

Human Resource Development in Higher Education: A Humanistic Core–AI Enhanced Model from Islamic Perspectives

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ARTICLE INFO

Keywords:

Human Resource Development;
Higher Education;
Strategic Human Resource
Management;
Artificial Intelligence;
Islamic Perspectives;

Article history:

Received 2026-02-25
Revised 2026-05-12
Accepted 2026-07-20

ABSTRACT

Human resource development (HRD) is a strategic factor in ensuring the sustainability and competitiveness of higher education institutions amid globalization, digital transformation, and the rapid advancement of artificial intelligence (AI). This study aims to examine the evolution of HRD management, identify dominant HRD models, and analyze future challenges and opportunities in higher education from both contemporary and Islamic perspectives. A Systematic Literature Review (SLR) was conducted using articles published between 2016 and 2026. Literature searches were performed through Publish or Perish across Scopus, Web of Science, and Google Scholar, and analyzed using the PRISMA 2020 framework. A total of 674 records were identified, of which 50 articles met the eligibility criteria for the final review. The findings reveal a shift from conventional administrative HRD toward strategic, adaptive, and technology-enabled management. The review identifies several dominant models, including Strategic Human Resource Management (SHRM), Organizational Citizenship Behavior (OCB), Knowledge Transfer-Based HRD, Career Ecosystem-Based HRD, and AI-based HRD. As its primary theoretical contribution, this study proposes the Humanistic Core–AI Enhanced Human Resource Development (HCAE-HRD) model, which integrates SHRM, OCB, and AI-Driven HRD while positioning humanistic values as the core and AI as a supporting tool. From an Islamic perspective, the model is strengthened by the principles of amanah, ihsan, ta'awun, adl, and shura, providing an ethical and sustainable framework for human resource development in higher education.

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INTRODUCTION

Higher education institutions play a strategic role in sustaining the development of knowledge amid the challenges of global civilization (Clark, 2008), which continue to evolve under conditions of uncertainty. Cantor, (2020) argues that this situation requires universities to undergo comprehensive transformation across all dimensions (Trow, 1972), including management (Bangbon et al., 2023; Prasodjo, 2019), human resources (J. Pandit & Paul, 2023b; Rijdt et al., 2016) and infrastructure and facilities (Poutanen, 2025) in order to respond effectively to globalization. This view is consistent with Barfi & Opoku, (2023) who regard higher education as a key force in sustaining knowledge, modernizing civilization, and strengthening national development (A. Alam, 2022; Fathir, 2026; Husni et al., 2026; Misdah et al., 2025; Qolbi, 2025). Nevertheless, evidence shows that the major challenges of higher education in the twenty-first century are largely centered on technological integration, pedagogical evolution, educational accessibility, curriculum relevance, and globally competitive education policies (Daulay et al., 2024; Grant, 2021; Ikhwan et al., 2025; Muttaqin et al., 2025; Utsman et al., 2026).

In line with these challenges, human resources have become an irreplaceable and critical element in maintaining the existence of higher education institutions amid ongoing globalization pressures (Rasheed, 2023). Brewer & Brewer, (2010) further emphasize that human resources in universities represent a fundamental component responsible for ensuring effective knowledge transfer aligned with institutional vision and mission (Elice et al., 2025; Humaida et al., 2026; Mukhtar B et al., 2023; Nun et al., 2025; Syukur et al., 2024). This highlights the strategic importance of academic staff and educational personnel in higher education, whose roles extend beyond technical implementation in fulfilling the tridharma of higher education (Lea & Callaghan, 2008; Nicholls, 2005). Rather, they function as strategic assets that must be continuously developed so that institutions are able to respond to sustainable global challenges (Ul Hassan et al., 2025).

From this perspective, effective managerial practices in higher education become a key determinant in developing human resources, including the formulation of competency frameworks (Barth et al., 2007; Tigelaar et al., 2004), internationally competitive career management (Kurniawati et al., 2021; Pham et al., 2022), performance appraisal (Stevens & Kirst, 2015) and continuous evaluation processes (such as assessment methods, models, and teaching-related evaluation systems) (Allui & Sahni, 2016c) to achieve institutional goals. Without sound managerial systems, strong human resource development in higher education will remain an unattainable aspiration. Blackman & Lee-Kelley, (2006) note that institutions that fail to manage human resources optimally may hinder knowledge acquisition, resulting in organizational passivity and stagnation (Shahid et al., 2024).

From another perspective, existing research on human resource development in higher education remains largely dominated by optional and individual approaches (Allui & Sahni, 2016a; Voloshina & Kotlyarova, 2017), while management-based frameworks are still dispersed across different academic disciplines. For instance, Akpey, (2020) emphasizes the importance of social capital development as an innovation in human resource development, arguing that strong workplace relationships significantly enhance organizational performance in higher education (Fuller, 2014; Khasawneh, 2011). In contrast, Sušanj et al., (2020) focus on performance-based management systems in universities, highlighting their effectiveness in strengthening lecturers' professional development (Arbi et al., 2025; Asy'Ari et al., 2025; Avdeeva & Kokodey, 2024; Muluk & Dahliana, 2024; Shittu et al., 2025; Siregar et al., 2023).

J. M. Pandit & Paul (2023), further emphasize human resource development as a strategic process that positions individuals as integral components of long-term institutional planning aligned with vision, mission, and governance structures (Gupta, 2021a). Meanwhile, Hamilton & Torraco, (2013) propose an integrative governance-oriented management model, which stresses adaptive collaboration

in governance and human resource development processes (A. Karim et al., 2026; Rosdiana et al., 2024, 2024; Tusriyanto et al., 2024; Waldan et al., 2025). Empirical findings by Gupta, (2021b) also highlight the strategic human resource management model (SHRMM) as a solution to global dynamics and digital transformation, particularly by integrating academic, research, and community service functions in alignment with institutional vision (Sihite & Tukiran, 2020).

Although previous studies have comprehensively discussed human resource development in higher education, limited attention has been given to how contemporary HRD models can be interpreted through the lens of Islamic ethical values. In higher education, particularly within Islamic universities (Haidar et al., 2022; Hanif et al., 2024; Umami & Yasin, 2024; Wafiyah, 2025), organizational effectiveness and global competitiveness should be balanced with ethical principles such as amanah (trustworthiness), ihsan (excellence), adl (justice), shura (consultation), and maslahah (public benefit). These values complement humanistic approaches by providing a moral foundation for strategic human resource development in the era of digital transformation. Therefore, the findings of this review are expected to provide conceptual implications for integrating strategic human resource development with Islamic ethical values in higher education.

Based on these research findings on various human resource development management practices in higher education, this study identifies a significant research gap in mapping conceptual developments, model variations, and practical challenges in a structured and comprehensive manner using a systematic literature review (SLR) approach. Therefore, this study aims to fill this gap by addressing three research questions. First, how has human resource development management in higher education evolved within the literature? Second, what management models are employed in managing human resource development in higher education institutions? Third, what are the challenges and opportunities in the practice of human resource development management in higher education?

METHODS

The research method employed in this study is a systematic literature review (Lame, 2019), which involves a comprehensive analysis of various studies on human resource development in higher education through a systematic, transparent, and applicable synthesis based on findings from previous research articles. The search process for relevant studies was conducted empirically by utilizing the Publish or Perish application to ensure data accuracy and minimize bias in the article selection process within the period 2016–2026. The article search in Publish or Perish was conducted across global databases, namely Scopus, Web of Science (WoS), and Google Scholar, using a Boolean search string: (“human resource management” OR “HR management” OR “strategic human resource management”) AND (“human resource development” OR “staff development” OR “faculty development”) AND (“higher education” OR “higher education institution” OR “university” OR “college”) (Nightingale, 2009; Torres-Carrión et al., 2018). The data analysis was carried out using the PRISMA framework through three key stages: identification, screening, and inclusion (Cogliati et al., 2021; Shamseer et al., 2015).

In the subsequent stage, the researchers applied inclusion and exclusion criteria to ensure that previous research findings were systematically categorized and synthesized (Meline, 2006; Rockwood & Gauthier, 2005). Detailed inclusion and exclusion criteria are presented in the table below.

Table 1: Research Inclusion and Exclusion

Apect	Inclusion	Exclusion
Research Theme	All articles that discuss human resource development management in higher education	Articles that examine management in general that are not related to higher education (schools, madrasas, etc.)
Publication type	Articles published through a peer reviewed process	Articles that are not produced from a peer reviewed process, such as opinion pieces, research reports, conferences)
Year of publication	Articles published in the last 10 years (2016-2026)	Articles published outside the year range (2016-2026)
Publication language	Articles in English Language	Articles published in languages other than English
Supporting applications	The article search process uses the publish or perish application version 8 with a focus on 3 global databases (Scopus, WOS and Google Scholar)	The search process is carried out manually in each database and outside the 3 global databases (Scopus, WOS and Google Scholar)

Based on the articles that passed the inclusion and exclusion process conducted through the Publish or Perish application across three global databases (Scopus, Web of Science, and Google Scholar) on February 1, 2026, the researchers obtained detailed data as follows:

Table 2: Article Search Keywords With Boolean Search String

No	Boolean search string keywords	Year	Databased	Amount
1	("human resource management" OR "HR management" OR "strategic human resource management")		23	72
4	BHGGFDXDRFHN. ZDS			
2	AND ("human resource development" OR "staff development" OR "faculty development")	2016-2026	Wos	24
3	AND ("higher education" OR "higher education institution" OR "university" OR "Collage").		Google scholar	578
Total				674

Furthermore, the researchers conducted a classification process based on the research questions. First, how has human resource development management in higher education institutions evolved in the literature? Second, what management models are used to manage human resource development in higher education? Third, what are the challenges and opportunities in the practice of human resource development management in higher education? From a total of 674 articles, the researchers carried out

the analysis using the Zotero application. The collected data were categorized and exported in RIS format to enable visualization using VOSviewer (Effendi et al., 2021) as presented in the figure below.

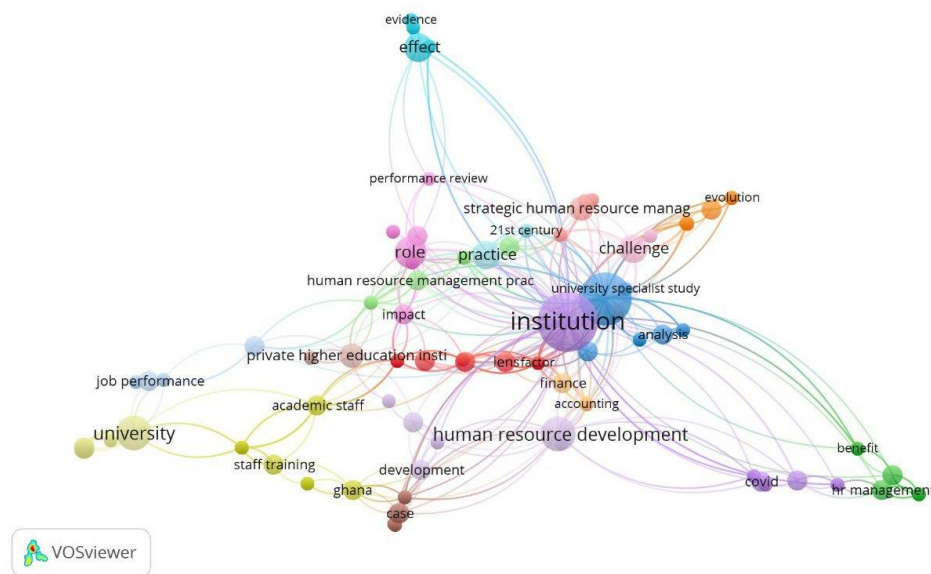
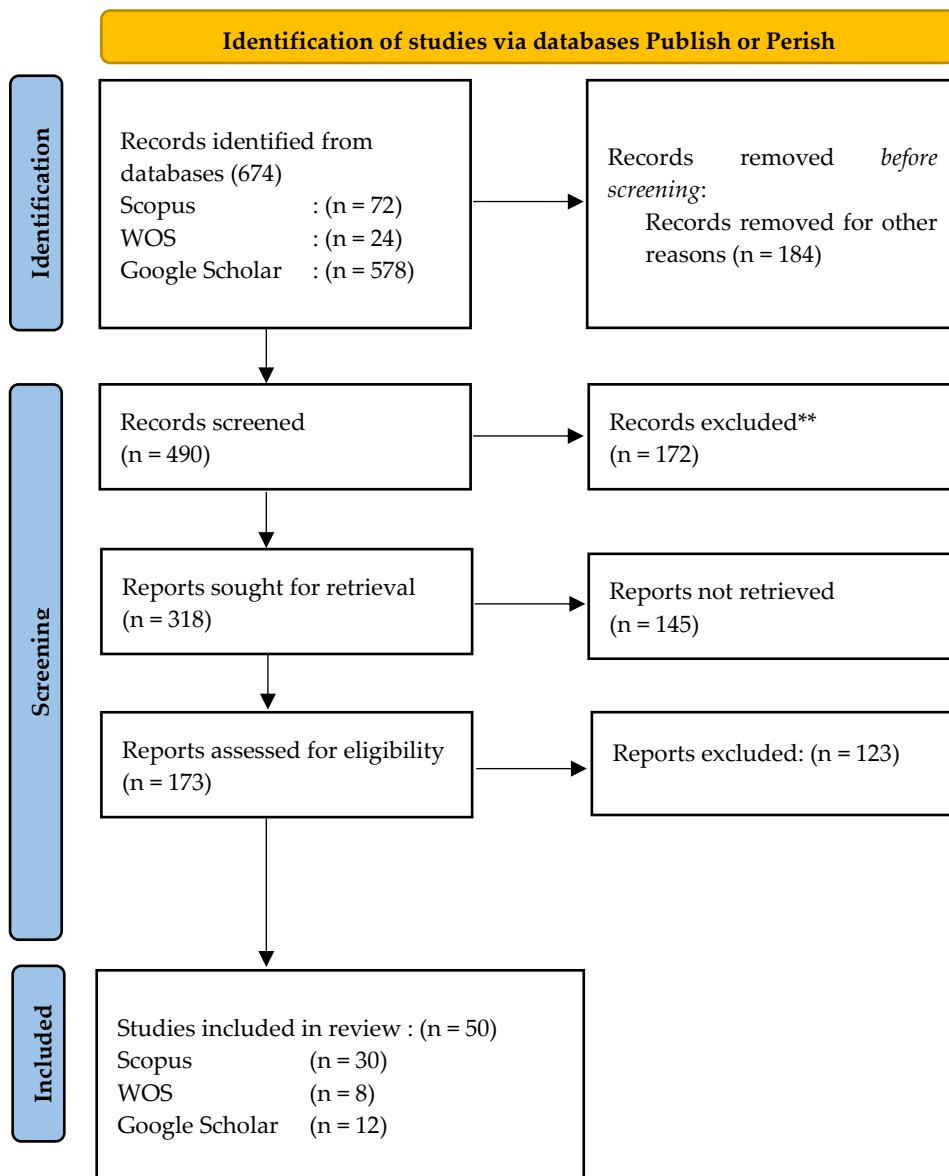


Figure 1: Visualization of article findings

The figure above indicates that there is a strong interrelationship among human resource management, institutions, universities, and higher education. In addition, other linkages are also identified in human resource development, strategic human resource management, and evaluation, demonstrating that these variables remain interconnected both directly and indirectly. Furthermore, based on the findings above, the researchers conducted an analytical process using the PRISMA approach to minimize research bias (Page et al., 2021), The detailed process is presented in the flowchart below.



Based on the PRISMA analysis process, out of 674 articles identified from the search results across three global databases (Scopus, Web of Science, and Google Scholar), 50 articles were included in the final review. Furthermore, the researchers present the research findings in detail in the following section.

FINDINGS AND DISCUSSION

The research findings will present data based on the PRISMA analysis, consisting of 50 selected articles that are relevant and grouped into three research questions. First, the focus is on the pattern of development in human resource development management studies, the tendency of management models applied, and various strategic issues emerging from the practice of human resource development in higher education. The details are presented in the following sub-sections:

Human Resource Development Management In Higher Education Institutions

Human resource development management in higher education has undergone significant changes in response to labor market demands and the corporate sector (Khasawneh, 2011; Tkachenko et al., 2022). In the early phase, human resource development management mainly focused on administrative activities with a primary orientation toward conventional tridharma-based development in higher education (Xia et al., 2024). Esmaelpour et al., (2019) further detail several development practices, such as human resource recruitment, educational training, and employee maintenance in higher education (Suandi, 2025). Untawale, (2025) argues that such human resource development models tend to be urgent, individualistic, and insufficiently capable of integrating and innovating autonomously (Akpey, 2020; Shroff, 2023), including strategic planning, human resource development, and periodic evaluation as institutional investments (Tsauri, 2022). Bangbon et al., (2023) note that the most effective human resource management lies in nurturing talents, skills, and knowledge continuously to enhance competitive advantage in higher education (Tkachenko et al., 2022).

In line with Donald et al., (2023) the acceleration of the technological era, driven by the COVID-19 pandemic, has made human resource development an indispensable need for higher education institutions (Sato et al., 2021; Shroff, 2023). In addition, globalization pressures, such as internationalization in higher education (Khasawneh, 2011; Svetlik & Braček Lalić, 2016), have become a major driving force for integral and systemic institutional development (Allui & Sahni, 2016b). Ngo et al., (2022) argue that the future development of higher education must be based on institutional strategies emphasizing competitiveness, innovation, and sustainability (Govender et al., 2018). including strategies to enhance lecturers' professionalism (Indayanti et al., 2022; Tsauri, 2022). Djikhy & Moustaghfir, (2019) illustrate that the development of international universities must be supported by stakeholders and strong team performance (Donald et al., 2023), such as through faculty training and collaborative research projects (Fedorova & Ponomareva, 2017).

The rapid expansion of higher education has implications for the need to prepare integrated human resource development strategies, starting from the formulation of institutional vision (Tkachenko et al., 2022; Tsauri, 2022), mission, quality assurance systems, and performance and career management (Halid et al., 2024). The emergence of the artificial intelligence era further highlights the need for culturally responsive, technologically competent, and collaborative approaches to address global challenges (Karim et al., 2024; Wang, 2022). Hamouche et al., (2023) state that prioritizing both human and machine (AI) resource development can accelerate organizational progress in higher education (Esmaelpour et al., 2019). This condition confirms a shift from purely technical competencies toward transformative competencies (Zhao, 2019), including academic leadership, collaboration, and the ability to navigate global uncertainty.

Based on the literature above, it is evident that human resource development management has experienced a significant paradigm shift, moving from an administrative approach toward a strategic and transformative management paradigm (Suandi, 2025). Reactive management, limited collaborative development, and fragmented practices are no longer aligned with the dynamic global higher education environment (Dejene, 2022). This indicates that conventional development programs lack a managerial framework that positions human resources as a sustainable strategic investment (Abdulmumini, 2021). Furthermore, the acceleration of digitalization and artificial intelligence reinforces the need for transformational human resource development management that is academic, collaborative, digitally literate, and adaptive to serve as a foundation for addressing global challenges.

Management Models In Managing Human Resource Development In Higher Education

The transformation of higher education must be accompanied by optimal human resource development (Donald et al., 2023). One key strategy is shifting from conventional approaches to collaborative management models designed to improve academic quality (Dejene, 2022), enhance overall performance accountability (Bangbon et al., 2023), and respond to global higher education needs (Suandi, 2025). Various human resource development models may serve as options for universities. First, Halid et al., (2024) propose the organization citizenship behavior (OCB) model as an integrative approach, as it involves employees' commitment and voluntary intentions to contribute sincerely and remain loyal (Sato et al., 2021) enabling institutions to grow in line with contemporary demands (Kovačić, 2024).

Ngo et al., (2022) prioritize the Autonomy-Governance Based HRD model, which views human resource development as a response to institutional transformation (Zhao, 2019), enabling the integration of faculty professionalism with governance reform, organizational culture, and evaluation systems. In contrast, the model applied in Chinese universities emphasizes HRM as a negotiation process among socialist, market, and corporate logics, demonstrating a balance among the state, market, and professional autonomy (Obedgiu, 2017; Svetlik & Braček Lalić, 2016), allowing universities to adapt without losing their academic identity Xia et al., (2024). Alwiya Allui & Sahnii, (2016b) add that the SHRM model implemented in Saudi universities strengthens conceptual awareness and strategic orientation, focusing on recruitment, faculty development, and competency-based performance systems (Asio, 2020).

Dijkhy & Moustaghfir, (2019) emphasize that the most effective management lies in optimizing human resource development in response to internationalization challenges. Therefore, the Knowledge Transfer-Based HRD model, which positions collaboration, organizational learning, and partnerships as key mechanisms, is considered a strategic option for sustainability (Hamouche et al., 2023). Donald et al., (2023) further highlight technological transformation as a turning point in building a human resource development framework based on a career ecosystem (Omotunde et al., 2024; J. Pandit & Paul, 2023a), emphasizing the integration of national human resources (Tkachenko et al., 2022), career development strategies, and talent management aligned with institutional needs (Manenzhe, 2021). However, Ito, (2024) argues that in the context of digital transformation and artificial intelligence, the RC Model is more effective, as it builds stakeholder consensus in role distribution, responsibilities, and AI risk management. This perspective aligns with Hamouche et al., (2023) who suggest that AI-based human resource development, including tools such as ChatGPT, can strengthen organizational impact and accelerate the development of both human and technological capabilities (Prasodjo, 2019; Zhao, 2019).

Table 3: Models In Managing Human Resource Development In Higher Education

No	HR Management Model	Main Focus	Characteristics	References
1	Organization Citizenship Behavior (OCB)	Loyalty, commitment and voluntary contribution of human resources	Emphasizes extra-role behavior, emotional engagement, organizational integration to enhance academic quality and college adaptation.	Halid et al. (2024); Sato et al. (2021); Kovačić (2024)
2	Autonomy-Governance Based HRD	Professionalism and governance reform	Integration of human resource development with governance systems,	Ngo et al. (2022); Zhao (2019)

			organizational culture, and performance evaluation as a response to institutional transformation	
3	Human Resource Management (HRM) Model	Balance between state, market and professionalism	Adaptation of higher education to social, economic and political changes without losing academic identity	Xia et al. (2024); Obedgiu (2017); Svetlik & Braček Lalić (2016)
4	Strategic Human Resource Management (SHRM)	Strategic awareness and institutional competitiveness	Focus on recruitment, development of lecturer competencies, performance systems, and strengthening institutional excellence	Alwiya Allui & Sahni (2016); Asio (2020)
5	Knowledge Transfer-Based HRD	Collaboration and organizational learning	Emphasizing partnerships, innovation, knowledge transfer, and sustainability in the internationalization of higher education	Djikhy & Moustaghfir (2019); Hamouche et al. (2023)
6	Career Ecosystem-Based HRD	Talent management and career development	Integration of national HR needs, career development, and talent planning based on institutional needs	Donald et al. (2023); Omotunde et al. (2024); Tkachenko et al. (2022); Manenzhe (2021)
7	Risk and Consensus (RC) Model berbasis AI	Technology and AI risk management	Stakeholder consensus, role division, digital technology adaptation, and human resource and machine integration	Ito (2024); Hamouche et al. (2023); Prasodjo (2019); Zhao (2019)

Based on the table above, it can be seen that in the process of human resource development, higher education institutions adopt various management models that position human capital as the primary asset in responding to global and digital transformation. This condition indicates that universities develop their human resource systems in a flexible, innovative, and responsive manner to address the challenges and demands of the labor market. These management models serve as a comprehensive foundation for strengthening professional values, enabling institutions to achieve competitive advantage at the international level.

Challenges and Opportunities in the Practice of Human Resource Development Management in Higher Education

The practice of human resource development management in higher education cannot be separated from the various challenges and opportunities that are currently evolving, whether structural, cultural, or technological in nature, which are becoming increasingly complex. The first major challenge is the emergence of technological disruption and artificial intelligence (Indayanti et al., 2022; Li, 2020). As Zhao, (2019) notes, the rise of OpenAI requires lecturers and educational staff to possess strong digital literacy (Hamouche et al., 2023; Wang, 2022) while continuously adapting to innovative technological transformation and strengthening cultural sensitivity and inclusive practices (A. M. Karim et al., 2024). This condition creates new requirements for prospective faculty members and leads to increased operational and maintenance costs. The second challenge lies in the persistence of conventional administrative practices in some higher education institutions (Asio, 2020; Xia et al., 2024), which remain insufficiently data-driven and lack measurable performance systems. The third challenge concerns the competence of human resource managers, who should serve as key drivers of institutional transformation (Othayman et al., 2022), but in some cases become obstacles due to limited experience, lack of specialization, and inadequate capacity in conducting training needs analysis. The fourth challenge relates to higher education autonomy policies and reform (Govender et al., 2018; Kooli & Abadli, 2022). Evidence from several countries (H. T. T. Nguyen, 2019; T. L. H. Nguyen, 2016; Omotunde et al., 2024; Suandi, 2025; Sušanj et al., 2020; Svetlik & Braček Lalić, 2016) shows that institutional autonomy in managing human resources (Manenzhe, 2021; Mynzhanova, 2018), enables universities to develop systematic human resource and career management systems (Prasodjo, 2019; Tang, 2022).

Several opportunities also emerge in the practice of human resource development management in higher education. First, Donald et al., (2023) highlight that the presence of digital technology and OpenAI accelerates system integration processes, leading to more efficient improvement mechanisms (Ito, 2024; A. M. Karim et al., 2024). In line with Zhao, (2019) the greatest opportunity lies in fostering the transformation of human resource management models and enhancing the overall effectiveness of human resource development. Second, Abdulmumini, (2021) argues that human resource development offers significant opportunities to strengthen professionalism by building communication pathways, responsibility (Esmaelpour et al., 2019), motivation (Allui & Sahni, 2016b), trust, and care, thereby creating an optimal organizational environment for achieving institutional goals (Dejene, 2022; Halid et al., 2024). Third, Hartley & Jarvis, (2022) identify the emergence of collaborative models among faculty members as another opportunity, particularly in strengthening academic capacity through local innovation ecosystems and collaborative research initiatives (Halid et al., 2024; Kooli & Abadli, 2022). This condition fosters partnerships with industry, government, and society (Khasawneh, 2011), positioning higher education institutions as strategic solutions for workforce demands and social development.

Discussion

The development of human resource (HR) management in higher education has undergone various transformations, shifting from administrative approaches toward structured and optimized models supported by digitalization (Norton, 2008; Parellada & Bertrán, 1999). Tanjung, (2020) argues that human resources are the most crucial element in advancing educational institutions; therefore, effective management aligned with institutional functions and strategic vision becomes the key to achieving global competitiveness in higher education (Akinyemi & Abiddin, 2013; Mallillin et al., 2024). The emergence of new higher education management paradigms reflects the pressures of globalization

(Jones, 2005; Maassen & Cloete, 2006; Vaira, 2004), internationalization (Ilieva et al., 2014; Jiang, 2008; Tight, 2022) and the acceleration of digital transformation and artificial intelligence. Glen et al., (2011) emphasize that optimal human resource development contributes to two essential outcomes: knowledge creation and national strengthening (Anisah & Marzuki, 2019; Oni & Abiodun, 2010).

Various human resource development models have emerged as solutions for ensuring institutional sustainability amid global uncertainty. The Organization Citizenship Behavior (OCB) model is recognized as one of the approaches that supports human resource development in educational institutions (Somech & Oplatka, 2014). Somech & Ron, (2007) note that the OCB model tends to focus more on individual behavior than institutional systems. Therefore, a more realistic approach is integrating OCB with the Strategic Human Resource Management (SHRM) model. Tuytens et al., (2023) argue that SHRM emphasizes institutional sustainability and strategic alignment. Moreover, this model encourages innovation through transformational and collaborative leadership (Knies et al., 2024; Tran, 2015).

This perspective differs from the Autonomy-Governance Based HRD model, which is considered highly relevant for higher education institutions (Gharib et al., 2020; Noriega & Plaza, 2024). This model focuses on global higher education reform and academic competence, particularly the transition of higher education provision and governance from state-centered systems toward market-oriented mechanisms (Enders et al., 2013; Varghese & Malik, 2025). Consequently, the Autonomy-Governance Based HRD model emphasizes the integration of human resource development, institutional governance, and organizational culture. Shin et al., (2022) reinforce that autonomy is a long-term strategic goal (Elena & Sánchez, 2013), yet capacity building in both human resources and governance remains the core foundation. Without strong capacity development, universities will struggle to achieve sustainable governance (Anh et al., 2021). Another limitation lies in leadership readiness, as top-level management requires maturity and courage to implement transformation while maintaining accountability and evaluation systems (Lumino & Gambardella, 2020).

Appropriate management approaches significantly influence higher education development. Gourlay, (2001) highlights the Knowledge Transfer-Based HRD model as a strategic framework that can be implemented to address globalization, internationalization, and digitalization (Iles & Yolles, 2002). This model accelerates innovation, collaboration, and academic networking to achieve institutional vision (Parise, 2007). Furthermore, this approach can be strengthened by career-based management models to ensure sustainable and comprehensive competency development rather than fragmented outcomes (Sugiono et al., 2026). Such models promote structured career pathways that directly contribute to institutional sustainability (Donald et al., 2024; Miller, 2015). This perspective aligns with the AI-based Risk and Consensus (RC) Model, an innovative approach suitable for digital transformation challenges, particularly the emergence of OpenAI (Govender et al., 2018; Phillips et al., 2024). As stated by Al-Ajmi, (2025) this model offers strong advantages in risk mitigation, participatory governance, and data-driven decision-making due to technological integration. However, its primary limitation lies in the dependency on infrastructure readiness and organizational culture in managing human resources.

Based on the distribution of human resource development management models discussed above, several weaknesses remain. One critical issue is how to design a management framework that builds a holistic and human-centered human resource ecosystem (Ginting et al., 2023; Lazareva et al., 2024). This includes strengthening loyalty, collaboration, ethics, and organizational commitment while integrating artificial intelligence as a strategic partner (supporting system) (Chaudhuri et al., 2022). Such integration supports personalization, predictive analytics, and evidence-based decision-making. Therefore, future higher education institutions must develop sustainable competitive advantages without neglecting

humanistic identity and ethical values (Budini, 2024; Melé, 2016). This vision is reflected in the Humanistic Core–AI Enhanced Human Resource Development (HCAE-HRD) model, which positions human values as the core foundation while utilizing AI as a strategic tool to support training personalization, competency analytics, workforce planning, and strategic decision-making in higher education. The detailed conceptual framework is presented in the figure below.

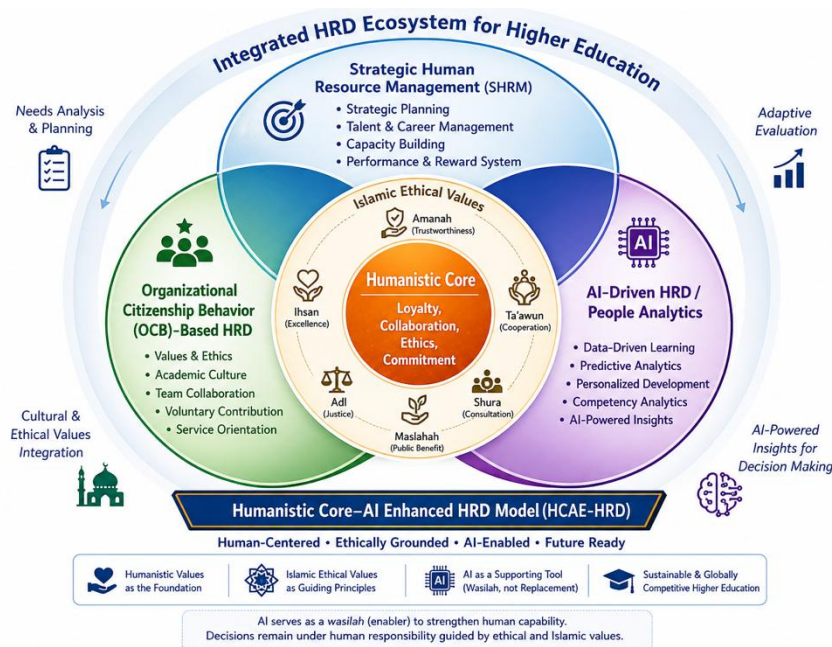


Figure 3: Humanistic Core–AI Enhanced Human Resource Development (HCAE-HRD) Model

Based on the figure above, the Humanistic Core–AI Enhanced Human Resource Development (HCAE-HRD) model represents an appropriate approach for developing human resources in higher education. The data indicate that future universities cannot rely solely on technology and institutional strategies. Instead, humanistic values must remain at the center of the system. In this model, the integration of Strategic Human Resource Management (SHRM) (Alfawaire & Atan, 2021; Ojokuku & Akanbi, 2015), Organizational Citizenship Behavior (OCB)–based HRD (Idrus et al., 2019; Singh et al., 2025), and AI-Driven HRD approaches (Erlangga & Magdalena, 2025; Saaïda, 2023) serves as a connecting framework. This integration encompasses institutional strategies, the strengthening of individual behavior, and the use of AI-based data analytics in a continuous and sustainable manner.

The findings above suggest that the emergence of the Humanistic Core–AI Enhanced Human Resource Development model results from the integration of three key perspectives. First, Strategic Human Resource Management (SHRM) (Boxall & Purcell, 2000; Delery & Roumpi, 2017) functions as the strategic planning and vision framework for higher education institutions. One of its advantages is that artificial intelligence can serve as a supporting tool in designing accurate and adaptive human resource development plans aligned with future institutional needs. Second, the Organizational Citizenship Behavior (OCB) model (Chin, 2015; Ocampo et al., 2018) provides a foundation for humanistic culture, collaboration, loyalty, and ethics as essential elements in preserving human values. Third, AI-Driven Human Resource Development and People Analytics (Maghsoudi et al., 2025; Mahade et al., 2025), strengthen digital transformation through personalization, adaptive evaluation, and predictive analysis. These elements reflect proactive anticipation of future higher education challenges while sustaining academic innovation.

From an Islamic educational perspective, the Strategic Human Resource Management (SHRM) component of the HCAE-HRD model can be further strengthened through the principle of amanah (trustworthiness) (Mariyono, 2024; Yuniar, 2024). Strategic planning in higher education is not merely directed toward achieving institutional performance indicators but also toward ensuring accountability, integrity, and responsibility in managing human resources (Chowdhury et al., 2024; Kumar Mishra & Aithal, 2023; Muhammad & Nugraheni, 2022). The concept of amanah encourages university leaders to formulate human resource policies that are transparent (Affan, 2025; Miftahussurur et al., 2025; Siswahyuningsih et al., 2025), fair, and oriented toward the long-term welfare of both individuals and institutions. Consequently, strategic human resource development becomes not only a managerial function but also an ethical responsibility that balances organizational excellence with moral accountability (Balogun & Zaghmout, 2024; Patel, 2024).

Likewise, the Organizational Citizenship Behavior (OCB) dimension aligns closely with Islamic ethical principles such as ihsan (excellence in conduct) and ta'awun (mutual cooperation). Behaviors including voluntary contribution, collaboration, loyalty, and commitment, which characterize OCB, reflect values that have long been emphasized in Islamic teachings (Andriana et al., 2025; Arifin, 2024; Budiyo et al., 2024; Cahyani et al., 2026; Chotijah et al., 2025; Guo et al., 2023). In this regard, the Humanistic Core proposed in the HCAE-HRD model may be interpreted not only as a universal humanistic foundation but also as a value-based framework enriched by Islamic ethics (Amin, 2024). Principles such as amanah, ihsan, adl (justice), and shura (consultative decision-making) reinforce organizational culture by encouraging ethical leadership (Junaidi, 2023; Rozaki & Izudin, 2025), mutual respect, teamwork, and collective responsibility within higher education institutions. Furthermore, the integration of artificial intelligence within the HCAE-HRD model is consistent with the Islamic view that technology functions as a wasilah (supporting means) rather than an ultimate objective (M. R. Z. Alam & Rahmawati, 2026; Mahfud & Wasilah, 2026). AI-based systems can significantly enhance competency mapping, workforce planning, predictive analytics, and evidence-based decision-making. Nevertheless, strategic decisions concerning academic governance and human resource development should remain under human responsibility and be guided by ethical values. Therefore, artificial intelligence should complement rather than replace human judgment (Ryberg, 2025; Xu, 2022), ensuring that technological advancement continues to support human dignity, institutional sustainability, and ethical governance in higher education (Muggleton & Chater, 2021; Roos et al., 2022).

The proposed human resource development management model offers an alternative solution in addressing the challenges of the digital and OpenAI era. Human resources are increasingly required to collaborate with technology through management processes integrated with AI (Barra Arias et al., 2024; Lin, 2024). In this context, artificial intelligence is not positioned as the primary subject but rather as a supporting tool to optimize higher education management in the technological era. This approach can reduce the persistence of conventional administrative management models still implemented in some institutions. Mialkovska et al., (2023) argue that contemporary universities must develop sustainable visions through technology-integrated management models. Similarly, Rajabov & Alimov, (2025) emphasize that digital management transformation should not eliminate the humanistic role of human resources, including loyalty, career advancement, job security, intellectual freedom, and comprehensive personal development (Matwangsaeng et al., 2020).

CONCLUSION

In summary, This study demonstrates that human resource development in higher education has evolved from conventional administrative practices toward strategic, human-centered, and technology-enabled approaches. The systematic literature review identified several dominant human resource development models, including Organizational Citizenship Behavior (OCB), Strategic Human Resource Management (SHRM), Autonomy-Governance Based HRD, Knowledge Transfer-Based HRD, Career Ecosystem-Based HRD, and the AI-based Risk and Consensus (RC) Model. Although these models offer important contributions to organizational sustainability, innovation, and institutional competitiveness, no single framework comprehensively integrates strategic management, organizational behavior, humanistic values, and artificial intelligence within a unified human resource development approach.

Based on these findings, this study proposes the Humanistic Core-AI Enhanced Human Resource Development (HCAE-HRD) model as its primary theoretical contribution. The model positions humanistic values as the core foundation while integrating Strategic Human Resource Management, Organizational Citizenship Behavior, and AI-Driven Human Resource Development to create an adaptive and sustainable human resource ecosystem. From an Islamic perspective, the Humanistic Core can be further enriched by ethical principles such as amanah (trustworthiness), ihsan (excellence), ta'awun (mutual cooperation), adl (justice), and shura (consultative decision-making). Likewise, artificial intelligence should be understood as a wasilah (supporting means) that enhances strategic decision-making without replacing human responsibility, ethical judgment, and institutional accountability. This perspective broadens the applicability of the HCAE-HRD model by integrating technological innovation with universal and Islamic ethical values.

Despite its theoretical contribution, this study is limited by its reliance on a systematic literature review and secondary sources. Therefore, future research is recommended to empirically validate the HCAE-HRD model in diverse higher education contexts through qualitative, quantitative, or mixed-method approaches. Further studies are also encouraged to investigate how humanistic values and Islamic ethical principles can be operationalized alongside artificial intelligence to strengthen leadership, organizational culture, and sustainable human resource development in both public and Islamic higher education institutions.

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