

Reinventing Talent Management through AI: Challenges and Opportunities for HRM in Moroccan Companies

Réinventer la gestion des talents grâce à l'IA : Enjeux et opportunités pour la GRH dans les entreprises marocaines

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Abstract

Artificial Intelligence (AI) is revolutionizing the field of Human Resource Management (HRM) around the world by increasing the speed, precision, as well as the personalization of talent affairs. Recruiting automation, learning personalization and predictive performance management are only a few examples of how AI is infiltrating HR technology at warp speed. But in Morocco, even while there is formulation of digital strategy in process, AI is not making inroads for HRM except scattered efforts being made in recruitment. We review how AI is reshaping talent management around the world and positioning it as it could fit in businesses in the Moroccan context.

This article draws on a narrative literature review and synthesizes academic contributions between 2018 and 2025 in French and in English focusing on Scopus, Google Scholar, IEEE, Cairn.... The review is organized around five themes: AI in recruitment, learning and development, performance and retention, ethical considerations, and the rise of generative AI tools (such as ChatGPT) in HR processes.

The review establishes a burgeoning work on the global consensus on AI as a strategic asset in HR, driven by underlying theoretical perspectives including Resource-Based View, Technology Acceptance Model, and motivational theories. In comparison, Moroccan research shows a low integration of technology, little empirical work, and no ethical framework. This void underscores the urgent need for culture specific research, strategic plans and regulation.

Through reinstating a fragmented literature within the international and to the Moroccan context, this article is a contribution to stimulate further academic and practical interest. It adds to the growing body of literature on AI-HRM in developing economies and provides specific implications for HR practitioners, scholars, and policy makers who wish to utilize AI technology in an ethical and effective way.

Keywords: Artificial Intelligence; Talent Management; Human Resource Management; Morocco; Digital HR; Ethics in AI; AI Adoption; Strategic HRM; Emerging Markets; HR Technology.

JEL code: M12, M53, O33, J24, O15

Paper Type: Theoretical Research

1. Introduction

The advancement of Artificial Intelligence (AI) is quickly changing the landscape of how organizations source, develop and retain talent. With respect to HRM, the AI has evolved from experimental tools to strategic decision-making, promoting not only the efficiency, but also the objectivity and agility of the approach. In all industries, AI is now integrated into processes, including recruitment screening, personalized training, performance review, and workforce planning (Budhwar et al., 2023; Brynjolfsson & McAfee, 2014). These are more than just technological shifts, but a fundamental reshaping of how human capital is perceived and managed in organizations.

Across the world, organizations increasingly deploy AI in HRM and make use of data analytics, NLP, machine learning and more to automate processes and uncover predictive insights. Technologies like AI-powered applicant tracking systems, adaptive learning platforms, or sentiment analysis tools are increasingly common (Gélinas, Sadreddin, & Vahidov, 2022; Chamorro-Premuzic et al., 2019). Simultaneously, theoretical contributions have grown in numbers and variety (such as the Technology Acceptance Model – Davis, 1989; the Resource-Based View – Barney, 1991,2000; or motivational theories), which collectively help explain the technical, organizational and psychological conditions that lead successful AI integration.

Talent management is a key concept within this changing environment. Talent Management, being the strategic and integrated approach to recruit, develop, motivate, and retain employees in line with the organizational objectives of performance, is an important determinant of organizational performance (Collings, Wood, & Szamosi, 2018). The ability of AI to personalize learning plans, predict who will stay and go, and link employee skills with business objectives might signal an overhaul of traditional talent strategy. Moreover, the switch is not just technological, but conceptual, requiring new paradigms for how we assess potential, for how we cultivate engagement, and for how we ensure a proliferation of lifelong learning.

However, the scholarly and practitioner debate on AI risk management is uneven, especially in developing economies. For example, we see slowly growing institutional interest in the Moroccan case with increasing initiatives toward digitalization, AI themed events and public-private partnerships. In spite, AI implementation within HR practices is still mainly experimental and limited to the recruitment domain (Benhmama & Bennani, 2024; El Mnouer et al., 2023). This is why very few studies have addressed the impact of AI on employee development, motivation, retention of workforce, ethical aspect or decision-making process in the Moroccan companies.

Communications in Morocco lack conceptual depth and are descriptive; they are hardly based on theoretical argumentation, let alone comparative ones (Allam, Habachi & Tabit, 2024a; Horchi & Soudane, 2024). This highlights a dual gap: one empirical (far from field- or sector-condition specifics) and another theoretical, since frameworks like TAM, RBV or strategic HRM are still to be fully explored. Furthermore, the lack of policy orientations and ethical norms is a source of confusion for HR managers when seeking to engage in responsible AI (Baddouch & Soudane, 2024).

The adoption of artificial intelligence in talent management represents an unprecedented opportunity for Moroccan companies to modernize their HR practices and gain competitiveness (Brynjolfsson & McAfee, 2014). However, this transition is not without its challenges. It faces structural, cultural, and organizational challenges specific to the Moroccan context (Louali & El Abboubi, 2023). On the one hand, technological infrastructure and digital skills are not evenly distributed (Benhmama & Bennani, 2024). On the other hand, regulatory and ethical frameworks are struggling to keep pace with innovations (Baddouch & Soudane, 2024). Our issue thus lies at the intersection of the technological promise of AI and the socio-economic

realities of Morocco. It is about understanding how Moroccan companies can navigate this complexity to effectively integrate AI into their talent management, while minimizing the risks of digital divide and ensuring a just and equitable transition for employees (April & Daya, 2025). This study aims to shed light on possible paths for successful adoption by identifying strategic levers and obstacles to overcome.

The worldwide AI discourse within Human Resource Management (HRM) emphasizes its potential in promoting efficiency, objectivity and strategic orientation. However, not all technologies are similarly adopted and have similar impact even in developing countries such as Morocco. However, despite the national digitalization strategy as part of industry 4.0 in Morocco the employment of AI in Moroccan HRM seems to be emergent and fragmented copy that is mainly reduced to recruitment has not been used strategically or organically. As a result, a huge technology gap exists between the capabilities of AI and the social economic and organizational realities. It is this gap that leads into our main knowledge problem: How might Moroccan business organizations balance the strategic and ethical adoption of AI in managing their talents lifecycle final Q&A from hiring to retaining them while discounting home-grown issues and unlocking competitive advantage within a context marked by an emerging digital infrastructure, limited focused research, as well as no formal regulation?

This gap is what this research attempts to fill in the Moroccan case, it takes interest on the differences between AI-HRM in global practices and AI-HRM practices in Morocco as a source of guide for practitioners, researchers and decision makers.

The review appraises worldwide trends in AI-infused HRM and contrasts these with nascent perspectives coming out from Moroccan academia and industry. It also references (English and French-language) sources from 2018 to 2025 in order to be inclusive and context relevant. The review is guided by three central research questions:

- (1) What are the dominant themes and approaches in current literature on AI and talent management?
- (2) How is AI in HRM being studied and applied in Moroccan organizations?
- (3) What theoretical and strategic frameworks can guide future research and practice?

Through these questions, the article aims to:

- Identify key trends and innovations in AI-enhanced talent management.
- Highlight the specific challenges and opportunities of AI integration in the Moroccan HR context.
- Propose research and policy directions for closing the current gap between technological potential and practical application.

The organization of the article is as follows: In Section 2, we describe the literature review methodology. Section 3 - Types of Data, Implementation and Theories for analysis, this section will introduce the theoretical and the conceptual types upon which we will draw. Section 4 describes five thematic clusters that we found in the literature: recruitment, training, performance, ethics, and generative AI. Section 5 is dedicated to (Moroccan) strengths and weaknesses. Theoretical and managerial implications are presented in Section 6 and limitations and future research in Section 7. The paper ends with a synthesis of findings and a call for additional field-informed, multidisciplinary research in Moroccan AI-led talent management.

2. Methodology

This article offers the narrative literature review to study how artificial intelligence (AI) is being used in talent management in general with a special attention for Morocco. We used a narrative review as the narrative mode was also adapted according to knowledge on AI in Human Resource Management (HRM) Research in Morocco is still new, fragmented and lacks empirical depth. Unlike systematic reviews that aspire to be exhaustive, the narrative approach

offers more flexibility in integrating various theoretical, empirical and contextual contributions, and are particularly useful for burgeoning fields of research such as an interdisciplinary field on SGM (White et al., 2018).

The literature triage spanned academic content from 2018 to 2025, when the AI in HRM field experienced rapid growth and generative AI tools began to surface. Peer-reviewed journal articles and full conference papers, as well as selective institutional reports on AI in HRM, talent management, recruitment, learning and development, performance management, retention and ethical concerns were focused by the search. The principal databases supplemented were Scopus, Google Scholar, IEEE Xplore and Cairn. info, to guarantee international coverage and give space to Francophone and Moroccan academic work. Publications in English and French were also sought to represent the linguistic diversity of research.

The search was built one step at a time, in order to narrow the focus first from general concepts to more specific topics associated with our study.

For the initial search string, general key words were chosen to mediate the general landscape of research related to AI and HRM. This preliminary search was based on a combination of terms "artificial intelligence" and "human resource management" (as well as their French counterparts being "intelligence artificielle" and "gestion des ressources humaines") enabling us to identify seminal pieces in the nature of theoretical and conceptual work.

The second search burst was directed with narrower focus on talent management and digital HR practices. For this phase, the preliminary idea were augmented by using more "focused" keywords like "talent management", ">"digital HR", ">"HR technology" and ">"AI in HR". This action aided the authors in selecting studies that focused on the FP of AI within various HR functions, rather than specific technologies.

The third search sequence involved the introduction of thematic keywords to address the primary aspects of the talent management life cycle. These ranged from mixes around recruitment and selection, to learning and development, through performance management, then employee retention, predictive analytics; AI ethics see more (generative setting of possible stories on \ChatGPT\) see also here) little tools like generative AIs. In the context of these themes, specific HR practices and arising ethical and organizational issues were able to be delineated.

Then, in order to situate the analysis and differentiate cases, a spatial filter was used by including keywords such as "Morocco," "Maroc" and when relevant "MENA". This stage guaranteed that the selected studies either specifically focused on Morocco or provided relevant information applicable to analogous transition countries.

We included articles that were relevant, but not comprehensive, following the narrative review format. Eligible Papers were prioritized to favor publications that provided significant theoretical contributions, practical analysis or contextual insights on AI-assisted talent management. Opinion editorials, blogs and articles with no specific relevance to HRM or technical AI studies were not included. Because this was not a systematic review, no formal PRISMA protocol was used. Rather, articles were included based on their conceptual rigour and analytical depth as well as because they contribute to the understanding of AI adoption in HRM.

Based on the relevance about a final set of 42 publications Article were included and analyzed. These 42 references are not representative of the full universe of studies on AI and HRM, but rather a selected sample of influential and context-specific works that serve as the analytical base for this article. Here we adopt the conventions of narrative reviews, where emphasis is placed on depth of interpretation and conceptual integration rather than numerical exhaustiveness.

The included studies were synthesized thematically. Five key themes were identified: AI in recruitment, AI in learning and development, performance and retention management using AI, ethics and the emergence of generative AI in HR practices. This thematic arrangement made for a well-organized comparison between the global research trends and the local particularities of research in Morocco, emphasizing contributions as well as important gaps.

2. Theoretical and Conceptual Framework

2.1 Understanding Artificial Intelligence in Talent Management and HRM

2.1.1 Defining Human Resource Management (HRM): Scope and Evolution

HRM (human resource management) is a critical business function that deals with the management of an organization's most valuable asset – the employees. In the past, HRM has been known as a series of functions, including recruitment, training and development, performance appraisal, compensation, and employee relations. The field has evolved significantly, from the predominantly administrative and transactional nature of these original activities to one that includes a more strategic and proactive orientations (Collings, Wood, & Szamosi, 2018). Contemporary HRM seeks to integrate human resource strategies and policies with organizational objectives, focusing on operational efficiency as well as long-term human resource management, employee engagement needed for organizational success and leadership phase for enhancement of organizational performance.

HRM has been extended by trends such as globalization, information and communication technologies and increasing relevance of knowledge-based work and evidence-based and data-based orientation. Strategic HRM specifically highlights the harmonization of HR practices with the organization's business strategies, which acknowledges human capital as a competitive advantage that is sustainable (Barney, 1991; Delery and Roumpi, 2017). The development of digital technologies has also enhanced this evolution. The HR function today is increasingly digital, driven by process and analytics tools to ease its processes, monitor employee engagement and help decision-making.

Now, this revolution has led to exploring newer technologies like Artificial Intelligence (AI) becoming instrumental in overhauling the HR operations. Given that HRM is both a functional and strategic area, in order to understand how AI is being deployed not just as device-induced technological superiority, but as a catalyst of cultural and operational change in organizations it is important to understand both the positive and negative consequences. The development of HRM lays the groundwork for more specialized constructs such as talent management, which pay a far greater attention to the acquisition and development of those individuals most likely to contribute to the success of the organizations.

2.1.2. Conceptualizing Talent Management and Its Strategic Link to HRM

Talent management (TM) is a specific aspect of HRM that creates, encourages, and maintains an organizational culture that supports the discovery, retention, and promotion of the most talented employees through knowledge, skills, incentives, and inflexible opportunities for the club's success ". HRM covers wide areas of people management processes and activities, but talent management is narrower and selection-oriented. It focuses on long-term throughflow planning, the development pipeline and maximizing pivotal roles that have a disproportionate impact on business success (Collings, Wood, & Szamosi, 2018). In these terms, TM could be conceptualized as a high-solution approach of HRM which focuses on the allocation of resources to key resources – i.e., high-potential employees and future leader. (Yildiz and Esmer, 2023)

The adaptive incorporation of TM in HRM is vital to ensure congruence between the human resource capabilities and organizational goals. Talent management, as one component area of

strategic HRM, is an HRM practice that ensures that the appropriate people with appropriate competencies are in the right positions at the right time and that they are developed and maintained in a manner that can support long-term competitiveness (Delery & Roumpi, 2017). In addition, effective talent management is pursuant to internal and external (market-based recruitment or hiring) capabilities be directed by the data, organizational principles, and propensity for future skills. Unlike traditional HR approaches, which may be reactive and transactional, talent management is forward-looking and evidence-driven, requiring coordination across leadership, learning, and performance domains.

Talent management encompasses workforce planning, succession planning, handpicked training programs, and someone to engage with your high potentials. It also originates from the personality-based theories of motivation and employee engagement, emphasizing the harmony of an individual's aspirations with those of the organization. The relationship between HRM and talent management is, therefore, structural and strategic in nature. HRM presents the systems, policies, and culture in which talent management takes place. And as such emerging technologies like AI start to influence both, the convergence of the two is increasingly important for organizations seeking to future-proof their workforce

2.1.3. Artificial Intelligence in Talent Management

Artificial Intelligence (AI), a subfield in computer science, is dedicated to developing systems that can afford human-like tasks, which include learning, reasoning, problem solving, and language understanding (Bostrom & Yudkowsky 2018). For Human Resource Management (HRM), AI is not just automation—it is a strategic enabler that reshapes the way talent management works in your organization. It uses machine learning (ML), natural language processing (NLP), and predictive analytics to change the way companies attract, develop, and keep their talent; this changes HR from a reactive administrative function into a strategic, proactive partner. AI-based Applicant Tracking Systems (ATS) are used in recruiting to automatically scan thousands of résumés with the aim of relieving HR managers from the tedious task while decreasing human biases (Gélinas et al., 2022). But this is an application that also calls for a skeptical eye. As Cowgill et al. (2020) have shown, when AI models are trained based on data from the past where discrimination in hiring exists, they could further enforce or even exacerbate biased hiring. It is yet another sign that AI as a non-decision-making entity is already a failure and points to the necessity of transparent, explainable AI (XAI) and continuous auditing to guarantee fairness. From a TAM's view, if candidates or recruiters regard these systems as black boxes and are more skeptical towards them, the acceptance of and trust in them will decrease, minimizing their expected value (Davis, 1989). In L&D, AI enables hyper-personalized learning paths. Adaptive learning platforms recommend content based on how well an employee is doing, their skills gaps, and their career aspirations to promote a culture of ongoing development (Minbaeva, 2017). This also corresponds with motivational theories, such as self-determination theory, which is centred around autonomy and competency and is central to engagement (Deci & Ryan, 2000). AI can foster intrinsic motivation by enabling employees to drive their own development. But the quality of the data and pedagogical models behind these systems are what make them effective. An external, processor-based value may not be sensitive to the nuances of human learning and thus feel more like a surveillance measure than a developmental one, repelling employees. AI-based predictive analytics can be used for performance management and retention whereby employees that are at risk of leaving can be predicted using the data on communication sentiment, network activity, and absenteeism (Budhwar et al., 2023). The ability to develop and modify existing organizational practices by HR not only establishes it as a strategic asset but is also in line with the RBV, which presents human capital as being a source of sustainable competitive advantage (Barney, 1991). By combating disengagement before it happens, companies can preserve this

key investment. But the ethical ramifications are many. This ongoing observation entails serious data privacy issues, which can also lead to a lack of trust reports for employees if not openly handled (Calo, 2017). The success of such tools relies on an organizational culture that values psychological safety and uses AI to help employees, not just watch over them. Lastly, the advancement of generative AI (e.g., ChatGPT) has considerations for HR about how job descriptions or interview questions can be automated as well as internal communications. Although such an approach leads to increased productivity, it is not free from associated pitfalls (e.g., pertaining to accuracy, bias, and de-skilling of HR practitioners) (Budhwar et al., 2023). Therefore, AI in talent management is a double-edged sword. It provides unparalleled potential for strategic optimization but has also brought complex ethical and organizational problems. As noted by Chamorro-Premuzic and colleagues (2019), the objective is not to manage talent better but to co-create work ecosystems in which AI can enhance human capabilities and remain ethical at the centre by humans. In Morocco, as both digital literacy and regulatory frameworks are still under construction, these critical elements are crucial for the success of any successful and responsible AI adoption (Benhmama & Bennani, 2024).

2.2 Relevant Theoretical Models

2.2.1. Resource-Based View (RBV)

A theoretical ground, including the Resource-Based View (RBV) of Barney (1991, 2000) provides fundamental basis for analyzing how firms attain and maintain competitive advantages. In the RBV perspective, an organization's internal resources (valuable, rare, inimitable, non-substitutable, i.e., VRIN) are the source of superior performance. In the realm of HRM, human capital is widely viewed as a strategic asset. However, in the era of Artificial Intelligence (AI) in HR applications, the RBV is being redeemed with technological capabilities as supportive resources that enhance human capital potential.

But in this context AI systems for recruiting, learning, and performance observation are not just gadgets but potential VRIN resources when they are used in a discriminating manner. For example, AI-driven predictive analytics can help organizations better predict which candidates have the greatest potential, reduce turnover by providing earlier warnings and better-fit employee development plans, and utilize behaviors characteristic of successful employees for performance trends. These lines of applications resonate with RBV's focus on utilizing internal strengths to gain superior performance vis-à-vis competitors.

Minbaeva (2017) contributes significantly by stressing the credibility of human capital analytics pointing out that the success of AI in HR is not only a question of how advanced the tools, but also how well they fit with strategic decision-making and managerial judgement. AI-predicted insights do not qualify as VRIN resources unless they can be relied on and acted upon. Therefore, the ability of organization to make sense of, integrate, and respond to the outputs of AI is a new dynamic capability in the RBV framework.

In the Moroccan context, where AI is relatively nascent in HRM, the inclusion of AI tools in talent management can provide a potentially valuable opportunity for firms to develop core competencies particularly when it is strategically embedded and industry and culture specific (Louali & El Abboubi, 2023). However, barring investments in digital literacy and infrastructure, the VRIN potential of AI augmented HR systems might go unrealized. Accordingly, RBV not only provides support for the justification of the AI adoption in HRM, but also highlights the organization motivation and strategic vision to make such an adoption generate sustainable advantage.

2.2.2. Technology Acceptance Model (TAM)

Davis' technology acceptance model (TAM) (1989) is among the most popular of models for explaining why people adopt and use new technologies. Two key factors that determine a user's

acceptance of a system identified by TAM as perceived usefulness—the degree to which a person believes that using a specific system will help enhance their job performance, and perceived ease of use—the degree to which a person believes that using a specific system will be free of effort. For the integration of AI into HRM, this model becomes increasingly useful as it explains attitudes of employees and HR practitioners with smart systems in daily life.

In the HRM context, where AI-based tools are used for candidate screening, training recommendations, or performance feedback, user perception is a principal factor to explain the extent to which the technology is adopted.

If an AI system is not seen as practically useful, or is too difficult to use, even if it is technically sophisticated, resistance is expected. Some authors (cf Allam, Habachi, and Tabit, 2024a) have stressed how closely motivation and system acceptance are related. Their study suggests that AI-powered HR tools should be case-relevant and compatible with users' expectations and current routines in order to drive user engagement and trust.

Furthermore, the emotional and psychological dimensions of acceptance are particularly important in HR settings, where AI is often perceived as a threat to human judgment and interpersonal interaction (Chamorro-Premuzic et al., 2019).

Workers can feel threatened by the prospect of being watched or even replaced in the future by AI, or by HR professionals who feel sidelined by algorithm-led decision-making. Hence, perceived ease of use should not be limited to the interface, but should also include the training, communication, and organizational supportive rhythms of trust and clarity.

In Morocco, where digitalization is not uniformly spread as technology was adopted heterogeneously across sectors, application of TAM can help predict the extent to which AI will be incorporated into HRM. Low digital literacy of HR practitioners may prevent the perceived ease of use and still unclarity of AI business case may affect the perceived usefulness (Louali and El Abboubi 2023). Therefore, successful AI adoption in Moroccan HRM depends not only on technology deployment but also on change management, user involvement, and cultural adaptation all of which are central to TAM's explanatory power.

Other perspectives also enrich the discussion. Institutional theory highlights how norms, regulations, and social expectations influence the way organizations adopt new practices (Scott, 2014). The socio-technical approach reminds us that technology and human systems are interdependent: tools succeed only when they are embedded in supportive structures and cultures (Bostrom & Yudkowsky, 2018). Including these perspectives helps balance the analysis and avoids over-reliance on a single explanatory model.

2.2.3. Motivational Theories in HRM

Employee engagement, performance, and retention are driven by the motivation of employees. Classical theories, such as Maslow's need theory (1943) and Herzberg's ditto (1968), offer basic understandings. According to Maslow's hierarchy, people are motivated by a series of needs that range from basic necessity and safety to higher-order needs such as esteem and self-actualization. Herzberg differentiated between "hygiene factors" (e.g., wages, working conditions), which stop dissatisfaction, and "motivators" (e.g., recognition, accomplishment), which actively move towards satisfaction and growth. These theories are also very much still applicable in the era of AI, serving as a reminder that before any technology is classified into an AI category, it should support bottom-up human needs. That becomes essential when AI is incorporated into HRM. As Allam, Habachi, & Tabit (2024a) contend, AI tools need to be developed and used in a manner that enhances rather than distracts from employee motivation. For instance, an AI-based performance management tool, which is interpreted as a surveillance device, may create anxiety and feelings of being manipulated; it will then not respond to safety and esteem needs, acting as a strong demotivator. On the other hand, an AI solution that offers individualized constructive feedback and recommends development opportunities can be a

powerful motivational device, tapping into an employee's desire to self-improve and grow. Even more recent frameworks such as Deci and Ryan's Self-Determination Theory (SDT) (2000) provide an especially powerful lens through which to examine AI within HRM. According to SDT, intrinsic motivation is fostered through the satisfaction of three psychological needs: autonomy (the need to experience volitional control over one's behaviour), competence (the need to experience effectiveness in actions), and relatedness (the need to feel connected with others). It is possible for AI systems to help or hinder the fulfillment of these needs. For example, the use of an adaptive learning platform that offers learners the autonomy to select a learning path. The existence of a program that makes AI-driven skills analytics, showing its user what the strengths and weaknesses are along with comparisons to the standard, also enhances confidence. But if AI automates decision-making without human involvement or limits the possibilities for interpersonal collaboration, then it's possible to erode both autonomy and relatedness. Thus, for AI to serve as a source of motivation, it should be employed not as a substitution for human judgement but as a tool that helps employees grow and become more connected with the organization's mission.

2.2.4. Strategic Human Resource Management (SHRM)

The basis of SHRM is the alignment between HRM practices and overall strategic goals within a company so as to secure continued competitive advantage on the market (Delery & Roumpi, 2017). Contrary to HRM, which is frequently functional and bureaucratic in nature, SHRM is strategic and prospective. It envisions human capital not as a cost to be contained but as an asset to develop strategically. The ability of AI in HRM to serve as armoured weapons for this strategy alignment process. With AI-driven analytics, HR can shift from historical reporting to predictive and prescriptive insight and redefine their role in the organization. For example, AI is able to mine real-time labour skills data with market trends and internal performance data, revealing future skill gaps long before they are severe. This enables organizations to be proactive in developing upskilling and reskilling programs that keep the workforce agile and aligned with evolving business needs. This predictability is a fundamental characteristic of SHRM and enables active talent planning as opposed to reactive hiring (Budhwar et al., 2023). In addition, by taking care of the administrative part of the job automatically, AI liberates HR professionals to focus on more high-value strategic issues such as organizational design, change management, and creating a culture where innovation thrives. In that way, AI isn't replacing the strategic role of HR but enhancing it by offering the data-based insight needed to guide informed decisions. But for AI to act as an enabler of SHRM, its implementation needs to be a strategic pursuit in and of itself. Adopting AI tools ad hoc and without a system-wide vision will lead only to isolated efficiencies. Implementing an SHRM requires the implementation of AI to also be strategic, operational, and measured in concert with a comprehensive HR transformation that aligns with business objectives.

2.2.5. Ethical and Institutional Frameworks for AI

While AI is more and more integrated into HR, making mission-critical decisions; like hiring and firing; a matter of high stakes, ethical issues shift from a fringe concern to a central tent pole of responsible talent management. Algorithmic manipulation results in great risks in the four dimensions of bias, transparency, fairness, and privacy. This AI can unintentionally duplicate and exacerbate the bigotry that already exists in society, sabotaging organizational efforts to promote diversity and inclusion (Calo, 2017; Sinapin 2020).

The most urgent ethical problem is bias in algorithms. For example, an AI model that is trained on historical HR data might "learn" from discriminatory practices in order to "reproduce" them and end up systematically disadvantaging certain minority groups (Cowgill et al., 2020). Such an unfairness may come from biased data or perhaps the assumption behind the algorithm design itself. Against this backdrop, the Explainable AI (XAI) has been proposed. XAI systems

are computer systems that promise to explain themselves in plain language understandable to ordinary human beings, resulting in enhanced auditability, accountability and trust. In HRM, where decisions have such life-changing consequences for people's livelihoods, the capacity to justify why a job seeker was deselected or an employee was identified with a performance issue is a moral and legal obligation.

Data privacy, not just bias is a crucial issue. HR departments manage a large amount of travel, health, and other employee-sensitive information, which falls under strict data protection laws such as GDPR. Won't this also take into account principles such as informed consent, purpose limitation and data minimisation? And in a Moroccan context, the ethical considerations are further blurred by the fact that there are no particular legal guidelines related to AI governance. As noted by Baddouch and Soudane (2024), there are other cases of Moroccan companies using AI tools without a clear framework regarding data protection, algorithmic transparency, and employee consent. This lack of regulation poses such high risk of reputation and legality to corporations, drives the loss of trust from employees that is believed to be an essential requirement for a successful implementation of the technology (Technology Acceptance Model or TAM).

To address this issue we draw on Institutional Theory that accounts for the choice processes whereby organizations select practices to achieve legitimacy in their environment (Scott, 2014). With only informal standards in place, organizations will either participate in unchecked and dangerous activities or refer to global best practices and ethical frameworks as they search for guidance. Proactive development of internal AI governance policies for Moroccan companies centered on issues of transparency, fairness and human oversight may at the end of the day be not only grounded in ethics but also extend to an exercise in strategy. It inspires trust, minimizes risk and helps the organization establish its leadership responsibility in a digital age.

3. Key Themes in AI-Driven Talent Management

AI brings to talent management the kind of interconnectedness that makes it a seamless process rather than a series of siloed steps. The topics covered in this section : hiring, learning and development, performance and retention, ethics, and generative AI; cannot be considered independently. Instead, they should be conceptualized as a continuum that is mutually reinforcing and in which insights and evidence from one component directly build the next. For instance, insights on the success of new employees siloed from AI-powered recruitment analytics can be leveraged to fine-tune sourcing strategies and develop bespoke onboarding and training initiatives. Performance management data can also be used to find skill gaps that trigger personalized learning interventions, for example via adaptive learning, and ethical governance is a pivotal layer that guarantees trust and fairness at all times. This part discusses these themes, both in terms of how they each have evolved and what the collective impact has been and will continue to be on a more agile, data-based, human approach to managing talent.

3.1. AI in recruitment, learning and development

Recruitment is arguably the most developed domain for AI in HRM. Artificial intelligence (AI) is being used to automate and improve the hiring process, especially at the beginning, as candidates are being screened for job roles. Such systems rely on machine learning algorithms and natural language processing (NLP) to screen huge application databases, extract relevant competencies, and evaluate applicants' fit (Chamorro-Premuzic, Polli, & Dattner, 2019; Chevalier & Dejoux, 2021).

AI-enabled applicant tracking systems also help in managing time while eradicating human bias and providing higher precision in terms of candidate selection (Gélinas et al., 2022). Despite these examples, concerns about algorithmic fairness and data-driven discrimination persist.

Research by Cowgill et al. (2020) have shown that biases may arise not only from the training data, but also from the assumptions built into the algorithm.

Morocco's use of AI in recruitment is expanding, but uneven. Large firms have started to adopt AI tools into their HR processes, while SMEs tend not to due to the lack of digitalization infrastructure or expertise (Benhmama and Bennani 2024).

Moreover, the use of these information technologies is still very limited and classical recruiting methods are still widely used, mainly in the public sector (Louali & El Abboubi, 2023).

Nevertheless, the fear of automation, while legitimate, represents apparent opportunities for the Moroccan HR to optimize recruitment through AI. AI can, for example, reinforce inclusive hiring by anonymizing applications and minimizing unconscious bias (Baddouch & Soudane, 2024). However, that opportunity rests on ethical deployment and transparency.

Beyond hiring, AI is being applied to facilitate learning and development (L&D) and provides employees with personalized and adaptive learning journeys. AI-enabled learning management systems (LMS) monitor employees' progress, suggest training modules and offer personalized real-time feedback (Brynjolfsson & McAfee, 2014; Stone et al., 2015). This is also consistent with motivation theories based on self-determined learning and autonomy (Allam, Habachi, & Tabit, 2024a).

The growing role of AI in learning and development is trying to solve an important question for HR: how they can train workers on content that is relevant to the business yet still engaging to the learner.(Naïm,2023)

For instance, Minbaeva (2017) stresses the significance of leveraging reliable data analytics to inform workforce upskilling and reskilling, especially in dynamic industries.

The use of AI in learning and development appears to not only be underdeveloped but under-represented in the case of Morocco. According to Kamar and Jamal (2024), despite having explored AI powered language and service training tools in the hotel industry, such innovations are not common. Most of such training is generic and not driven by data, thus not as effective it could be. AI-powered learning systems clearly hold promise for Morocco – not least for the skills gap related to the digital transition. This observation is true, but also notes that successful implementation of Technology framework is not only related to technology adoption, rather, it involves changes in the culture toward continuous learning and system confidence (Benabou, Touhami, & Demraoui, 2024).

3.2.AI in performance and retention

Performance management and workforce retention are keys to long-term organizational success, and AI offers predictive and real-time analytics tools to aid in these areas. By using AI to study patterns of behavior, employee attendance, engagement, and productivity data, it can forecast the risk of churn or identify performance problems (Budhwar, 2023; Ransbotham et al., 2017).

These applications are consistent with the Resource-Based View (Barney, 1991, 2000) perspective that considers the strategic role of human capital. AI helps HR become strategic in modern talent management by identifying high performers, recommending personalized development plans, and using data-driven retention plans.(Ghedabna et al,2024)

In Morocco, empirical studies on AI in performance management remain scarce. Horchi and Soudane (2024) note a general lack of integration between HR systems and analytics capabilities. Performance reviews are still largely conducted manually, with limited use of technology to inform or enhance evaluation processes.

Yet, as the Moroccan companies are engaging a digitalization process, so there is an increasing usage of HR dashboards and Key Performance Indicators (KPIs) in HRD supported by AI in order to inform HRD strategies. As Allam, Habachi, and Tabit (2024b) indicate, it is necessary

to coordinate this set of technologies with intrinsic and extrinsic motivation factors to prevent disinterest or distrust.

3.3. Ethical and Organizational Implications

Yet, as the Moroccan companies are engaging a digitalization process, so there is an increasing usage of HR dashboards and Key Performance Indicators (KPIs) in HRD supported by AI to inform HRD strategies. As Allam, Habachi, and Tabit (2024b) indicate, it is necessary to coordinate this set of technologies with intrinsic and extrinsic motivation factors to prevent disinterest or distrust. From an institutional perspective, the use of AI in HR also influences organizational structures and norms.

Such homogenization of technology can be seen as being consistent with DiMaggio and Powell (1983) theory of institutional isomorphism, where organizations come to follow similar technological practices to be considered legitimate. But in the absence of governance, such mimetic behavior can drive unethical or anti-ethical applications of AI.

Morocco In Morocco, Baddouch and Soudane (2024,) stress out the absence of regulation and ethical rules regarding the use of AI in HR. This lack of regulation is especially problematic for hiring and performance reviews, areas where black boxes could perpetuate existing inequalities. Furthermore, employee perceptions play a vital role in AI adoption. As Davis (1989) argues in the Technology Acceptance Model, perceived usefulness and ease of use determine whether individuals accept or resist new technologies. In the absence of transparency, even well-designed AI systems may be rejected by employees who feel monitored or marginalized.

To foster ethical and effective use of AI in HRM, Moroccan organizations must prioritize transparency, co-design of systems with end users, and ongoing ethical audits (April and Daya, 2025).

This also involves investing in digital literacy and building a culture of trust and accountability around AI tools (Chamorro-Premuzic et al., 2019; Allam et al., 2024b).

3.4. Generative AI and Intelligent HR Support

The latest wave of AI innovation is characterized by the development of generative models like ChatGPT and other large language models (LLMs) that are now beginning to transform HR. Budhwar et al. (2023), as generative AI brings new forms of augmented HR through instant content generation for job descriptions, interview questions, performance summaries and training content. (Kaminski,2023)

Generative AI can also help deliver more interactive and customized employee experiences. HR chatbots, for instance, can engage in complex dialogue, express empathy, and autofit the context on the fly. These systems not only optimize productivity but adds to employee satisfaction in that it offers 24/7 access to HR support (Benabou et al, 2024).

In Morocco, Apps in this area are still very early. Few studies on the use of generative AI in HR practices exist, but some experiments have been conducted even in banks and tech companies (Louali & El Abboubi, 2023). As adoption increases, research must explore how generative AI affects decision quality, HR roles, and employee autonomy.

Generative AI also poses novel ethical questions. As Cowgill et al. (2020) warn that these systems tend to reproduce the biases present in their training data and generate illusory but inaccurate knowledge. It follows that governance mechanisms need to develop to mitigate these risks and support the ethical use of AI in HRM.

In summary, the real potential for AI in talent management is not about optimizing individual HR tasks—it's about integrating these tasks into an intelligent system. Data from AI-enabled recruitment creates a foundation for personalized L&D, which in turn produces performance data that populates predictive retention models. Generative AI is the lifeblood that connects

and improves factors among all these areas. Yet this synergy relies on a strong ethical framework applied throughout the lifecycle. Without openness and confidence, the channels of data that link them can be perceived as unwelcome surveillance rather than enabling more engaged workforces, with little to no relation to possible benefits. You will discover later that a comprehensive strategy that encompasses these mutual interrelationships is needed for organizations to unlock the potential of AI, not as a conducting tool but as a homogenous vehicle for strategic talent management, mainly within the Moroccan organizational context.

4. The Moroccan Context: Findings and Gaps

4.1. Current Research and Insights

Artificial intelligence (AI) has just recently started interesting academe and institution in Human Resource Management (HRM) in Morocco. Yet the attention is uneven and, to some extent, fragmented; many more studies are currently being conducted on AI for recruitment, the fewest on AI in the hospitality sector and among SMEs (Small and Medium-sized Enterprises) are still insufficient (at least from the available literature). This section presents a synthesis of key research contributions and emerging trends, while highlighting the thematic and sectoral biases that characterize the current Moroccan literature.

4.1.1 Emphasis on Recruitment Processes

The most evident and recurring theme in the Moroccan academic landscape regarding AI in HRM is its application in recruitment and candidate selection. Moroccan scholars such as Benhmama and Bennani (2024) and Horchi and Soudane (2024) have extensively explored the deployment of AI-driven tools in optimizing recruitment efficiency. Their studies demonstrate that Moroccan organizations, especially larger corporations and international firms based in urban areas, have begun experimenting with AI-enabled platforms for CV screening, candidate profiling, and preliminary interviews.

Benhmama & Bennani (2014) stress that AI tools play a crucial role in the shortening of the recruitment circles, automating repetitive tasks such as the screening of applications, and in the elimination of the subjectivity in the selection process. With the help of AI-backed systems, HR professionals can also utilize these technologies to utilize natural language processing (NLP) and machine learning (ML abilities) to evaluate not just what the technical skills presented on the profile of the candidate but as well analyze their soft skills on the basis of a video or written interview input.

Furthermore, El Mnouer et al. (2023) have presented research that highlights the increasing interest of Moroccan employers in predictive hiring models predicting candidate performance and cultural fit. This is in line with the worldwide move for “smart recruitment,” but is prevalent only among high-technology companies, or those that have access to AI providers abroad.

Yet the focus on recruitment, however, is at odds with other less developed areas of HRM, such as learning and development, employee engagement, and retention. Moroccan literature still lacks wholistic approaches that consider AI throughout the entire employee's life cycle, which leads to a narrow perspective of the transformative dimensions of AI in HRM.

4.1.2 Emergence of AI Applications in the Hospitality Sector

Another field in which Moroccan tourism research has made significant progress is the field of the tourist-reception sector, on which the author will in the following paragraphs focus. Indeed, some authors, such as Kamar & Jamal (2024) have underlined the advantages in hotel HRM systems operation, which inherit from the use of AI — particularly as far as scheduling, performance monitoring and training management are concerned.

The hotel industry, along with high employee turnover rates, fluctuating demand, and challenges related to seasonal staffing, is slowly adopting AI-based HR technology to monitor labor in real time and allocate resource accordingly. Research by Kamar and Jamal (2024) illustrate the use of such systems in reducing administrative tasks, simplifying on-boarding processes, and even compliance with labor laws tracking can be automated. Their empirical data demonstrate that AI improves employee retention and satisfaction, when utilized to optimize staffing patterns and to distribute workload fairly.

In a similar vein, Ejjami (2024) explores how AI supports leadership and workforce planning in Moroccan hospitality chains. AI decision-making tools can help middle managers predict labor requirements and be more agile in adjusting to shifts in guest volume and service demands, he says. These capabilities are particularly relevant in the post-COVID era in which flexibility, robustness and the ability to cope with turbulence have turned into strategic necessities for the sector.

These studies represent a positive move towards adoption of AI, however its impact is primarily on operational efficiencies rather than strategic HR transformation. AI's use in this context is predominantly instrumental and not yet aligned with long-term talent development or culture change goals.

4.1.3 Initial Penetration Among SMEs

Small and medium-sized enterprises (SMEs), which represent over 90% of the Moroccan private sector (HCP, 2023), are also beginning to show interest in AI-enhanced HR practices, although their adoption remains embryonic. Research by Tamanine et al. (2024) has indicated that some SMEs, especially those in tech clusters or those with international partnerships, are integrating AI for simplified HR workflows, such as payroll automation, e-recruitment, and attendance monitoring.

However, these implementations tend to be ad hoc and tool-specific rather than part of a broader HR digitalization strategy. As pointed out by Louali and El Abboubi (2023), most Moroccan SMEs still face major hurdles including limited digital infrastructure, lack of internal IT capabilities, and low awareness of AI's full potential beyond administrative efficiency. Consequently, while AI may be present in isolated systems, its impact on strategic HR decision-making, talent analytics, or workforce development remains minimal.

Secondly, the attitude of management is very important. According to a recent study by the African Scientific Journal (2025) the owners of SMEs in Morocco tend to see AI as an expensive and complicated action to good to prefigure the ones that AI threaten to replace. This perception might be getting in the way of wider adoption even when AI could solve ongoing HR-related problems, such as tracking absenteeism or evaluating performance.

4.1.4 Role of Digital Transformation Initiatives

The Moroccan government has implemented a various number of programs, including the "Digital Morocco 2030" program, that aim at promoting the digital integration into both public and private sectors. These initiatives acknowledge AI as a key driver of digital transformation, even within HR departments. However, their direct influence in HRM practices, especially in the private sector, is still small in this stage.

According to Benabou et al. (2024), public policy has not yet translated into concrete incentives or capacity-building programs that target HR professionals specifically. There is also a lack of industry-specific roadmaps that guide Moroccan firms—particularly SMEs and tourism enterprises—on how to adopt AI tools in alignment with their human capital strategies.

Thus, although the policy discourse around AI in Morocco is gaining momentum, the translation of national strategies into sector-level HRM innovation is still limited. Academic research must play a role in bridging this gap by documenting successful case studies,

developing localized AI adoption models, and evaluating the effectiveness of public-private partnerships in advancing HR technology.

4.1.5 Toward a Broader Understanding of AI's Role in Moroccan HRM

To synthesize, the current body of Moroccan research on AI in HRM is still narrow in scope, both thematically and at sector. Recruitment dominates the discourse, with emerging attention paid to hospitality and isolated SME cases. However, comprehensive studies that examine how AI reshapes organizational culture, enables talent analytics, or drives employee experience personalization are largely absent.

Moreover, most existing literature lacks empirical grounding. Much of the academic work remains theoretical, and there is a notable scarcity of field-based evidence involving direct input from Moroccan HR practitioners, employees, or IT departments. Without such grounded perspectives, it is difficult to assess how AI is actually experienced within organizations and what barriers are encountered in real-world implementation.

Lastly, there is a disciplinary gap. Most contributions come from fields such as management sciences or computer science, with limited cross-pollination between HR experts, data scientists, and legal scholars. As pointed out by Chamorro-Premuzic et al. (2019), developing ethical and human-centered AI applications in HRM requires interdisciplinary collaboration, a notion that is yet to gain traction in the Moroccan research community.

Figure 1: Overview of Current Research on AI in HRM in Morocco

| Focus Area | Key Insights | Identified Gaps |
|---|---|--|
| AI in Recruitment | - Extensive research on AI tools for recruitment and candidate selection. - Studies by Benhmama & Bennani (2024) and Horchi & Soudane (2024) highlight the use of AI in CV screening, candidate profiling, and preliminary interviews. - El Mnouer et al. (2023) discuss predictive hiring models for forecasting candidate performance and cultural fit. | - Overemphasis on recruitment processes. - Limited exploration of AI applications in other HRM areas such as learning and development, employee engagement, and retention. - Lack of holistic studies examining AI's impact across the entire employee lifecycle. |
| AI in Hospitality Sector | - Emerging research on AI's role in hotel HRM systems, focusing on scheduling, performance tracking, and training management. - Kamar & Jamal (2024) demonstrate AI's benefits in reducing administrative workloads and enhancing employee satisfaction through optimized shift patterns. - Ejjami (2024) explores AI-driven decision-making tools for workforce planning in hospitality chains. | - Studies primarily focus on operational efficiencies. - Limited analysis of AI's strategic role in talent development and organizational culture transformation within the hospitality sector. |
| AI Adoption in SMEs | - Initial adoption of AI in SMEs, particularly in tech clusters and firms with international partnerships. - Tamanine et al. (2024) report on AI integration for payroll automation, e-recruitment, and attendance monitoring. - Louali & El Abboubi (2023) discuss challenges faced by SMEs, including limited digital infrastructure and low awareness of AI's potential beyond administrative tasks. | - AI implementations are often ad hoc and tool-specific. - Absence of comprehensive HR digitalization strategies in SMEs. - Managerial perceptions of AI as costly and complex hinder broader adoption. |
| Digital Transformation Initiatives | - Government programs like "Maroc Digital 2025" and "Digital Morocco 2030" aim to support technological integration, recognizing AI as a key enabler. - Benabou et al. (2024) note the limited direct impact of these initiatives on HRM practices in the private sector. | - Lack of concrete incentives or capacity-building programs targeting HR professionals. - Absence of industry-specific roadmaps guiding AI adoption in alignment with human capital strategies. - Need for academic research to document successful case studies and develop localized AI adoption models. |

| | | |
|--|--|---|
| <p>Interdisciplinary Research</p> | <p>- Current literature predominantly stems from management sciences and computer science fields.- Chamorro-Premuzic et al. (2019) emphasize the necessity of interdisciplinary collaboration for ethical and human-centered AI applications in HRM.</p> | <p>- Limited cross-disciplinary studies involving HR experts, data scientists, and legal scholars.- Scarcity of empirical research incorporating perspectives from HR practitioners, employees, and IT departments.- Need for studies assessing real-world AI implementation experiences and barriers within organizations.</p> |
|--|--|---|

Source: Authors

4.2. Identified Gaps

The adoption of Artificial Intelligence (AI) into Human Resource Management (HRM) has received great global interest, with attention increasingly focused on talent management. Yet in the Moroccan context, AI adoption and academic investigation in HRM are still in the early stage and isolated.

This section highlights the main gaps identified in the literature and practice, thereby underlining the originality and relevance of the present study, which focuses on AI-enhanced talent management in Morocco.

4.2.1 Limited empirical research on AI applications in HRM

Although the international literature on AI in HRM has expanded considerably over the past decade, empirical research conducted in Morocco remains scarce. Most Moroccan studies adopt a predominantly conceptual or exploratory approach, offering limited field-based evidence on how AI technologies are actually implemented and experienced within organizations. Moreover, existing research tends to focus narrowly on recruitment processes, while other key HR functions—such as performance management, learning and development, and employee retention—remain largely underexplored.

Another important limitation lies in the absence of sector-specific analyses. Moroccan industries such as healthcare, banking, and manufacturing face distinct regulatory, operational, and cultural challenges, yet AI adoption in HRM is often treated as a homogeneous phenomenon. Furthermore, the human dimensions of AI implementation, including data privacy, algorithmic bias, transparency, and employee trust, receive insufficient attention. This gap is particularly critical given the lack of clear regulatory frameworks governing the use of AI in HRM practices.

The rapid emergence of generative AI tools, such as ChatGPT, opens new opportunities for HR communication, training, and knowledge management. However, their implications for employee experience, organizational culture, and internal communication remain largely unexplored in the Moroccan context. In addition, most studies adopt a narrow, job-oriented perspective and rarely integrate interdisciplinary approaches combining technology, management, psychology, and ethics. Factors related to change management—such as employee training, leadership support, and organizational readiness—are also largely absent from the literature. Finally, small and medium-sized enterprises (SMEs), which constitute the backbone of the Moroccan economy, are frequently overlooked, despite facing specific constraints and challenges in AI adoption. Most available studies provide only short-term snapshots, with limited consideration of long-term impacts and sustainability.

4.2.2 Strategic and ethical gaps in AI-enhanced HRM

Beyond empirical limitations, significant strategic and ethical gaps characterize the Moroccan literature on AI-enhanced HRM. HR digitalization in Morocco is still at an early stage, and few studies establish strong theoretical or practical links between AI technologies and strategic HRM outcomes. Compared to international research—where case studies, comparative

analyses, and data-driven evaluations are increasingly common—Moroccan contributions remain largely descriptive and lack empirical rigor.

AI adoption in HRM within developing economies such as Morocco is also insufficiently theorized, which limits its contribution to broader HRM and management debates. From a managerial perspective, the literature highlights the need for a more strategic approach that goes beyond technological adoption. This includes investing in HR professionals' skills, ensuring fairness and transparency in algorithmic decision-making, and establishing accountability mechanisms. However, Moroccan studies rarely address how AI initiatives can be aligned with organizational strategies to generate sustainable business value.

At the policy level, national strategies such as Maroc Digital 2030 demonstrate a clear governmental commitment to digital transformation and AI adoption. Nevertheless, gaps persist in terms of infrastructure development, financial incentives, and effective public–private collaboration. Ethical concerns cut across the entire talent management lifecycle—from recruitment and training to performance evaluation and retention—yet they are often addressed in a fragmented manner. Moreover, the increasing integration of AI across HR functions creates new ethical challenges, as data generated in one HR process can influence decisions in others. This systemic dimension of AI-enabled HRM remains largely unexplored in Moroccan research.

4.2.3 Integration, sustainability, and future directions

Overall, the digital transformation of HRM in Morocco remains in its infancy, with limited integrative analyses linking AI technologies to HR practices in a coherent and sustainable manner. In response to these gaps, the present paper contributes by synthesizing Moroccan literature published between 2018 and 2025 across five key domains: recruitment, learning and development, performance and retention, ethics, and generative AI. This synthesis is grounded in established theoretical frameworks, including the Resource-Based View (RBV), the Technology Acceptance Model (TAM), and motivation theories, in order to provide a structured and theoretically informed analysis.

The findings reveal significant deficiencies in empirical evidence, sectoral perspectives, and ethical frameworks. At the same time, AI adoption in HRM within developing countries such as Morocco offers a valuable opportunity to extend existing HRM theories to diverse economic, institutional, and cultural contexts, thereby challenging models largely developed in industrialized economies. From a managerial standpoint, HR departments are encouraged to adopt a strategic and integrated approach to AI implementation, supported by continuous training programs and clearly defined ethical guidelines.

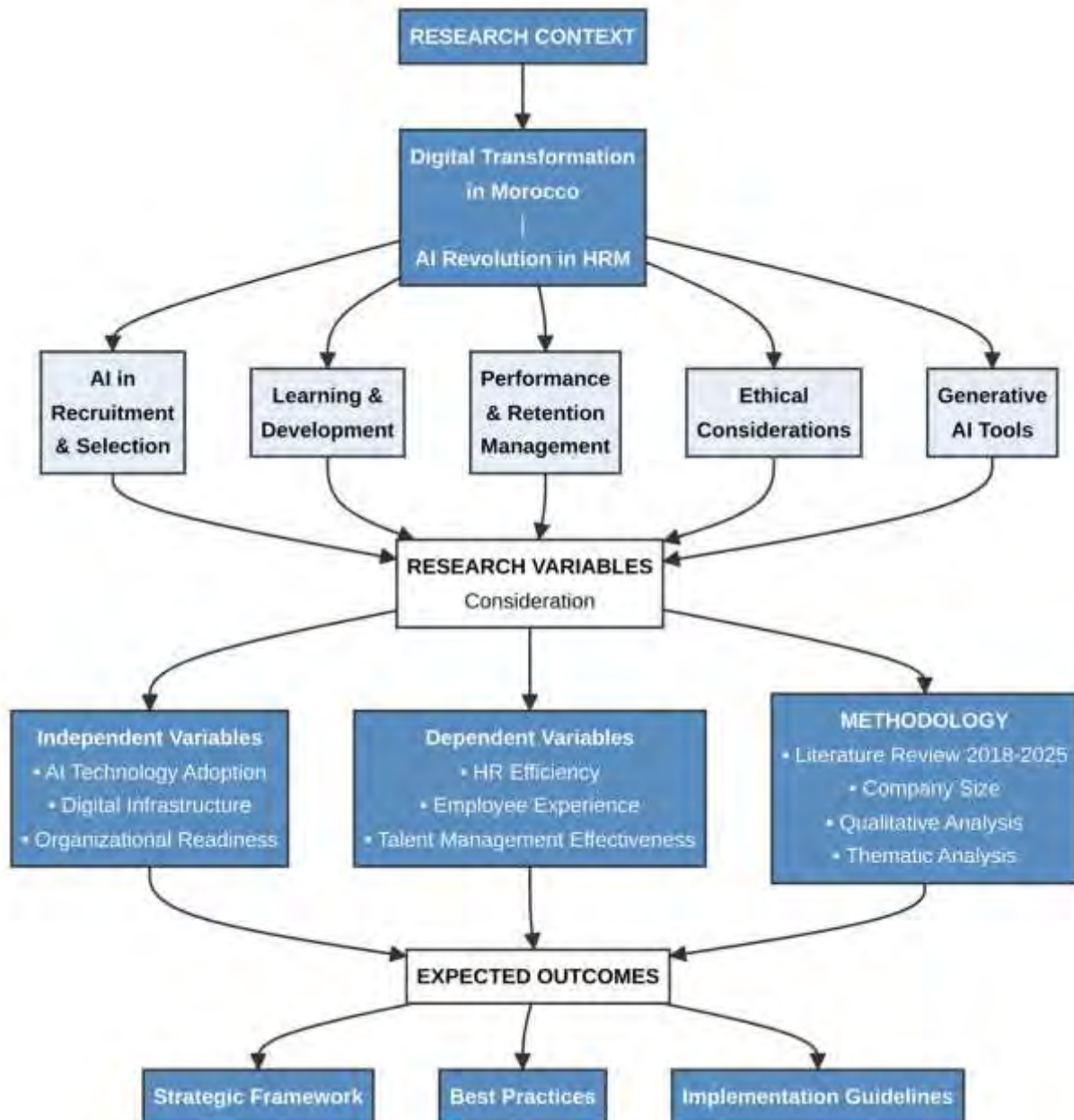
Aligning AI initiatives with organizational strategies is essential to ensure that technological investments translate into meaningful HR and business outcomes. While Morocco's digital transformation policies signal strong political will, their effectiveness depends on enhanced infrastructure, targeted incentives, and stronger collaboration between public institutions and private organizations. Ultimately, AI enables the creation of an interconnected HR ecosystem, in which recruitment data informs training decisions, training outcomes influence performance evaluation, and generative AI reshapes HR information systems and learning processes. Although this integration supports proactive and predictive talent management, it simultaneously raises ethical and governance challenges that must be addressed at every stage of the talent lifecycle.

5. Suggested Research Model

Based on the theoretical foundations and empirical gaps identified in the preceding sections, this study presents an integrated research model to investigate the impact of Artificial Intelligence (AI) adoption on talent management practices within Moroccan enterprises. The

suggested model takes into account the unique aspects of Morocco's digital transformation while also using well-known ideas on HRM and technology adoption. The goal is to give a disciplined way to look at the strategic, organizational, and human aspects of AI-enhanced talent management.

Figure 1: Proposed research model.



Source: Authors

5.1 Background and Theoretical Foundations of the Research

The research model is based on two different contexts. On the one hand, it is part of Morocco's continuous digital transformation, which is being driven by national policies like Maroc Digital 2030 and a growing interest in digital HR solutions among businesses. On the other side, it shows how AI is changing human resource management around the world. AI is now seen as a strategic tool that can improve efficiency, personalization, and predictive decision-making throughout the talent lifecycle. The model recognizes that the adoption of AI in HRM is

influenced by institutional preparation, digital infrastructure, organizational culture, and ethical considerations particular to emerging economies, rather than occurring in isolation.

5.2 The Model's Main Parts

The suggested model envisions AI-enhanced talent management across five interconnected HR domains: AI-driven recruiting and selection, learning and development, performance and retention management, ethical issues, and the utilization of generative AI tools. These areas are where AI has the biggest impact on HR operations and the experiences of employees. When it comes to hiring and selecting people, AI focuses on algorithmic screening, matching candidates, and tools that forecast who will be hired. Adaptive training platforms and tailored skill development pathways are both part of learning and development. Performance and retention management means using AI-based analytics to keep an eye on performance, measure engagement, and predict attrition. Ethics are important in all HR jobs since they deal with concerns like fairness, data privacy, and algorithmic responsibility. Finally, conversational agents and content creation systems are examples of generative AI tools that are changing the way HR communicates, trains, and makes decisions.

5.3 Variables that are both independent and dependent

The model conceptualizes AI adoption in HRM through three primary independent variables: AI technology adoption, digital infrastructure, and organizational readiness. The level of AI technology adoption shows how much firms use AI-based HR products. Digital infrastructure is the availability of technology resources, data systems, and digital skills that make it possible to use AI. Organizational readiness includes things like how open the culture is, how supportive the leaders are, how skilled the employees are, and how well the organization can handle change. These independent variables are anticipated to affect essential dependent outcomes concerning the efficacy of talent management. The approach specifically looks at how well HR works, how well employees feel about their jobs, and how well talent management works as a whole. HR efficiency means making processes work better, making decisions faster, and lowering costs. The employee experience includes how fair, open, engaged, and satisfied they are with AI-supported HR procedures. The success of talent management shows how well a company can find, train, and keep talented people in line with its strategic goals. Ethical issues serve as a moderating factor inside the model, influencing the translation of AI adoption into either beneficial or detrimental results. Ethical governance, openness, and trust are anticipated to enhance the correlation between AI utilization and employee-centric outcomes, whereas their deficiency may incite resistance and diminish performance improvements.

5.4 Methodological Orientation

The study model is implemented via a qualitative methodological framework, utilizing a narrative literature review spanning the years 2018 to 2025. The analysis considers organizational attributes, including company size, acknowledging the structural disparities in AI adoption capacity between large enterprises and SMEs. A thematic analysis approach is utilized to discern patterns, links, and deficiencies within the selected material, hence facilitating a contextualized and theory-driven interpretation. This methodological design aligns with the exploratory essence of AI research within the Moroccan HRM environment and facilitates the incorporation of strategic, technological, and ethical factors.

5.5 Anticipated Contributions and Results

The suggested research model is anticipated to yield several contributions. Theoretically, it provides a comprehensive framework that links AI deployment, talent management methods, and HR outcomes within the context of a developing economy. It broadens prevailing HRM and technology adoption theories by integrating ethical and generative AI aspects. From a

managerial standpoint, the model offers a systematic framework to assist HR decision-makers in harmonizing AI activities with corporate goals while maintaining employee trust and ethical norms. At the policy level, it shows what needs to happen for AI to help Morocco's HR revolution be sustainable and include everyone. In general, the model sees AI not just as a technology tool, but also as a strategic and ethical force for proactive and predictive talent management that fits with the cultural and institutional characteristics of Moroccan enterprises.

6. Conclusion

This paper has analyzed how AI has been increasingly integrated into HRM, and more specifically into talent management in Moroccan settings. Through narrative literature review, there were five (5) themes which were analyzed; AI in recruitment; learning and development of employees, AI in performance management; ethical implications and emergence of generative AI. The review shows that in various parts of the world, the HRM is being automated by AI making it more efficient, objective and important strategic decisions. Yet AI uptake in Morocco is also disparate and only fragmentary, mainly in hiring, with low empirical and sectorial evidence. The results indicate significant deficiencies in the local academic discourse and demand for pragmatic frameworks considering the country's technological, cultural and institutional position.

This work is also basing the understanding of AI integration in HRM in developing countries on extant theories, namely the Resource-Based View, Technology Acceptance Model and motivational theories. Such frameworks, therefore, serve to articulate how AI is not just a technical instrument, but a strategic asset that serves business objectives and human capital development. Beyond this, the study underlines the need for both ethical and accountable AI when incorporated into decision-making in HR, in a setting where data governance, digital literacy and institutional guardrails are under formation.

Although AI is becoming more popular in that country, there is still a knowledge gap in Morocco. There is a general dearth of the studies on employee motivation, retention, and development in the AI working domains, and most of them are descriptive and not empirically based. This paper reinforces the demand for strong, interdisciplinary methodologies that interface HR practices with domains like data science, ethics, org-psychology and public policy. Only empirical-anecdotal is going to bring in some insight about how AI technologies are conceived, deployed, and lived within Moroccan organizations.

Hence, an instrumented and participative research practice of this paper is found to lie in a new generation of contextual research that is also collaborative. Researchers need to undertake case studies, experimental work, and long-term assessments in different domains and not least in underexplored domains such as health care, banking, and education. More dialogues are needed between the policy makers, scholars and practitioners that can co-construct AI practices ethical, strategically and inclusively in the HRM. It is through such interdisciplinary, field-based research that Morocco could harness the power of AI to revolutionize talent management in an innovative, human-centered way.

References

- (1). Allam, Y., Habachi, M., & Tabit, Y. (2024). Théories motivationnelles de contenu & Théories motivationnelles de processus. *International Journal of Accounting, Finance, Auditing, Management and Economics*, 5(5), 247-258.
- (2). Allam, Y., Habachi, M., & Tabit, Y. (2024). Intelligence artificielle et la motivation RH: Revue théorique. *International Journal of Accounting, Finance, Auditing, Management and Economics*, 5(12), 602-613.

- (3). April, K., & Daya, P. (2025). The Use of AI in HRM and Management Processes: The Promise of Diversity, Equity, and Inclusion. In *AI and Diversity in a Datafied World of Work: Will the Future of Work be Inclusive?* (Vol. 12, pp. 97-123). Emerald Publishing Limited.
- (4). Baddouch, L., & Soudane, J. A. (2024). L'Intégration de l'IA dans la Gestion des Ressources Humaines: Convergence et Défis Éthiques. *International Journal of Accounting, Finance, Auditing, Management and Economics*, 5(4), 210-222.
- (5). Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*.
- (6). Barney, J. B. (2000). Firm resources and sustained competitive advantage. In *Economics meets sociology in strategic management* (pp. 203-227). Emerald Group Publishing Limited.
- (7). Benabou, A., Touhami, F., & Demraoui, L. (2024, May). Artificial intelligence and the future of human resource management. In *2024 International Conference on Intelligent Systems and Computer Vision (ISCV)* (pp. 1-8). IEEE.
- (8). Benhmama, A., & Bennani, Y. B. (2024). Factors driving the adoption of artificial intelligence technology in the recruitment process in Morocco. *Access Journal*, 5(3), 387-406.
- (9). Brynjolfsson, E., & McAfee, A. (2014). The second machine age: Work, progress, and prosperity in a time of brilliant technologies. WW Norton & company.
- (10). Bostrom, N., & Yudkowsky, E. (2018). The ethics of artificial intelligence. In *Artificial intelligence safety and security* (pp. 57-69). Chapman and Hall/CRC.
- (11). Budhwar, P., Chowdhury, S., Wood, G., Aguinis, H., Bamber, G. J., Beltran, J. R., ... & Varma, A. (2023). Human resource management in the age of generative artificial intelligence: Perspectives and research directions on ChatGPT. *Human Resource Management Journal*, 33(3), 606-659.
- (12). Calo, R. (2017). Artificial intelligence policy: a primer and roadmap. *UCDL Rev.*, 51, 399.
- (13). Chamorro-Premuzic, T., Polli, F., & Dattner, B. (2019). Building ethical AI for talent management. *Harvard Business Review*, 21(November), 1-15.
- (14). Chaudhary, A., & Khandelwal, S. (2024). A Bibliometric Analysis of the Role of Artificial Intelligence and Machine Learning in Human Resource Management. In *Resilient Businesses for Sustainability* (Vol. 34, pp. 119-137). Emerald Publishing Limited.
- (15). Chamorro-Premuzic, T., Polli, F., & Dattner, B. (2019). Building ethical AI for talent management. *Harvard Business Review*, 21(November), 1-15.
- (16). Chevalier, F., & Dejoux, C. (2021). Intelligence artificielle et Management des ressources humaines : pratiques d'entreprises. *Annales des Mines-Enjeux Numériques*, (15), 94-105.
- (17). Collings, D. G., Wood, G. T., & Szamosi, L. T. (2018). Human resource management: A critical approach. In *Human resource management* (pp. 1-23). Routledge.
- (18). Cowgill, B., Dell'Acqua, F., Deng, S., Hsu, D., Verma, N., & Chaintreau, A. (2020, July). Biased programmers? Or biased data? A field experiment in operationalizing AI ethics. In *Proceedings of the 21st ACM Conference on Economics and Computation* (pp. 679-681).
- (19). Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- (20). Delery, J. E., & Roumpi, D. (2017). Strategic human resource management, human capital and competitive advantage: is the field going in circles?. *Human Resource Management Journal*, 27(1), 1-21.

- (21). Deloitte. (2018). Global Human Capital Trends: The Rise of the Social Enterprise.
- (22). DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*, 48(2), 147-160.
- (23). El Mnouar, O., Katfi, A., Katfi, H., & Mrhari, A. (2023). Artificial Intelligence and Recruitment in Morocco: Innovative Frontiers for Optimizing the Collaborator Experience. *International Journal of Accounting, Finance, Auditing, Management and Economics*, 4(6-2), 223-238.
- (24). Ejjami, R. (2024). AI-powered leadership in Moroccan organizations: an integrative literature review. *Int J Multidiscip Res*, 6(3).
- (25). Gélinas, D., Sadreddin, A., & Vahidov, R. (2022). Artificial intelligence in human resources management: A review and research agenda. *Pacific Asia Journal of the Association for Information Systems*, 14(6), 1.
- (26). Ghedabna, L., Ghedabna, R., Imtiaz, Q., Faheem, M. A., Alkhayyat, A., & Hosen, M. S. (2024). Artificial Intelligence in Human Resource Management: Revolutionizing Recruitment, Performance, and Employee Development. *Nanotechnology Perceptions*, 52-68.
- (27). Horchi, M., & Soudane, J. A. (2024). L'intégration de l'Intelligence Artificielle dans les pratiques de Gestion des Ressources Humaines: Une revue de littérature. *International Journal of Accounting, Finance, Auditing, Management and Economics*, 5(8), 275-290.
- (28). Kamar, R. E. D. A., & Jamal, A. (2024). Exploration du Rôle des Outils Technologiques dans l'Optimisation de la Gestion des Ressources Humaines dans le secteur Hôtelier Marocain. *Economics and Management Review*, 2(2).
- (29). Kaminski, A. (2023). Using Artificial Intelligence to Augment and Enhance Human Resource Strategy, Planning, Job/Work Design, Staffing, Learning and Development, and Performance Management.
- (30). Khaoula, Moussaoui & Nafii, I. Benrissoul. (2025). Manager's perception of Artificial Intelligence: Case of Moroccan organizations. *African Scientific Journal*, 3(28), 0388-0388.
- (31). Louali, I., & El Abboubi, M. (2023, November). The HR function in Morocco between Digitalization and Artificial Intelligence: Reality and challenges. In *2023 IEEE International Conference on Technology Management, Operations and Decisions (ICTMOD)* (pp. 1-6). IEEE
- (32). Minbaeva, D. (2017). Building credible human capital analytics. Manuscript submitted for publication. Retrieved from <http://www.cbs.dk/hc-analytics>.
- (33). Naim, M. F. (2023). Reinventing workplace learning and development: Envisaging the role of AI. In *The adoption and Effect of artificial intelligence on human resources management, Part A* (pp. 215-227). Emerald Publishing Limited.
- (34). Ransbotham, S., Kiron, D., Gerbert, P., & Reeves, M. (2017). Reshaping business with artificial intelligence: Closing the gap between ambition and action. *MIT sloan management review*, 59(1).
- (35). Rogers, E. M. (2003). *Diffusion of Innovations* (5th ed.). Free Press.
- (36). Rogers, E. M., Singhal, A., & Quinlan, M. M. (2014). Diffusion of innovations. In *An integrated approach to communication theory and research* (pp. 432-448). Routledge.
- (37). Serbouti, S., Ettaqy, A., Boukcim, H., Mderssa, M. E., El Ghachtouli, N., & Abbas, Y. (2023). Forests and woodlands in Morocco: Review of historical evolution, services, priorities for conservation measures and future research. *International Forestry Review*, 25(1), 121-145.

- (38). Sinapin, J. (2020). AI ethics in HR: Balancing innovation and equity. *Journal of Organizational Behavior*, 41(5), 35-58.
- (39). Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. (2015). The influence of technology on the future of human resource management. *Human Resource management review*, 25(2), 216-231.
- (40). Tamanine, R., Fahim, I., Houssas, M. B., Elkandoussi, F., & Baazizi, Y. Assessing the Determinants of AI Integration in Tourism SMEs.
- (41). Trends, G. H. C. (2018). The rise of the social enterprise. URL: <https://documents.deloitte.com/insights/HCTrends2018> (дата обращения: 09.10. 2019).
- (42). Yildiz, R. O., & Esmer, S. (2023). Talent management strategies and functions: a systematic review. *Industrial and commercial training*, 55(1), 93-111.