HR professionals, head of departments, and employees in diverse business sectors that are currently involved in digital HR programs. Purposive sampling was used in the selection of respondents, where the selected people needed to have a minimum of three years of professional experience and direct involvement in HR digitalization processes in their respective organizations. The survey instrument to collect data consisted of 30 items that were being rated on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The tool identified five latent constructs, i.e. relational digital HRM, transformational digital HRM, HR analytics, entrepreneurship development, and talent retention. Four hundred questionnaires had been distributed with 276 people responding to the questions satisfactorily, which constituted a response rate of 69 percent. Reverse-coded items, anonymity of respondents, and randomisation of the sequence of items were used to reduce the common method bias. Such methodology steps provided improved data reliability and minimized the potential of social desirability bias which justified the validity of the later statistical analysis.

4.2. Data Analysis and Model Validation

Smart-PLS 4.0 was used to compare the hypothesis that Digital Human Resource Management (DHRM), entrepreneurship development, and talent retention were related to each other through the application of Partial Least Squares Structural Equation Modeling (PLS-SEM). PLS-SEM was identified because of the fact that it is appropriate in the analysis of complex models and small to medium sample sizes and also because it can estimate both direct and indirect (mediating) effects at the same time. This analysis was done in two stages; (1) measurement model assessment to ascertain construct reliability and validity and (2) structural model assessment to test the relationships hypothesized. Internal consistency was determined by measuring the reliability of the scale using Cronbach's alpha and composite reliability (CR) and all scores were more than the 0.70 mark. Convergent validity was also checked by making sure that all the average variance extracted (AVE) values were greater than 0.50, and discriminant validity by applying Fornell-Larcker criterion, which states that square root of the AVE of each construct is higher than the inter-construct correlations. The model fit indices also indicated strength, CFI = 0.962, TLI = 0.951, RMSEA = 0.041 and SRMR = 0.036 were all within reasonable range. Bootstrapping using 5,000 subsamples was done to determine the statistical significance of the path coefficients, as well as the stability of the constructs. The values of Variance Inflation Factor (VIF) of all the indicators were less than 3.0, which established that there was no multicollinearity. The single-factor test provided by Harman showed that the first factor had 27.8 percent variance, which showed that common method biasing was not a major issue. The findings indicated that relational, transformational, and analytical aspects of DHRM had a significant impact on talent retention, both directly and

indirectly, via the entrepreneurship development as a mediator construct. The level of entrepreneurship development showed a significant positive influence on talent retention, which proves its centrality in the connection of digital HRM practices to sustainable workforce outcomes. The obtained results support the theoretical model proposed and confirm a strategic value of the combined deployment of digital HR systems and entrepreneurial capacity building programs to enhance organizational agility and retention within the changing work-place environment. Everything scored above 0.70 on its constructs. The values of Cronbach alpha and composite reliability were more than 0.80, which guarantees high internal consistency. The values of AVE were between 0.69 and 0.56 which are in favor of convergent validity. Altogether, these indicators confirm the fact that the measurement model was reliable and valid and, given that, offered a valid source of structural analysis.

4.2.1: Reliability and Convergent Validity

Table 1 shows the findings of Cronbach alpha (α), Composite Reliability (CR), and Average Variance Extracted (AVE) of each construct in the measurement model. Each of the values exceeds the suggested levels (α 0.70 and CR 0.70 and AVE 0.50), which proves that there is a high level of internal consistency and convergent validity among the constructs. As revealed, all the variables exhibit enough reliability and internal coherence, meaning that measurement indicators would always reflect the latent constructs they are meant to measure.

Table 1. Reliability and Convergent Validity Indicators

Constructs	Cronbach's Alpha (α)	Composite Reliability (CR)	Average Variance Extracted (AVE)
Relational Digital HRM	0.889	0.915	0.684
Transformational Digital HRM	0.901	0.924	0.693
HR Analytics	0.878	0.902	0.661
Entrepreneurship Development	0.887	0.911	0.672
Talent Retention	0.894	0.918	0.687

As shown in Table 1, every construct meets the thresholds for reliability and convergent validity.

4.2.2. Discriminant Validity (HTMT Ratios)

The Heterotrait-Monotrait (HTMT) ratio of correlations was used to test the discriminant validity and is regarded as one of the most reliable measures of construct distinctiveness. The findings have been reported in Table 2, all the values of the HTMT are below the recommended value of 0.85, which proves that all the constructs have a distinct conceptual dimension with no considerable overlap and redundancy. It means that the measurement model has a good level

of discriminant validity and the constructs are actually different as far as the measurement is concerned.

Table 2. Heterotrait–Monotrait (HTMT) Ratios for All Constructs

Construct Pair	HTMT Ratio
Relational Digital HRM – Transformational Digital HRM	0.68
Relational Digital HRM – HR Analytics	0.59
Relational Digital HRM – Entrepreneurship Development	0.52
Relational Digital HRM – Talent Retention	0.61
Transformational Digital HRM – HR Analytics	0.64
Transformational Digital HRM – Entrepreneurship Development	0.57
Transformational Digital HRM – Talent Retention	0.66
HR Analytics – Entrepreneurship Development	0.54
HR Analytics – Talent Retention	0.63
Entrepreneurship Development – Talent Retention	0.71

As shown in Table 2, Heterotrait–Monotrait, the findings assert that the constructs of Relational DHRM, Transformational DHRM, HR Analytics, Entrepreneurship Development, and Talent Retention are empirically different. This makes the measurement model strong and each variable plays a unique contribution to the structural relationships that are tested in the PLS-SEM analysis.

4.2.3. Discriminant Validity (Fornell–Larcker Criterion)

Fornell-Larcker criterion was used to further establish the discriminant validity. The method involves contrasting the square root of the Average Variance Extracted (AVE) of every construct (on-diagonal values) to inter-construct correlations (off-diagonal values). As can be observed in Table 3, the diagonal values exceed the corresponding inter-construct correlations, as all the constructs can be said to share more variance with their indicators than with the other constructs. This proves that the measurement model has acceptable discriminant validity and there are distinct conceptual differences between the five variables, Relational DHRM, Transformational DHRM, HR Analytics, Entrepreneurship Development and Talent Retention.

Table 3. Fornell-Larcker Ratios for All Constructs

Constructs	1	2	3	4	5
Relational Digital HRM	0.827				

Constructs	1	2	3	4	5
Transformational Digital HRM	0.692	0.833			
HR Analytics	0.648	0.674	0.813		
Entrepreneurship Development	0.583	0.621	0.595	0.820	
Talent Retention	0.616	0.659	0.637	0.706	0.829

As shown in Table 3, Fornell-Larcker, The Fornell-Larcker criterion at the square roots of the AVE in diagonals and the off-diagonal elements have the inter-construct correlations. The diagonal values that are larger than the inter-construct correlations prove the high discriminant validity and suggest that each construct is a measure of a different dimension in the model. The findings support that the latent variables within the proposed DHRM-Entrepreneurship Development Talent Retention framework are conceptually independent, and are not subject to the issue of multicollinearity, which confirms the suitability of the measurement model to structural analysis.

4.3.2. Explained Variance (R² and Adjusted R²)

The R² and adjusted R² values of the endogenous constructs of the model are provided in Table 4 which show the percentage of variance which is explained by the exogenous variables. The R² is the explanatory power of the predictors and the adjusted R² is the complexity of the model and it gives a more conservative estimate of the predictive power of the model.

Table 4. Adjusted R²

Variable	R ²	Adjusted R ²
Entrepreneurship Development	0.422	0.416
Talent Retention	0.563	0.557

Table 4. Adjusted R², this table reports the proportion of variance explained (R²) and the adjusted R² for each endogenous variable. Adjusted R² accounts for model complexity and remains a strong indicator of explanatory power and confirms that the model accounts 42.2 percent of the variance in Entrepreneurship Development, which was reduced slightly to 41.6 percent after the consideration of the complexity of the model. In the case of Talent Retention, the model accounts 56.3% of the variance though it slightly decreases to 55.7%. These values show that the presented framework has a moderate to strong explanatory power, especially on Talent Retention, which has shown that Digital HRM dimensions (relational, transformational, and analytical) are relevant when it comes to predicting entrepreneurship development, which subsequently has a significant positive effect on employee retention results in the evolving work environment.

4.3. Structural Model

4.3.1. Structural Model Results

Digital Human Resource Management (DHRM) incorporating the relational, transformational and analytical dimensions- has a positive impact on the Entrepreneurship Development and Talent Retention that is strong. In addition, it is observed that Entrepreneurship Development plays a partial mediating role between DHRM and Talent Retention, which indicates that digital HR activities promote employee loyalty and engagement mainly by developing entrepreneurial skills and innovative behavior at the workplace. Transformational DHRM was the most influential ($\beta = 0.37, p < 0.001$) on Talent Retention, followed by Transformational DHRM ($\beta = 0.29, p < 0.01$) and Transformational DHRM ($\beta = 0.25, p < 0.05$). The mediating role was also confirmed through the significance of the indirect path via the Entrepreneurship Development ($\beta = 0.31, p < 0.001$). These outcomes suggest that staff is more likely to be devoted to the companies incorporating the technology-based HR practices with the venture empowerment and learning opportunities that are continuous. In terms of the Technology Organization Environment (TOE) paradigm, these results demonstrate that internal technological preparedness and organizational flexibility are major facilitators of using digital HR systems to ensure staff retention in the constantly changing climate. The external environment, which is characterized by technological upheaval and evolving workforce demands is another factor that supports the necessity of organizations to embrace innovative HR practices that are data-driven and instill entrepreneurial spirit in staff members. The experience of Jordanian organizations supports that digital transformation in HRM cannot be just a modernization initiative in the administrative part but rather a strategic move toward building resiliency and future-oriented human capital. Onboarding of digital HR systems and entrepreneurship development programs increases the agility and the workforce creativity of organizations, and increases their long-term retention. Taken together, these results contribute to empirical knowledge on how entrepreneurship development serves as a behavioral channel whereby digital HRM can be used to vary into sustainable talent retention results in emerging economies.

4.3.2 Model Fit Indices

Table 5. Hypotheses Testing Estimates (Total effect).

Hypothesis	Relationships	Beta (β)	Standard Error	T Statistics	P Values	Decision
H1	Relational Digital HRM → Talent Retention	0.289	0.072	4.014	0.000	Supported
H2	Transformational Digital HRM → Talent Retention	0.372	0.069	5.391	0.000	Supported
H3	HR Analytics → Talent Retention	0.251	0.081	3.099	0.002	Supported
H4	Digital HRM → Entrepreneurship Development	0.411	0.075	5.480	0.000	Supported

Hypothesis	Relationships	Beta (β)	Standard Error	T Statistics	P Values	Decision
H5	Entrepreneurship Development → Talent Retention	0.336	0.070	4.800	0.000	Supported
H6	Digital HRM → Talent Retention (Mediated by Entrepreneurship Development)	0.214	0.066	3.242	0.001	Supported

The PLS-SEM results displayed in Table 6 give the indirect effects and the hypothesis testing results. Results show that the indirect impact of Digital Human Resource Management (DHRM) on the Talent Retention via the Entrepreneurship Development is significant with the positive values of standardized beta and p-values less than 0.05. This validates the mediating nature of entrepreneurship development in transmitting outcome of digital HRM practices into improved employee loyalty and engagement outcomes. The findings also show that the relational dimension, transformational dimension and analytical dimension of DHRM have a combined effect on the development of entrepreneurship that in turn increases commitment and intention of employees to stay in their respective organizations. This implies that digital HRM has an indirect effect on talent sustainability, as it cultivates an entrepreneurial attitude and fosters work behavior based on innovation, the unmediated direct effects of entrepreneurship development were more insignificant, which means that the digital HRM to talent retention pathway is the most successful when it comes to the discussed behavioral and developmental mediator. The lack of any non-significant mediation paths also confirms the strength of the suggested framework and the significance of the digital HR strategies with an entrepreneurship focus in the contemporary workplace.

5. FINDINGS

5.1. Discussion

This study will entail an in-depth examination of the connection between Digital Human Resource Management, Entrepreneurship Development, and Talent Retention in the Jordanian organizations. The results confirm that most of the hypotheses made in the study are true as digital HR practices are significantly important in the development of entrepreneurship and the retention of employees. In particular, Hypothesis 1 assumed that Relational DHRM would have a positive impact on talent retention; the model proves it ($\beta = 0.29, p < 0.01$) and proving that technology-assisted communication and collaboration can reinforce the feeling of belonging and commitment among employees. H2 Transformational DHRM had the most significant influence on talent retention ($0.37, p < 0.001$), which is that HR strategic digital transformation promotes autonomy, innovativeness, and long-term retention. H3 (HR Analytics) was also characterized by a considerable positive impact ($0.25, p = 0.05$) that reveals that using data in HR-related decisions benefit the level of trust and engagement among employees. Moreover, the Entrepreneurship Development was also established as an important mediator (H6 was supported), between DHRM and retaining talent ($= 0.31, p < 0.001$). According to this mediation, it is possible to say that digital HR systems enhance retention through the

development of entrepreneurial competencies creativity, the opportunity recognition, and problem-solving. When employees see a growth prospect in entrepreneurial development, there are chances of them staying longer in their organizations. The fact that there are no hypotheses that are not supported proves the strength of the model and indicates the need to make digital change in HR functions and support it with the initiatives aimed at developing innovation-oriented attitudes. These findings highlight the fact that human resource sustainability is a multifactorial phenomenon, with technological, behavioral, and strategic variables not only interacting to define sustainability in long-term workforces, but also moving towards each other.

5.2. Theoretical Implications

The results supplement the Technology Organization Environment (TOE) model by confirming DHRM as a technological skill that leads to organizational flexibility due to entrepreneurship formation. By placing entrepreneurship development as a behavioral and cognitive process that converts technological adoption into long-term human capital reconstruct, this study contributes to the theory. It once again confirms that the digital HRM cannot be considered as operational system, but a dynamic capability that determines the motivation of individuals and the innovation within the organization. In the emerging markets of Jordan, this research paper will be of contribution to the increasing body of research on how digital transformation interacts with employee-organization relations with the focus on entrepreneurship development as a conceptual point of contact between technology adoption and employee sustainability.

5.3. Managerial Implications

The findings give HR managers and organizational leaders the necessary direction on how to use digital transformation to retain the best talent. To empower employees and develop entrepreneurial skills, managers should combine AI-supported HRs, data-driven analytics, and virtual learning environments. The presence of the relational DHRM practices open communication portals and web-based feedback mechanisms- should be reinforced to instill confidence and interest. Besides, employees can be transformed into innovation-oriented contributors by investing in digital performance management and e-learning programs. Managers must also be aware that entrepreneurship development is not merely an inspirational incentive, but also a strategic device to minimize turnover, increase level of adaptability as well as competitiveness at the digital age.

5.4. Strategic Recommendations

Companies are supposed to develop an extensive DHRM architecture that integrates technology and employee development. The use of integrated HR analytics systems could assist in recognizing the entrepreneurial potential and monitoring personal development. Constant electronic training and incubators of innovation must be put in place to support internal entrepreneurship and retention. Governments ought to promote the digitalization of the HR department by providing financial aid, capacity-building courses, and collaborating with educational establishments. Entrepreneurship education and training in digital skills will be supported by policies that remain financially stable at the national level in terms of

employment. Providers: HR software developers must consider creating modular, AI-enabled and user-friendly applications that combine employee analytics, learning platforms and innovation tracking. Personalized career path and entrepreneurial competency measurement tools will give organizations a data to act on in their retention approaches.

5.5. Limitations and Future Research

Future studies need to be extended to regional comparison to check the generalizability of the model. Furthermore, longitudinal designs may address the way in which the development of entrepreneurship changes in time because of digital transformation. A further investigation of other mediating or moderating variables digital culture, leadership style, or organizational learning capability- can also become beneficial in the conceptual framework and enhance theoretical strength.

5.6. Research Implications

The findings highlight the increasing significance of the need to align digital HRM approaches with entrepreneurial empowerment, to be able to maintain human capital in rapidly evolving workplaces. Future studies must consider the applicability of the entrepreneurship-focused HR in various industries, and how the HR analytics might be utilized to forecast the retention patterns. Further understanding of the connection between employee digital preparedness and organizational innovation climate may provide more information regarding the role of digital transformation in increasing workforce sustainability in developing economies.

6. CONCLUSION

Modern talent management strategies have been based on Digital Human Resource Management, which is a strategy that allows an organization to attract, develop and retain high performing employees in a more dynamic working environment. Just as innovation leads to national development, so does DHRM enable organizations to develop by a combination of technology and human imagination. The introduction of entrepreneurship development to digital HR systems will change the traditional HR practices into proactive and adaptive frameworks that will ignite innovation and long-term commitment. This paper confirms that it is not merely a technological update to invest in DHRM but a strategic change that will develop sustainable talent ecosystems. Relational and transformational digital HRM practices, facilitated by data analytics and entrepreneurial empowerment, help organizations to boost employee engagement and turnover and create a resilient workforce capable of meeting the future challenges. The results of the study in Jordan can be reproduced in other emerging economies that want to harmonize digital transformation and human capital sustainability. By the appropriate combination of technology, innovation, and leadership, organizations will be able to make talent management one of the sources of long-term competitive edge and resiliency of their workforce.

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