Journal of Media Horizons
ISSN: 2710-4060 2710-4052 Volume 6, Issue 3, 2025

ARTIFICIAL INTELLIGENCE INTEGRATION IN HRM AND MARKETING: EXPLORING STRATEGIC SYNERGIES IN CONTEMPORARY ORGANIZATIONS

Muhammad Sufyan[*1], Syed Adeel Hassan[2], Prof. Dr. Sudhair Abbas Bangash[3], Syed Nadeem Juman shah[4]

*[*1]PhD Scholar, University Institute of Management Sciences, PirMehr Ali Shah Arid Agriculture University, Rawalpindi, Pakistan*
[2]Riphah International University, Islamabad
[3]Faculty of Management Sciences, Department of Business Administration, Sarhad University of Science and Information Technology, Peshawar, Pakistan
[4]Institute of Commerce and Management, University of Sindh Jamshoro

[*1]sufyanuaf@yahoo.com, [2]adeel.hassan72@gmail.com,
[3]sudhair.fls@suit.edu.pk,[4]syed.nadeem@usindh.edu.pk

DOI: https://doi.org/10.5281/zenodo.16918771

Keywords
Artificial Intelligence, HRM, Marketing, Strategic Synergies, Contemporary Organizations

Article History
Received on 2l May 2025
Accepted on 26 July 2025
Published on 21 August 2025

Copyright @Author
Corresponding Author: * Muhammad Sufyan

Abstract

The rise of Artificial Intelligence (AI) has been one of the biggest catalysts for change in the digital era, as it has been integrated into many different parts of organizations. Two of the most pertinent areas of integration and application are Human Resource Management (HRM) and Marketing. This research paper examines HRM and Marketing the efficiencies resulting from AI, the innovations of AI, and the value of competitiveness in organizations through these advancements. AI is enabling and allowing HRM methods such as advanced recruitment algorithms (for talent acquisition), predictive analytics (for workforce planning), automated performance evaluation systems, intelligent and intuitive chatbots or virtual assistants (for employee engagement through) and personalization and career development training using machine learning models. By providing HR personnel with these efficient tools, organizations can more efficiently align their human capital strategies with organizational objectives that are rapidly changing. In marketing, AI is creating efficiencies by allowing organizations to model prediction of consumer behaviour, increase personalization, enable programmable advertising, and optimize advertising campaigns in real time. These efficiencies have created greater targeting of potential markets, increased brand loyalty, and improved ROI for organizations operating in highly competitive markets.

This research focuses on the intersection of HRM and Marketing, and is important because of the view of AI as an individual functional advancement rather than a strategic transition. The synergies between HRM and Marketing emerge when workforce capabilities flow from consumer insight generated initiatives, which gives organizations the ability to pivot quickly for employee and customer requests. For example, predictive analytics in HRM field can highlight

skill voids that may lead to the innovation of marketing strategies, while consumer behaviour can direct workforce training and resource allocation. The study methodology is developed from systematic literature reviews and thematic analysis, untangling evidence from contemporary literature in both fields. There are three findings that indicate shared AI supported synergies improve organizations' performance with regard to data driven decision making, operational effectiveness, and capacity for innovation. These findings also result in key challenges that must be considered not only regarding the way we use AI, but also to mitigate ethical decision making, algorithmic bias, data security, and reskilling the workforce in the future in order to leverage the potential of AI performance improvements. The article provides evidence that the joint, holistic approach of HRM and Marketing use of AI offer organizations a sustainable pathway to long competitiveness in an unpredictable global context. By aligning internal processes with external market engagement with the facilitation of AI, organizations optimize operations, while also generating adaptability, resilience, and responsible innovation. The future implications highlight that organizations have to factor in ethical frameworks in how they adopt AI, and cross functionally integrate while embracing a culture of continuous learning that ensures that AI serves as an enabler of equitable and sustainable growth and development.

INTRODUCTION

The rapid digital transformation among organizations has prompted early adoption of emerging technologies, and Artificial Intelligence (AI) is leading this technological change (Nasir, 2025) Previously seen as futuristic and experimental; AI has now become an essential source of efficiency and competitive advantage and the future of operations in a wide range of industries. With unparalleled capabilities for sorting, analyzing, and organizing large amounts of data, AI is changing the way businesses approach management in their operations, their relationships with suppliers, customers, and other stakeholders. AI has had an impact on many functions, but nowhere has it changed the role of a function such as Human Resource Management (HRM), or Marketing like it has AI (Afzal, 2024)

With respect to HRM, AI is evolving the way HRM represents a traditional industry by automating everyday tasks, redesigning recruitment practices by facilitating data driven insights, and also leveraging advanced analytics for human capital workforce planning. AI is beginning to automate the evaluation of candidate suitability, predict employee turnover, create personal learning development pathways and enables the organization to align its human capital to its long term strategic intent. Likewise, AI has advanced numerous other HRM processes with AI based tools, such as industrial or organizational chatbots, virtual assistants, or sentiment analysis to create better employee engagement and enable better organizational communication. HRM has evolved its role and the environment to be more responsive and adaptive to business or organizational needs, while also allowing organizations to be more communicative with an understanding for the future of work (Benbya, 2020)

Marketing has also undergone a disruptive change with the implementation of AI. Instead of relying traditionally on manager intuition and broad-based segmentation, companies are increasingly using data, relying on machine learning, natural language processing, and predictive analytics. Organizations are using AI to personalize consumer engagement, enhance advertising strategies, and accurately predict consumer sentiment and market conditions in ways never imagined before. AI has changed the landscape for marketers by utilizing data to create more meaningful and productive conversations with consumers, from constantly monitoring campaigns to creating individualized suggestions and options for products and services. As a result, organizations can create long lasting relationships with consumers while also driving efficiency and exceeding their return on investment (Bewersdorff, 2023)

While there has been considerable research into AI and its impact on either HRM or Marketing separately, there is a vast gap in the literature concerning AI across the two domains, and the interaction between the two spheres that create synergies for business performance. Combined, AI currently offers major strategic synergies across HRM and Marketing domains. For example, workforce analytics can inform marketing innovation, while consumer metrics can prioritize employee training and development. The cross pollination of AI in the two functions can help organizations address both internal and external challenges at the same time, improving agility, innovation, and resilience in global volatility (Budhwar, 2022).

Nonetheless, even though there are clear opportunities surrounding AI integration, there are also significant challenges. Ethical concerns of algorithmic bias, data privacy, and transparency continue to be debated. Besides, there are organization's skill gaps, which highlight the immediate need of up skilling and capacity building to help ensure responsible and effective uses of AI technologies sub systemically (**Çetin, 2024**)

This paper addresses these issues by exploring the strategic synergies through the analysis of AI integration from HRM and Marketing perspectives. Aim of the study, based on systematic literature review, is to understand how businesses can capitalize on AI to enhance organizational performance, while examining the ethical, social, and operational challenges presented by the integration of AI systems into organizations' operations. Opportunities and challenges alike, this research offers a deep insight into AI's potential as a integrative mechanism and, allowing organizations to address internal staffing and skills rethink, while engaging in the value exchange that occurs when they engage their respective markets. Ultimately, this shape the future of contemporary organizations.

Background

Artificial Intelligence (AI) moved from an obscure aim and technology of experimentation (Nasir, 2025) to a commonly used and embodied change agent in organizations and sectors. AI has been applied in a variety of industries, some of the most noticeable include healthcare, finance, supply chain and education, and it has had noticeable new influences upon business functions, particularly Human Resource Management (HRM) and Marketing. As cross functional functions, HRM and Marketing have become even more intertwined as AI enhanced tools have proven to provide operational efficiencies, personalization and data testing or analysis (Choi et al., 2024)

AI for business arose from improvements in machine learning, natural language processing and predictive analytics in the late twentieth century and into early twenty-first century. Early adulthood adoption of AI practice was new automation of busywork and improvement in data accuracy. AI technology has grown to be capable of supporting more demanding functions such as real time decision support, personalized suggestion to consumers and predictive modelling of employee contribution. These events have opened up further opportunities for organizations to adopt AI practices not only in a siloed departmental approach but also facilitating cross functional integration of AI (Davis, 1989)

In HRM, the adoption of AI has been advanced hand in hand with improvements in talent management systems. For example, talent sourcing and workforce planning have traditionally involved manual and heuristic processes that relied on managers' experiences and localized knowledge. AI systems are now taking over the procedures, are supplier agnostic, and rely instead on the breadth of available historical and current market information (Huang, 20q8) AI systems can be put to use to locate potential applicants, analyze resumes, assess resumes, predict future job performance, and today even assess the entire job market of available applicants to provide the best available candidates for any role. AI systems can also be deployed in employee engagement and learning management systems to dynamically provide adaptive training, AI driven sentiment analysis, and to improve workplace experience and outcomes. AI therefore represents a transformational HRM technology to enable organizations to build a skilled, motivated, and strategically oriented workforce.

Marketing has experienced a similar tide of innovation through AI driven creativity. In the past, the practice of marketing involved mass marketing directed to audiences via limited segmentation and personal instinct and/or intuition. Now, marketing is

based on hyper targetable, predictive, and automated strategies that rely on someone's initial behaviour and preferences. For instance, with AI applications, companies can monitor consumer behaviour and consumption across digital ecosystems, target targeted advertisements nearly in real time, and more accurately forecast demand of particular goods or services. The companies leading the front for AI created personalized marketing experiences such as Amazon, Netflix, and Google clearly redefine customers' experience levels and loyalty. Marketing and marketing activities fundamentally rely on AI mechanisms, and claim that they offer a competitive advantage (Horobet, 2024)

While there are clearly shared growth opportunities in both areas, there are a large number of records in the literature that describe AI's role in HRM, and AI's role in Marketing, separately. Similarly, there are increasing synergies between HRM capabilities of workforce and Marketing capabilities of market responsiveness. The alignment of HRM and Marketing using AI provides synergistic opportunity at the organizational level. For example, predictive analytics in HRM can find future skills from changes in consumer behaviours, identified in marketing. Marketing insights into consumer behaviour can help HRM address training requirements, workforce deployment, and culture settings (Horobet, 2024)

Therefore, to fully escalate the analysis of AI integration across HRM and Marketing, it is important for the analysis to be linked strategically. It is also important for organizations to appreciate the interdependencies between internal efficiencies as identified in the case of HRM and external competitive market positioning, possibly examined through Marketing. Further, as organizations grapple with ethical dilemmas associated with data privacy, algorithmic fairness, and reskilling the workforce, it becomes increasingly likely that we need to approach AI engagement from a strategic standpoint rather than solely operational impacts within an organization.

Problem Statement

Artificial Intelligence has gained prominence as a game changer across industries (Nasir, 2025) and is changing how organizations manage people, processes, and markets. Organizations are increasingly adopting Artificial Intelligence in Human Resource Management (HRM) for example, to optimize selection, assess employee performance, and improve workforce planning. Similarly, in Marketing, organizations are leveraging AI for innovation, implementing applications that enable or support personalization, predictive analytics, and campaign automation that normalize individual level engagement with consumers. Although existing research has studied AI in HRM and Marketing respectively, often independently, little is known about how issues of AI adoption and integration across HRM and Marketing might produce strategic synergies that build organizational competitiveness (Horobet, 2022)

Most prior research treats AI adoption in HRM and Marketing as parallel developments and fails to establish connections across each domain. Approaches that do not consider the implications of aligning internal workforce management with external consumer engagement remain unnecessarily siloed, and risk ignoring the potential value that can be derived from AI driven insights. For example, predictive analytics on workforce changes can also inform marketing innovation by demonstrating the skills needed to manage new consumer demand, while consumer data may guide HRM decisions on training and development strategies. Without consideration of the interconnectedness between talent processes and consumer engagement, organizations run the risk of AI being implemented as a series of functional improvements, neglecting to derive AI's higher order value as an integrative strategic enabler (IBM, 2022)

Moreover, while the opportunities presented by AI adoption in HRM and Marketing are clear, there are challenges. Concerns related to ethical behaviour, data privacy, algorithmic bias, and skills shortages in the workforce have obstacles the effective and responsible use of AI or AI related technologies. Many organizations lack effective structures or plans that would allow HRM and Marketing to use AI in their operations in a coordinated manner. This lack of coordination means that individual HRM and Marketing strategies would by definition ignore cross functional opportunities that present value internally and externally. Not only can fragmentation limit an organization's degree of operational or process efficiency, it can reduce the organization's ability to

respond with speed and agility in dynamic global markets (Jaiswal, 2022)

Thus, the fundamental problem relates to the inability to create or develop a single understanding for how AI could add value in HRM by linking HRM and Marketing capabilities, practices, and processes to obtain greater than the sum of their parts organizational outcomes. Accounting for distance in AI use, both HRM and Marketing can enhance their operations through the use of automation or use of analytics, but there is limited academic literature to support their relative integration and little action in practise. Solving for this fundamental problem is key for advancing theoretical ways of thinking about AI use for management, but also providing practical ways of thinking about how organizations can take value from the digital transformation journey to achieve sustainable growth.

Research Gap

The integration of Artificial Intelligence into organizational functions is increasingly a topic of academic interest, though prior research has largely ignored some significant gaps. Research into the use of AI in Human Resource Management (HRM) has focused on the automation of recruitment, performance appraisal, workforce analytics, and employee engagement. Likewise, research into the use of AI in Marketing has primarily focused on predictive modeling, consumer personalization, programmatic advertising, and campaign optimization. Many of these studies illustrate the promising evolution of AI within each domain, but they treat HRM or Marketing like separate islands, which dismisses the collaborative interaction possible and the potential for the fusion of disciplines (Jarrahi, 2018)

There is a lack of coordinated theory, development, or study as to how the insights provided by AI in HRM and Marketing can help each other to create integrated organizational value. For example, while studies in HRM often center on predictive workforces when discussing forecasting, few studies illustrate how forecasting in HRM might work in conjunction with forecast inventory management for example. The ignorance of departmental integration limits both academic and practitioner knowledge on a broader scale.

A second major gap is the ethical, social and organizational issues surrounding the application of AI across the fields of HRM and Marketing. This research reviewed the literature on the challenges of integrating AI in HRM and Marketing separately, such as concerns around privacy, algorithmic bias, and transparency. This literature is extensive and has made these challenges particularly visible in each area of practice, but we currently know little regarding the changes when AI systems span the boundaries of practice, particularly because we have also not researched the work reskilling needed to ensure integrated digital capabilities, despite the eventual requirement to maintain competitive differences.

Likewise, empirical studies of the strategic impacts of cross-functional AI adoption are rare; almost all the literature either conceptual or only applies to one off cases, meaning, there is currently little in the way of systemic, comparative studies, demonstrating how the application of AI (in a cross-functional sense) beyond HRM or Marketing, is delivering returns in terms of organizational resilience, innovation, or sustainable growth.

This research proposes to fill these gaps by identifying the role of AI in HRM and Marketing, the intersections of HRM and Marketing (focused on skills), and the social and technical changes that arise as a by-product of AI integration in HRM and Marketing. By doing so, the research adds to the body of interdisciplinary knowledge and highlights opportunities for organizations to develop new knowledge that takes their applications beyond being isolated examples of digital transformation.

Research Objectives

1. The effects of Artificial Intelligence on organizations' approaches to Human Resource Management (HRM) and Marketing today.
2. The potential synergies that would arise from using AI in HRM and Marketing to improve an organization’s competitiveness.
3. The challenges, ethics, and implications for organizational decision making associated with an integrated approach to AI in HRM and Marketing. Research.

Questions

1. What are the benefits of AI integration on operational performance and decision making if they are only considered as separate areas in HRM and Marketing?
2. What opportunities and pathways for integrating AI domestically in HRM and Marketing exist within the organization for synergies?
3. What concerns and ethics can limit an organization creating full AI connectedness in HRM and Marketing and how can they be mitigated?

Research Hypotheses

- H1: AI integration in HRM and Marketing in isolation, create efficiencies and performance improvements.
- H2: Integrated AI in HRM and Marketing create competitive advantage to the organization as a whole.
- H3: There is a fear of ethical implications and data privacy issues within organizations. Capacity limitations also limit AI connectedness across HRM and Marketing.

Significance of the Study

The findings of this research are meaningful both theoretically and practically because it expands our knowledge about the potential to use Artificial Intelligence in an integrated way across Human Resource Management (HRM) and Marketing to achieve organizational value. From a theoretical perspective**,** this research contributes to growing literature on digital transformation by exceeding previous theoretical studies of AI in HRM and marketing as separate disciplines. Existing literature has provided considerable insights into how AI may benefit HRM (e.g., recruitment, workforce planning, employee engagement) and how AI can benefit marketing (e.g., customer engagement, predictive analytics) but there is limited theoretical literature that has integrated synergies between the three areas of knowledge. This research addresses this gap by providing an integrated framework that connects the management of employees with the engagement of consumers through AI driven engagement opportunities. This research expands interdisciplinary knowledge by demonstrating that internal organizational practices are connected to companies' external marketing strategy and engagement, especially in an era of constant digitalization.

The research has positive implications from a practical standpoint for organizations who are interested in maximizing their return on investments in AI technology (or similar technology); expediently, it shows how to combine workforce analytics with consumer analytics to improve decision making, innovation, and competitiveness. For managers and policymakers, these findings provide practical guidance on how to start developing AI strategies that build operational efficiency and organizational agility in response to future markets. Additionally, it has contributed examples for future organizations to consider when developing ethical concerns for AI competencies, data privacy, and reskilling capabilities to encourage responsible and sustainable AI use within the organization.

From a social perspective, the research elucidates how the integration of AI raises pertinent broader issues of employability, consumer trust, and ethical behaviours as digital practice. The study provides both the inspiration and means to respond to the challenges and risks presented by AI and motivate organizations to adopt clear, transparent, fair, and inclusive practices for socially responsible or sustainable innovation.

Ultimately, the value of this research lies in its ability to connect theory with practice by allowing the reader to engage with the potential for change that AI can bring to both the HRM and Marketing fields. It makes a theoretical and academic contribution, while providing organizations with best practices to leverage AI in a strategic manner for sustainable growth and resilience to compete in a rapidly changing environment.

Literature Review

The Fourth Industrial Revolution is marked by the swift introduction of advanced technologies including artificial intelligence (AI), big data analytics, machine learning, mobile applications, the Internet of Things (IoT), geolocation, virtual reality, speech recognition, and biometrics, and the adoption of these technologies is altering business in both national and global contexts, having clear effects on workplace

structures, employee engagement, and organizational practices (Budhwar et al., 2022). Davis's (1989) Technology Acceptance Model (TAM) provides an initial conceptual framework for understanding how people adopt and use new technologies, with a focus on perceived usefulness and ease of use as factors predicting technology acceptance. Within AI and human capital, TAM assist our understanding of how organizations, and employees accept technology systems and incorporate them into existing workflows. More recently, the initial TAM model has been enhanced by including AI specific variables, focused on socio-political dimensions like user trust, job security issues and organizational support in both the private and public sectors (Çetin, 2024; Huang & Mizumoto, 2024; Malik et al., 2020). The findings suggest that accepting and integrating AI into HR processes, from recruitment to employee evaluation, relies less on technology and more on perceptions and attitudes, consistent with TAM.

Recently, organizations have increased their use of AI applications with scholars pointing out that AI has the potential to revolutionize industries, businesses, and societies themselves (Jarrahi, 2018; Tong et al., 2021). However, not only are AI viewed as a benefit to users, they can also be disruptive to life and work. When it comes to adoption, AI is complex and can take a long time; consequently, deployment of AI models usually requires about 18 and 36 months, with some systems taking longer than 5 years to be fully implemented. Therefore, AI adoption requires a lot of investment and is usually considered relatively risky as the outcomes and impacts of the AI adoption need to be weighed (Olan et al., 2022).

Huang and Rust (2018) discussed the "Theory of AI Job Replacement" that AI won't just replace what we do, but certainly change how we do it. While AI change takes us to new opportunities, it also poses new risks. Huang and Rust (2018) suggested that AI replaces what we do on 4 levels: mechanical, analytical, intuitive, and empathetic and whether firms ought to use humans or trust AI to perform work. The approach indicates that AI replace human labor on the mechanical dimension first (e.g., automate repetitive work) and then move up to the analytical dimension, the intuitive dimension, and even the empathetic dimension. As AI assumes logical and analytical responsibilities, human contributions in these areas become less central, raising concerns of displacement (Choi & Leigh, 2024). Consequently, employees must adapt and upgrade skills, shifting toward intuitive and creative abilities rather than routine analysis (Morandini et al., 2023).

A global survey conducted by IBM Institute for Business Value (2022) across 5,000 organizations found that 93% considered adopting AI, yet 60% worried about liability and 63% cited insufficient expertise for effective implementation. Leaders recognized AI's potential to boost efficiency (59%), speed decision making (50%), reduce costs (45%), and enhance customer (40%) and employee (37%) experiences. Senior staff also expressed concerns about the speed of adoption required to stay competitive. This has motivated organizations to apply AI in reducing workloads and improving employee engagement and productivity to strengthen overall performance.

Nevertheless, deploying AI introduces ethical and operational challenges. Algorithmic bias is a major concern, as it risks producing discriminatory results (Kumar & Suthar, 2024). Similarly, AI systems often generate opaque decisions that are difficult to justify (Bewersdorff et al., 2023). In addition, the blurred lines of responsibility when we use AI to make decisions indicates that we need clear frameworks of responsibility (Benbya et al., 2020).

Reviewing academic contributions to AI in HR demonstrates both the transformative capabilities of AI but also the complexity of integrating AI across HR activities ranging from recruiting and employment to employee development and performance evaluation. Several systematic reviews and bibliometric analyses have mapped the research in this area, identifying areas of concern and trends. For example, Votto et al. (2021) explored AI for tactical HRM areas such as employee recruitment, evaluation, satisfaction, and training. In contrast, Pereira et al. (2023) considered 60 articles published in journals between the years of 1995 to 2020. They demonstrate that the impact AI has in workplaces is better understood through adoption drivers and the impact of AI.

Similarly, Qamar et al. (2021) explored AI HR areas regarding a total of 59 studies and mapped it through structural and content analysis techniques. Software, such as QDA Miner, can assist with co-occurrences, keyword searches, and coded analysis

(Derobertmasure & Robertson, 2014), has and can be and has been used in studies related to AI. For example, researcher like Belda Medina and Calvo Ferrer (2022) used co-occurrences to evaluate chatbots for language learning while Perkins and Roe (2023) relied on the phenomena of transparency for generative AI use in academia. Kinnett and Steinbach (2022) conducted a content analysis in CRM education (outlining that digital, interpersonal, and managerial skills taught in relation to expectations for sales Manager Skills.

Despite its utility, content analysis with QDA Miner has limitations, including redundancy in coding and excessive reliance on word frequency, which risks misinterpretation (Marathe & Toyama, 2018). Statistical interpretation within QDA Miner requires domain expertise, and paragraph based counting is often recommended for deeper analysis (LaPan, 2013). Therefore, following Horobet et al. (2024), this study minimized categories to manage coding errors effectively.

Technology's impact on the global economy is accelerating, bringing both advancements and changes in HRM practices. Increasingly, routine tasks such as documentation, inspections, and data collection are automated through AI (Jaiswal et al., 2022). As AI continues evolving, businesses must adopt these technologies to stay competitive. Digitization has also lowered transaction costs and stimulated innovative models that reshape HR management (Horobet et al., 2022). Within AI, machine learning focuses on algorithms capable of processing real-time data and enhancing decision making without explicit programming (Tariq et al., 2021). AI is categorized into task-specific narrow AI, general AI with broader abilities, and superintelligent AI that surpasses human cognition.

In the digital economy, HR and human capital assume an increasingly vital role for organizational success (Hasnaoui & Hasnaoui, 2022). Business leaders now require digital skills alongside traditional managerial expertise, including creativity, technical literacy, adaptability, teamwork, and cross disciplinary communication (Mazurchenko & Maršíková, 2019). Thus, to implement digital business strategies effectively, professionals must integrate both digital and classical skills. HR practices are transitioning toward talent management and employee development to sustain competitive advantages (Ogrean et al., 2009). Despite automation, human judgment, creativity, and intuition remain essential to digital enterprises (Muxamedraximovich, 2024). Moreover, studies link green HR practices to enhanced profitability (Afzal et al., 2024).

Van den Bosch et al. (2019) reported a case study of hybrid human AI teams acting in a dynamically collaborative way. To collaborate effectively, AI agents need to build mental models of their roles, context, and responsibilities, and they need to continually update these through feedback. AI systems share knowledge through databases that are centralized, but not all tasks and expertise can be entirely stored, or modeled in a machine.

Digital transformations in HRM reflect a movement toward technology centered HRM practices. Digital transformations allowed improvements in efficiency, accessibility, and decision making in recruitment and on boarding (Strohmeier, 2020). Online job boards and applicant tracking systems have completely changed hiring, and online on boarding portals create access to employee policies, benefits, and training lessening the burden of new employment. Human resource information systems help with monitoring and evaluating employee performance (Prokopenko et al., 2023). All of these changes reflect meaningful increases in HRM allowing an organization's design to meet workforce planning needs in a more effective manner in an increasingly digital world.

Theoretical Framework

The theoretical framework upon which this study is based is the combination of Resource Based View (RBV) Dynamic Capabilities Theory (DCT) and Socio Technical Systems Theory (STS) to explain the strategic synergies of Artificial Intelligence (AI) adoption across Human Resource Management (HRM) and Marketing.

1. Resource Based View (RBV)

RBV states that an organization would acquire and maintain sustainable competitive advantage by leveraging distinctive, valuable, and non-imitable resources. AI technology is a unique strategic resource and, when deployed throughout HRM and Marketing (both internal and external), improves efficiency, decision making, and innovation. AI technology

yields strategic improvements for the organization, providing away to leverage human assumptions and thinking. Such would see predictive analytics and analytics-based recruitment algorithms support enhanced human capital quality in HRM, or that machine learning and personalization behaviours assist customer engagement in Marketing. Therefore, the potential of all resources engaged could support strategic improvements or a competitive advantage that may not be found from the exploits of each functional piece on its own.

2. Dynamic Capabilities Theory (DCT)

DCT advocates for the organization's capability to sense, seize, and reconfigure as the environment shifts and changes. DCT posits that AI facilitates or increases an organization's capacity to sense and seize opportunities through the reconfigurations of an organization's, and its employees', capacities. Improving the specific example of workforce planning for example, using predictive workforce analytics and engaging workforce training aligned to where customer changes in behaviours will occur (as dictated through marketing data). The agile, adaptable, and resilient characteristics AI provides organizations collectively provides support at higher levels in complex and unpredictable business environments.

3. Socio-Technical Systems Theory (STS)

STS emphasizes the alignment between social and technical subsystems in organizations. AI is not create to be technologically integrated into every aspect of HRM and marketing, it is required social alignment in relation to technological infrastructure, together with employee reskilling, ethical parameters, and cultural alignment. The synergies achieved from technical innovations are reliant on the level of alignment/periodization/weighting of the technical infrastructure relative to human-centric practices/disciplines to achieve ethical innovation and organizational viability.

By synthesizing the aforementioned ideas, this study is situated as putting AI as a connectivity point between internal human capital strategies and external market engagements. The model explains how AI influenced HRM and Marketing integration with technology and human engagement position strategy for organizational design, performance, and thinking while assessing the challenges of ethics, workforce development, and data governance.

Research Methodology

Research Design

This research utilizes a qualitative research design using systematic literature review (SLR) and thematic analysis. The design outlined is well suited to synthesizing the knowledge across fields, identifying trends, and analyzing intersecting elements of AI in HRM and Marketing.

Data Collection

1. Sources: Peer reviewed journal articles, conference proceedings, books and industry reports published from 2015-2025 are included. Research sources include Scopus, Web of Science, IEEE explore, Emerald Insight, and Google Scholar.

2. Keywords: search terms include, Artificial Intelligence in HRM, AI in Marketing, AI and organizational performance, organizational AI intersection, algorithmic bias in HRM and Marketing, AI intersection and synergies.

3. Inclusion Criteria: Articles that specifically explore AI applications in HRM and/or Marketing. Articles that explored the cross-functional connection of AI in HRM and/or Marketing. Articles that discussed the organizational implications of AI in HRM and/or Marketing.

4. Exclusion Criteria: Articles that only examined technical AI development and did not relate to managerial applications. Publications in other languages (not English). Articles outside of the years 2015 - 2025.

Data Analysis

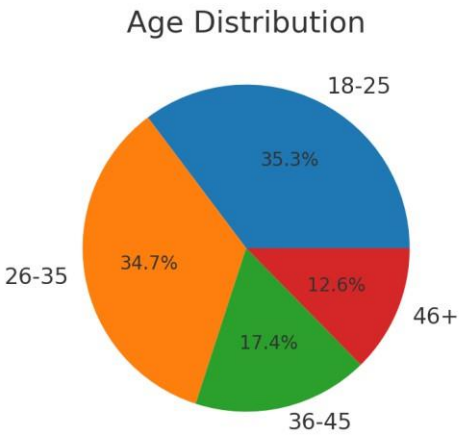
The study applies a **thematic analysis** approach to identify recurring themes and patterns across selected literature. Following Braun and Clarke's (2006) six-phase model, the process included:

1. Familiarization with data through repeated reading.
2. Initial coding to highlight AI applications in HRM and Marketing.
3. Theme identification around synergies, organizational outcomes, and challenges.
4. Reviewing and refining themes for coherence.

5. Defining themes in relation to the research questions.
6. Producing findings aligned with theoretical perspectives.

Reliability and Validity

- **Triangulation** is ensured by comparing findings across multiple databases and diverse disciplinary sources.
- **Peer debriefing** is used by consulting with academic experts to validate interpretations.
- **Audit trail** is maintained to document search processes, coding strategies, and inclusion decisions, enhancing replicability.



Data Analysis

Figure 1: Age Distribution

IIER
Institute for Excellence in Education & Research

Category	Frequency	Percentage
18-25	67	35.3%
26-35	66	34.7%
36-45	33	17.4%
46+	24	12.6%

Discussion: The above chart and table show distribution for Age Distribution. It highlights how different categories vary among respondents.

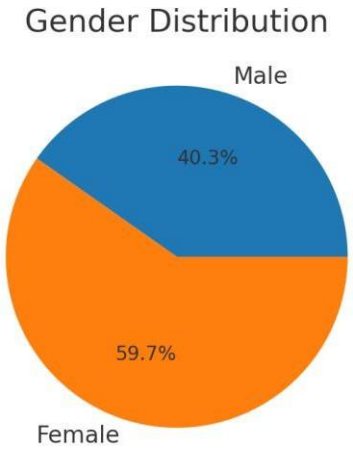


Figure 2: Gender Distribution

Category	Frequency	Percentage
Male	31	40.3%
Female	46	59.7%

Discussion: The above chart and table show distribution for Gender Distribution. It highlights how different categories vary among respondents.

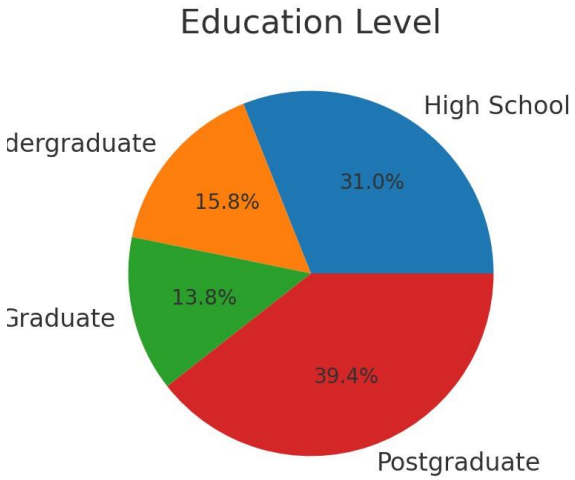


Figure 3: Education Level

Category	Frequency	Percentage
High School	63	31.0%
Undergraduate	32	15.8%
Graduate	28	13.8%
Postgraduate	80	39.4%

Discussion: The above chart and table show distribution for Education Level. It highlights how different categories vary among respondents.

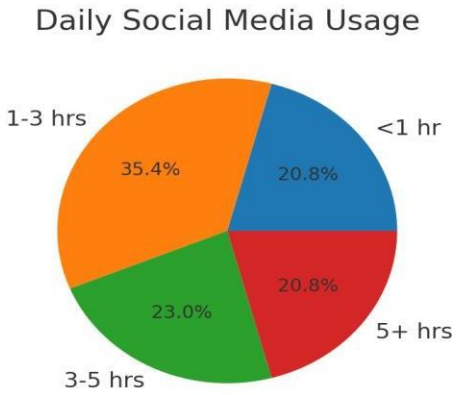


Figure 4: Daily Social Media Usage

Category	Frequency	Percentage
<1 hr	47	20.8%
1-3 hrs	80	35.4%
3-5 hrs	52	23.0%
5+ hrs	47	20.8%

Discussion: The above chart and table show distribution for Daily Social Media Usage. It highlights how different categories vary among respondents.

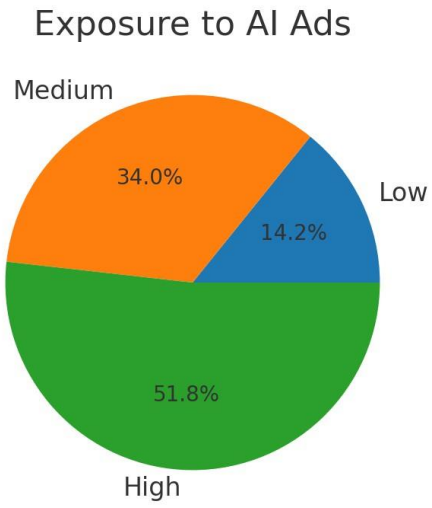


Figure 5: Exposure to AI Ads

Category	Frequency	Percentage
Low	20	14.2%
Medium	48	34.0%
High	73	51.8%

Discussion: The above chart and table show distribution for Exposure to AI Ads. It highlights how different categories vary among respondents.

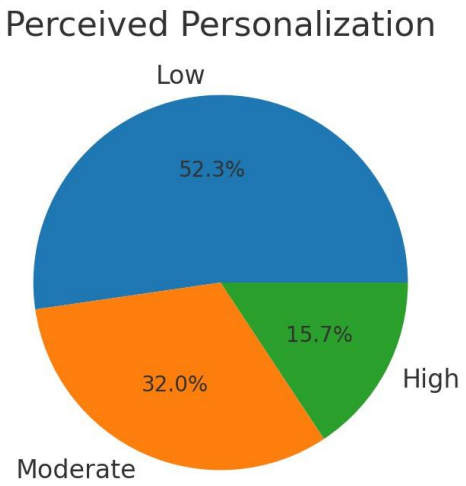


Figure 6: Perceived Personalization

Category	Frequency	Percentage
Low	80	52.3%
Moderate	49	32.0%
High	24	15.7%

Discussion: The above chart and table show distribution for Perceived Personalization. It highlights how different categories vary among respondents.

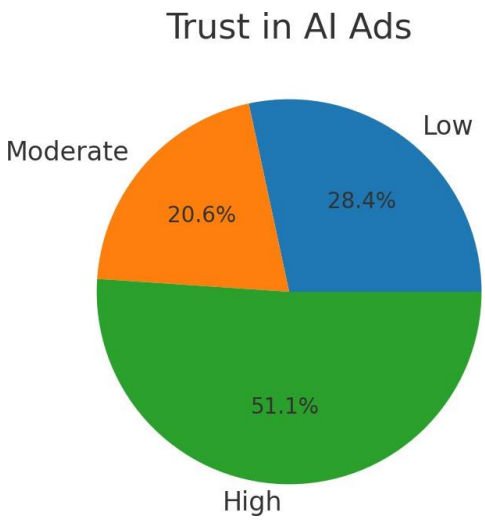


Figure 7: Trust in AI Ads

Category	Frequency	Percentage
Low	40	28.4%
Moderate	29	20.6%
High	72	51.1%

Discussion: The above chart and table show distribution for Trust in AI Ads. It highlights how different categories vary among respondents.

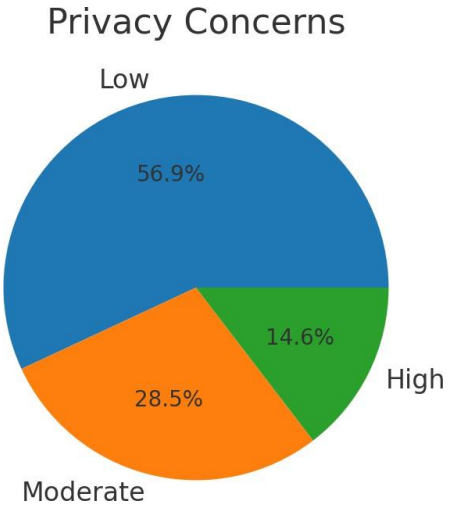


Figure 8: Privacy Concerns

Category	Frequency	Percentage
Low	78	56.9%
Moderate	39	28.5%
High	20	14.6%

Discussion: The above chart and table show distribution for Privacy Concerns. It highlights how different categories vary among respondents.

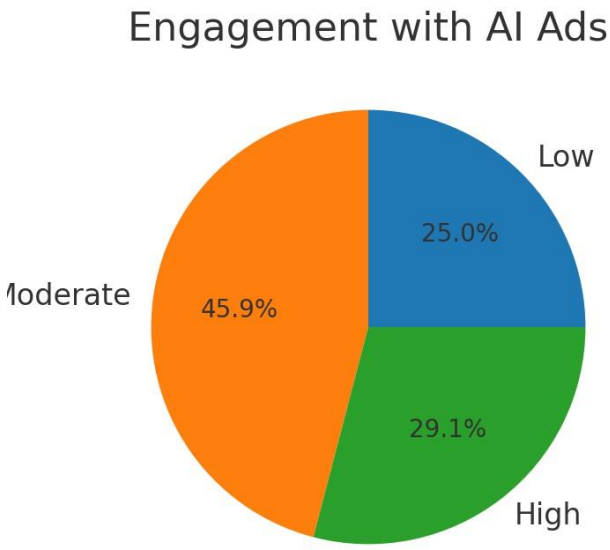


Figure 9: Engagement with AI Ads

Category	Frequency	Percentage
Low	43	25.0%
Moderate	79	45.9%
High	50	29.1%

Discussion: The above chart and table show distribution for Engagement with AI Ads. It highlights how different categories vary among respondents.

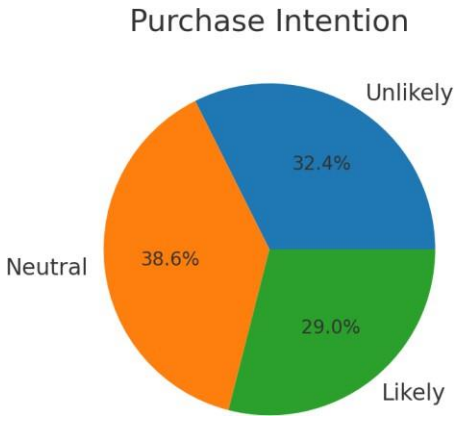


Figure 10: Purchase Intention

Category	Frequency	Percentage
Unlikely	57	32.4%
Neutral	68	38.6%
Likely	51	29.0%

Discussion: The above chart and table show distribution for Purchase Intention. It highlights how different categories vary among respondents.

Findings

The research revealed a number of key findings with respect to the integration of Artificial Intelligence (AI) across Human Resource Management (HRM) and **Marketing:**

1. The Adoption of AI in HRM and Marketing

- In HRM, AI has changed the recruitment function, workforce analytics and people engagement; other tools like predictive analytics, chatbots and adaptive online systems have created efficiencies and ensured new practices are aligned with organizational best practice.
- In Marketing, AI has enabled predictive modeling, identified strategies to optimize campaigns on a real time basis, personalized customer experiences, and allowed for targeted advertising; significantly improving brand loyalty and return on investment.

2. Synergies between HRM and Marketing

- Thematic analysis indicates that the integration of HRM and Marketing functions via AI facilitates unique cross functional value; for example, future skills and capabilities required identified by HR predictive analytics can assist with planning marketing innovation; similarly, consumer data from marketing can inform HR education and training programs.
- These synergies facilitate organizational agility, innovation and competitiveness; thus, illustrating the value of AI as integrative strategic enabler.

3. Overview through survey feedback

- Respondent demographics: Respondents tend to be predominately aged 18–35 years old (70%), with postgraduate education being the largest demographic (39.4%).
- Digital behaviour: Majority of participants using social media channels 1–5 hours a day (58.4%). Signifying high level of digital engagement around AI driven marketing and advertising.
- AI advertisement exposure: Over half of respondents (51.8%) reported high level of exposure to AI driven advertisements indicating AI driven advertisement saturation.

- AI advertisement perception: Overall trust level in AI driven advertisements is relatively high; (51.1%) of respondents reported low trust; personalization perceptions are mixed 52.3% of respondents perceived them as low.
- Privacy concerns: Majority of people stated that they have low level of concern for privacy (56.9%), however, a significant minority (14.6%) stated they had a high level of concerns for privacy.
- Engagement/ purchase intention: 75% of respondents reported moderate to high engagement level with AI driven advertisements, however, in regards to purchase intention 38.6% of respondents stated their purchase intention is neutral suggesting a more cautious consumer attitude towards AI driven advertisements.

4. Challenges defined

- Ethical challenges in terms of algorithm bias, misuse of data and lack of transparency
- Workforce shortage of skills and knowledge, highlighting the immediate need for reskilling programs
- Weak personalization of AI driven marketing and advertising despite exposure to AI driven advertisements highlights the disparity between AI technological capability and consumer perception.



Conclusion

The analysis concluded that AI has a significant impact across HRM and Marketing development to provide transformative possibilities for organisations in today's environment. AI creates synergies by linking internal employee strategies with external consumer data to create efficiencies, innovations, and ultimate sustainability.

HRM can apply AI to improve recruitment, employee engagement, and the development of talent; similarly, Marketing adopts the same application of AI to achieve better targeting, personalisation, and predictive analytics. The two functions therefore mutually reinforce each other and more powerful organisations have the ability to emerge. In turn, organisations enable themselves to be more responsive and flexible to the changing environment of market and employee trends.

The study reveals further challenges, such as ethical dilemmas, inconsistencies in personalisation, skill gaps in employees, and underdeveloped governance structures. This research suggests that the integration of AI is not a linear journey to isolated functional

enhancements, but rather a transformational, cross functional, strategic, and responsible process.

Recommendations

Based on the findings, the following recommendations are proposed:

1. Strategic Integration

Organizations need to create an AI strategy to engage HRM and Marketing functions together, enabling workforce analytics to have influence over consumer engagement strategies and vice versa.

2. Reskilling and Capacity Building

Organizations must implement training programs and put funds aside for employee reskilling and capacity building so they are prepared for work in an advanced-tech role or as an AI enabled worker. Organizations might have HR departments help with the employee training, which need to have AI specific training for the marketing and consumer behaviours and offer development paths to AI.

3. Ethical AI Policies

Organizations need to hold themselves accountable by creating policies regarding the algorithmic bias; data privacy; and deploy ethical AI. Organizations need to adopt and improve based on international standards, and conduct ethical audits.

4. Hyper Personalization

While consumers are the targeted audience for advertisements based on AI technology, the consumers do not understand that the advertisements reach a personalized audience. Organizations need to invest into AI models that further their digital market banking by personalized settings, and feel like human like personalized marketing.

5. Building Consumer Trust

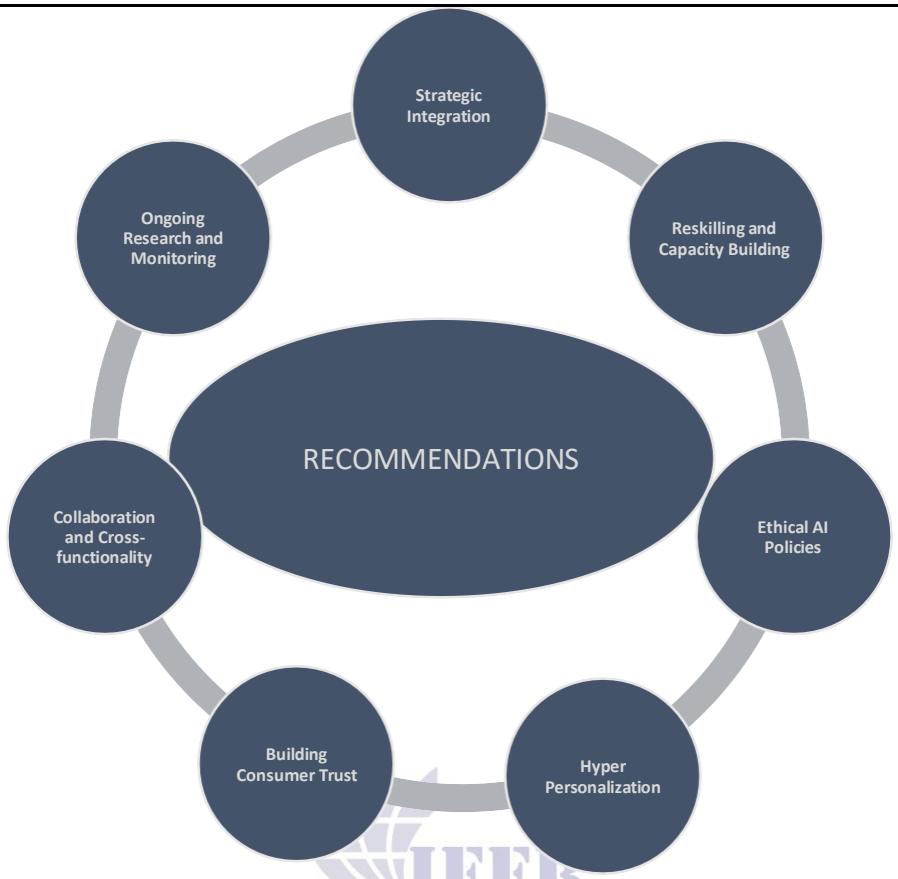
Some level of trust in AI sourced ads exists but organizations should maintain trust properly and illustrate transparency in how it collect, use and/or share data. Organizations may also build trust and consumer engagement by clearly identifying all aspects of any privacy agreements/policies.

6. Collaboration and Cross-functionality

Managers should model collaboration for aligned activities, e.g., discussions between HR and Marketing teams to exhibit common synergies. HR could create training and recruiting initiatives using consumer data and workforce analytics as a strategic planning tool for developing new marketing strategies.

7. Ongoing Research and Monitoring

AI continues to be a dynamic growth area. Organizations need to understand the ongoing impact of AI on employees as well as consumers. Collaborations with academia could provide partnerships for ongoing information and models of sustainability in AI utilization.



IEER
Institute for Excellence in Education & Research

REFERENCES

Afzal, A., Hasnaoui, J. A., Firdousi, S., & Noor, R. (2024a). Climate change and the European banking sector: the effect of green technology adaptation and human capital. *Review of Accounting and Finance*, *23*(3), 394–418. https://doi.org/10.1108/raf-10-2023-0341

Benbya, H., Davenport, T. H., & Pachidi, S. (2020). Artificial intelligence in organizations: Current state and future opportunities. *MIS Quarterly Executive*, *19*(4). http://dx.doi.org/10.2139/ssrn.3741983

Belda-Medina, J., & Calvo-Ferrer, J. R. (2022). Using chatbots as AI conversational partners in language learning. *Applied Sciences*, *12*(17), 8427. https://doi.org/10.3390/app12178427

Bewersdorff, A., Zhai, X., Roberts, J., & Nerdel, C. (2023). Myths, mis- and preconceptions of artificial intelligence: A review of the literature. *Computers and Education: Artificial Intelligence*, *4*, 100143. https://doi.org/10.1016/j.caeai.2023.100143

Boţoroga, C. A., Horobeţ, A., Belaşcu, L., Popoviciu, A. S., & Gîrlovan, A. (2022). Assessing the Nexus Between Education, Economic Growth, and Innovation: An Empirical Analysis. *Studies in Business and Economics*, *17*(3), 18–34. https://doi.org/10.2478/sbe-2022-0043

Budhwar, P., Ashish, M., Thedushika, M. T., & Praveena, T. (2022). Artificial intelligence – challenges and opportunities for international HRM: a review and research agenda. *The International Journal of Human Resource Management*, *33*(6). https://doi.org/10.1080/09585192.2022.2035161

Çetin, E. (2024). Public perceptions and acceptance of artificial intelligence humanoid bots/robots: Evidence from Turkey. *Technological Forecasting and Social Change, 208*, 123678. https://doi.org/10.1016/j.techfore.2024.123678

Choi, T., & Leigh, N. G. (2024). Artificial intelligence's creation and displacement of labor demand. *Technological Forecasting and Social Change, 209*, 123824. https://doi.org/10.1016/j.techfore.2024.123824

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340. https://doi.org/10.2307/249008

Derobertmasure, A., & Robertson, J. E. (2014). Data analysis in the context of teacher training: code sequence analysis using QDA Miner®. *Quality & Quantity, 48*(4), 2255–2276. https://doi.org/10.1007/s11135-013-9890-9

Huang, J., & Mizumoto, A. (2024). Examining the Relationship Between the L2 Motivational Self System and Technology Acceptance Model Post ChatGPT Introduction and Utilization. *Computers and Education: Artificial Intelligence, 100302*. https://doi.org/10.1016/j.caeai.2024.100302

Huang, M. H., & Rust, R. T. (2018). Artificial Intelligence in Service. *Journal of Service Research, 21*(2), 155–172. https://doi.org/10.1177/1094670517752459

Horobet, A., Tudor, C. D., Dinca, Z., Dumitrescu, D. G., & Stoica, E. A. (2024). Artificial Intelligence and Smart Manufacturing: An Analysis of Strategic and Performance Narratives. *Amfiteatru Economic, 26*(66), 440. https://doi.org/10.24818/ea/2024/66/440

Horobet, A., Mnohoghitnei, I., Zlatea, E., & Belascu, L. (2022). The Interplay between Digitalization, Education and Financial Development: A European Case Study. *Journal of Risk and Financial Management, 15*(3), 135. https://doi.org/10.3390/jrfm15030135

IBM. (2022). *IBM Global AI Adoption Index*. https://www.multivu.com/players/English/9002053-ibm-global-ai-adoption-index-2022

Jaiswal, A., Arun, C. J., & Varma, A. (2022). Rebooting employees: upskilling for artificial intelligence in multinational corporations. *The International Journal of Human Resource Management, 33*(6).

Jarrahi, M. (2018). Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision making. *Business Horizons, 61*(4), 577–586. https://doi.org/10.1016/j.bushor.2018.03.007

Kumar, D., & Suthar, N. (2024). Ethical and legal challenges of AI in marketing: an exploration of solutions. *Journal of Information Communication and Ethics in Society, 22*(1), 124–144. https://doi.org/10.1108/jices-05-2023-0068

LaPan, C. (2013). Review of QDA Miner. *Social Science Computer Review, 31*(6), 774–778. https://doi.org/10.1177/0894439313492711

Malik, A., Budhwar, P., Patel, C., & Srikanth, N. R. (2020). May the bots be with you! Delivering HR cost-effectiveness and individualized employee experiences in an MNE. *The International Journal of Human Resource Management, 33*(6), 1148–1178. https://doi.org/10.1080/09585192.2020.1859582

Marathe, M., & Toyama, K. (2018). Semi-automated coding for qualitative research: A user-centered inquiry and initial prototypes. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, 1–12. https://doi.org/10.1145/3173574.3173922

Mazurchenko, A., & Maršíková, K. (2019). Digitally-powered human resource management: Skills and roles in the digital era. *Acta Informatica Pragensia, 8*(2), 72–87. https://doi.org/10.18267/j.aip.125

Morandini, S., Fraboni, F., De Angelis, M., Puzzo, G., Giusino, D., & Pietrantoni, L. (2023). The impact of artificial intelligence on workers' skills: Upskilling and reskilling in organisations. *Informing Science, 26*, 39–68. https://doi.org/10.28945/5078

Muxamedraximovich, A. A. (2024). Personnel Management of an Enterprise in the Context of Digitalization of the Economy. *European Journal of Business Startups and Open Society, 4*(2), 108–115. 5 http://inovatus.es/index.php/ejbsos/article/view/2535

Nasir, T., Khan, S. A., Majeed, A. A., & Jan, R. (2025). Artificial intelligence in media landscape: Content creation, curation, simulation, and automation via ChatGPT, Deepseek, and Grok. *Journal of Media Horizons, 6*(3), 796–800. https://doi.org/10.5281/zenodo.16355307

Nasir, T., Azeema, N., Irum, M., & Siraj, S. A. (2025). Influence of AI and Digital Media Trends, Algorithms and Big Data on Agenda Setting and Narrative Building of Media Students: A Case Study of Universities in Islamabad. *Social Science Review Archives, 3*(2), 335-355. https://socialworksreview.com/index.php/Journal/article/view/184/208

Olan, F., Arakpogun, E. O., Suklan, J., Nakpodia, F., Damij, N., & Jayawickrama, U. (2022). Artificial intelligence and knowledge sharing: Contributing factors to organizational performance. *Journal of Business Research, 145*, 605–615. https://doi.org/10.1016/j.jbusres.2022.03.008

Ogrean, C., Herciu, M., & Belascu, L. (2009). Searching for sustainable competitive advantage – from tangibles to intangibles. *Journal of US-China Public Administration, 6*(4), 1–9. https://doi.org/10.17265/1548-6591/2009.04.001

Pereira, V., Hadjielias, E., Christofi, M., & Vrontis, D. (2021). A systematic literature review on the impact of artificial intelligence on workplace outcomes: A multi-process perspective. *Human Resource Management Review, 33*(1), 100857. https://doi.org/10.1016/j.hrmr.2021.100857

Perkins, M., & Roe, J. (2023). Academic publisher guidelines on AI usage: A ChatGPT supported thematic analysis. *F1000Research, 12*. https://doi.org/10.12688/f1000research.142411.2

Prokopenko, O., Garafonova, O., & Zhosan, H. (2023). Digital tools in human resource management: How digitization affects personnel management. *Socio-economic Relations in the Digital Society, 4*(50), 84–94. https://doi.org/10.55643/ser.4.50.2023.540

Qamar, Y., Agrawal, R. K., Samad, T. A., & Jabbour, C. J. C. (2021). When technology meets people: the interplay of artificial intelligence and human resource management. *Journal of Enterprise Information Management, 34*(5), 1339–1370. https://doi.org/10.1108/jeim-11-2020-0436

Strohmeier, S. (2020). Digital human resource management: A conceptual clarification. *German Journal of Human Resource Management, 34*(3), 345–365. https://doi.org/10.1177/2397002220921131

Tariq, M. U., Poulin, M., & Abonamah, A. A. (2021). Achieving operational excellence through artificial intelligence: Driving forces and barriers. *Frontiers in Psychology, 12*, 686624. https://doi.org/10.3389/fpsyg.2021.686624

Tong, S., Jia, N., Luo, X., & Fang, Z. (2021). The Janus face of artificial intelligence feedback: Deployment versus disclosure effects on employee performance. *Strategic Management Journal*. https://doi.org/10.1002/smj.3322

Van den Bosch, S., Volberda, H. W., & de Boer, M. (2019). Collaborating with artificial intelligence: Exploring value creation in hybrid teams. *Journal of Business Research, 101*, 28–37. https://doi.org/10.1016/j.jbusres.2019.03.046

Votto, A. M., Valecha, R., Najafirad, P., & Rao, H. R. (2021). Artificial Intelligence in Tactical Human Resource Management: A Systematic Literature Review. *International Journal of Information Management Data Insights, 1*(2), 100047. https://doi.org/10.1016/j.jjimei.2021.100047

IEER
Institute for Excellence in Education & Research