

SCIENCE FOR A SMARTER WORKPLACE



How to Survive the AI Revolution in HR: Culture Change and Immediate Action

Sara Gutierrez and Richard N. Landers

A White Paper prepared by the Visibility Committee of the Society for Industrial and Organizational Psychology. 6635 W. Central Ave. #105, Toledo, OH 43617

Copyright 2024 Society for Industrial and Organizational Psychology, Inc.

Table of Contents

Authors	1
Introduction	2
How HR Responds to the Rapid Pace of Change in AI	3
Use of Al in HR Today	5
Adapting Through AI Evolution	7
Final Thoughts	. 11
References	. 12



Authors



Sara Gutierrez

Sara Gutierrez is the chief science officer at SHL. In this role, she leads a talented group of research and data scientists in the design and development of SHL's most innovative talent measurement solutions, including traditional psychometric as well as AI-based assessments. Her teams share the goal of creating solutions that provide interactive and engaging experiences that more accurately reflect real-world business scenarios. Most recently, Sara has focused her

efforts on the intersection between testing and technology, and the opportunities our growing technological capabilities provide toward driving innovation into assessment design and measurement. She has conducted and published a wide range of industry-specific research to advance the science of assessment. Sara holds a PhD in Assessment and Measurement from James Madison University and an MA in Industrial/Organizational Psychology from George Mason University.



Richard N. Landers

University of Minnesota/Landers Workforce Science LLC

Richard N. Landers, PhD, is the John P. Campbell Distinguished Professor of Industrial-Organizational Psychology at the University of Minnesota and principal investigator of TNTLAB: Testing New Technologies in Learning, Assessment and Behavior. His research examines innovative technologies including games, gamification, artificial intelligence, and virtual reality used in psychometric assessment, employee selection, adult learning, and research methods. He is a Fellow of

the Society for Industrial and Organizational Psychology, American Psychological Association, and Association for Psychological Science. His work appears primarily in psychology and interdisciplinary human–computer interaction journals. He is author of three textbooks on statistics and research methods and has developed two edited scholarly volumes on technology and employee behavior. He is featured frequently in the popular press, such as *Forbes, Business Insider,* and *Popular Science* and regularly consults as president of Landers Workforce Science LLC (https://landers.tech) by providing recommendations on or auditing of talent management systems incorporating artificial intelligence.

The authors contributed equally to this whitepaper.





Introduction

In the ever-evolving landscape of human resources (HR), the adoption of artificial intelligence (AI) has become a cornerstone for organizational advancement. With a staggering 81% of HR leaders exploring or implementing AI solutions to enhance process efficiency or create new opportunities, the urgency for digital transformation within HR departments is more palpable than ever (Gartner, n.d.). This trend is not a fleeting one; 76% of HR leaders believe that failing to adopt and implement AI solutions within the next 12–24 months could significantly hinder organizational success, positioning them behind their more technologically agile counterparts (Gartner, n.d.). Furthermore, the commitment to harnessing AI in HR is underscored by financial investments, with 89% of HR leaders planning to increase their HR technology budgets, marking it as the top investment area for the third consecutive year, according to Drake Star's 2024 HR Tech Report. This collective movement toward AI-driven HR practices highlights a critical juncture for professionals in the field, signaling a shift toward more efficient, insightful, and responsive HR management strategies that promise to redefine the workplace.



Al, in this context, encompasses a range of technologies that enable machines to mimic human cognitive functions such as learning, problem solving, and decision making.

The integration of AI in HR signifies a paradigm shift in how organizations manage and engage with their workforce. AI, in this context, encompasses a range of technologies that enable machines to mimic human cognitive functions such as learning, problem solving, and decision making. These capabilities are harnessed in HR through applications like predictive analytics in talent acquisition, personalized learning and development platforms, and automated employee feedback systems. Industrial-organizational (I-O) psychologists have been using AI to improve HR, such as through computer-based statistical modeling for decision making, for decades. But over the last few years, both the capabilities and acceptance of AI have dramatically increased. What was once considered HR science fiction, such as a shift from human handling of employee inquiries to the use of automated chatbots, now appears to many not only feasible but inevitable.

The growing influence of AI in HR is driven by a convergence of factors, both internal and external to organizations. Internally, there is an increasing pressure on HR departments to innovate strategically. HR professionals are now frequently tasked with finding novel ways to attract, retain, and develop talent. AI offers a suite of tools that can transform these challenges into opportunities, enabling HR to become more proactive, data driven, and personalized in its approach. Yet this shift will likely require significant changes, both in terms of HR personnel competencies and technical infrastructure, for success.

Externally, market dynamics play a pivotal role in accelerating the adoption of AI in HR. HR technology companies are at the forefront, developing and offering AI-powered solutions that promise to revolutionize various HR functions. These companies are not only responding to the needs of the HR community but are also actively shaping expectations by creating new uses for AI that are pitched as solving complex HR challenges. This necessitates HR effectively evaluating the validity of often-surprising claims, which itself requires capabilities well outside the traditional skill set of HR personnel.

Adoption is further facilitated by a significant shift in HR practices over the last few decades, characterized by an increased focus on data collection. The digital transformation of HR processes has resulted in a wealth of data on employee performance, engagement, and behavior. Such data enable more sophisticated analyses and insights using AI that were previously unattainable, and there is often a feeling that existing data are not being used to their full potential. With appropriate technological and



interpersonal support, this data-driven foundation enables HR departments to transition from a reliance on intuition and experience to position in which decisions are principally informed by data and analytics. In this way, the increasing embracing of AI reflects only the most recent turn within this longer term shift in values and priorities toward evidence-based decision making.

How HR Responds to the Rapid Pace of Change in AI

The fertile ground prepared by data-centric HR practices and market innovations sets the stage for the current, rapid evolution of AI capabilities in HR, bringing both exciting opportunities and new challenges. Over the past few years, the capabilities of AI in HR have expanded at an unprecedented rate, reshaping our understanding of what is possible. From predictive analytics that forecast employee turnover to AI-driven personalized learning platforms, the boundaries of AI applications in HR are continually being pushed. This constant evolution is not just technological; it encompasses shifts in organizational culture, employee expectations, and the strategic role of HR itself. As AI becomes more integrated into HR functions, it transforms them from transactional processes used to solve specific problems into longer term strategic initiatives intended to drive organizational success and employee well-being.

The potential benefits of AI in HR are substantial, suggesting transformative impacts on efficiency and capabilities. Most obviously, AI-driven tools can automate routine tasks, from payroll processing to scheduling, freeing up HR professionals to focus on more strategic initiatives. But beyond mere efficiency, AI has the potential to enhance HR capabilities in profound ways. For instance, AI can provide deeper insights into employee engagement and performance, enable personalized learning and development opportunities, and improve talent acquisition strategies through predictive analytics (Guenole & Feinzig, 2018). These enhanced capabilities can lead to more informed decision making, a better understanding of employee needs, and, ultimately, a more dynamic and responsive HR function.

As HR professionals continue to lean into increased use of AI in HR, it is essential to weigh the many promises of vendors and technology professionals against the various risks, trade offs, and drawbacks resulting from increased integration. We present eight major concerns.

Concerns

- 1. More complex relationships are needed with new organizational partners.
- 2. Data governance is more complex and also generally more ambiguous.
- 3. Al solutions customized to meet organizational needs can be very costly.
- 4. The state-of-the-art may become outdated very quickly.
- 5. Staying up to date with current AI is challenging.
- 6. There is limited trustworthy research on the validity of current AI solutions.
- 7. The behavior of many AI systems cannot be exhaustively vetted in advance.
- 8. The legal landscape surrounding AI is constantly changing.

Concern 1: More Complex Relationships Are Needed With New Organizational Partners

The nature of outsourcing and partnerships with external AI firms is transforming, which can expose HR to greater risk. The increasing reliance on specialized AI solutions for HR functions has led to more strategic partnerships with technology providers but requires greater investment by HR. These partnerships are ideally not just transactional but collaborative, with HR departments and AI firms working together to cocreate solutions that are tailored to the unique needs of the organization. This shift reflects a broader trend toward a more integrated approach to HR technology, where external solutions are seamlessly woven into the fabric of HR strategies and practices.

Concern 2: Data Governance Is More Complex and Also Generally More Ambiguous

A primary risk of AI integration is greater reliance on the thirdparty systems created and managed by these strategic partners, which can raise significant concerns regarding employee privacy and control over HR data (Jha, 2022). Entrusting sensitive employee information to external platforms necessitates stringent security measures and compliance with data





protection regulations, which may not always be guaranteed. Some more advanced types of AI, like chatbots based on large language models, may be impossible to be hosted on organization-managed information technology (IT) resources, forcing HR decision makers to choose between assurance of compliance and adoption of the most powerful AI tools.

Concern 3: AI Solutions Customized To Meet Organizational Needs Can Be Very Costly

The adoption of generic AI technologies that may not be tailored to the specific needs of an organization is often less expensive than a bespoke solution but can introduce unclear risks. Off-the-shelf solutions can offer cost and time savings, but they may lack the customization required to address the unique challenges and opportunities within a specific organizational context. This mismatch can lead to underutilization of the AI system's potential and may even exacerbate existing inefficiencies or create hidden biases.

Concern 4: The State of the Art May Become Outdated Very Quickly

The rapid pace of technological advancement in AI creates increased risk of rapid obsolescence. Investing in an AI solution today might mean locking into a technology that could become outdated in a relatively short time frame. This risk underscores the importance of choosing adaptable and scalable AI solutions, with a clear roadmap for updates and integration with emerging technologies, a challenge closely related to managing the risks of third-party solutions. AI vendors vary substantially in their willingness and expertise as related to managing such changes over time. A major case study related to this issue is BloombergGPT, a cutting-edge custom AI system built on GPT-3.5 and released for use in March 2023 (Wu et al., 2023) that Bloomberg likely spent at least \$1 million to develop in technical costs alone (Mittal, 2023). Yet it was later discovered that the performance of BloombergGPT was lower than that of the generic, uncustomized version of GPT-4, which was released for public use that same month (Li et al, 2023).

Concern 5: Staying Up to Date With Current AI Is Challenging

Amid the rapid integration of AI in HR, there emerges a critical need for upskilling and reskilling. Executives project that within the next 3 years, approximately 40% of their workforce will need to undergo training to effectively manage and harness the potential of these advanced technologies (Tulchinsky, 2024). This challenge applies to both those managed by HR and HR personnel themselves. Investment in human capital is essential not only for the effective implementation of AI-driven solutions but also for ensuring that HR teams can interpret and apply AI insights in a manner that aligns with the organization's values and enhances the employee experience.

Concern 6: There Is Limited Trustworthy Research on the Validity of Current AI Solutions

Because of the rapid pace of development in the technology underlying AI platforms, academic and other trustworthy research is lagging increasingly far behind. Most research reports on the validity and effectiveness of AI platforms are released by the vendors who developed those platforms, which decreases confidence in the trustworthiness of those findings. Yet by the time a trustworthy research team can conduct a rigorous evaluation of an AI platform and publish a peer-reviewed report on the results, the platform tested often no longer still exists in the form that was tested.

Concern 7: The Behavior of Many AI Systems Cannot Be Exhaustively Vetted in Advance

Many cutting-edge AI solutions, such as modern chatbots, are probabilistic, meaning that user actions do not consistently lead to the same responses. Historically, HR has relied on deterministic technology solutions, meaning that a user action always leads to the same outcome. For example, when using a deterministic chatbot for HR employee relations, the chatbot might be programmed to detect certain keywords and always refer the employee to a phone number when detected. A probabilistic chatbot, in contrast, might fabricate answers to questions in certain circumstances. Probabilistic systems also introduce new, difficult-to-prevent vulnerabilities that can be exploited by bad-faith actors. The legal risks enabled by probabilistic AI is unexplored territory for most HR departments.



Concern 8: The Legal Landscape Surrounding AI Is Constantly Changing

Last, risk assessment in general is made more complex due to the now-constant change in the legal landscape surrounding AI. What is understood to be legal in terms of data privacy, ethical use of AI, and nondiscriminatory practices is in flux. Governments and regulatory bodies worldwide are grappling with these challenges, leading to an ever-changing tapestry of regulations that organizations must navigate (Trueman, 2023). This legal evolution is crucial for HR professionals to monitor and adapt to, ensuring that the use of AI aligns not only with current laws but also with the ethical standards that govern fair and respectful treatment of employees.

Use of AI in HR Today

Because the state of the art in AI is under constant and rapid development, practical applications in HR are both myriad and always changing. Today, AI is not just a futuristic concept but a tangible tool that is reshaping the way HR departments operate. From recruitment and staffing to training and development, performance management, organizational development, compensation, compliance, employee relations, and diversity and inclusion, AI solutions are making significant inroads. This section reveals the diverse landscape of AI applications in HR, providing real-world examples of how these technologies are already being used with the goal of enhancing efficiency, decision making, and employee engagement, to help contextualize what is already possible. By exploring the current and near-future uses of AI across these key HR areas, we can gain insights into the transformative potential of AI in creating more adaptive, responsive, and inclusive HR practices.

Importantly, as you consider how the applications in this list might be integrated into your own HR practices, we recommend caution. Although these are all descriptions of existing AI HR applications, research evidence supporting their effectiveness is generally thin, as described above. Most critically, high-quality research takes time, and by the time research results become available, the AI technologies being studied are often already obsolete. This situation is unlikely to resolve soon, leaving the burden on HR departments to conduct their own, rigorous internal research on the validity of potential solutions before adoption, ideally to the high standards of consensus documents produced by industrial-organizational psychology, such as the Society for Industrial and Organizational Psychology's <u>Considerations and Recommendations for the Validation and Use of AI-Based Assessments for Employee Selection (2023)</u>. We recommend you generally do not trust vendor claims without additional research, in large part because vendors in this space often have much greater expertise in AI development than in HR practices.

HR function	AI application domain and example solutions	Recommended initial reading
Recruitment and staffing	Attraction/recruitment AI-powered platforms for candidate sourcing and headhunting to find suitable candidates with desired skills.	Black & van Esch, 2020
	to simulate interactions with company personnel as a tool to communicate company culture.	
	AI-powered HR chatbots can respond to inquiries about open positions and provide technical details about open positions.	
	Assessment/selection Al-enabled employee selection tool content, such as automated candidate matching, avatar-based interviewers in asynchronous video interviews, and generation of complex materials in simulation or gamification of preemployment assessments.	Tippins et al., 2021
	AI-enabled scoring and recommendation systems that use predictive analytics to interpret assessment content to forecast candidate success, identify optimal matches for specific roles, or otherwise enhance hiring decisions.	



HR function	AI application domain and example solutions	Recommended initial reading
	Job and work analysis Generation of job analytic information and related documents, such as job descriptions, automatically on the basis of secondary use of existing data.	Putka et al., 2022
	Monitoring systems that use AI to monitor if work content remains in align- ment with existing job descriptions and profiles; if not, use automated data collection and analysis to update this material or flag it for review.	
Engagement and growth	Learning and development Learning content customized to individual employee's wants and needs, auto- matically integrating organizational goals with personal development goals to recommend individualized learning programs.	Maity, 2019
	AI-customized onboarding experiences tailored to individual profiles, such as through the automated matching of mentors and proteges, automated selection of onboarding materials and experiences	
	<i>Retention</i> Automated coaching systems delivered via chatbots that help employees track their own goals and goal progress, and provide recommendations for goal achievement.	Hughes et al.
	AI-powered systems monitor employee satisfaction based upon existing data streams and provide recommendations to supervisors when an employee is a turnover risk	
Performance management	<i>Monitoring and feedback</i> AI tools for continuous performance tracking and real-time feedback, including trend analysis in employee performance without manual intervention.	Nyathani, 2023
	Automated recommendation systems suggesting meaningful follow-up dis- cussion or action to supervisors when performance is either problematic or deserving of recognition	
Organizational development	<i>Culture change</i> AI-enhanced systems monitoring conversations and interactions within teams and across the organization, such as through automated monitoring and interpreta- tion of email content or audio from badges/wearables, summaries of which along with recommended actions can be provided to change agents, such as supervisors or L&D personnel.	Lewis et al., 2016
	<i>Well-being analysis</i> AI solutions to monitor employee well-being, predict burnout, design intervention programs, and intervene when needed, such as by notifying supervisors or sending recommendations directly to those at risk.	Thilakarathne et al., 2021
	Surveying and outcome monitoring Automatic surveying of stakeholders whenever a new HR initiative is imple- mented, providing AI-generated summary reports and recommendations with content automatically customized to the appropriate reporting level.	Tambe et al., 2019
Compensation/ benefits, compliance, and employee relations	Automated employee relations HR chatbots for automated responding to employee queries, replacing or aug- menting time-consuming and repetitive 1-on-1 HR personnel interactions, and refocusing personnel time toward addressing more complex and meaningful HR challenges.	Budhwaret al., 2023





HR function	AI application domain and example solutions	Recommended initial reading
	Auditing and compliance checks AI-based approaches to flag compliance issues automatically, potentially even providing warnings about likely future noncompliance so that HR personnel can intervene early.	Munoko et al., 2020
Workforce planning and talent mobility	Workforce monitoring and succession planning AI for identifying skills gaps, aiding in succession planning, and facilitating talent mobility within the organization; providing warnings when unexpected gaps appear due to attrition or when key skills are not represented in the existing workforce.	Ravid et al., 2023
	Leadership development AI-powered executive coaching to continuously and automatically manage the organization's leadership pipeline through targeted and continuous develop- mental intervention.	Bhat & Muduli, 2022
Diversity and inclusion	Bias monitoring and reduction AI systems designed to monitor and mitigate bias throughout all HR processes and decision making, thereby promoting diversity and inclusion, automatically flagging problematic actions before they are finalized, and notifying stakeholders. AI systems to conduct automated, continuous audits for equity and fairness in high-stakes systems, such as hiring decisions.	Choudhury et al., 2020

Adapting Through AI Evolution

As shown, Al's current and near-future applications within HR showcase an evolving environment where technology not only streamlines operations but also has potential to foster a more inclusive, equitable, and efficient workplace. From enhancing recruitment processes to advancing diversity and inclusion efforts, Al's role in HR is likely to be both varied and profound. However, the journey doesn't end here. As we pivot toward the future, the necessity for HR professionals to adapt to the constant evolution of Al technology and the regulatory environment becomes paramount.

On one hand, because AI technology is in constant development, the state-of-the-art and current confidence that the technology works as advertised is always changing. Traditionally, many HR departments have prioritized consistent and predictable legacy systems over agility and new features, in large part due to the more intense regulatory scrutiny within HR when contrasted with many other business functions. Yet the world of software development is one marked by constant improvement through iteration. If a third-party HR chatbot is purchased today, the capabilities of that chatbot are likely to be somewhat different even 3 months from now and practically unrecognizable by the 5-year mark. In this environment, HR decision makers cannot afford to simply purchase a piece of software and assume it will continue to function as originally promised over time.

On the other hand, the regulatory landscape surrounding AI is unstable and likely to remain so for the indefinite future. AI regulation currently imposes a hodgepodge of requirements that vary at local/city, state, national, and international levels. For example, at the city level, New York City's Local Law 144 requires the independent auditing of certain AI systems used for employment decisions. At the international level, the European Union's General Data Protection Regulation describes how people have rights to consent, withdrawal, explanation, removal, portability, and minimality over the data they have provided to organizations that might be used in the creation of AI systems, as well as the stiff financial penalties incurred when those rights are violated. New regulations continue to appear with some regularity, sometimes expert informed and sometimes not, and regulations may be somewhat in conflict with each other in certain jurisdictions.

To meaningfully navigate this landscape, a culture embracing change and all its requisite complexity is necessary. Practical, more temporary decision making must be embraced as a strategy. Whereas HR has historically been driven by rigorous, exhaustive investigations leading to decisions that persist for years or perhaps decades, decisions about AI implementation for the foreseeable future must be contingent upon information known at the time and subject to change if



Actions

- 1. Constantly upskill decision makers about AI
- 2. Collaborate across functional groups to manage AI initiatives
- 3. Pursue effective change management related to AI
- 4. Embrace AI as both neutral tool and collaborator
- 5. Actively pursue ethical and responsible use of AI

Action 1: Constantly Upskill Decision Makers About AI

new information is learned. This is a seismic shift in norms and values for most HR decision makers. Yet without such culture, adopting new AI technology is as likely to lead to harmful outcomes as improved ones.

To effectively implement AI in HR, we recommend embracing the following five actions be taken consistently as part of a broader culture change.

In comparison to technology-based fields, HR has many historic best practices that do not change very often. For example, the need for HR to serve as an impartial mediator of disputes between organizational members is a bedrock value. The fundamental values of HR, to serve the organization's interests by ensuring human resources are managed well, have been well-established since at least the 1950s transformation of "personnel administration" into HR. These values, fundamentally, are no different when AI is used to meet HR goals. However, the rapid pace of change in AI means that there are few AI best practices beyond very general ones. This can be frustrating to HR decision makers, as there are often no simple answers to questions about the specifics of how AI platforms function.

For example, large language models are the foundation of modern HR chatbots. An HR decision maker trying to make a purchasing decision might ask each vendor how its chatbot knows the answer when an employee asks it a question. Even framing the question this way highlights a knowledge gap for this person. HR chatbots do not "know" anything at all but instead predict the most likely text output given text input. For example, you'd be likely to hear the correct answer when asking a person, "What's the missing word: hip hip _____!"?" Much as a person can consider this pattern and interpolate the missing word is probably "hooray," a chatbot can predict the most likely HR response to the sentence, "Please explain my benefits to me" as long as enough high-quality data and good engineering practices were used to develop it.

The challenge for HR in this context is that salespeople may take advantage of such knowledge gaps to suggest that specific AI platforms are capable of functions of which they are not truly capable. For example, an AI cannot "think" or "decide," as this is not possible with current technology, yet such anthropomorphism is common during sales meetings. Even worse, an HR decision maker who is not sufficiently informed does not know what questions would even be meaningful to ask to uncover such half truths. For example, when a vendor claims an AI is "unbiased," it is not because AI is inherently unbiased but instead because the vendor has taken specific steps to make it "unbiased," steps that might not be fully disclosed or might not align with the values of your organization, all while using a definition of "unbiased" that you might not share.

The first action we recommend, constant upskilling, is intended to cultivate a discerning eye that can cut through the marketing hype to allow one to evaluate the true value and utility of AI tools. Decision makers must make a consistent, regular effort to upskill in relation to AI. At its most basic, this might involve completion of short online open courses to build fundamentals and then actively monitoring current AI news in HR publications. After building greater familiarity, this might involve occasionally sitting in on meetings with more technology-oriented decision-making bodies. It also requires that HR core competencies are maintained at a high standard so as to immediately recognize when HR's core values might be threatened by a proposed new technological change. This need for multifaceted expertise is closely related to our next recommended action.

Action 2: Collaborate Across Functional Groups to Manage AI initiatives

There are few people in the world with sufficiently deep expertise to be fully informed on both HR matters and the state of the art in AI. Further, many HR investment areas require specific areas of expertise. For example, an I-O psychologist with expertise in leadership assessment is likely critical to the successful redesign of an organization's leadership pipeline and



The fundamental values of HR, to serve the organization's interests by ensuring human resources are managed well, have been well-established since at least the 1950s transformation of "personnel administration" into HR. These values, fundamentally, are no different when AI is used to meet HR goals.



related support systems. If that pipeline redesign also might involve AI technology, HR decision makers should also partner with relevant expert technologists in relevant functional groups to ensure that the project's needs are truly being met.

Traditionally, such decisions are siloed. For instance, although HR leaders might decide they want to adopt a new HR management system (HRMS), the technical details of implementation are typically handed off to the IT department. This has historically worked well enough because HRMS vendors are sensitive to the HR regulatory landscape. In the world of AI in HR, this sort of rigid compartmentalization is very risky, because it requires that the organization's IT group be savvy enough in HR to notify HR when the platforms are updated or changed in a way that HR work would be affected. Yet much as HR rarely contains IT experts, IT rarely contains HR experts. This lack of communication across functional groups can be frustrating when navigating traditional software implementations. It can be significantly worse when that software involves AI, as IT may not have internal AI experts either.

The second action we recommend, cross-group collaboration, begins with identifying who within your organization has ownership and expertise related to AI. Ideally, these individuals or groups will be found within IT, but this depends heavily on how mature your organization's IT function is. If your organization contains no AI experts, it is important to either develop that capability or bring in outside, independent experts. Once you have identified meaningful AI collaborators, ensure that all AI in HR decision-making teams comprise at least one expert in general HR, one deep expert in the specific HR domain to be affected such as by an I-O psychologist, one expert in general IT, and one AI expert. Importantly, this mix should be considered a starting

point and should be deepened depending upon the particulars of the new AI project. This team should embrace a culture of collaboration, an admission that every member knows significantly more about their area of expertise than the others. Meaningful progress will be made most quickly when members of these groups are willing to teach and learn from each other.

Action 3: Pursue Effective Change Management Related to AI

Currently, the pace of change in AI remains constant in terms of both capabilities and the regulatory environment. Adopting a formalized approach to managing change in this domain can help establish ground rules and boundaries for decision making that provide a sense of consistency in the face of such change.

Most critically, no decision related to AI can be viewed as permanent. Although implementation decisions will ideally be made thoughtfully enough that an adoption decision might persist for a while, this should not be assumed. Instead, decisions should prioritize simultaneously maximizing effectiveness and minimizing risk, not to finalize a specific long-term course of action. A recent example of this sort of issue is evident in large language models, the technology used to support HR chatbots. In 2022, almost every HR chatbot relied on an older language technology. Within two years, all chatbots reliant on this technology became outdated, although moving to the state of the art introduces new risks. Thus, although reversing a recent decision to adopt a chatbot for a more effective alternative may be disappointing, it should be considered as a realistic option, with new trade offs to consider, rather than disregarded solely because of the recency of the previous decision.



The third action we recommend, the adoption of effective change management, begins with a culture change within HR. As an organization becomes more comfortable and accustomed to technological changes, resistance and overhead associated with those transitions will decrease. A culture of iteration, improvement, and agility has the potential to benefit the organization beyond HR, and this benefit should not be underestimated. Simultaneously, change agents should work toward a culture of healthy skepticism and a valuing of evidence-based practice. These changes together position HR as a more strategic force within the organization, which benefits all HR members broadly.

Action 4: Embrace AI as both Neutral Tool and Collaborator

Al itself is morally neutral. It is a technology, much like a hammer or a computer. The way it is used is what determines if it is a net benefit or net detriment for an organization and its members. Al is very likely to replace many specific job tasks, but the way this is implemented in a particular organization and how it ultimately affects its workforce is a matter of management. Although Al is and will soon be even more capable of completing diverse job tasks, it does not necessarily need to replace jobs. Instead, if well-managed, it can augment and enhance the capabilities of existing personnel to make their work both higher quality and more efficiently done.

The fourth action we recommend, to embrace AI as a neutral tool and collaborator, begins with encouraging employees to experiment with how AI can help them do their jobs better. A helpful cliche has emerged in discussions of the future of work related to this issue: AI will not necessarily replace jobs, but people who use AI will replace the people who do not (Lakhani 2023). A culture of experimentation and strategy, with thoughtful risk mitigation efforts, will encourage people to find ways to use AI productively, for the benefit of both their own personal work and the organization as a whole.

In this way, it can be useful to encourage workers to think of AI tools as collaborators. Automated scheduling software gives workers time back that they would have spent scheduling. Large language models that put together draft text of reports and documents gives workers time back that they would have been staring at a blank page trying to brainstorm ways to start. Predictive job performance models give hiring managers time back that they would have spent trying to create complicated, multipart application packages to come to a single recommendation. In each of these situations, buy-in can be further increased by involving relevant stakeholders in the decision-making process, to communicate clearly that the goal is not to replace them but to help spend less time on the more monotonous, time-consuming parts of their jobs and more time on the parts that really matter.

Action 5: Actively Pursue Ethical and Responsible Use of AI

The fifth action we recommend, the active pursuit of ethical and responsible use of AI, applies across all the other actions described here. AI can certainly be used to harm through both malice and ignorance. To avoid this, continuous monitoring and evaluation of impact is required by any AI capability used in the organization.

Risks can sometimes be quite subtle and the chain of responsibility unclear. Consider an HR staffer who improves their personal efficiency by adopting a third-party scheduling AI for employee meetings. Without realizing the risk involved, this person shares personally identifying information about employees through this scheduling AI. Although the company promises state of the art in cybersecurity, the associated data are later released publicly via a data breach. In this situation, there is currently a great deal of disagreement as to who is actually responsible for the release of employee data in this situation. Complicating matters further, different regulations may place the blame on different people or organizations.

There are few easy answers right now when it comes to AI. What we can generally recommend is that whenever feasible, there should be a "human in the loop." This concept refers to the idea that AI should generally not be able to make a recommendation or prediction that is implemented autonomously to meaningfully impact others. If possible, there should generally be a human at least glancing at that decision before it is finalized to ensure its quality. When AI systems do make decisions or produce content autonomously, the quality of those decisions should be reviewed regularly.



Most fundamentally, we recommend the establishment of first principles of ethical AI for your organization. By developing and stating these ethics directives plainly, they can be used to guide all levels of organizational decision making, from HR-wide adoption decisions down to individual contributor's personal assistants. These can be adopted from larger professional standards. For example, the Association for Talent Development published a set of seven first principles for AI: fairness, inclusiveness, transparency, accountability, privacy, security, and reliability (Association for Talent Development, 2023). Many nongovernmental organizations, such as UNESCO and the Bill and Melinda Gates Foundation, have provided similar lists. We strongly recommend identifying a list that makes sense for your organization, training relevant personnel in its importance and implications for practice, and enforcing its stated values in all decision making. We also recommend applying traditional industrial-organizational psychology principles, such as the need for rigorous validity and utility evidence, in the evaluation of AI tools to ensure the tools your organization implements are not only ethically sound but also practically beneficial, fair, and predictive.

Final Thoughts

The integration of AI into human resources is not only an inevitable progression but also a strategic imperative for organizations aiming to thrive in the modern workplace. As we have explored, the adoption of AI in HR holds the potential to significantly enhance operational efficiencies, drive strategic talent management, and foster a more inclusive and engaging work environment. However, this journey is accompanied by its own set of challenges, including ethical considerations, data privacy concerns, and the need for continuous upskilling of HR professionals. It is paramount that organizations navigate these complexities with a balanced approach, ensuring that the use of AI aligns with ethical standards and enhances the employee experience.

As the landscape of AI continues to evolve, so too must the practices of HR professionals, who are urged to embrace a culture of adaptability, lifelong learning, and cross-functional collaboration. By doing so, they will not only harness the transformative power of AI but also safeguard the human element that remains at the heart of human resources. The future of HR lies in the successful integration of technology and humanity, through which AI serves as both a tool and a catalyst for creating more adaptive, responsive, and people-centric HR practices.

The future of HR lies in the successful integration of technology and humanity, through which AI serves as both a tool and a catalyst for creating more adaptive, responsive, and people-centric HR practices.





References

- Association for Talent Development. (2023, April 21). 7 principles to guide the ethics of artificial intelligence. https://www.td.org/atd-blog/7-principles-to-guide-the-ethics-of-artificial-intelligence
- Bhatt, P. & Muduli, A. (2022). Artificial intelligence in learning and development: A systematic literature review. *European Journal of Training and Development*, *47*(7/8), 677-694. DOI: 10.1108/EJTD-09-2021-0143
- Black, J. S. & van Esch, P. (2020). Al-enabled recruiting: What is it and how should a manager use it? *Business Horizons*, 63, 215-226.
- Budhwar, P., Chowdhury, S., Wood, G., Aguinis, H., Bamber, G. J., Beltran, J. R., Boselie, P., Cooke, F. L., Decker, S., DeNisi, A., Dey, P. K., Guest, D., Knoblich, A. J., Malik, A., Paauwe, J., Papagiannidis, S., Patel, C., Pereira, V., Ren, S.... & Varma, A. (2023). Human resource management in the age of generative artificial intelligence: Perspectives and research directions on ChatGPT. *Human Resource Management Journal*, *33*(3), 606-659.
- Choudhury, P., Starr, E., & Agarwal, R. (2020). Machine learning and human capital complementarities: Experimental evidence on bias mitigation. *Strategic Management Journal*, *41*(8), 1381-1411.
- Drake Star. (2024). *Global HR tech report Q1 2024*. https://8573936.fs1.hubspotusercontent-na1.net/hubfs/8573936/Re-search/HCM/HR%20Tech%20Report%20Q1-2024.pdf
- Gartner. (n.d.). AI in HR: The ultimate guide to implementing AI in your HR organization. https://www.gartner.com/en/ human-resources/topics/artificial-intelligence-in-hr
- Guenole, N., & Feinzig, S. (2018). *The business case for AI in HR: With insights and tips on getting started.* IBM Workforce Institute. https://www.ibm.com/downloads/cas/A5YLEPBR
- Hughes, C., Robert, L., Frady, K., & Arroyos, A. (2019). Artificial intelligence, employee engagement, fairness, and job outcomes. In *Managing technology and middle- and low-skilled employees* (pp. 61-68). Emerald Publishing Limited.
- Jha, S. (2022). Data privacy and security issues in HR analytics: Challenges and the road ahead. In I. J. Jacob, F. M. Gonzalez-Longatt, S. K. Shanmugam, & I. Izonin, I. (Eds.) *Expert clouds and applications. Lecture notes in networks and systems* (vol. 209, pp. 199-206). Springer. https://doi.org/10.1007/978-981-16-2126-0_17
- Lakhani, K. (2023, August 4). AI won't replace humans—but humans with AI will replace humans without AI. *Harvard Business Review*. https://hbr.org/2023/08/ai-wont-replace-humans-but-humans-with-ai-will-replace-humans-without-ai
- Lewis, S., Passmore, J., & Cantore, S. (2016). *Appreciative inquiry for change management: Using AI to facilitate organizational development.* Kogan Page Publishers.
- Li, X., Zhu, X., Ma, Z., Liu, X., & Shah, S. (2023). Are chatgpt and gpt-4 general-purpose solvers for financial text analytics? an examination on several typical tasks. *arXiv*:2305.05862.
- Maity, S. (2019). Identifying opportunities for artificial intelligence in the evolution of training and development practices. *Journal of Management Development, 38*(8), 651-663.
- Mittal, Aayush. (2023[updated]). *Generative AI in finance: FinGPT, BloombergGPT & beyond*. Unite.ai. https://www.unite. ai/generative-ai-in-finance-fingpt-bloomberggpt-beyond/
- Munoko, I., Brown-Liburd, H. L., & Vasarhelyi, M. (2020). The ethical implications of using artificial intelligence in auditing. *Journal of Business Ethics*, 167(2), 209-234.
- Nyathani, R. (2023). Al in performance management: Redefining performance appraisals in the digital age. *Journal of Artificial Intelligence & Cloud Computing*, *146*. DOI:10.47363/JAICC/2023(2)134
- Putka, D. J., Oswald, F. L., Landers, R. N., Beatty, A. S., McCloy, R. A., & Yu, M. C. (2022). Evaluating a natural language processing approach to estimating KSA and interest job analysis ratings. *Journal of Business and Psychology, 38,* 385-410.
- Ravid, D. M., White, J. C., Tomczak, D. L., Miles, A. F., & Behrend, T. S. (2023). A meta-analysis of the effects of electronic performance monitoring on work outcomes. *Personnel Psychology*, *76*(1), 5-40.
- Society for Industrial and Organizational Psychology. (2023, January). *Considerations and recommendations for the validation and use of ai-based assessments for employee selection*. https://www.siop.org/Portals/84/SIOP%20Considerations%20and%20Recommendations%20for%20the%20Validation%20and%20Use%20of%20AI-Based%20Assessments%20for%20Employee%20Selection%20010323.pdf
- Tambe, P., Cappelli, P., & Yakubovich, V. (2019). Artificial intelligence in human resources management: Challenges and a path forward. *California Management Review*, *61*(4), 15-42.



- Thilakarathne, N. N., Priyashan, W. M., & Premarathna, C. P. (2021, July). Artificial intelligence-enabled IoT for health and wellbeing monitoring. *Proceedings of the 12th International Conference on Computing Communication and Network-ing Technologies (ICCCNT) 2021* (pp. 01-07). IEEE.
- Tippins, N. T., Oswald, F. L. & McPhail, S. M. (2021). Scientific, legal, and ethical concerns about AI-based personnel selection tools: A call to action. *Personnel Assessment and Decisions*, 7(2).
- Trueman, C. (2023, June 5). *Governments worldwide grapple with regulation to rein in AI dangers*. Computerworld. https://www.computerworld.com/article/3698191/governments-worldwide-grapple-with-regulation-to-rein-in-aidangers.html
- Tulchinsky, I. (2024, January 3). Why we must bridge the skills gap to harness the power of AI. World Economic Forum. https://www.weforum.org/agenda/2024/01/to-truly-harness-ai-we-must-close-the-ai-skills-gap/
- Wu, S., Irsoy, O., Lu, S., Dabravolski, V., Dredze, M., Gehrmann, S., Kambadur, P., Rosenberg, D., & Mann, G. (2023). BloombergGTP: A large language model for finance. *arXiv*, 2303.17564.