

Literature summary

The Impact and Risks of Artificial Intelligence on Employee Skills Development and Daily Work: An Analysis for Human Resources Development

Bachelor of Arts in Social Sciences

Sources used (39 item(s))

Acemoglu, D., Autor, D., Hazell, J., & Restrepo, P. (2022). Artificial intelligence and jobs: Evidence from online vacancies. Journal of Labor Economics, 40(S1), S293–S340.

https://doi.org/10.1086/718327

Link:

https://shapingwork.mit.edu/wp-content/uploads/2023/10/Paper_Artificial-Intelligence-and-Jobs-Evidence-from-Online-Vacancies.pdf

Relevant Key Findings:

- Al-related vacancies experienced rapid growth between 2010 and 2018, particularly in establishments whose workers perform tasks aligned with Al capabilities (p. 1).

- Al adoption is associated with a decline in some of the skills previously sought in job postings and the emergence of new skills, suggesting Al is altering job task structures (p. 3).

- AI exposure is associated with lower non-AI and overall hiring, with substantial declines occurring between 2014 and 2018, coinciding with the surge in AI activity (p. 4).

- Industries with greater AI exposure do not show significant employment or wage impacts, nor do occupations more exposed to AI (p. 4).

- Establishments with AI-suitable task structures have significantly increased their AI-related postings (p. 18).

- Al exposure is robustly associated with negative and positive skill changes in establishments, suggesting that while some skills become redundant, new skills are also demanded (p. 26).

Al Qahtani, E. H., & Alsmairat, M. A. (2023). Assisting artificial intelligence adoption drivers in human resources management: A mediation model. Acta Logistica, 10(1), 141–150. https://doi.org/10.22306/al.v10i1.371

Link: https://actalogistica.eu/issues/2023/I_2023_15_AL-Qahtani_Alsmairat.pdf

Relevant Key Findings:

- Significant and positive effects of perceived usefulness and trust on artificial intelligence adoption in human resource management are highlighted (p. 1).

- Trust mediates the relationship between perceived usefulness and the adoption of AI applications in HRM (p. 3).

- The R2 for AI adoption is 0.545, whilst for trust, it is 0.435 (p. 6).

- PU significantly and positively influences the adoption of AI (p. 6).
- Trust has a direct impact on the adoption of AI (p. 6).

- The mediation effects of trust on the relationship between PU and the adoption of AI was ascertained to be significant and positive (p. 6).

Amazon Web Services (AWS), & Access Partnership. (2023). Accelerating AI skills: Preparing the workforce for jobs of the future.

https://assets.aboutamazon.com/e1/a0/17842ee148e8af9d55d10d75 a213/aws-accelerating-ai-skills-us-en.pdf

Link:

https://assets.aboutamazon.com/e1/a0/17842ee148e8af9d55d10d75a213/aws-acceleratingai-skills-us-en.pdf

Relevant Key Findings:

- More than 90% of surveyed employers expect to use AI-related solutions in their organizations by 2028 (p. 3).

- Over 90% of both employers and employees expect to benefit from generative AI (p. 4).

- Employers estimate that workers who acquire AI expertise could see their paychecks jump by 35% or more (p. 4).

- Surveyed employers believe that AI could boost productivity by 47% (p. 5).

- 42% of surveyed employers are actively looking for people with AI development qualifications today, and this will rise to 51% in the next five years (p. 5).

- Employers rank AI as the most important technology skillset a job candidate can possess (p. 14).

Amazon Web Services (AWS), & Access Partnership. (2023). Accelerating AI skills. Amazon Web Services; Access Partnership. <u>https://assets.aboutamazon.com/84/4b/c039993d4111b54af1afcb6bf</u> <u>bfb/aws-accelerating-ai-skills-us-report.pdf</u>

Link:

https://assets.aboutamazon.com/84/4b/c039993d4111b54af1afcb6bfbfb/aws-accelerating-aiskills-us-report.pdf

Relevant Key Findings:

- More than 90% of surveyed employers expect to use AI-related solutions in their organizations by 2028 (p. 4).

- Over 90% of both employers and employees expect to benefit from generative AI (p. 4).
- 84% of employees indicate that AI could have some positive impact on their careers (p. 4).
- Surveyed employers believe that AI could boost productivity by 47% (p. 5).

- Employers rank AI as the most important technology skillset a job candidate can possess (p. 5).

- Nearly three out of four (75%) of employers who consider hiring AI talent as a priority report having difficulty finding qualified candidates (p. 5).

Baki, N. U., Rasdi, R. M., Krauss, S. E., & Omar, M. K. (2023). Integrating artificial intelligence in human resource functions: Challenges and opportunities. International Journal of Academic Research in Business and Social Sciences, 13(8), 1262–1277. <u>https://doi.org/10.6007/IJARBSS/v13-i8/18071</u>

Link: https://pdfs.semanticscholar.org/6374/23cc9c0968cd77f1df74fc968a527fcb1d3e.pdf

Relevant Key Findings:

- Al integration can lead to high implementation costs for technology tools and potential employee resistance due to uncertainty and a perceived lack of human touch, raising legal and ethical concerns (p. 2).

- Companies are using AI to offer personalized and customized training accessible anytime, anywhere, based on employee needs, enhancing the learning experience (p. 3).

- Al-powered tools can help HR in salary benchmarking, performance-based compensation, and predictive analytics for remuneration trends, helping to attract new talents and retain existing employees (p. 7).

- Al systems can monitor employee performance in real-time and provide prompt feedback, helping to avoid disengagement and turnover, while also enforcing transparent performance appraisals (p. 8).

Integrating AI in HR increases time efficiency by automating tasks, mitigating human biases in processes such as recruitment, and reducing both manpower and training costs (p. 10).
Major challenges of AI in HR include high implementation costs, uncertainty and resistance from employees, lack of human touch, and legal and ethical concerns (p. 11-12).

Bui, Q. K., Nguyen, V. T., Do, T. T. H., Tran, Q. T., Hoang-Tien, N., Dinh, B. H. A., Nguyen, M. N., Bui, T. G., & Ngo, T. H. T. (2024). Influential factors of Artificial Intelligence (AI) in the digital transformation of the human resources recruitment process sector in Vietnam. International Journal of Multidisciplinary Research and Growth Evaluation, 05(06), 1181–1193.

https://doi.org/10.54660/.IJMRGE.2024.5.6.1181-1193

Link:

https://www.allmultidisciplinaryjournal.com/uploads/archives/20241217184805_F-24-199.1.p

Relevant Key Findings:

- Al adoption in HR recruitment is still in its early stages, with only 35% of surveyed companies reporting using Al-powered tools (p. 4).

- Businesses using AI-powered tools have experienced significant improvements in efficiency, with 78% reporting a reduction in time-to-hire (p. 4).

- 62% of businesses using AI reported an improvement in the quality of candidates hired, and 55% noted an increase in candidate diversity (p. 5).

- A prominent challenge is the lack of technical skills and expertise within HR teams, reported by 68% of respondents (p. 5).

- Other challenges include concerns about data privacy and security (52%), the high cost of AI implementation (45%), and the need to align AI systems with existing HR processes and policies (38%) (p. 5).

- 60% of surveyed companies have invested in training and development programs to upskill their HR teams in AI and data analytics (p. 5).

Casic, A., Pavlou, C., & Gavala, G. (2023). Skills for success in the Al-driven future. TalentLMS.

https://www.talentlms.com/wp-content/uploads/documents/Skills-fo r-Success-in-the-Al-Driven-Future%E2%80%94-2023-Research.pdf

Link:

https://www.talentlms.com/wp-content/uploads/documents/Skills-for-Success-in-the-AI-Drive n-Future%E2%80%94-2023-Research.pdf

Relevant Key Findings:

- 65% of HR managers think digital skills will be important in a new workplace shaped by AI and automation (p. 5).

- 65% of HR managers find that interpersonal skills will be important as AI and automation are becoming more prevalent in the workplace (p. 5).

- 65% of HR managers find that cognitive skills will be important as AI and automation are spreading in the workplace (p. 6).

- 60% of HR managers think that self-managing skills will be important as AI and automation are becoming more prevalent in the workplace (p. 6).

- 43% of surveyed HR managers think their company will face a skills gap because of the rise of AI (p. 8).

- 85% of HR managers plan L&D investments for training employees on AI (p. 11).

Chukwuka, E. J., & Dibie, K. E. (2024). Strategic role of artificial intelligence (AI) on human resource management (HR) employee

<u>df</u>

performance evaluation function. International Journal of Entrepreneurship and Business Innovation, 7(2), 269–282. <u>https://doi.org/10.52589/IJEBI-HET5STYK</u>

Link:

https://abjournals.org/ijebi/wp-content/uploads/sites/5/journal/published_paper/volume-7/issu e-2/IJEBI_HET5STYK.pdf

Relevant Key Findings:

- Some firms spend over two million hours annually conducting manual HR performance reviews and evaluations, highlighting a significant time investment in a process that is often unreliable due to its reliance on subjective opinions and past performance (p. 12).

- Artificial Intelligence (AI)-driven assessments enable immediate incentives and praise for good performances, ensure accuracy throughout the entire evaluation process, and promptly signal when targets are not met or performance standards are declining (p. 12).

- A study across 20 worldwide publics found that 33% of respondents felt the use of AI and computer systems had a detrimental influence on society, while 53% indicated it had a good one (p. 3).

- Al can assist in automating tedious administrative chores, allowing HR staff members to concentrate on other facets of their jobs and make more educated and data-driven decisions by using Al technologies, which can analyze massive volumes of data, spot patterns, and make predictions (p. 3).

- According to the McKinsey Global Institute, artificial intelligence has the potential to replace over 30% of employment across 60% of industries (p. 8).

- The C4.5 method's precision after optimization for examining 300 signs increases to 95%, demonstrating an increased overall assessment competency and dependability (p. 10).

Cockburn, W. (2023). Artificial intelligence and workplace safety and health: The future of work or a complex challenge? Healthy Workplaces Campaign 2023-2025, 1–3. EU-OSHA.

https://healthy-workplaces.osha.europa.eu/sites/hwc/files/uploads/ Editorial-article-Impact-of-AI-on-OSH_EN.pdf

Link:

https://healthy-workplaces.osha.europa.eu/sites/hwc/files/uploads/Editorial-article-Impact-of-AI-on-OSH_EN.pdf

Relevant Key Findings:

- Al reliance can lead to a lack of transparency, potentially resulting in biased decisions, dangerous situations, and ethical issues for workers and employers. (p. 1)

- The potential for diminished human situation awareness and overreliance on technology due to task automation can reduce vigilance and attention, possibly leading to fatal mistakes.

(p. 2)

- Reduced motivation to maintain manual skills and fears about job loss are psychosocial risks stemming from AI-driven automation. (p. 2)

- Rapid work pace encouraged by AI systems can cause anxiety and psychosocial issues, as seen in call centers that track call duration, intervals, and breaks. (p. 2)

- A loss of the relationship between workers and managers, resulting from AI taking over managerial tasks, is proven to increase work-related stress. (p. 2)

- 5% of workers in the EU use machines or robots that incorporate AI at work, and 3% use robots that interact with them. (p. 3)

Corvo, L. (2024). Handbook hot topics: Workplace AI risks. Law360. https://www.whiteandwilliams.com/assets/htmldocuments/Handboo k%20Hot%20Topics%20Workplace%20AI%20Risks32566453.1.pdf

Link:

https://www.whiteandwilliams.com/assets/htmldocuments/Handbook%20Hot%20Topics%20 Workplace%20AI%20Risks32566453.1.pdf

Relevant Key Findings:

- Misuse of AI tools can expose employers to lawsuits, penalties, and other liabilities (p. 1).

- In October 2023, the Biden administration issued a sweeping executive order designed to ensure the safety, trustworthiness, and security of AI tools (p. 1).

- Over one-third of U.S. states have passed some form of legislation governing AI tools (p. 1).

- In January 2023, New York City passed legislation requiring employers utilizing AI for hiring to conduct detailed bias audits and post the results on company websites (p. 2).

- In May 2023, the EEOC issued a technical assistance document warning of liability under Title VII of the Civil Rights Act in cases where algorithmic decision-making tools produce a discriminatory result (p. 2).

- Al tools are prone to hallucinations or the creation of patterns or objects that are nonexistent, nonsensical or wrong, and are known to produce sloppy content with errors in grammar and spelling (p. 3).

De Smet, A., Durth, S., Hancock, B., Mugayar-Baldocchi, M., & Reich, A. (2024). The human side of generative AI: Creating a path to productivity. McKinsey & Company.

https://tvg-smart.com/TVG/humanside.pdf

Link: https://tvg-smart.com/TVG/humanside.pdf

Relevant Key Findings:

- 88% of employees who use generative AI are in nontechnical roles such as middle managers, healthcare workers, and educators (p. 2, 3).

- 51% of technical and nontechnical employees who are creators and heavy users of generative AI plan to quit their jobs in the next three to six months (p. 2).

- 72% of heavy users and creators staying in their jobs report feeling engaged at work, but 55% report clinical levels of burnout (p. 5).

- When workers use gen AI more heavily, higher cognitive skills are rated as more important than technological skills, even among technical workers (p. 6).

- 57% of organizations plan to increase generative AI talent internally through upskilling, reskilling, and redeploying (p. 8).

- McKinsey research suggests gen AI may automate up to 30% of business activities across occupations by 2030 (p. 9).

Doménech, R., Neut, A., & Ramírez, D. (2025). The impact of AI on employment and productivity. BBVA Research.

https://www.bbvaresearch.com/wp-content/uploads/2025/01/The-im pact-of-Al-on-employment-and-productivity.pdf

Link:

https://www.bbvaresearch.com/wp-content/uploads/2025/01/The-impact-of-Al-on-employme nt-and-productivity.pdf

Relevant Key Findings:

- Al technologies are impacting key sectors such as health, education, transportation and finance (p. 2).

- The effects of AI on employment include the creation of new occupations, complementarity with existing roles, and the automation of tasks (p. 2).

- The most productive countries generally work fewer hours (p. 8).

- In OECD countries, despite the relative increase in the supply of skilled labor, the wage premium associated with a university degree increased (p. 9).

- AI development is characterized by "winner-takes-all" dynamics or public good/competitive dynamics and the "late-mover advantage" (p. 14).

- Al in finance could generate greater efficiency in financial markets, better risk management, identification of fraud, and an improved ability to quickly identify and respond to cyber threats (p. 50).

Ekandjo, T. A. T., Cranefield, J., & Chiu, Y. (2021). The impact of intelligent personal assistants on work practices. ECIS 2021 Research-in-Progress Papers, 53, 1–12.

https://openaccess.wgtn.ac.nz/articles/conference_contribution/Th e_Impacts_of_Intelligent_Employee_Assistants_on_Productivity_W

ork_Practices_An_Exploratory_Study/15027912/1/files/28903134.pd f

Link:

https://openaccess.wgtn.ac.nz/articles/conference_contribution/The_Impacts_of_Intelligent_ Employee Assistants on Productivity Work Practices An Exploratory Study/15027912/1/ files/28903134.pdf

Relevant Key Findings:

- Gartner predicts that half of all workers will use IPAs daily by 2025 (p. 2)

- KWs find it challenging to manage a broad range of competing work, tasks and responsibilities, deal with interruptions, procrastination, effectively collaborate, and manage meeting and email overloads (p. 1)

- Enhancing and sustaining workers' productivity have become even more difficult as organizations transition to hybrid-remote work models in response to the COVID-19 pandemic (p. 1)

Organizations using or planning to implement AI productivity-enhancing technologies need to understand the implications of these technologies on workers and their daily practices (p. 4)

- IPAs are designed to support and assist workers with work management tasks, which include collaboration management, time management, email management, and task management (p. 4-5)

- When new work practices are created, existing work practices are eliminated entirely or altered, and the professional skills and expertise interwoven in those practices made obsolete as organizations and workers increase their reliance on the new technology (p. 6)

Ekandjo, T., Cranefield, J., & Chiu, Y. (2023). Human-Al collaboration in everyday work-life practices: A coregulation perspective. Association for Information Systems.

https://openaccess.wgtn.ac.nz/articles/conference_contribution/HU MAN-AI_COLLABORATION_IN_EVERYDAY_WORK-LIFE_PRACTICE S_A_COREGULATION_PERSPECTIVE/28262858/1/files/51859157.pd f

Link:

https://openaccess.wgtn.ac.nz/articles/conference_contribution/HUMAN-AI_COLLABORATI ON_IN_EVERYDAY_WORK-LIFE_PRACTICES_A_COREGULATION_PERSPECTIVE/282 62858/1/files/51859157.pdf

Relevant Key Findings:

- IPAs adopt rationalistic, moralistic, and normalistic strategies to guide and shape personal productivity, self-care, social bonding and relationship management, and work and personal

boundary management practices (p. 6).

- Instrumental rationalistic strategy was mainly applied to personal productivity practices, such as time, task, meeting, and distraction behaviors (p. 7).

- The humanistic rationalistic approach is mainly deployed to support workers in developing better self-care and work-life boundary management practices (p. 7).

- The humanistic moralistic approach coregulates mainly work-life boundary management and social bonding and relationship management practices (p. 9).

- Workers actively search for satisfaction and self-fulfillment (p. 9).

- IPAs used prescriptive and retrospective normalistic strategies to guide, challenge, and shape all four identified work-life practices (p. 9).

Elkahlout, M., Karaja, M. B., Elsharif, A. A., Dheir, I. M., Abunasser, B. S., & Abu-Naser, S. S. (2024). Al-Driven organizational change: Transforming structures and processes in the modern workplace. International Journal of Academic Information Systems Research (IJAISR), 8(8), 24-28. <u>https://philarchive.org/archive/ELKAOC</u>

Link: https://philarchive.org/archive/ELKAOC

Relevant Key Findings:

- Al technologies challenge traditional hierarchical models by streamlining communication and decision-making, fostering more decentralized and networked organizational forms (p. 1).

- Al enhances decision-making processes by providing advanced data analytics and predictive insights, enabling more informed and strategic choices (p. 1).

- Al streamlines repetitive and time-consuming tasks such as data entry and customer inquiries, which can be efficiently handled by Al systems, freeing up employees to focus on more strategic activities (p. 2).

- Al drives innovation by enabling new product development and business models, allowing companies to stay competitive and meet evolving customer demands (p. 2).

- Resistance to change from employees and management is a primary obstacle to AI adoption, potentially leading to apprehension about job security and altered responsibilities (p. 3).

- The increasing demand for AI-related skills will lead to the creation of new job roles and the need for upskilling and reskilling within organizations, demanding expertise in AI development, data science, and AI ethics (p. 4).

García-Madurga, M.-Á., Gil-Lacruz, A.-I., Saz-Gil, I., & Gil-Lacruz, M. (2024). The role of artificial intelligence in improving workplace well-being: A systematic review. Businesses, 4(3), 389-410. https://doi.org/10.3390/businesses4030024

Link: https://zaguan.unizar.es/record/144759/files/texto_completo.pdf?version=1

Relevant Key Findings:

Al exerts a substantial influence on society, presenting both opportunities and challenges, potentially 'a curse or a blessing', depending on its application and management (p. 1)
Jobs that involve repetitive tasks are expected to be the most affected by automation, including low-level service tasks, production jobs, and financial sector tasks (p. 2)

- Automation can create problems of unemployment and lower wages, particularly among service-related professions (p. 2)

- Al could also enable employees to focus on more valuable and creative tasks, working alongside Al in what is known as "hybrid intelligence" (p. 2)

- The psychological impacts of AI implementation in workplaces are largely unknown (p. 7)

- Changing workplace behavior requires altering habits, and smart technology positively affects employee well-being and learning performance (p. 9)

Gusti, M. A., Satrianto, A., Candrianto, Juniardi, E., & Fitra, H. (2024). Artificial intelligence for employee engagement and productivity. Problems and Perspectives in Management, 22(3), 174-184.

https://www.businessperspectives.org/images/pdf/applications/pub lishing/templates/article/assets/20461/PPM 2024 03 Gusti.pdf

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https://www.businessperspectives.org/images/pdf/applications/publishing/templates/article/a ssets/20461/PPM_2024_03_Gusti.pdf

Relevant Key Findings:

- Before the pandemic, around 62% of employees liked working at the company's location, but after the pandemic, only 37% showed their preference. With the use of AI, employees work faster, more effectively, and more efficiently (p. 2)

- The partial least squares (PLS) analysis shows a direct relationship between AI and employee engagement (p < 0.05) and productivity (p < 0.05), as well as employee engagement and employee productivity (p < 0.05). (p. 2)

- The effect of AI on employee productivity is mediated by employee engagement (p < 0.05), but the moderating effect provided by change leadership is not significant (p > 0.05) in increasing employee productivity. (p. 2)

- Around 60% of respondents were women; 36% had bachelor's degrees, followed by associate degrees (23%); 45% have work experience in the banking industry for 3-5 years, serving as frontline (29%) and customer service (22%) employees; the majority are aged between 30-35 years with a percentage of 48%; 62% are married with two children (78%), and more than half earn more than IDR 4.000.000 per month. (p. 7)

- Only one factor was able to explain a variance of 28.053% indicating no bias. (p. 7)

- Al explains 56% of the variance in employee engagement while Al and employee engagement together explain 60% of the variance in employee productivity. (p. 8)

Johnson, D., & Pestana, R. (2024). Artificial intelligence and workforce development. Jack D. Gordon Institute for Public Policy. <u>https://gordoninstitute.fiu.edu/research/policy-innovation-series/art</u> <u>ificial-intelligence-and-workforce-development-v2.pdf</u>

Link:

https://gordoninstitute.fiu.edu/research/policy-innovation-series/artificial-intelligence-and-wor kforce-development-v2.pdf

Relevant Key Findings:

- Integrating AI into the workforce presents both opportunities and challenges, with routine automation increasing efficiency and productivity, but potential benefits may be lost if the workforce does not keep up, leading to adverse effects on the economy, productivity, and livelihoods (p. 1).

- State funded universities in Florida should consider offering technical and non-technical degree programs on AI with flexible curriculum that can adapt to current and projected labor market needs, including onboarding faculty with AI competencies and researching AI-related priorities for curricula (p. 2).

- State funded universities should offer below market rate certificate programs, MOOCs, or micro credentials that are cost effectively available to residents of the state, purpose fit for both upskilling and reskilling (p. 2).

- Universities need to track the effectiveness of their AI upskilling and reskilling efforts based on employment outcomes, relevance to industry (p. 2).

- Al training and sensitization should be made compulsory for state employees (p. 2).

- The state legislature should provide the fiscal space to facilitate partnerships among government, academia, and industry to identify AI skills gaps in Florida's workforce (p. 2).

Joshi, S. (2025). Retraining US workforce in the age of agentic Gen AI: Role of prompt engineering and up-skilling initiatives. International Journal of Advanced Research in Science, Communication and Technology (IJARSCT), 5(1), 543-557. <u>https://doi.org/10.48175/IJARSCT-23272</u>

Link:

https://satyadharjoshi.com/wp-content/uploads/2025/02/Paper23272-Retraining-US-Workfor ce-in-the-Age-of-Agentic-Gen-AI-Role-of-Prompt-Engineering-and-Up-Skilling-Initiatives.pdf

Relevant Key Findings:

- Targeted upskilling, particularly through training in prompt engineering, offers avenues to empower employees and retain talent amidst AI integration. (p. 1)

- Prompt engineering enhances accuracy, efficiency, and applicability of LLMs in various sectors. (p. 2)

- Studies show prompt engineering education can influence user experience and accuracy of LLM-generated content. (p. 2)

- Education and training in prompt engineering can significantly impact user performance. (p. 4)

- As generative AI becomes more prevalent, organizations need employees who can effectively use LLMs to improve productivity and innovation. (p. 6)

- Prompt engineering is being applied in the financial sector to enhance decision-making, automate tasks, and improve customer service. (p. 7)

Lane, M., & Williams, M. (2023). Defining and classifying AI in the workplace. OECD Social, Employment and Migration Working Papers, No. 290, 1-40. OECD Publishing.

https://dx.doi.org/10.1787/59e89d7f-en

Link:

https://www.ospi.es/export/sites/ospi/documents/documentos/OCDE_AI_in_the_workplace.p_df

Relevant Key Findings:

- Al rarely automates jobs entirely because most jobs consist of many varied tasks, and while Al can perform certain tasks very well, it cannot yet mimic the full range of abilities innate to humans (p. 15).

- Al often automates parts of a job by substituting labour in certain tasks and thereby transforming that job rather than eliminating it (p. 15).

- There is a positive link between exposure to AI and increased rates of involuntary part-time work in occupations where computer use is low, indicating that these workers work fewer hours than they would like to (p. 15).

- Around half of AI adopters in finance and manufacturing reported that AI had created tasks that were not previously done by workers, while over two-thirds reported that AI had automated tasks that workers used to do (p. 17).

- In response to an OECD survey of the impact of AI on the workplace, 65% of AI workers using in the manufacturing sector reported that AI had improved their physical health and safety, compared to under 10% who said it worsened it (p. 18).

- OECD surveys of AI use in the workplace show that, among workers who report that their employers' use of AI involves the collection of data on workers or how they do their work, more than half expressed worries regarding their privacy and more than half said that they worried that too much of their data was being collected (p. 22).

Lane, M., Williams, M., & Broecke, S. (2024). Using AI in the workplace. OECD Artificial Intelligence Papers No. 11. OECD Publishing.

https://www.oecd.org/content/dam/oecd/en/publications/reports/202 4/03/using-ai-in-the-workplace_02d6890a/73d417f9-en.pdf

Link:

https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/03/using-ai-in-the-work place_02d6890a/73d417f9-en.pdf

Relevant Key Findings:

- Four in five workers said that AI had improved their performance at work, and three in five said it had increased their enjoyment of work (p. 3).

- Three in five workers are worried about losing their job to AI in the next 10 years, and two in five expect AI to reduce wages in their sector (p. 3).

- Around 80% of AI users said that AI had improved their performance at work, and AI users were more than four times as likely to say that AI had improved working conditions as to say that AI had worsened them (p. 4).

- Occupations at the highest risk of automation account for about 27% of total employment (p. 4).

- Only 17% of adults in the United Kingdom can often or always tell when they are using AI (p. 11).

- Evidence shows that the outcomes of AI for workers are more positive in firms that consult workers about the adoption of new technologies (p. 12).

Lăzăroiu, G., & Rogalska, E. (2023). How generative artificial intelligence technologies shape partial job displacement and labor productivity growth. Oeconomia Copernicana, 14(3), 703–706. https://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.ojs-doi-10_24136_oc_2023_020/c/articles-19900462.pdf.pdf

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https://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.ojs-doi-10 24136 oc 2023 020/c/a rticles-19900462.pdf.pdf

Relevant Key Findings:

- Generative AI tools can automate artistic creative production and labor by use of synthetic media and data (p. 1)

- Machine and deep learning can augment decision-making using real-time, trustworthy data fabric architecture (p. 1)

- Machines can perform tasks autonomously via deep learning, augmented reality, computer

vision, and natural language processing, elevating productivity in factories (p. 1)

- Generative AI bolsters engagement patterns, decisions, and behaviors through customer data collection, management, and analysis (p. 2)

- Generative AI reconfigures managerial and professional roles, career paths, job mismatches, workforce skill demands, and hiring practices (p. 2)

- Algorithmic knowledge, adaptive systems, collective action coordination, and coherent talent acquisition articulate Web3-based remote work experiences, resulting in meaningful productivity growth (p. 2)

Loomis, A., & Mainelli, T. (2024). Workforce upskilling for the AI era. IDC.

https://www.delltechnologies.com/asset/en-us/solutions/business-s olutions/industry-market/idc-infobrief-workforce-upskilling-for-theai-era.pdf

Link:

https://www.delltechnologies.com/asset/en-us/solutions/business-solutions/industry-market/i dc-infobrief-workforce-upskilling-for-the-ai-era.pdf

Relevant Key Findings:

- 40% of current job roles will be redefined or eliminated across G2000 organizations by 2027 due to GenAI adoption (p. 4)

- Enterprises will leverage personalized technology skills development to drive \$1 trillion in productivity gains by 2026, enabled by GenAI and automation (p. 4)

- Organizations are projected to spend \$346 billion on products and services to implement GenAl from 2024 to 2027 (p. 4)

- 47% of global organizations cite investments in skills and digital training as their most enduring technology investment through 2024, followed by 46% citing generative AI solutions (p. 4)

- 41% of organizations consider IT training and skills development as the most important investment for improving employee experience and productivity (p. 4)

- 57% of organizations say skills training on codeless development is a key requirement for employees to automate their own work (p. 8)

Manseau, J. (2020). Al in the workplace: A qualitative analysis of intelligent employee assistants. AMCIS 2020 Proceedings, 5, 1–10. https://core.ac.uk/download/pdf/326836018.pdf

Link: https://core.ac.uk/download/pdf/326836018.pdf

Relevant Key Findings:

- Intelligent employee assistants (IEAs) are showing rapid adoption in organizations, changing the nature of work. (p. 1)

- IEAs are used to search for information, automate work processes, and augment employee capabilities. (p. 1)

- Gartner states that 2% of digital employees are using IEAs in the workplace, potentially increasing to 25% by 2021. (p. 2)

- Employees use IEAs to perform different actions such as to seek information, automate procedures and augment the capabilities. (p. 6)

- Positive outcomes of using IEAs include increased efficiency, productivity, and cost savings, while negative outcomes include increased expectations and societal costs, including job losses. (p. 6, 7)

- The majority of respondents stated that they found IEAs themselves to help with their work, a bottom-up approach where employees are using available applications to improve their work. (p. 8)

Muehlemann, S. (2024). Al adoption and workplace training (Discussion Paper No. 17367). IZA Institute of Labor Economics. <u>https://docs.iza.org/dp17367.pdf</u>

Link: https://docs.iza.org/dp17367.pdf

Relevant Key Findings:

- AI adoption reduces continuing training for incumbent workers (p. 3)

- Al-adopting SMEs tend to hire more high-skilled workers while reducing their hiring of medium-skilled workers (p. 3)

- Al adoption is linked to an increase in apprenticeship contracts, particularly in SMEs (p. 3)

- Al adoption is associated with an almost 10% increase in the number of newly concluded apprenticeships (p. 16)

- Al adoption is associated with a 1.1 percentage point decrease in the share of separations (p. 18)

- Firms that adopted AI increased the share of high-skilled employees at the expense of skilled employees (p. 21)

Nguyen, A., & Mateescu, A. (2024). Generative AI and labor: Power, hype, and value at work. Data & Society.

https://doi.org/10.69985/gksj7804

Link:

https://datasociety.net/wp-content/uploads/2024/12/DS_Generative-AI-and-Labor-Primer_Fin al.pdf

Relevant Key Findings:

- The public availability and hype over applications like ChatGPT and Midjourney are only one form that generative AI takes, while enterprise applications of generative AI will likely have the greatest impact on workers (p. 1).

- AI is dependent on human labor, including data workers, creators whose content is amassed for training AI, and workers whose digital likenesses and voices are commodified and reproduced (p. 1).

- As employers integrate generative AI into workplaces, their application can obscure new dynamics of extraction, devalue human labor, and build on older practices of algorithmic control (p. 2).

- Generative AI models can recognize patterns in data, such as transcripts of call center interactions, to identify the language workers use to build rapport with customers (p. 7).

- An industry-wide survey report from AP News examining journalists' adoption of generative AI found that in some cases it functioned much like self-service checkout, in that staff journalists are increasingly expected to do extra editing or proofreading work that would have otherwise gone out to contract freelancers (p. 18).

- In mid-2023, consulting firm McKinsey predicted that 30 percent of work hours would be automated by 2030 (p. 17).

Okiridu, O. S. F., Ogwunte, P. C., & Godpower, Y. J. (2024). Emerging technologies adoption for improved job efficiency in a knowledge-driven work environment. World Journal of Innovation and Modern Technology, 8(6), 56–66.

https://iiardjournals.org/get/WJIMT/VOL.%208%20NO.%206%202024 /Emerging%20Technologies%2056-66.pdf

Link:

https://iiardjournals.org/get/WJIMT/VOL.%208%20NO.%206%202024/Emerging%20Technol ogies%2056-66.pdf

Relevant Key Findings:

- Postgraduate students in Rivers State universities agreed to a high extent that they are ready to adopt cloud-based platforms and artificial intelligence for improved job efficiency in a knowledge-driven work environment (p. 1).

- Business Education postgraduate students are ready to adopt Cloud-Based Platforms for improved job efficiency in a knowledge-driven work environment to a high extent, with a grand mean score of 3.49 (p. 6).

- Business Education postgraduate students are ready to adopt artificial intelligence for improved job efficiency in a knowledge-driven work environment to a high extent, with a grand mean score of 3.41 (p. 7).

- There is no significant difference between Business Education Postgraduate Students of Rivers State University and Ignatius Ajuru University of Education on the extent to which

Students are ready to adopt cloud-based platforms for improved job efficiency in a knowledge-driven work environment (p. 8).

- There is no significant difference between Business Education Postgraduate Students of Rivers State University and Ignatius Ajuru University of Education on the extent to which Students are ready to adopt Artificial Intelligence for improved job efficiency in a knowledge-driven work environment (p. 8).

- Business Education postgraduate students in Rivers State Universities are willing to use cloud-based platforms like Dropbox, OneDrive, and Google Drive and know how to use AI tools like Grammarly and ChatGPT (p. 9).

Pape, M. (2024). Addressing AI risks in the workplace: Workers and algorithms (PE 762.323). European Parliamentary Research Service. https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/762323/ EPRS_BRI(2024)762323_EN.pdf

Link:

https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/762323/EPRS_BRI(2024)76232 3_EN.pdf

Relevant Key Findings:

- Algorithms can lead to systematic discrimination in recruitment, task assignment, or bonuses if the data they are based on is biased (p. 3).

- A 2024 study showed that algorithmic management in logistics and healthcare can streamline work processes and increase efficiency, but raises concerns about job quality and worker surveillance (p. 3).

- A 2023 study in manufacturing and finance found that automation tends to reorient jobs towards tasks where humans have a comparative advantage (p. 3).

- The International Labour Organisation (ILO) predicts that generative AI will augment occupations rather than automate them, particularly in clerical roles (p. 4).

- The Al Act prohibits tools for emotion recognition at the workplace (except for medical or safety reasons) and social scoring (p. 5).

- The 2022 Parliament report recognizes positive AI impacts on the labor market, but warns that algorithmic management can lead to power imbalances and obscured decision-making and condemns AI-fueled surveillance in the workplace (p. 5).

Ramya, V. V., & Khandelwal, A. (2024). Smart living: The influence of AI on daily activities, day-to-day work and life-style. Proceedings of the 2nd ICSSR Conference on "India Towards Viksit Bharat @2047", 1-8.

http://bvicam.in/INDIACom/news/ViksitBharat2024Proceedings/pap

ers/72.pdf

Link: http://bvicam.in/INDIACom/news/ViksitBharat2024Proceedings/papers/72.pdf

Relevant Key Findings:

- Al boosts workplace productivity by 65% through automation tools and virtual assistants handling routine tasks and data analysis (p. 5).

- 70% of people use AI-driven apps for daily tasks like personal scheduling, health monitoring, and home automation (p. 5).

- 60% of users experience an enhanced quality of life due to AI-based recommendations in entertainment, shopping, and travel planning (p. 5).

- Google Trends data indicates a 75% increase in interest surrounding specific AI applications (p. 5).

- Al application growth in India showed fluctuations between January and August 2024, with percentage changes ranging from positive growth to negative growth depending on the month and Al application field (p. 6, 7).

- Al can automate mundane tasks, assist in energy conservation, and improve safety in homes, while also aiding in more accurate disease diagnosis, personalized treatments, and well-being tracking in healthcare (p. 7).

Sadeghi, S. (2024). Employee well-being in the age of AI: Perceptions, concerns, behaviors, and outcomes. University of the Incarnate Word. <u>https://arxiv.org/pdf/2412.04796</u>

Link: https://arxiv.org/pdf/2412.04796

Relevant Key Findings:

- Al raises concerns about job security, fairness, and privacy while also offering efficiency and bias reduction (p. 1).

- Lack of transparency in AI systems can breed mistrust and negative views about fairness among employees (p. 2).

- Al-driven systems, especially in scheduling and performance management, can reduce employees' control over their work, leading to dehumanization and increased stress (p. 3).

- Negative perceptions of AI can lead to higher turnover intentions and reduced engagement among employees (p. 4).

- Unexplained or unpredictable changes in Al-driven evaluations can erode job satisfaction, leaving employees feeling unsupported (p. 3).

- Organizations should ensure transparency, clear communication, and employee involvement in AI implementation to mitigate negative impacts and enhance positive outcomes (p. 4).

Salvi del Pero, A., Wyckoff, P., & Vourc'h, A. (2022). Using artificial intelligence in the workplace: What are the main ethical risks? OECD Social, Employment and Migration Working Papers, No. 273. OECD Publishing. https://dx.doi.org/10.1787/840a2d9f-en

Link:

https://www.sipotra.it/wp-content/uploads/2022/07/Using-Artificial-Intelligence-in-the-workpla ce-What-are-the-main-ethical-risks.pdf

Relevant Key Findings:

- 44% of respondents in advanced economies expressed concerns about explainability regarding the use of AI at work, 41% were concerned about privacy, and 30% about equity and fairness (p. 9).

- A 2018 survey showed that 76% of workers see a danger that AI may result in more surveillance, 65% that it may dehumanize work, and 21% that it may lead to unethical use of personal data (p. 18).

- ICT usage surveys in Canada, Denmark, France, and Korea found that between 2 and 11% of firms used AI technology in recent years, but large firms (250+ people) were 2 to 6 times more likely to do so (p. 19).

- In 2021, 8% of respondents reported using AI for human resources (p. 19).

- A meta-analysis of 30 years of experiments in the United States found that white job applicants were 36% more likely to receive a callback than equally qualified African Americans, and 24% more likely than Latinos (p. 27).

- Facial recognition technologies are being found to have much poorer accuracy for women, black people, and 18-30 year olds, with higher accuracy for male and light-skinned subjects due to training data (p. 29).

Schaefer, C., Lemmer, K., Kret, K. S., Ylinen, M., Mikalef, P., & Niehaves, B. (2021). Truth or dare? – How can we influence the adoption of artificial intelligence in municipalities? Proceedings of the 54th Hawaii International Conference on System Sciences, 2347-2357.

https://scholarspace.manoa.hawaii.edu/bitstream/10125/70899/1/02 31.pdf

Link: https://scholarspace.manoa.hawaii.edu/bitstream/10125/70899/1/0231.pdf

Relevant Key Findings:

- 86% of 300 public sector leaders want to increase or significantly increase spending on AI for 2020, with 90% expecting a medium to high return on their investment (p. 1)
- Companies like Google and Microsoft have bought more than 140 AI companies since 2011 (p. 1)

- In an AI study by Accenture, 86% of 300 public sector leaders want to increase or significantly increase spending on AI for 2020. 90% of the participants in the study expect medium to high return on their investment (p. 1)

- Semi-structured expert interviews in twelve German municipalities examined perceived challenges of AI adoption from employee's perspectives (p. 1)

- Al systems can offer advantages such as 24-hour service and faster, consistent processing quality, relieving employees and allowing them to focus on core processes (p. 4)

- Municipalities stated that the technical compatibility of their IT systems with new AI technology is of great importance and has a decisive influence on adoption (p. 5)

Shahvaroughi Farahani, M., & Ghasemi, G. (2024). Artificial intelligence and inequality: Challenges and opportunities. Qeios. <u>https://doi.org/10.32388/7HWUZ2</u>

Link:

https://radensa.ru/wp-content/uploads/2024/05/Artificial_Intelligence_and_Inequality_Challen ges_.pdf

Relevant Key Findings:

- Al technologies can exacerbate existing inequalities across labor markets, education, healthcare, and access to services, potentially leading to job displacement and wage polarization (p. 1).

- Algorithmic biases embedded in Al systems can perpetuate discrimination and inequity, particularly against marginalized communities (p. 1).

- Al-driven automation may lead to job displacement and wage polarization, widening the gap between high-skilled and low-skilled workers (p. 1).

- Biases in AI algorithms can reinforce existing social inequalities, perpetuate stereotypes, and marginalize certain groups (p. 2).

As Al systems automate routine tasks, there is a growing demand for workers with skills that complement Al technologies, such as data analysis, programming, and digital literacy (p. 4).

- Ethical concerns arise from the lack of transparency and accountability in Al decision-making processes, making it challenging to understand how decisions are made or to identify and address instances of bias (p. 8).

Singh, G., Bhatt, M., Singh, R. R., Atluri, B. S., Jha, V., Jain, P., Chheda, K., Arora, J., Shekhawat, R. S., Gautam, A., Karnik, N. N., Gupta, S., Jain, A., Chopra, D., Meena, R. K., & Sinha, S. (2024). G20, sustainability in management and economics: Future agendas and prospects. NEX GEN Publications.

https://nexgenpublication.com/pdf/2022-2023/g20-sustainability-in-

management-and-economics-future-agendas-and-prospects.pdf

Link:

https://nexgenpublication.com/pdf/2022-2023/g20-sustainability-in-management-and-econo mics-future-agendas-and-prospects.pdf#page=11

Relevant Key Findings:

- AI could potentially contribute \$15.7 trillion to the global economy by 2035 (p. 44).

- The Indian artificial intelligence (AI) market size was estimated at USD 672.11 million in 2022 (p. 44).

- The size of India artificial intelligence (AI) market is projected to grow at a CAGR of 32.26% reaching a value of USD 3,966.51 million by 2029 (p. 44).

- The artificial intelligence market size at global level was valued at USD 150.2 billion in 2023 and is expected to grow at a CAGR of 36.8% from 2023 to 2030 (p. 44).

- According to a 2023 Gartner survey, 55% of business organizations that have deployed AI always consider AI for every new use case they're evaluating (p. 51).

- Big data analytics helps identify patterns and trends related to human behavior, preferences, and interactions (p. 21).

Singh, S., Solkhe, A., & Gautam, P. (2022). What do we know about employee productivity?: Insights from bibliometric analysis. Journal of Scientometric Research, 11(2), 183–198.

https://jscires.org/wp-content/uploads/2023/07/JScientometRes-11-2-183.pdf

Link: https://jscires.org/wp-content/uploads/2023/07/JScientometRes-11-2-183.pdf

Relevant Key Findings:

- Greater productivity offers different advantages to a firm and its personnel, leading to economic expansion, high profits, and better social advancement, as well as better earnings and working conditions for employees (p. 1).

- Employee productivity is supported by factors like customer-client relationships, profitability, leadership style, and teamwork (p. 2).

- Younger employees (under 50) are more likely to demonstrate high productivity through hard skills, while older employees (over 50) emphasize soft skills such as commitment (p. 2).

- Happiness derived from a job correlates with increased employee productivity (p. 2).

- Work-life balance and employee engagement are strongly associated with high levels of employee productivity, resulting in lower absenteeism and a more responsive workforce (p. 2).

- Honesty in leadership is crucial for enhancing employee productivity, especially when integrated with market and innovation orientations within the company (p. 2).

Syifa, A. F. (2024). Ethics in the Age of AI : Principles and Guidelines for Responsible Implementation in Workplace. International Journal of Advanced Technology and Social Sciences, 2(2), 237-242. <u>https://doi.org/10.59890/ijatss.v2i2.1398</u>

Link: https://pdfs.semanticscholar.org/7a33/317d892cae21d46e4dedcb36a566d7c22e65.pdf

Relevant Key Findings:

- 50% of respondents have adopted AI in their business unit. (p. 2)
- 78% of employees are concerned about the misuse of AI in the workplace. (p. 2)
- 94% of consumers trust companies transparent about AI use. (p. 2)
- 85% of executives deem ethical considerations essential for AI adoption. (p. 2)
- 32% of organizations have encountered AI-related ethical issues. (p. 2)
- 73% of consumers believe companies should focus on AI regulation. (p. 2)

Yadav, M., Kakkar, M., & Kaushik, D. P. (2023). Harnessing artificial intelligence to empower HR processes and drive enhanced efficiency in the workplace to boost productivity. International Journal on Recent and Innovation Trends in Computing and Communication, 11(8s), 381-390.

https://doi.org/10.17762/ijritcc.v11i8s.7218

Link: https://core.ac.uk/download/pdf/579951359.pdf

Relevant Key Findings:

- Traditional HR procedures can be time-consuming and cause inefficiencies and delays in decision-making. (p. 1)

- Only 40% of organizations and industries use AI in their recruitment processes, primarily using chatbots. (p. 2)

- Al can reduce administrative burdens and assist in selecting the right applicants with the necessary skills, lowering discrimination. (p. 2)

- Al can improve product features, functionality, and performance, free up people through automation, and improve overall efficiency and inventiveness. (p. 2)

- If companies do not make learning AI necessary for their employees, they will lose their competitive edge. (p. 3)

- Al algorithms can be designed to eliminate biases and focus solely on candidate qualifications and job fit. (p. 6)

Zalavadiya, J. G., & Patil, V. M. (2024). How AI is reshaping

employment and what it means for future careers. International Research Journal of Modernization in Engineering Technology and Science, 6(12), 3041-3045.

https://www.doi.org/10.56726/IRJMETS65477

Link:

https://www.irjmets.com/uploadedfiles/paper//issue_12_december_2024/65477/final/fin_irjm ets1735047667.pdf

Relevant Key Findings:

- Al is revolutionizing the employment ecosystem, altering traditional job roles and redefining the skills required for future careers by automating routine tasks, enhancing decision-making, and driving innovation (p. 1).

- AI is fostering new opportunities while posing challenges like job displacement and the need for workforce reskilling (p. 1).

- Frey and Osborne's (2017) research estimates that up to 47% of current jobs in the U.S. are at risk of automation (p. 1).

- The World Economic Forum's Future of Jobs Report (2023) identifies skills such as digital literacy, problem-solving, creativity, and emotional intelligence as critical for the future workforce (p. 1).

- Surveys from the World Economic Forum highlight that nearly 50% of employees will need reskilling by 2030 due to AI's influence (p. 4).

- Ethical concerns emerge as AI systems influence hiring practices, employee monitoring, and decision-making processes (p. 1).

Zeng, H. (2020). Adaptability of artificial intelligence in human resources management in this era. International Journal of Science, 7(1), 271–276.

http://www.ijscience.org/download/IJS-7-1-271-276.pdf

Link: http://www.ijscience.org/download/IJS-7-1-271-276.pdf

Relevant Key Findings:

Leaders are less risk tolerant than even ten years ago due to the widespread implications of the recession, and CEOs want to see facts and data supporting their positions (p. 1).
Core AI technologies offer significant opportunities to improve HR functions such as self-service transactions, recruiting, payroll, reporting, and access policies (p. 1).

- Conversational AI for HR transactions has strong potential to perform certain transactions routed via an approval-chain process (p. 2).

- The World Economic Forum projects that 75 million current jobs will be displaced as artificial intelligence takes over more routine aspects of work, while 133 million new jobs will be created (p. 3).

- DBS Talent Acquisition was able to shorten screening time from 32 minutes per candidate to 8 minutes, improve job application completion rate from 85% to 97%, and respond to 96% of candidate queries through their AI system (p. 3).

- Nearly 40% of companies are using some form of AI in HR (p. 5).