



Closing the Gap **Upskilling and** **Reskilling in** **an AI Era**

Introduction

The process of continuously developing and advancing skills in the workplace—known as upskilling—is vital to company growth and competitiveness. At a time when generative artificial intelligence (AI), high volume data analytics and shifting societal norms are upending many traditional jobs and creating new ones, DeVry University wanted to understand the current role learning and development opportunities play in today’s workforce.

Terms to Know

Upskilling

The process of expanding or developing new skills to better perform in a current job or improve career prospects.

Reskilling

The process of learning new skills or qualifications unrelated to a current job, with the goal of moving to a different area of responsibility, or a new job or industry.

DeVry’s second annual report, *Closing the Gap: Upskilling and Reskilling in an AI Era*, reveals an ongoing challenge with upskilling and reskilling, as well as a resurgence of lifelong learning among workers in the U.S. Specifically, the study found a persistent gap between what workers say they want and the *actions* they take to engage with continuous skill development. This gap notwithstanding, our close examination of these trendlines shows renewed enthusiasm among workers to learn and fewer concrete barriers in their path toward upskilling.

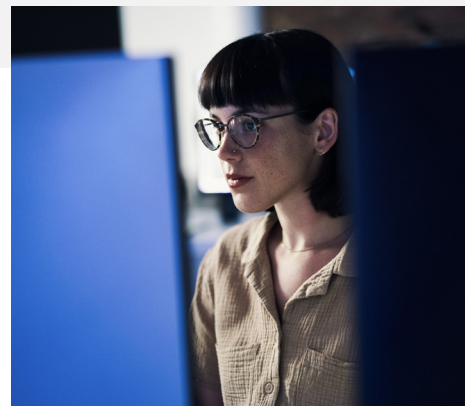
We also found that workers and employers alike are adrift in how to prepare for AI as the workforce attempts to keep up with its impact. U.S. workers are quickly adopting AI tools in their day-to-day lives, but they lack proper training in how best to deploy and leverage these tools at work. Employers, too, are looking for direction on how to move forward and reorient their organizations—and their teams—to keep pace with this changing landscape.

With a deep dive into the approach that both workers and employers take toward upskilling and reskilling, this year’s report uncovered two emerging risks:

- 1 Security concerns, ethical questions and practical skills gaps around the proper use of AI abound, with employers vastly underestimating how extensively workers have already adopted these tools. *If workplaces do not address these issues, organizations and workers could put themselves at risk.*
- 2 Women, who consistently lag behind men in access and utilization of training, are falling further behind. Women are less likely than men to understand AI and recognize the potential of AI in helping them advance. *This gap threatens to exacerbate existing leadership and career advancement challenges for women.*

Methodology

To conduct this study, DeVry University partnered with independent research firm Reputation Leaders to survey more than 1,500 American workers and hundreds of American employers in June 2024 about their approach to worker training and skill building, including in AI. In comparing our data to last year’s results, we found a crucial need for upskilling leadership to create equitable and accessible paths for career mobility



Four Key Findings

1

Workers Have More Access, Time and Energy for Upskilling

Nearly 9 in 10 employers say they offer upskilling but estimate on average only about half (55%) of workers participate. However, workers reported lower barriers than last year and renewed energy for continuous learning.

2

Workers Are More Ready Than Employers for an AI Future

Employers say 32% of their workers are novices at AI, but only 3% of workers describe themselves as such.

3

Women Are Not Convinced AI Will Positively Impact Their Careers

Men are over 50% more likely than women to report that AI skills give them more career opportunities.

4

Current Upskilling Approaches—including in AI—are Exposing Companies to Long-Term Risk

72% of employers admit they *do not* provide upskilling benefits to *all* workers, and 42% of employers say they're not confident that their organization understands how to effectively train workers on AI—leaving gaps in who gains access to and benefits from new technologies.

Workers Have More Access, Time & Energy for Upskilling

But the gap between availability and practical use remains

Nearly 9 in 10 employers say they offer company-paid upskilling benefits but estimate that on average only half of workers (55%) use them. This represents a slight increase compared to [last year's study](#) in both availability and utilization of upskilling programs, but across industries, workers and employers still report a substantial say/do gap in use of upskilling benefits.

Worker enthusiasm for lifelong learning is propelling this slight increase, along with increasing availability of employer-funded programs and diminishing barriers to upskilling for the workforce as a whole. Time, money and competing priorities remain the most common reasons that workers do not take advantage of upskilling resources, but the prevalence of all barriers declined this year.

Skills development opportunities can also buoy worker enthusiasm for their current roles. Workers are at risk of feeling unmotivated or burnt out in their current jobs when they do not participate in upskilling or reskilling programs.

76%

Three in four (76%) workers agree that investing in education will help them advance in their career, and nearly two in three (64%) believe alternative credentials are just as valuable as traditional degrees in starting the career they want

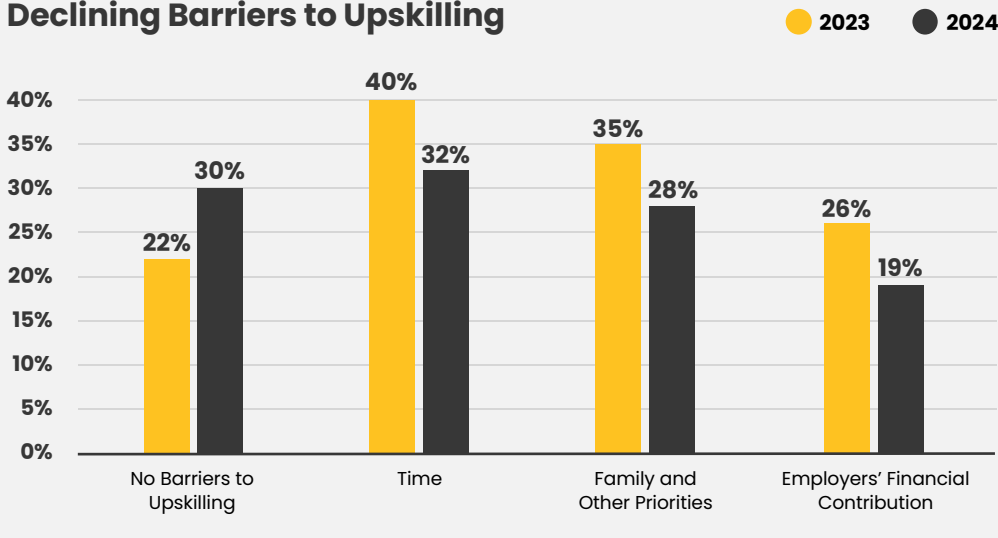
67%

Two-thirds of workers (67%) are open to alternative credentials and lifelong learning to advance their careers, seeing alternative credentials as equally valuable as traditional degrees in career advancement

43%

of workers who don't receive upskilling benefits and 46% of workers who don't receive reskilling benefits feel more tired of their job compared to those who receive and use these benefits (30%)

Declining Barriers to Upskilling



C20: What personal challenges, if any, do you have in work-related training or learning new job skills? (worker)
 C19: What workplace challenges, if any, do you have in training or learning new job skills? (worker)

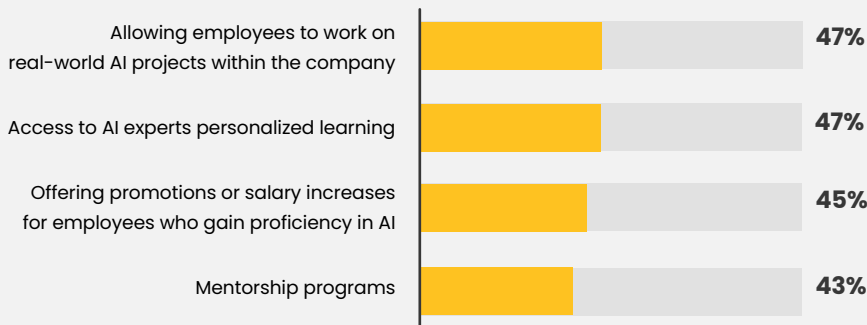


Workers Are More Ready Than Employers for an AI Future

Workers and employers both acknowledge the ubiquity of AI and the importance of embracing skills in this new technology for the near-future workplace.

Employers are tackling their workforce skill-building with a mix of training and hiring. In fact, nearly all employers (98%) are providing incentives to spur more AI usage, such as bonuses and awards or recognitions for workers who achieve AI certifications, as well as tuition reimbursement for AI courses. In addition, 73% of employers believe hiring more people with AI skills will benefit their organization.

Top Four Incentives Employers Offer for AI Upskilling



B13: What sort of career or financial incentives for upskilling in AI does your organization offer? (employer)



AI Curiosity Drives Upskilling Demand

75%

of workers and 77% of employers think everyone needs upskilling or reskilling to keep up with the pace of technology, including AI

75%

of workers and employers agree that people who take the initiative to upskill or reskill, including in AI, will get ahead in their careers

83%

of workers say AI skills have some impact on their ability to remain employable

48%

of workers want to reskill to a more AI-focused role

45%

of employers are offering promotions or salary increases for workers who gain proficiency in AI

52%

of workers and 45% of employers highlight the ability to use AI effectively as the most valuable future skill

Workers Are More Ready Than Employers for an AI Future

However, employers underestimate AI fluency of their current workers. Employers say that 32% of their workers are novices at AI, but only 3% of workers describe themselves as such. This leaves 97% of workers who consider their AI proficiency level as beginner or higher.

Workers are embracing AI and making it work for them, even though they expect workforce changes due to this new technology. More than half of workers—including those in tech, manufacturing, education and business—are already using AI tools regularly, and 49% consider their AI skills to be beyond the basic level. Even amid fears about changing jobs and worker redundancies, only 1 in 5 workers feel like their job security has decreased because of AI.

Workers Feel Prepared to Incorporate AI

49% of workers already consider their AI skills to be intermediate or higher

56% of workers use AI regularly

75% of workers are confident they know what AI can do for them at work

Employers Underestimate AI Proficiencies of Workers

This gap reveals a profound blind spot for employers who may not be prepared to manage the organizational risks that come from widespread, open-source AI use. This also points to a lack of clear standards that employers and workers can use to measure AI proficiency—which begs the question, how well do employers truly understand their workers' skill levels in AI?

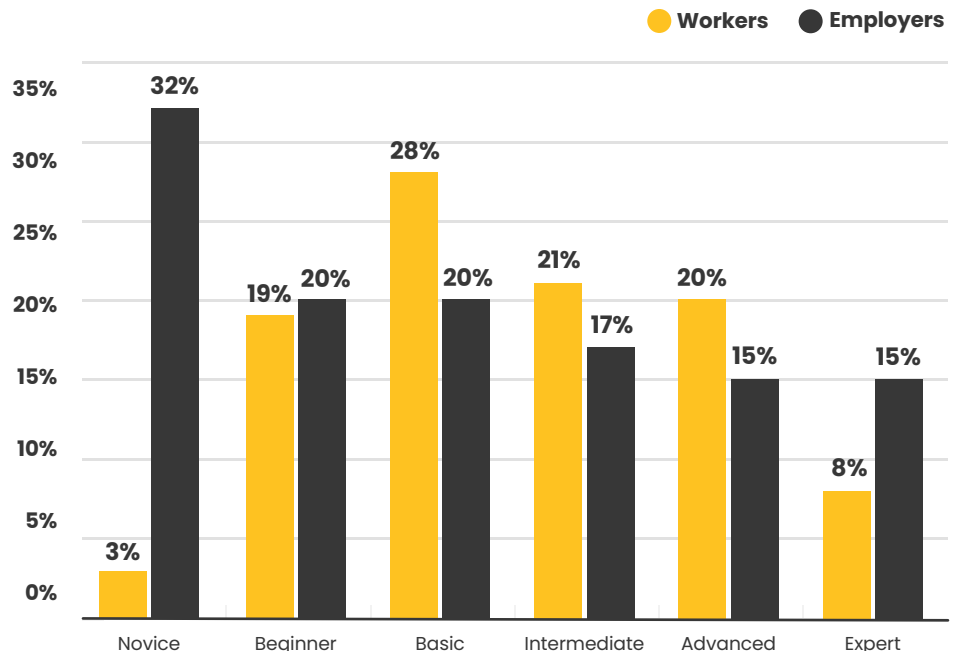
Workers

How would you describe your skill or proficiency level when it comes to using AI at work?

Employers

What percentage of your workforce do you estimate being on each level and are for example AI novices?

- Novice**
 I don't yet know how to effectively use AI in my work
- Beginner**
 I have a basic understanding of AI and have explored AI tools
- Basic**
 I am a regular user of AI tools (e.g. ChatGPT, Gemini or DALL-E)
- Intermediate**
 I use and train generative AI models
- Advanced**
 I use custom AI solutions (e.g. genAI, LLM, ML, NLP, etc./with programming, big data and model optimization)
- Expert**
 I lead AI initiatives or research with advanced programming (e.g. genAI, LLM, ML, NLP, etc.)



B10: How would you describe your skill or proficiency level when it comes to AI at work? (worker)

B8: Read the following levels of AI skill levels. What percentage of your workforce do you estimate belong on each level and are for example AI novices? (employer)

Women Are Not Convinced AI Will Positively Impact Their Careers

Women Are Less Likely to Have Access to Upskilling and Reskilling Resources

	Women	Men
Yes, I have access to and use company-paid upskilling and tuition	43%	51%
No, I don't have access to company-paid upskilling and tuition	24%	19%
Yes, I have access to and use company-paid reskilling opportunities	37%	46%
No, I don't have access to company-paid reskilling opportunities	26%	20%

C14: Do you have access to and use any upskilling or tuition benefits from your current employer? (worker) D2: Do you have access to any reskilling training, resources or benefits from your current employer? (worker)

Men are more likely than women to have access to general upskilling and reskilling resources. The women who do have these resources available to them do not use them as much as men.

Men Are More Likely to Say They Fully Understand AI

	Women	Men
I could describe what AI does to a friend or family member	70%	83%
I fully understand what AI means	68%	82%
I understand what AI can do for me at work	70%	81%
I understand what AI can do for the organization that I work in	71%	80%

B4: How much do you agree or disagree with the following statements? (worker)

Women also trail men in uptake of AI tools and AI-related skills development. While 55% of men consider their AI skills intermediate or higher, only 41% of women feel the same. In addition, only 68% of women say they fully understand what AI means, compared to 82% of men who say they fully understand what AI means.

Women

Men

Women See Durable Skills as Important in Tomorrow's Economy, While Men View AI and Technical Skills as More Important

Women and men also have differing views on the value of AI skills. More women cite durable skills as most valuable in tomorrow's economy, whereas more men cite technical hard skills as most valuable. For example, 65% of women say critical thinking is important (vs. 51% of men), while 56% of men say the skilled use of AI is important (vs. 49% of women).

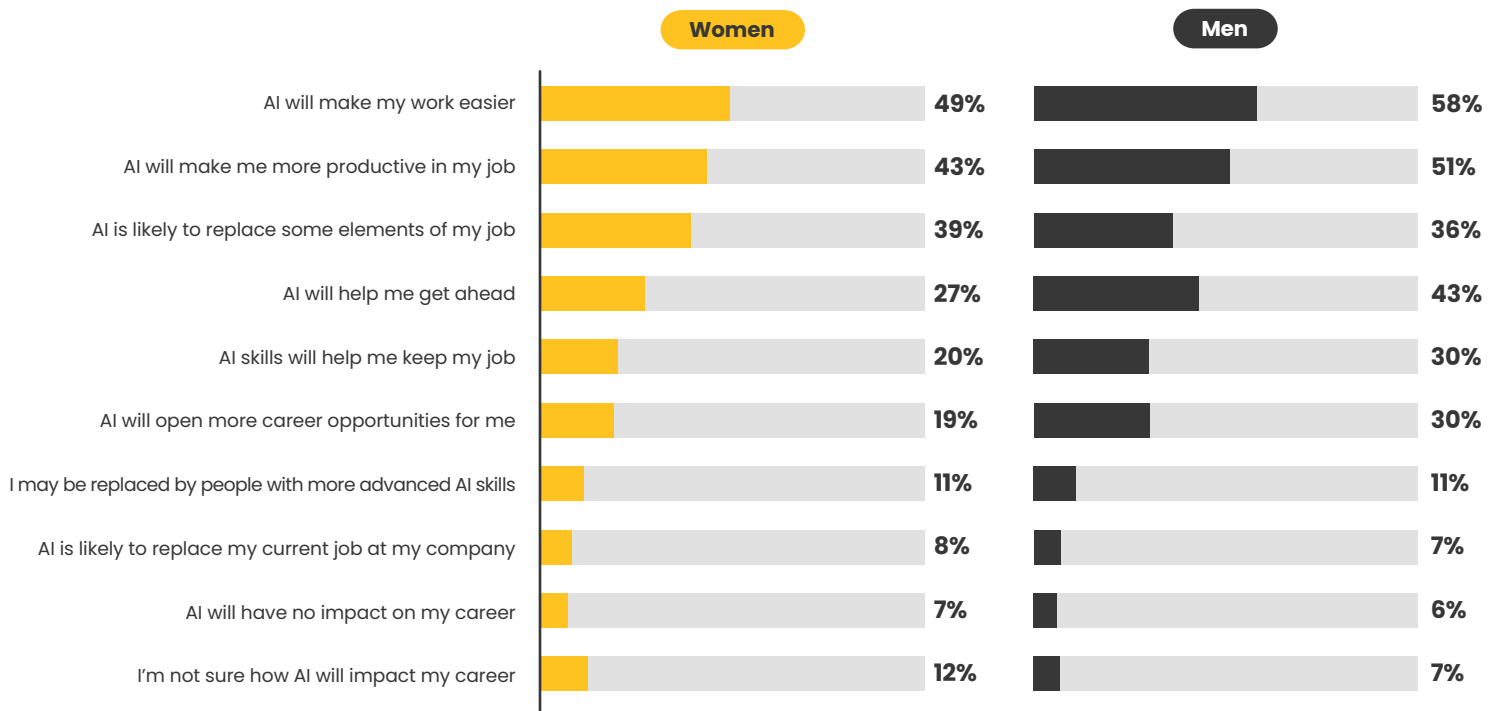


A1: What will be the most valuable employment skills to have in tomorrow's economy? (worker)

Women Are Not Convinced AI Will Positively Impact Their Careers

Women do not see as many positive impacts of AI on their future, with men being over 50% more likely than women to report that AI will open more career opportunities for them. Women also see less potential for AI to make work easier or more productive.

Women Are Less Convinced of AI's Importance in Tomorrow's Economy



B7: What might be some of the ways that AI will impact your job or career in the future, if at all? (worker)

This gender gap in AI's potential to drive professional advancement occurs despite a universal acknowledgment from workers and employers that AI skills are important to get ahead and that upskilling is necessary to keep up with technology.

The risk to our economy and our society more broadly is that women may be deprioritizing AI during this early experimentation phase, extending a cycle where women already fall behind men in continuous upskilling. This could affect female job advancement, satisfaction and retention.

79%

Women

87%

Men

Women are less likely (79%) to think AI skills will have at least some impact on their employability compared to men (87%)

B11: What impact will learning more AI skills and tools have on your remaining employable? (worker)

Current Upskilling Approaches—Including in AI—Are Exposing Companies to Long-Term Risk

In response to the demand for upskilling, employers are sorting through the best way to help their workforce stay ahead of the technological curve. Employers are making choices about who needs access to training and skills—and often it is only a select group of high-performing workers. Most employers (72%) admit they do not provide company-paid upskilling to all workers, with organizations being likely to train workers based on their background or career trajectory.

Employers Prioritize Upskilling for Select Workers

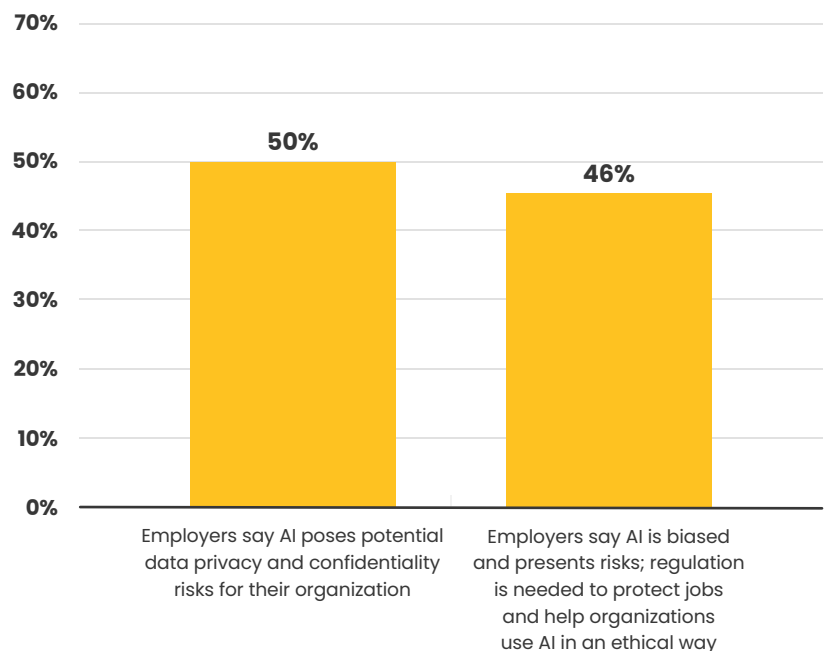


E28: How strongly do you agree or disagree with the following statements? (employer)



AI Training is Critical to Avoid Skills Gaps and Organizational Risks

When it comes to AI, this selectivity can leave employers open to multiple risks, including an emerging gender gap in skilled workers—with women being less confident than men (51% vs. 65%) in their employer’s ability to train them on incorporating AI into their work. It could also create a workforce that is inadequately prepared to manage the risks and opportunities of AI. AI advancement is driving a significant need for employers to ensure none of their workers, or their skills, are left behind.



E28: How strongly do you agree or disagree with the following statements? (employer)

Current Upskilling Approaches—Including in AI—Are Exposing Companies to Long-Term Risk

AI Drives New Skill Demands

Employers and workers are not in sync on who needs to be trained on AI or on how to do it. Companies have a leading role to play in preparing the American workforce for an AI future and guiding the proper integration of this new technology into daily work.



Employers Say They Shoulder More Responsibility for AI Training, but They're Not Sure How

Employers acknowledge they shoulder more responsibility for upskilling related to AI (58%). However, employers do not have a solid understanding of how to effectively train their workers on AI.

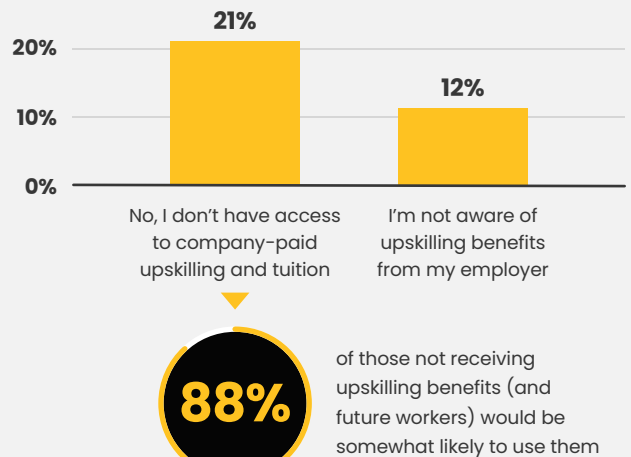


Workers Without Access to Company-Paid Upskilling Opportunities Would Use Them

Employers could significantly improve skills development uptake and access challenges by expanding their upskilling and reskilling programs for all employees.

Workers, especially those currently limited in their professional development options, are seeking more upskilling opportunities. Among workers with no access to upskilling, 88% would be likely to use these benefits if they were offered.

Investing in these workers can drive economic advancement and internal company equity, reduce turnover and—maybe more importantly—reduce the risks of workers experimenting with new technologies and skills at work on their own.



C14: Do you have access to and use any upskilling or tuition benefits from your current employer? (worker) C15: How likely would you use upskilling resources if they were offered by your employer (worker)

Solutions to Close Access Gaps

Workplace shifts driven by AI are well underway in both the day-to-day work and in the changing expectations that workers now have for lifelong learning. Upskilling and reskilling to meet these demands has become essential for workers to stay competitive and for companies to mitigate organizational risks.

Furthermore, inequitable access to learning and development resources threatens to deepen workforce demographic challenges that could last generations. While this year's report suggests barriers such as insufficient time and money are dissipating, motivation for and benefits of acquiring AI skills remain uneven. Early data on workplace AI training indicates that the say/do gap of workers (i.e., saying skills development is essential but being blocked from following through) could expand along gender lines as AI becomes more commonplace.

When employers limit AI training to select groups of workers, they compound this inequality, putting too much emphasis on DIY exploration and not enough on intentional risk management. If employers do not take proper control of—and responsibility for—upskilling their workers on this technology, they could open themselves up to potential threats.

Employers

Manage AI Risks with Integration Plans and Holistic Training

Mitigating risks around AI in the workplace requires a successful integration plan, one that includes comprehensive training and education—not just for a select group—as well as ethical guardrails and work rules. This will allow for more seamless management of AI migration and help workers remain employable in the near-future business environment.

Intentionally Engage Women in AI Training

Women are just as capable as men when it comes to learning AI skills. With the data showing women at risk of falling behind in AI skills development, employers must make a concerted effort to engage this employee base in learning opportunities by showcasing the personal and professional benefits for them.

Build the Right, Collaborative Spaces

With the prominence of hybrid and remote work, some employers may have forgotten that, in many ways, learning is a social activity. Designing and testing training programs that include social engagement can accelerate learning in the workplace. However, virtual learning can still be an effective and social tool through synchronous activities such as breakout rooms, smaller group activities and e-tutoring opportunities.

Understand that Employers Do Not Have to Do This Alone

Employers face a significant challenge in effectively training workers to ensure the safe and effective integration of AI. Fortunately, they can partner with higher education institutions that have deep expertise in helping organizations navigate technological change through upskilling and reskilling programs.

Workers

Ask Employers About Opportunities in AI

While learning AI skills can be intuitive, it is likely that employers have broader plans for integrating AI into their businesses. As employers identify how to best train their workforce on AI, workers can ensure they keep pace with the future of their company—and remain employable—by proactively asking about the right training opportunities for them.

Take Advantage of Continuing Education

Workers and their managers can align on skills needed to succeed within their organization and then determine the best path forward for learning, which could include employer-funded tuition assistance opportunities. By using a credible academic institution that offers alternative education, workers can take advantage of short-form AI skills development opportunities, like earning certificates or certifications.

Use AI Personally, but Understand its Impact Professionally

While many workers are already regularly using AI, it is vital they understand the risks associated with using it in the workplace in the absence of proper training. If workers are not sure how or when to use AI in their roles, they should ask their manager about the best options for proper training.

Know Your Education Options

Acquiring new skills to uplevel a career does not have to start or end with a traditional, four-year college degree. Workers can embrace non-traditional education via academic institutions that offer flexible, accessible and personalized learning pathways for their desired career ambitions, which can include keeping pace with the rapid evolution of AI in the workplace.



Methodology

DeVry University engaged Reputation Leaders to conduct research about artificial intelligence (AI) in connection to upskilling and reskilling from June 11-26, 2024.

The worker sample consisted of a total of 1,526 American adults between the ages of 25 and 45. The respondents were employed, underemployed, or unemployed but expecting to start work in the next 12 months.

The employer sample consisted of 581 hiring decision-makers from a mix of industries, with a particular focus on the technology sector and HR managers.

The margin of error for the worker sample $\pm 2.5\%$ at the 95% level of confidence, while the figure for the employer sample is $\pm 4.1\%$.

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