

The Indeed Global AI Survey: your guide to the future of hiring



indeed



Chris Hyams

'I was on a panel a few weeks back, and someone asked this question: "Are you excited or concerned about AI?" My answer was "yes". I am enthusiastically excited, but I am enthusiastically concerned. And I think it's important to hold both of those at the same time.'

– Chris Hyams, Indeed CEO

Table of contents

'We have seen technological advances like this before, and folks have experience with integrating new technologies into their day-to-day work. They see benefits from having done so.'

– Hannah Calhoon, Indeed Head of AI Innovation

'There are risks of bias. There are risks of abuse of these models as well. We need to be really careful.'

– Donal McMahon, Indeed Vice President of Data Science

'The more you can use new technology to take those time-consuming tasks off your plate, the more you can focus on what really matters.'

– Raj Mukherjee, Indeed Executive Vice President and General Manager of Employer

Introduction: the risks and rewards of using AI for hiring

Results and analysis

Optimism prevails – but younger respondents express more trepidation

Excitement in India; fear in France

Job replacement is the top concern

Worries about AI bias persist

Some underrepresented groups are more likely to view AI as a threat

HR/TA leaders are more optimistic than jobseekers about work wellbeing

Guidance and best practices

How to responsibly use AI-powered HR tools

Predictive analytics can help HR teams see the future

AI glossary

AI at Indeed

Indeed's AI Job Description Generator

More Indeed AI tools coming soon

The risks and rewards of using AI for hiring

'There will certainly be an evolution in jobs in much the same way we saw when the personal computer first came out.'

– Hannah Calhoon, Indeed Head of AI Innovation



Hannah Calhoon

The future of work is already being upended by the rise of sophisticated AI technology. And it's not just jobs that are changing. It's the hiring process itself.

According to a new survey commissioned by Indeed, 87% of human resources and talent acquisition decision makers say they're already using AI tools to complete tasks like summarising CVs, writing job descriptions and generating interview questions. The same is true for jobseekers, with nearly 70% saying they're using AI tools to research companies, draft cover letters and prepare talking points, among other tasks.

The sweeping global survey – which was conducted with 7,275 participants in the US, the UK, Canada, France, Germany, Japan and India – offers a rare detailed look at how both HR/TA leaders and jobseekers perceive AI and its impact on issues related to ethics and bias, work wellbeing, and diversity, equity, inclusion and belonging.

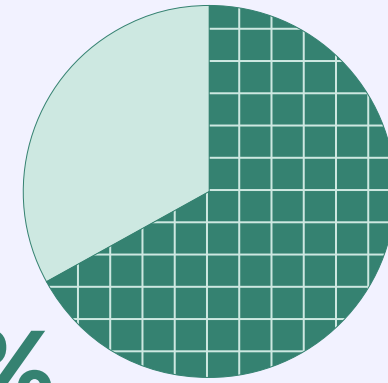
Overall, the results show that HR/TA leaders, as well as jobseekers, are more hopeful than fearful about the opportunities AI tools will provide. For both groups, the majority of respondents say they're optimistic that AI

tools will help them acquire new skills and minimise mundane or toilsome tasks. Some 66% of HR/TA leaders and 50% of jobseekers say they believe AI will actually improve the hiring process. Just 10% of HR/TA leaders and 17% of jobseekers think AI will make it worse.

And yet, both of these groups share concerns that AI may lead to biased outcomes, displaced workers and diluted human decision-making. About half (51%) of HR/TA decision makers and jobseekers surveyed say they think AI will replace more jobs than it creates.

'With each technology disruption, new jobs are created and existing jobs evolve or change,' says Donal McMahon, Indeed Vice President of Data Science. 'With this AI moment, that's true as well.'

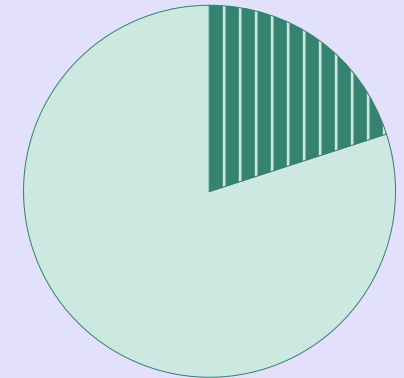
While AI will impact virtually every industry, research suggests not every job is as vulnerable to change. In its recent [AI at Work Report](#), Indeed's Hiring Lab analysed 55 million job postings, which contained 2,600 skill requirements between them, then asked ChatGPT to rank its own ability to perform those skills. Any jobs where ChatGPT said it could be 'good' or 'excellent' at 80% of the skills required were considered jobs with a



67%
of jobseekers are
currently using AI tools¹



87%
of HR/TA decision
makers are currently
using AI tools¹



20%
of jobs face high
exposure to generative
AI-driven change²

¹ Indeed survey

² Indeed Hiring Lab: AI at Work Report

high exposure to AI-driven change. In the end, the Hiring Lab report found that less than one fifth of job postings (20%) meet that description, meaning AI will have a moderate-to-low impact on most jobs.

Whatever level of change your industry is facing, this guide is designed to help your company navigate it. We'll share insights from exclusive Indeed survey data and offer takeaways on everything from how to vet AI vendors to how Indeed's own AI tools can help generate job descriptions, rank candidates and other aspects of the hiring process.

Methodology: *The research was conducted by Censuswide between late August and early September 2023. It includes responses from 3,532 HR/TA leaders and 3,743 jobseekers in the UK, the US, Canada, India, France, Japan and Germany. The questions focused on their hopes and concerns regarding AI systems and tools in general, rather than any specific type of AI technology. Except where noted otherwise, the data cited here reflects global, overall responses. Censuswide abides by and employs members of the Market Research Society, which is based on the ESOMAR principles.*

'With each technology disruption, new jobs are created and existing jobs evolve or change. With this AI moment, that's true as well.'

– Donal McMahon, Indeed Vice President of Data Science



Donal McMahon

Optimism prevails – but younger respondents express more trepidation

'AI can automate routine and repetitive tasks, such as data entry, analysis and processing. By offloading these tasks to AI, human workers can free up time for more creative, strategic and interpersonal aspects of their roles.'

– HR/TA leader in the US

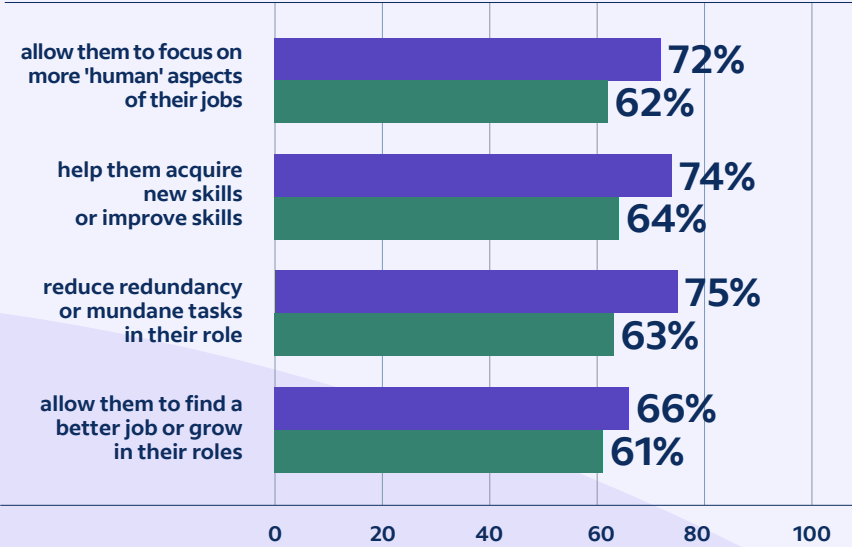
Despite broader concerns about AI's long-term effects, HR/TA leaders and jobseekers generally agree that these tools will help them do their jobs. Some 72% of HR/TA leaders and 62% of jobseekers surveyed are optimistic that this technology will allow them to focus on the more 'human' side of their work. Another 78% of HR/TA leaders and 65% of jobseekers say AI tools will likely make them more productive. In fact, both groups surveyed say their biggest hope for AI is that it will allow them to work on more complex, important tasks and be more productive.

'AI can automate routine and repetitive tasks, such as data entry, analysis and processing,' wrote one US HR/TA leader in an open response to the survey. 'By offloading these tasks to AI, human workers can free up time for more creative, strategic and interpersonal aspects of their roles.'

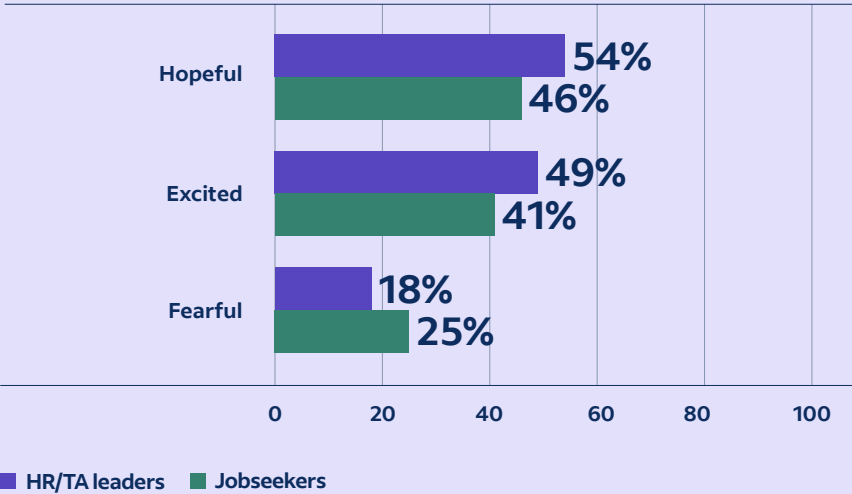
Results and analysis

HR/TA leaders and jobseekers are optimistic about AI

Portion of respondents who say AI tools will...



They also seem to be more excited and hopeful than fearful about AI's future impact at work.



Overall, the survey finds that both groups are more hopeful and excited than they are fearful about the future of AI tools at work. But the data also reveals some surprising trends: while just 25% of jobseekers overall say they're fearful about the impact of AI at work, that number was slightly higher (30%) among younger respondents between the ages of 18 and 24. That could be because, though young people tend to be early adopters of technology, they have less experience weathering seismic changes in technology. Hannah Calhoon, Head of AI Innovation at Indeed, believes it's people's past experience that may help them see the upside of AI innovation. 'We have seen technological advances like this before, and folks have experience with integrating new technologies into their day-to-day work,' Calhoon says. 'They see benefits from having done so.'

'The full impact of the steam engine gradually accelerated over many generations. But the travel, retail and music industries were turned completely upside down by the Internet in less than a decade. With AI, it's conceivable that college students might now find themselves learning skills that will be obsolete by the time they graduate.'

– Chris Hyams, Indeed CEO

Excitement in India; fear in France

Despite the global trendlines, the survey found that views on AI and its usage vary by country – in some cases, dramatically so. Respondents in India are by far the most excited about AI, with 98% of HR/TA leaders and 91% of jobseekers saying they're currently using AI tools for work. Compare that to Japan, where both groups are by far the most hesitant about AI adoption: more than one third (35%) of HR/TA leaders and over half (53%) of jobseekers in Japan say they aren't using AI tools professionally at all.

Meanwhile, respondents from France are the most fearful of AI at work, with 25% of HR/TA leaders and 30% of jobseekers saying they're concerned about the technology. France also had a slightly lower AI adoption rate among HR/TA leaders, with 15% of respondents saying they are not using AI for work, compared with 13% of HR/TA leaders globally.

Results and analysis

'By delegating tasks to AI systems, human workers can free up their time and mental energy for more creative and strategic endeavours.'

– HR leader in Canada

'It will make me redundant. I work in creative arts.'

– Jobseeker in the UK

'False information is being spread by AI, as is already happening everywhere.'

– Jobseeker in Germany

'We cannot exclude the possibility that AI may have an impact that undermines fairness due to human manipulation.'

– HR leader in Japan

'AI tools, in the right hands and used ethically, are like a force multiplier.'

– Jobseeker in the US

'I'm afraid they will take power.'

– Jobseeker in France

'AI is the super time saver for future generations.'

– HR leader in India

HR/TA leaders in Canada are more hopeful than fearful about AI

HR/TA leaders saying they're hopeful about the potential impact of AI on the workplace

57%

HR/TA leaders saying they're fearful about the potential impact of AI on the workplace

17%

The US is second only to India in terms of enthusiasm about AI

HR/TA leaders saying they're excited about AI at work

60%

Jobseekers saying they're excited about AI at work

52%

Jobseekers in the UK are the least hopeful and excited about AI

Jobseekers saying they are excited about AI's impact at work

28%

Jobseekers saying they are hopeful

38%

Respondents in France show the most concern about AI's impact

HR/TA leaders saying they are fearful of the technology

25%

Jobseekers saying they are fearful

30%

Jobseekers in Germany are the most likely to say job replacement is their biggest concern when it comes to AI

Jobseekers naming it as a concern

42%

Jobseekers naming it as a concern overall

39%

India ranks highest in AI usage

HR/TA leaders saying they're using AI systems for work

98%

Jobseekers saying they're using AI systems for work

91%

Japan has the lowest AI uptake

HR/TA leaders saying they're not using AI systems professionally

35%

Jobseekers saying they're not using AI systems

53%

Job replacement is the top concern

By far the biggest worry for HR/TA leaders and jobseekers alike is that AI will replace human judgement and intuition. Some 59% of HR/TA leaders say it's likely that AI will replace some human roles on their teams, with another 52% predicting the technology will likely make it harder to find jobs in the future.

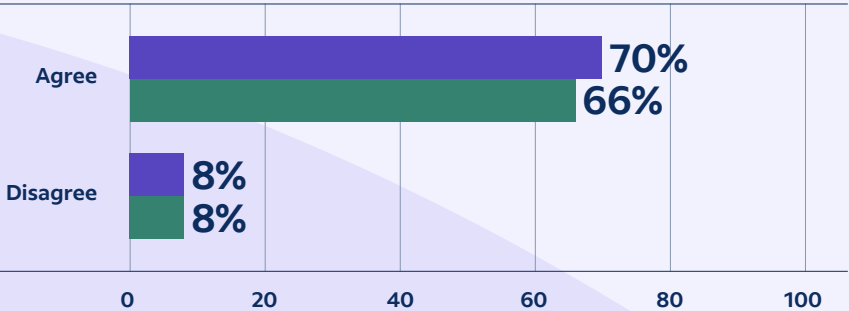
Jobseekers are similarly uncertain, with 53% predicting AI will replace colleagues and make job hunting more difficult. One US-based jobseeker in the survey's open responses worried about the possibility of 'economic decline caused by a lot of people being laid off in favour of AI replacements at once, with inadequate social safety nets.'

There's also broad agreement between HR/TA leaders (70%) and jobseekers (66%) that AI will benefit corporations more than workers. This, perhaps, explains why the majority of both groups say regulation is necessary to ensure AI systems benefit both businesses and individuals.

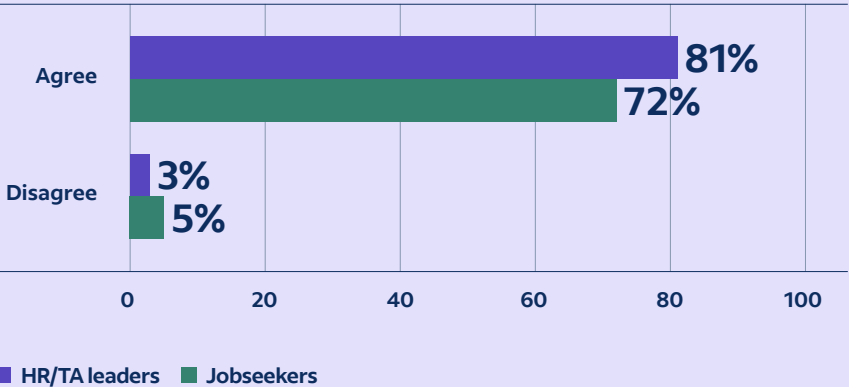
Results and analysis

Who will benefit more from AI, corporations or workers?

AI systems and tools will benefit corporations more by reducing costs of workers rather than creating more jobs for people.



Regulations need to be put in place to ensure AI systems and tools can be neutral technologies and benefit both corporations and individuals.



Fears about job replacement may appear to be in conflict with the otherwise optimistic outlook among survey respondents. But this reflects the reality that AI will both replace some jobs and also change others for the better.

'There will certainly be an evolution in jobs in much the same way we saw when the personal computer first came out,' Calhoon says. 'Five or 10 years from now, working with AI tools as part of your day-to-day work will be even more commonplace and important.'

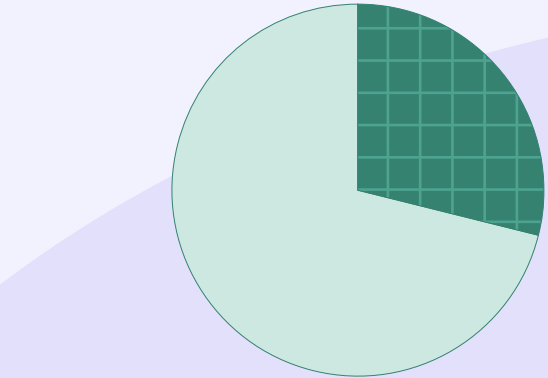
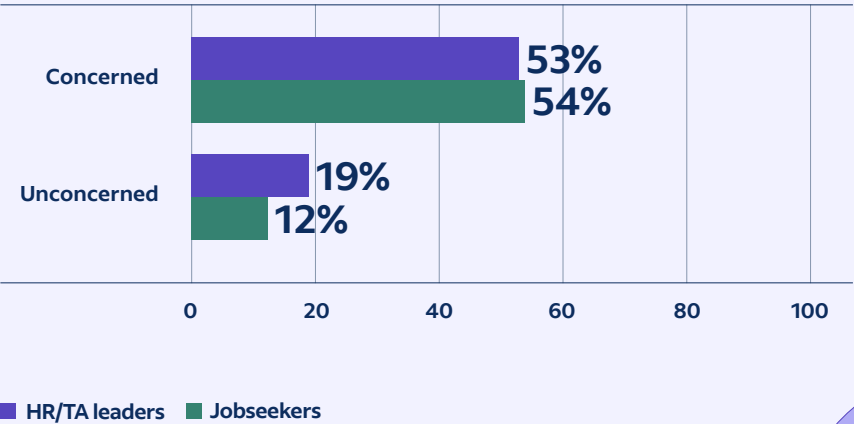
Of course, some jobs are more susceptible to dramatic change. According to Indeed Hiring Lab's AI at Work Report, jobs requiring skills like software development, IT operations and mathematics are the most at risk, while jobs that require a human being's physical presence to, say, drive a truck or care for children, are the most insulated from AI-driven change.

Worries about AI bias persist

While AI bias is not the biggest concern for HR/TA leaders and jobseekers, it's still a substantial one. More than half of HR/TA leaders (53%) and jobseekers (54%) surveyed say they're concerned about bias in AI training data. Just 19% of HR/TA leaders and 12% of jobseekers say they're not concerned. Meanwhile, 32% of HR/TA leaders and 29% of jobseekers say they're concerned about AI making the recruitment process more biased. 'Technological bias is a real thing, and just because it is AI does not mean it is void of bias,' one US-based jobseeker wrote in the open responses.

Concerns about bias are well founded, McMahon says, which is why it's crucial to ensure that AI models are used in the right contexts and with the right guardrails in place. 'The biases and barriers that jobseekers face could be reinforced or amplified at the scale that AI enables,' he says. 'We need to be, and are, really careful in how we develop and use these models.'

How concerned or unconcerned are you about bias in AI training data?



29%
of jobseekers are concerned about AI making recruitment more biased

32%
of HR/TA leaders are concerned about AI making recruitment more biased

'Even if you are having AI write job descriptions, you should have an employee who is aware of inclusive hiring practices check the copy before it's posted.'

– Abby Holtfort, Indeed Workplace Operations Coordinator and iPride & Gender Identity Co-Chair

Some underrepresented groups are more likely to view AI as a threat

Fears about AI bias are widespread, but they're most prominent among both HR/TA decision makers and jobseekers from some underrepresented groups. The survey found that HR leaders and jobseekers who identify as gay, lesbian, homosexual or bisexual, as well as those who have disabilities, are more likely to be concerned about bias in AI training data than people who do not fit those descriptions. (Transgender HR/TA leaders and jobseekers, by contrast, are less concerned than those who identify as heterosexual, but the sample size for transgender respondents in both groups is small.)

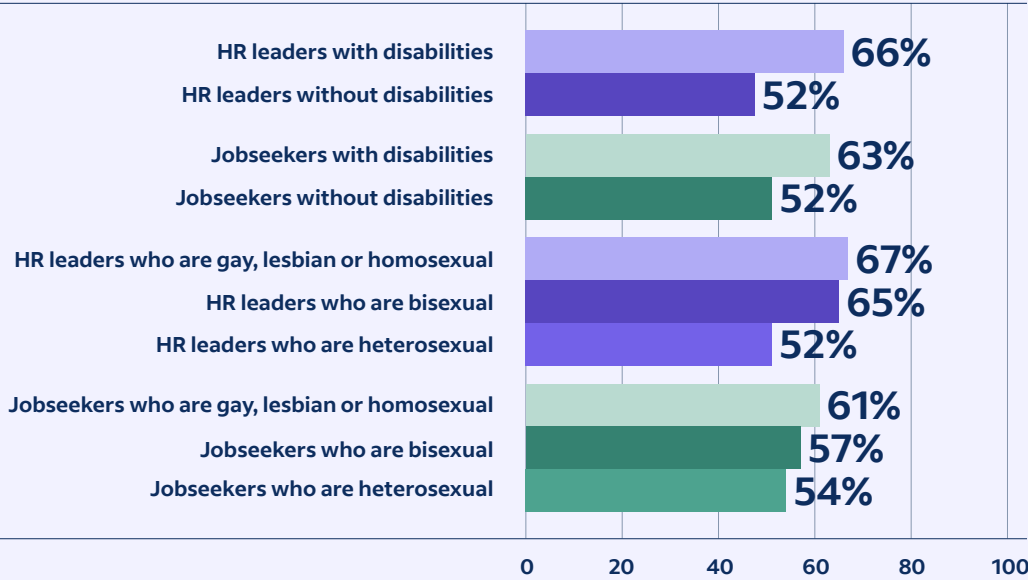
HR leaders with disabilities or who identify as homosexual, gay, lesbian, bisexual or transgender are also more likely to be fearful about the future of AI at work than people who aren't in those groups. The same goes for jobseekers.

Results and analysis

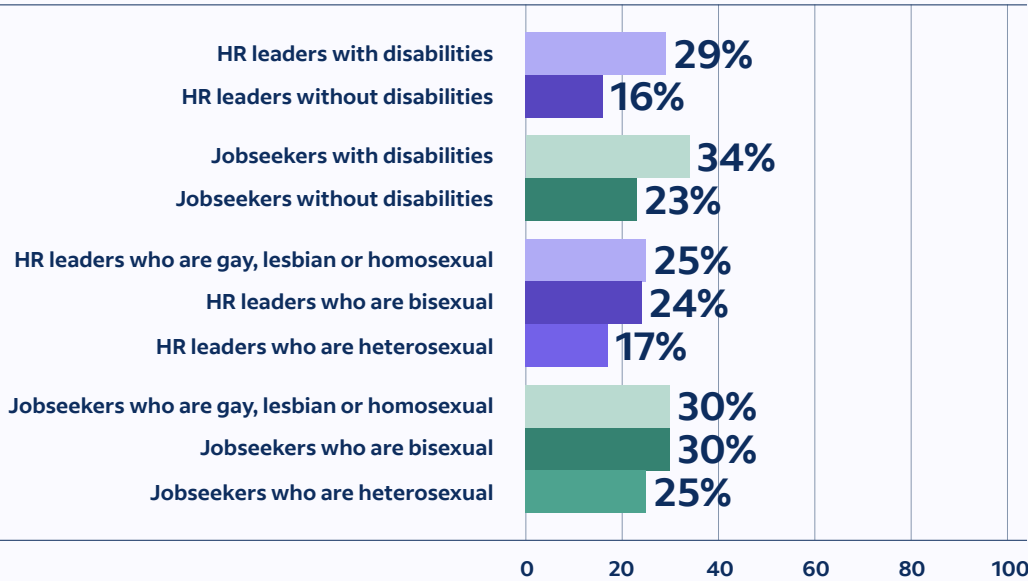
'AI learns from what is already out there – machine learning pulls from prejudice and bias that is present everywhere for LGBTQIA+ employees and jobseekers,' says Abby Holtfort, Indeed Workplace Operations Coordinator and iPride & Gender Identity Co-Chair. 'When we allow AI to communicate in the way it has learned from the world at large, it replicates all kinds of bias.'

To address those concerns, business leaders should adopt the same best practices they take with any AI usage: 'Even if you are having AI write job descriptions, you should have an employee who is aware of inclusive hiring practices check the copy before it's posted,' Holtfort says. 'Write holistic and inclusive equal opportunity employer statements that cover more under your policies than what your [country] requires as a protected characteristic. Take the time to assure marginalised groups they are encouraged to apply, and translate that into your hiring practices.'

Level of concern about bias in AI training data



Fearfulness about the future of AI at work



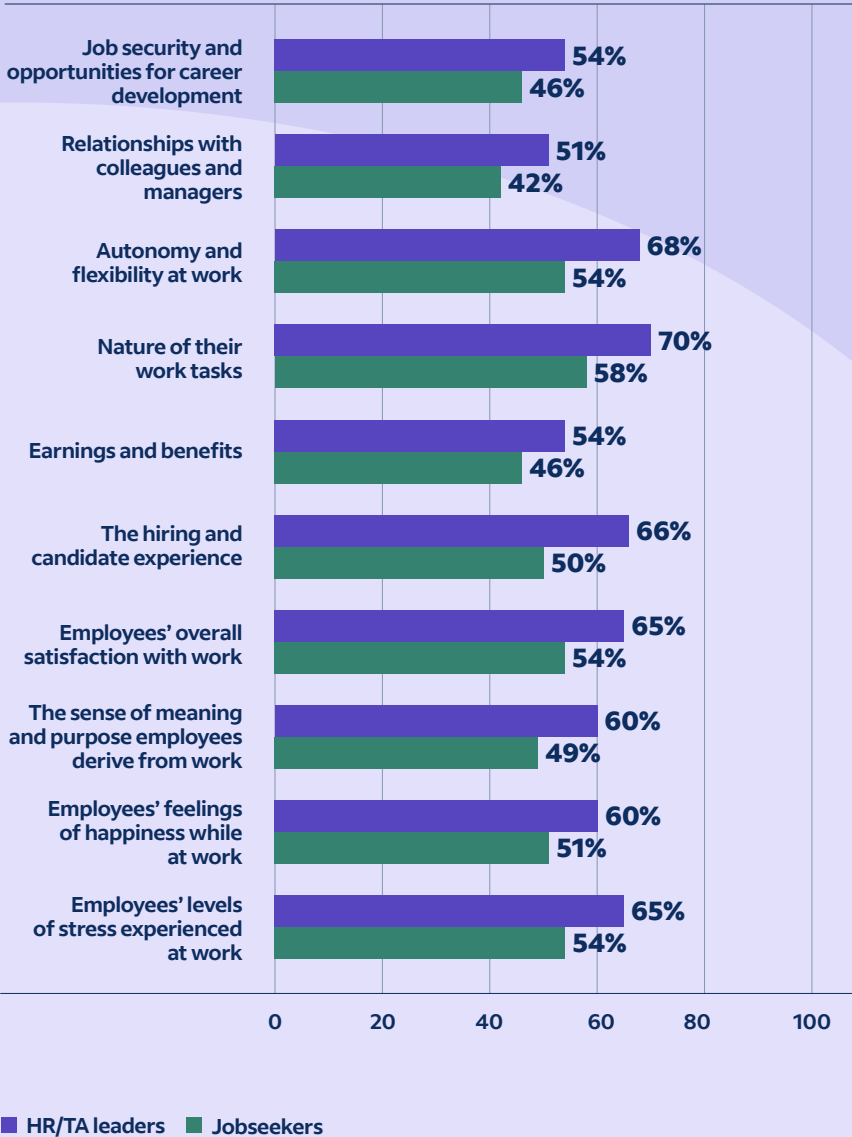
HR/TA leaders are more optimistic than jobseekers about work wellbeing

Overall, HR/TA leaders are much more likely than jobseekers to predict that AI will improve different aspects of work wellbeing. For instance, while 66% of HR/TA leaders say AI would improve the hiring and candidate experience, just 50% of jobseekers say the same.

HR/TA leaders are also more likely than jobseekers to predict that AI will improve employees' overall satisfaction with their work (65% vs 54%), the sense of meaning and purpose employees get from work (60% vs 49%), employees' sense of happiness at work (60% vs 51%), and employees' level of stress they feel at work (65% vs 54%).

Results and analysis

Respondents who agree that AI systems will improve the following:



Jobseekers, meanwhile, are more likely than HR/TA leaders to say that AI will worsen job opportunities and access to career development (20% vs 18%), relationships with colleagues and managers (16% vs 13%), autonomy and flexibility at work (14% vs 9%), and earnings and benefits (17% vs 12%).

This disparity may be the result of the extent to which HR/TA leaders can already see AI's impact at work, McMahon says. 'Employers know how the technology is being used to screen and source candidates. They know how it's being used or not used in decision making today,' he says. 'For jobseekers, there's a very rational fear of the unknown.'

'Biases are inevitable, so companies will need to figure out how they plan to address them, or accept that they are at risk.'

—Trey Causey, Indeed Head of Responsible AI

How to responsibly use AI-powered HR tools

Not all AI-powered tools are created equal, and if you're not careful, you run the risk of exacerbating bias, alienating applicants and running into legal trouble. Some jurisdictions are even beginning to regulate the use of automated systems in hiring. In New York City, companies must now conduct third-party bias audits and publish summaries of those audits. That doesn't mean you need to avoid these systems altogether. But it does mean you need to be vigilant in choosing vendors and ensure that you're using AI to augment human hiring managers, not replace them.

One simple way to test for bias is with a 'counterfactual analysis'. For example, if you're using an AI tool to rank CVs, try changing the candidate's name or the school they attended to see if their ranking changes too. Even a little tweak can help determine whether a given AI system is inadvertently discriminating against certain groups.

Cheat sheet: questions to ask your AI vendors

- How do they audit their systems?
- Was the testing done internally or by an external group?
- How is bias mitigated and measured?
- Are there testing metrics available for you to review as a prospective client?
- Are they compliant with current and emerging regulations?
- Will they comply with AI audits?

Predictive analytics can help HR teams see the future

How HR/TA leaders are using AI tools



While hiring is a big part of any HR/TA leader’s job, so is seeing around the bend. Which high performers are flight risks? Where will the company need to increase staff to accomplish next year’s goals? Predictive analytics tools can help, but only when they’re implemented carefully. That means having a clear idea of what problem you want predictive analytics to solve and a firm understanding of your employees’ rights. You also want experts on hand who can help you separate real solutions from snake oil. When used responsibly, predictive analytics tools can even help a company achieve its diversity, equity, inclusion and belonging goals by analysing decisions on salaries, pay rises, training opportunities and promotions.

Just beware of 'bossware' tools that track workers’ every move. 'Think of it like the golden rule: how would you feel if you were being evaluated this way?' Causey says.

AI glossary

Bossware: a term used to describe employee productivity tracking tools and other worker surveillance software, which can leverage AI to provide detailed insights into employee behaviour

ChatGPT: the name of a generative AI chatbot developed by the company OpenAI

Counterfactual analysis: a method of comparing the outcome of a real scenario to the potential outcomes of hypothetical scenarios

Deep learning: a subset of machine learning that is based on artificial neural networks, which are interconnecting layers of nodes modelled on the human brain

Generative AI (or GenAI): a type of artificial intelligence that's capable of generating new text and imagery from human prompts

Indeed's AI Job Description Generator: a tool that combines the benefits of OpenAI's ChatGPT with Indeed's own proprietary AI to quickly create compelling job descriptions.

Large language models: deep learning algorithms that are trained on vast amounts of data, enabling them to generate language

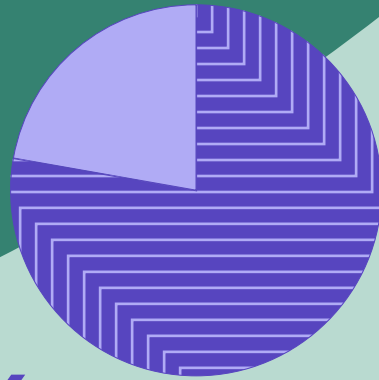
Machine learning: an artificial intelligence technique in which computers learn based on data they're given and then improve their performance in certain tasks based on what they've learned

Natural language processing: the ability of computers to interpret and manipulate language

Predictive analytics: the use of statistics, data and modelling to predict future trends and outcomes

'The more you can use new technology to take those time-consuming tasks off your plate, the more you can focus on what really matters: making hiring simpler, faster and more human.'

– Raj Mukherjee, Indeed's Executive Vice President and General Manager of Employer



78%
of HR/TA leaders surveyed say it's likely AI tools will make them more productive

Indeed's AI Job Description Generator

There's more to writing a job description than meets the eye. There are multiple stakeholders to consult, revisions to make and regulatory requirements to consider. No wonder [research](#) shows that HR/TA leaders spend, on average, at least two hours writing just one job description.

Indeed's AI Job Description Generator leverages OpenAI's ChatGPT to lighten that load. Users can input basic details about a role, including the job title and basic duties, and in seconds generate a job listing draft that uses Indeed's taxonomy of job descriptions to increase the likelihood of attracting the best candidates. Not only does this cut down on time spent drafting job descriptions, but employers who have already used the tool are seeing an increase of approximately 16% in applications on average.

More Indeed AI tools coming soon

Beyond the job description generator, in the coming months, Indeed will be introducing a variety of AI-powered tools to make the recruitment process easier for both applicants and employers. That pipeline includes new AI-generated applicant summaries called Candidate Highlights; an AI-powered Smart Message feature that allows employers to instantly generate personalised outreach; and updates to Indeed's Matched Candidates dashboard, which ranks hundreds of millions of CVs to help you find the right applicant.

In spring 2024, Indeed is also launching Smart Sourcing, which will allow employers to toggle between their job postings and automatically receive a list of AI-recommended CV matches. That way, they can contact candidates 'in one click,' says Maggie Hulce, Indeed Executive Vice President and General Manager for Jobseeker.

The goal is to speed up the recruitment and job application process and cut down on 'ghosting' for both sides. According to Hulce, jobseekers who receive some form of outreach within four hours of applying are 95% more likely to end up being hired than jobseekers who don't hear anything until a week later. 'To help solve this, we continue to add more ways to enable faster connections on Indeed, using AI to speed up the process,' Hulce says.

'I'm surprised but heartened by the mostly optimistic results from this survey. I firmly believe in a guarded optimism that doesn't shy away from addressing the real risks we face from AI, and that will allow us to fully take advantage of this epoch-defining moment. In doing so, we have the real power to build a more equitable future with AI.'

– Trey Causey, Indeed Head of Responsible AI

About Indeed

Indeed is the No. 1 job site in the world¹ with over 350M unique visitors every month from around the globe.² Indeed strives to put jobseekers first while providing quality matches for employers, fast, to support their hiring needs. Every day, we connect millions of people to better work to create better lives, combining the latest in AI technology and the power of human judgement and connection.

¹ Comscore, Total Visits, June 2023

² Indeed internal data, average monthly unique visitors April – July 2023

