From Fear to Enthusiasm

Artificial Intelligence Is Winning More Hearts and Minds in the Workplace

Oracle & **Future Workplace**
AI@Work Study 2019

futureworkplace
innovations to attract, develop and keep talent

ORACLE
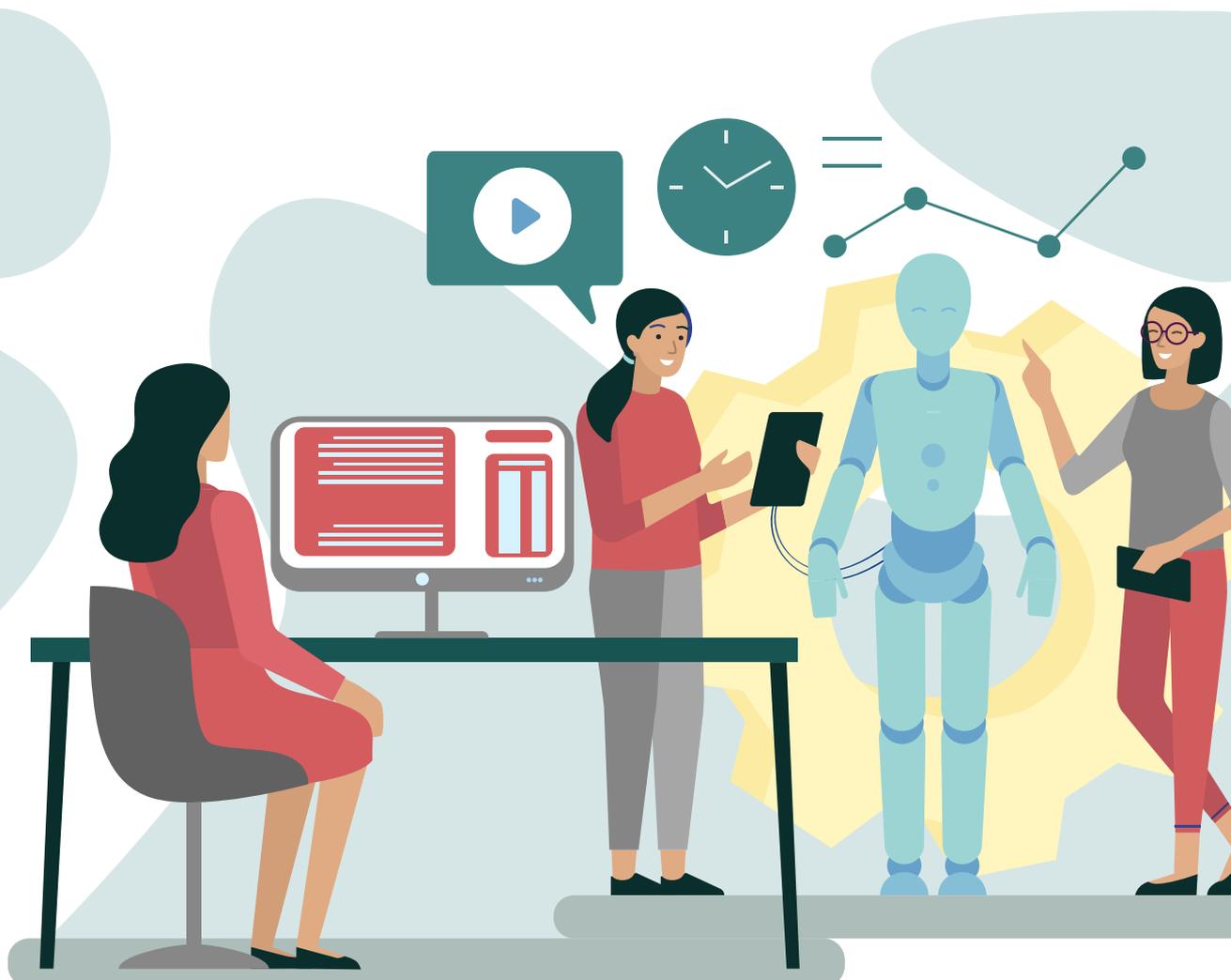
The latest advancements
in artificial intelligence (AI) and machine learning

From conversational user interfaces to blockchain and the Internet of Things—new technologies are rapidly being infused into mainstream business operations. As organizations eagerly embrace these new technologies, the relationship between human beings and machines in the workplace is undergoing major transformation. At the same time, AI is shaking up manager and employee dynamics and expectations.

Meanwhile, the potential payoff of AI is driving increasingly swift adoption of this technology at an unprecedented rate compared with previous technologies. The numbers speak volumes. As just one example, analysis by PWC[1] predicts that AI could contribute up to a whopping $15.7 trillion to the global economy as soon as 2030. Of this, $6.6 trillion will likely come from increased productivity; $9.1 trillion, from consumption-side effects.

How can HR teams and managers help make sure that these relationships are reshaped in a way that organizations and their employees win now and in the future? To answer this question, Oracle partnered with research firm Future Workplace to survey more than 8,000 employees, managers, and HR leaders, across 10 countries, on their attitudes toward and behaviors regarding AI.

Our findings uncovered some startling developments. For instance, as many as 50% of our survey respondents this year said they're currently using some form of AI at work. That's an impressive jump from the 32% who said this in last year's survey. Equally striking, people's perceptions of these technologies—to say nothing of the ways in which they interact with them—are changing as swiftly as the rate of adoption. While some individuals still express worry about potential job losses that could come with greater use of AI in the workplace, our study findings suggest that the majority of employees feel enthusiastic about these technologies.

[1] PWC's Global Artificial Intelligence Study (2017)

"People are no longer afraid of the robots. They have experienced how AI and machine learning can improve the way they work in a very pragmatic way. And the more they use these technologies, the more excited they are about them."

- Emily He, Senior Vice President, HCM Marketing, Oracle

Key Findings

1
The people/ technology relationship is warming up

AI has become more prominent in the workplace, suggesting readiness to embrace the technology and an ability to see its potential.

53%

are optimistic and excited about having robot co-workers
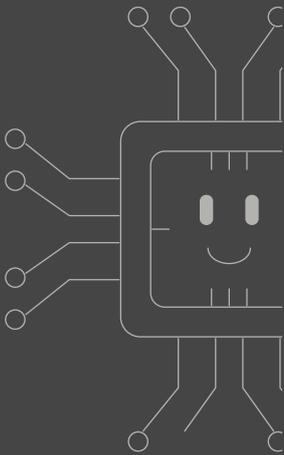
2
The employee/ manager relationship is shape-shifting

Employees are increasingly giving their trust to AI-enabled technologies.

64%

would trust a robot more than their manager
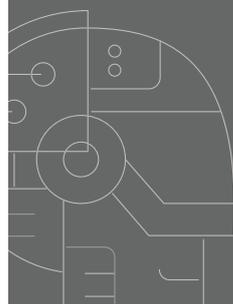
3
AI is challenging old notions of what managers do best

AI is reshaping managers' traditional role, with more individuals making distinctions between what robots do best and what managers do best. That has big implications for how managers spend their time as well as how companies manage talent and develop future leaders.

36%

think robots are better than managers at providing unbiased information
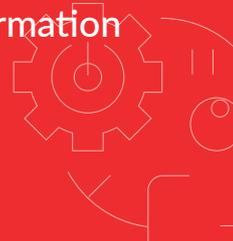
4
Organizations must make AI simpler and safer to use

Concerns about the complexity of AI technology, as well as data security and privacy, present the biggest obstacles to increased adoption of the technology.

71%

say security concerns prevent them from using AI at work
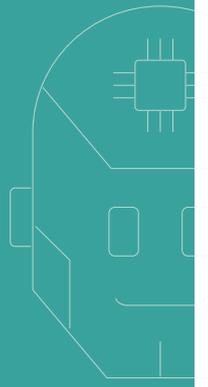
Survey
Methodology

Research findings are based on a global survey conducted on behalf of Future Workplace and Oracle by market research firm Savanta from July 2 to August 9, 2019.

In total, 8,370 respondents completed the survey. The study was administered online and fielded in 10 different countries and in six languages. Permanent full-time employees between the ages of 18 and 74 were eligible to participate. The survey targeted HR leaders, managers, and employees.

Respondents were recruited through a number of mechanisms, via different sources, to join the panels and participate in market research surveys. All panelists have passed a double opt-in process and complete, on average, 300 profiling data points before taking part in surveys. Respondents are invited to take part via email and are provided with a small monetary incentive for doing so.

Survey
Demographics

Respondents by Country
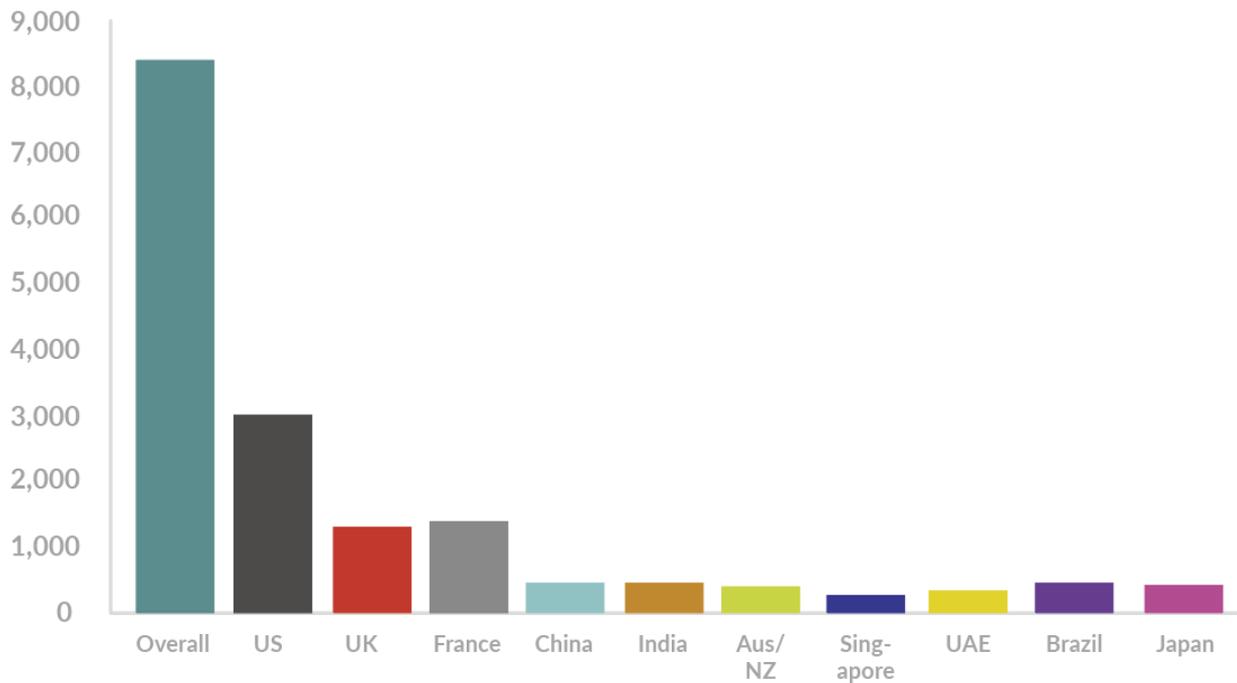

Respondents by Age Group

- 16 to 25-years-old
- 26 to 37-years-old
- 38 to 54-years-old
- 55 to 74-years-old
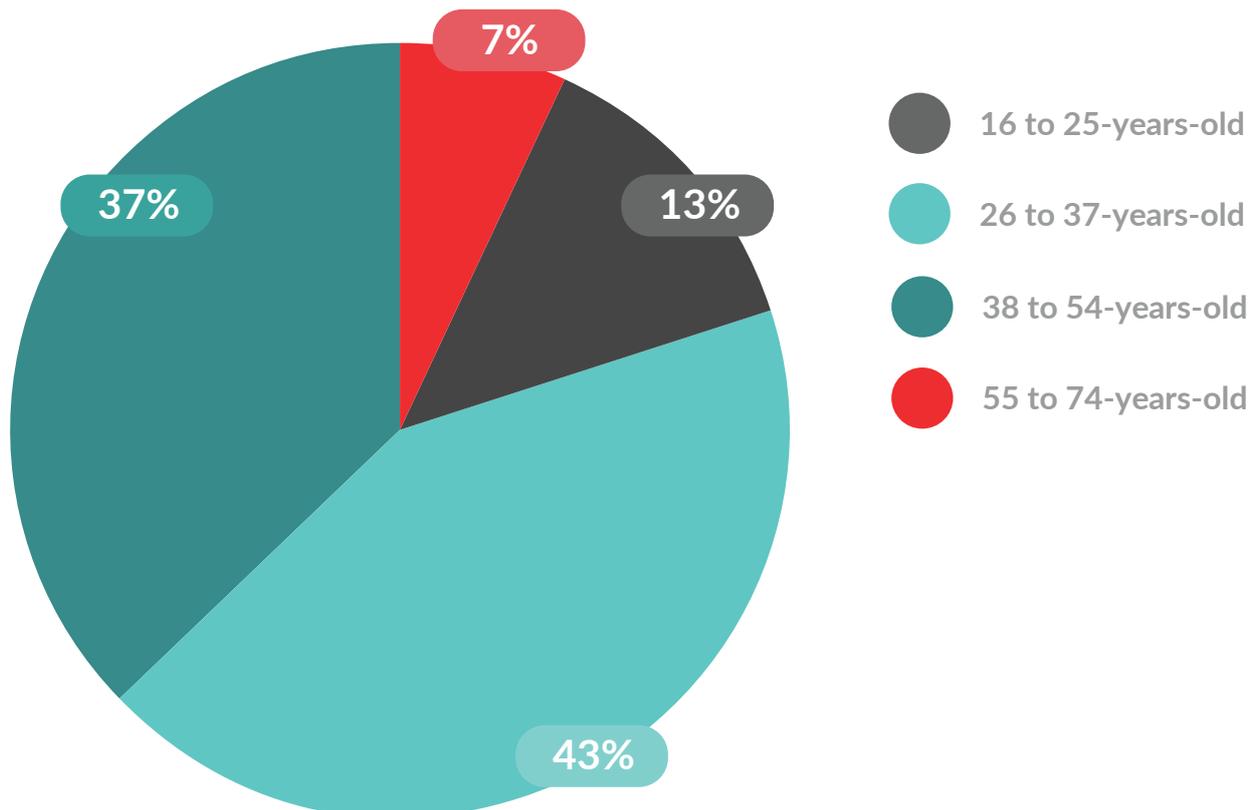
Respondents by Gender

52%
Male

48%
Female

Respondents by Role

27%

48%

25%

Managers

HR Leaders

Employees
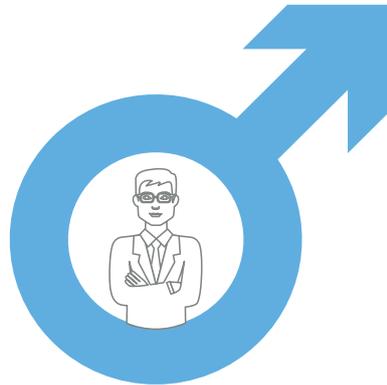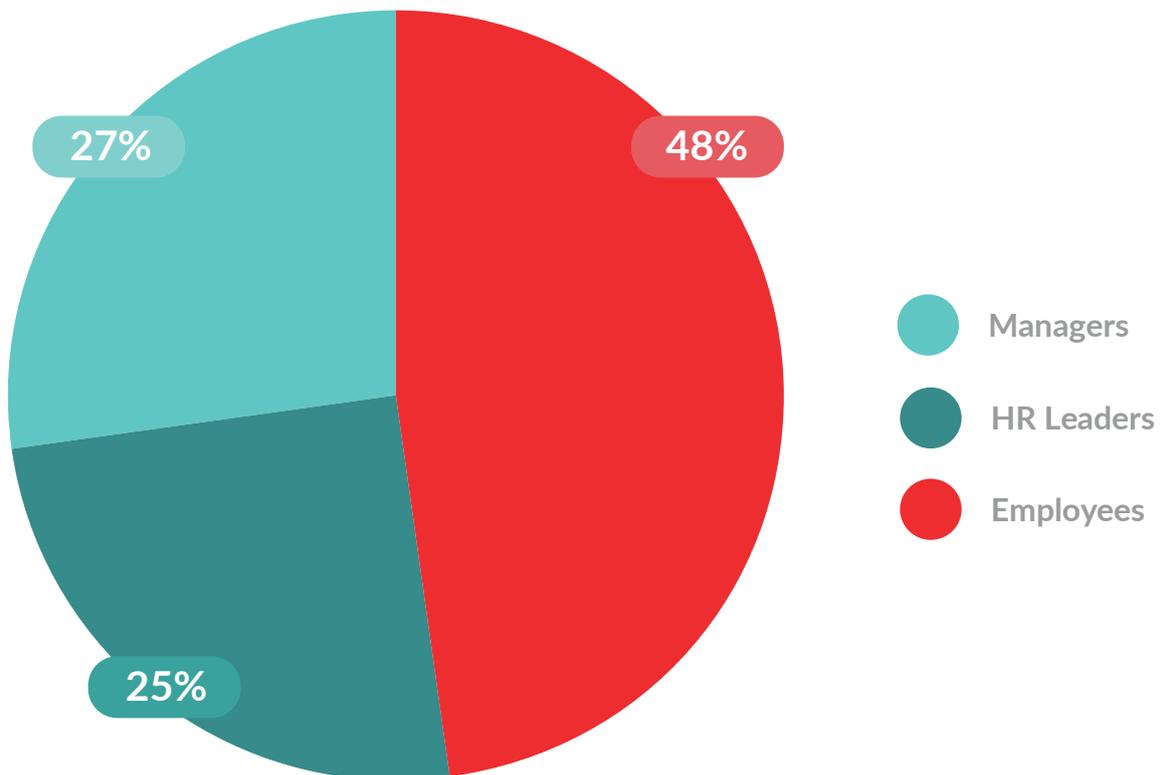
# 1 AI has changed the relationship between people and technology at work

AI appears to be gaining prominence in the workplace, with more people from our survey using some form of these technologies at work this year than last year. What's more, HR practitioners, line managers, and direct reports are expressing greater enthusiasm and optimism about the technology than they have in the past.

For instance, when asked how they feel about having robots (such as chatbots) as co-workers, as much as 65% of this year's survey respondents used words like "excited," "optimistic," and "grateful." Additionally, 43% of managers, HR leaders, and employees said they're excited about how AI will affect the future of work—a major jump from the 24% who answered this way in our

Clearly, people overall are feeling more comfortable with AI in the workplace and are better able to perceive and appreciate the technology's potential. To illustrate, workers in this year's study believe that AI can present them with important opportunities—including being able to master new skills (36%), to gain more free time (36%), and to expand their current role so it's more strategic (28%).

What opportunities do you think will be created for you through using AI?

Opportunity	Percentage
Have more free time	46%
Learn new skills	36%
Expand current role to be more strategic	28%
Drive organizational change	25%
Have better/healthier work relationships	20%
No opportunities	19%
Achieve faster promotions	17%
Obtain higher salary	16%
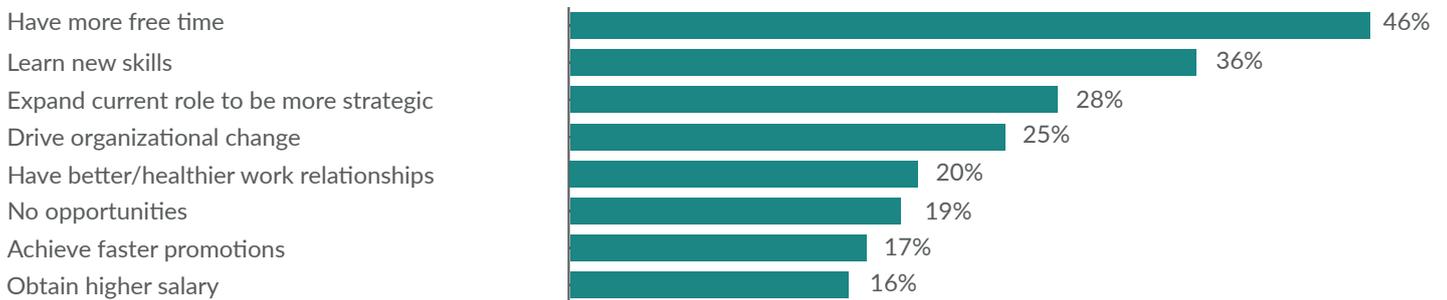
If we slice the data by role, we see some interesting differences. Specifically, HR leaders are most optimistic (38%) about AI, followed by other managers (31%) and finally employees (19%). Plus, 70% of all respondents this year expressed at least moderate optimism about an HR future powered by AI.

Uncertainty about AI seems to be easing up. Only 24% of our 2019 respondents said they felt "unsure" about AI—down from 38% in 2018. Equally telling, 38% of this year's survey participants used terms like "amazed" and "excited" when asked how they felt about the prospect of AI sounding more human.

38% of this year's survey participants used terms like "amazed" and "excited".

Demographics Make a Difference

Geography

The majority of respondents in **India** (60%) and **China** (56%) report being excited about AI, while in **France** and the **UK**, far fewer used the word "excited" to express their feelings about the technology (8% and 20%, respectively).

Age

Millennials are most excited about AI (31%), followed by **Gen Z** (24%) and **Gen X** (22%), with **Baby Boomers** coming in last place (14%).
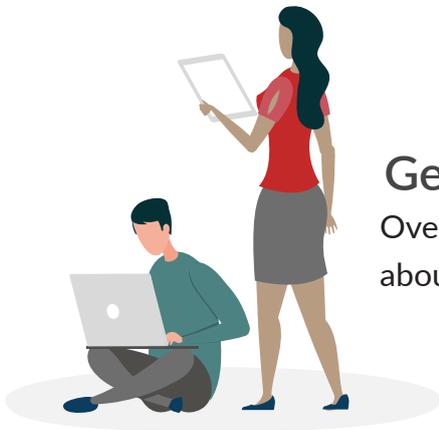
Gender

Overall, **men** are more excited (30%) and optimistic (32%) about AI than **women** are (21% excited, 23% optimistic).

Did you know?

The majority of this year's survey respondents say they have a **"functional"** (34%) or **"comfortable"** (25%) relationship with AI at work.

But 11% went as far as to say they have a **"loving"** relationship.

2 People now trust robots more than their managers

AI is reshaping the relationship between employees and their managers, including calling into question assumptions about who (or what) is more trustworthy for which types of tasks. The numbers point to a startling new development: workers apparently now trust robots more than they trust their managers.

Consider: As many as 82% of our survey respondents said they think robots can do certain types of work better than their managers. A whopping 64% said they'd trust a robot more than their manager, and 50% have turned to a robot instead of their manager for advice, with nearly 25% saying they "always" or "very often" ask AI questions over asking their boss.

38%
think robots can do certain types of work **better** than their boss can

64%
would trust a robot **more** than their manager

50%
have asked a robot for advice **instead** of their boss

Would you trust a robot more than your manager?

36%

64%

- Yes
- No

2
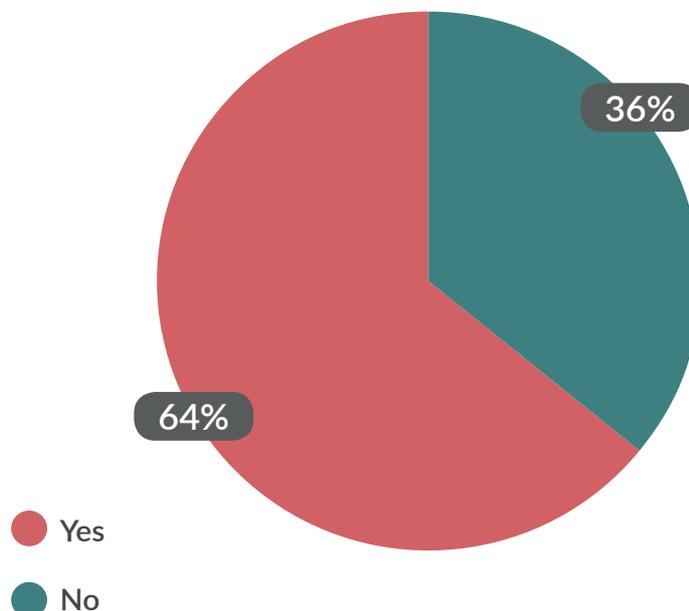
India	90%
China	88%
Singapore	84%
Brazil	79%
Japan	76%
UAE	76%
Auz/NZ	59%
US	57%
UK	55%
France	52%
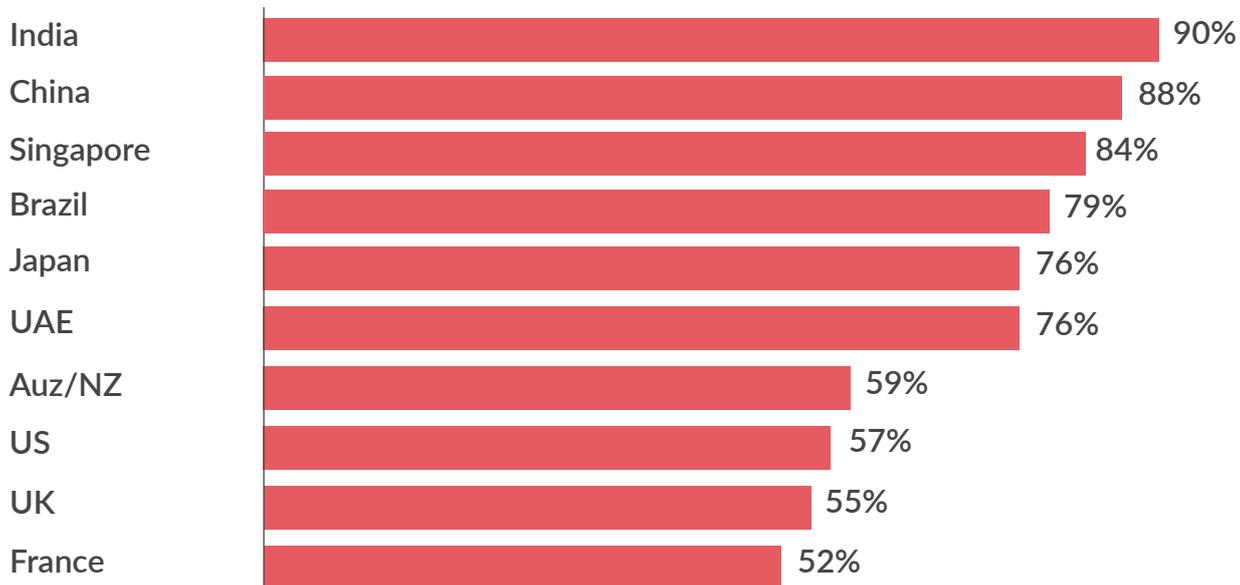
Additional analysis of our survey findings suggests that the employee/manager relationship may not just be shape-shifting; its very existence may be called into question. Specifically, 32% of all workers in our study said they believe that robots will replace their managers.

The numbers on this vary across the geographies represented in our survey, with India coming in at the highest (90%), followed by China (88%) and Singapore (84%). These levels were significantly lower in the Western geographies; specifically, the US (57%), France (56%), and the UK (55%). Meanwhile, we saw age differences as well, with respondents from the Gen Z age cohort holding the strongest belief that their boss will someday be, well, a robot.

Did you know?

39% of the Gen Z respondents in our survey say *that robots will replace managers...*

... but just **23%** of Baby Boomers share this belief.

3 Managers need to take on a new role

With AI transforming the relationship between people and technology at work as well as that between employees and their bosses, traditional assumptions about what managers do—and what they should be doing—are being called into question. In particular, our survey findings show that people think managers and robots are good at decidedly different types of work and tasks.

What can a robot do better than your manager?

Provide unbiased information	36%
Maintain work schedules	34%
Problem solve	29%
Manage a budget	26%
Answer confidential questions without causing fear of scrutiny	21%
Evaluate team performance	20%

What can your manager do better than a robot?

Understanding my feelings	45%
Coach me	33%
Create (or promote) a work culture	29%
Evaluate team performance	26%
Problem solve	25%
Provide oversight/direction	24%

According to our respondents, managers are better than robots at activities like understanding their feelings (45%), coaching them (33%), creating a work culture (29%), and evaluating team performance (26%). But robots are better than human bosses at tasks such as providing unbiased information (36%), maintaining work schedules (34%), solving problems (29%), and managing a budget (26%).

These differences have important implications for how organizations can get the most value from line managers, as well as how they can best attract, retain, and develop talent. For instance, managers who let AI handle more administration-related coordination and control tasks may free up time, mental bandwidth, and energy to interact more directly with their employees.

This is good news for managers and employees alike. An Accenture study described in
pointed out that managers now spend over half of each typical work day wrestling with low-value chores like scheduling, budgeting, and compiling reports. This leaves them with precious little time for activities that are far more essential to effectiveness in the managerial role—particularly crafting strategy and engaging one-on-one with their employees. The adoption of AI to relieve their administrative burden should open up more time for them to help direct reports master new skills and to build high-performing teams.

How is AI Being Used?
Spotlight on Employee and Customer Applications

We asked our survey respondents to identify what they see as the three most common ways AI is being used in their workplace.

Here's what rose to the top of the list:

31%
Collecting data on employees and customers

28%
Developing software for training

24%
Managing customer-support replies

22%
Operating digital assistants/chatbots

21%
Processing job applications using computer algorithms

17%
Predicting hiring success rate and employee retention

4 AI is here to stay. Organizations need to focus on simplifying and securing AI—or they risk being left behind

There's no doubt about it: When it comes to the workplace, AI is here to stay. But ever-increasing adoption of the technology isn't necessarily a done deal. That's because people still have a number of concerns about it. To extract maximum business value from this technology, organizations have to understand what's stopping people from fully embracing AI, and then devise smart strategies for overcoming those barriers.

Our study findings indicate that the biggest barriers to adoption and use of AI in the workplace are concerns about complexity, security, and privacy. Here we take a closer look at each of these.

What is preventing you from using AI at work?

Would rather have human interaction	31%
Security concerns	31%
Privacy concerns	30%
Nothing	21%
Fear of being laid off or having to lay off employees	19%
Not convinced of its impact	18%
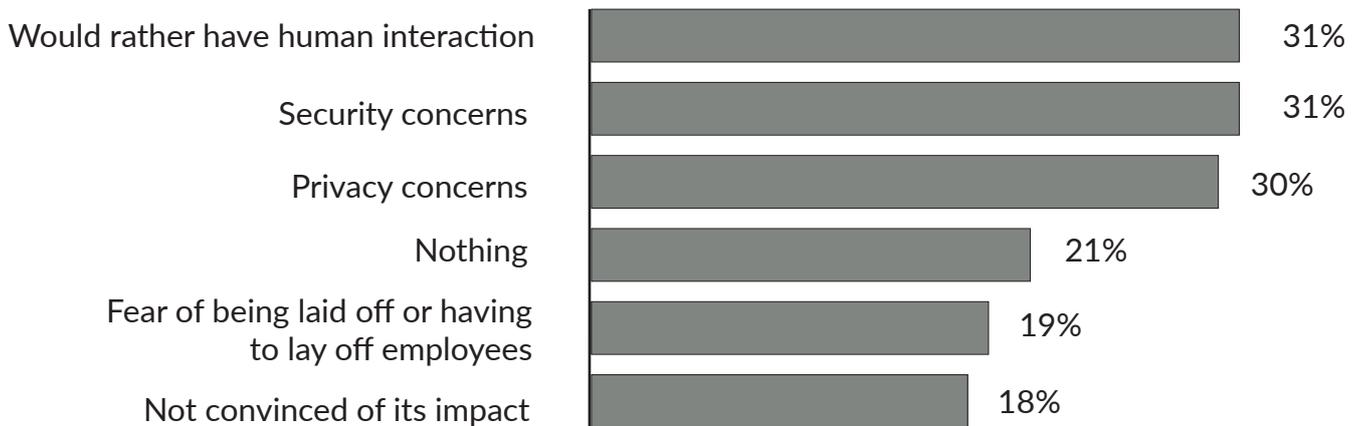
AI is here to stay.

Complexity: "Make AI Easier to Use, and Personalize It for Me"

Three out of four (76%) of our study participants overall (and 81% of the HR leaders in our respondent pool) said they find it challenging to keep up with the pace of technological changes at work. So it's not surprising that the employees we surveyed want a simplified experience with AI. Some (34%) identified a better user interface as a great way to get them to use AI more. Others (30%) said they wanted best-practice training in AI. And still others (30%) expressed a desire for an experience that's personalized to their behavior.

Interest in a simplified and more personalized experience with AI is particularly noticeable among the younger generations. For instance:
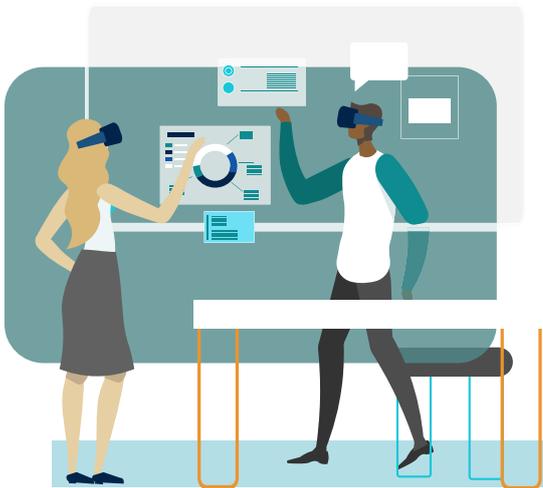
38% of the Millennials, **33%** of the Gen X respondents, and **31%** of Gen Z respondents emphasized the importance of a better user interface, versus **26%** of the Baby Boomers.

Regarding best-practice training in AI, interest was especially high among Millennials **(33%)** and Gen Z'ers **(31%)**, with Gen X'ers coming in at a close **29%** but Baby Boomers at **20%.**

Gen Z'ers and Millennials showed the highest interest in AI user experiences tailored to their behavior **(each at 33%)**, while members of Gen X came in at **27%** on this, and the Boomers at just **19%.**
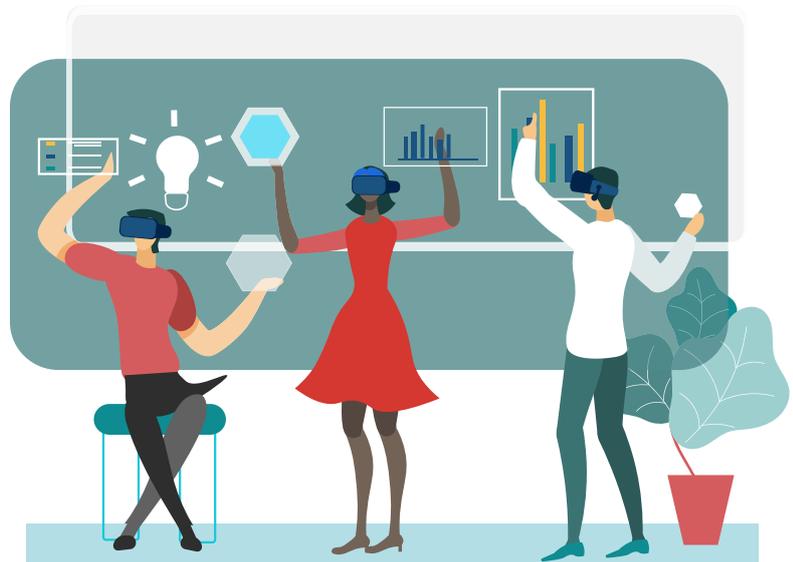
Complexity: "Make AI Easier to Use, and Personalize It for Me"

How can AI be simplified so you use it more?

Category	Percentage
Better use interface	34%
Personalized to my behaviour/voice/needs	30%
Best practice training	30%
Reduce the amount of steps	26%
Instruction guide	25%
None of above	21%
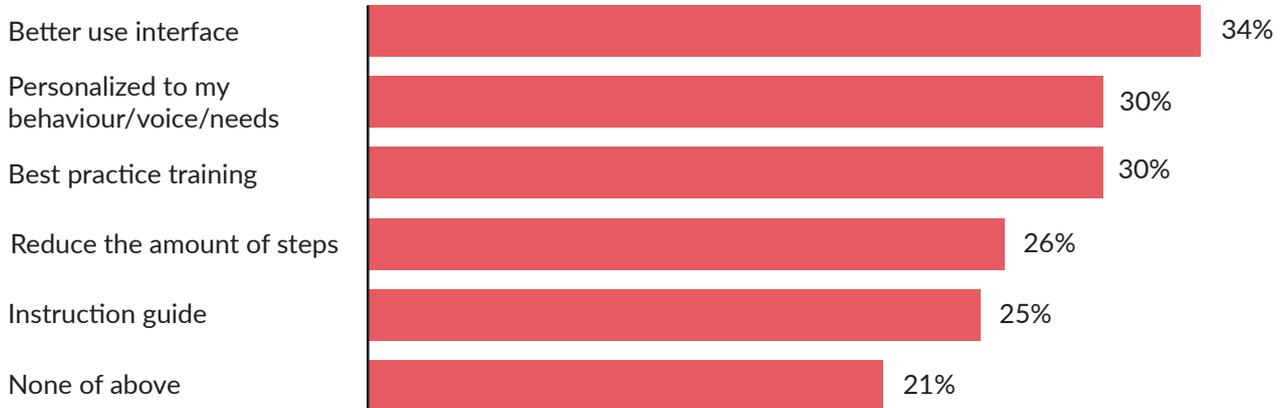
Security: "Protect My Organization from Data Breaches"

Among the workers in our respondent pool, 71% said they were "at least sometimes concerned" that there will be more data-security breaches at their workplace owing to use of AI, and 38% said they were "very concerned" or "always concerned" about such breaches. Security concerns seem particularly high in China (48%) and India (44%), compared with the US and Brazil (both at 30%) and the UK (26%).

Such concern isn't surprising, particularly given that the collection of data on employees and customers tops the list of ways in which AI is being used in organizations. Nevertheless, these worries can erode interest in and willingness to use AI tools if organizations neglect to address them.

Privacy: "Respect My Personal Data"

In our respondent pool overall, 30% said that concerns about privacy prevent them from using AI at work. Such worries are particularly high in India and China (46% and 44%, respectively), compared with Japan (29%) and the UK (24%).

The majority of the study participants (69%) expressed at least some degree of worry about the use of AI to collect data on their work activities, with 35% saying they're "very concerned" or "always concerned" about this particular use of the technology. They pointed out that if they could be assured of greater data security and privacy, they'd feel more comfortable trusting a recommendation from AI. Respect for personal data is clearly a top priority, with 80% of our entire respondent pool saying their company should ask for permission before gathering data on them while using AI technology.

Did you know?

60% of workers agree that their company should **protect them from job automation.**

Which Countries Are Leading in the AI Adoption Race?

This year's survey data shows that China and India, followed by the UAE and Brazil, are leading the way with AI adoption, compared with the other countries represented in the study—the US, UK, France, Australia/NZ, Singapore, and Japan. For instance, respondents from these four frontrunner countries report the highest adoption of AI across a varied list of use cases.

Perhaps not surprisingly, respondents from the countries reporting the most progress with adoption of AI also say they are the most excited and positive about the opportunities AI presents.

Are you currently using some form of artificial intelligence in your workplace?

- Yes
- Not sure
- No

13%

50%

37%
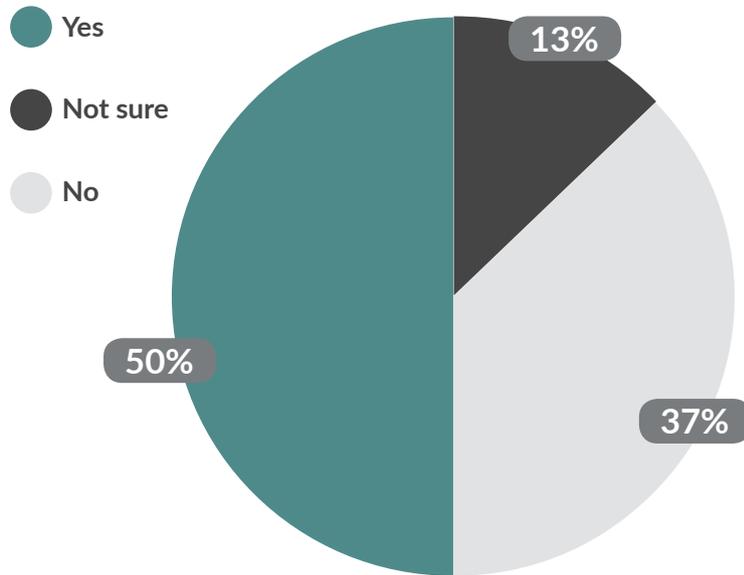
Are you currently using some form of artificial intelligence in your workplace? (Global)

Country	Yes	No	Not sure
India	78%	17%	5%
China	77%	17%	5%
UAE	62%	28%	10%
Brazil	60%	30%	9%
Auz/NZ	57%	35%	8%
Singapore	56%	33%	11%
US	53%	36%	12%
UK	38%	42%	20%
France	32%	51%	17%
Japan	29%	50%	21%

● Yes   ● No   ● Not sure
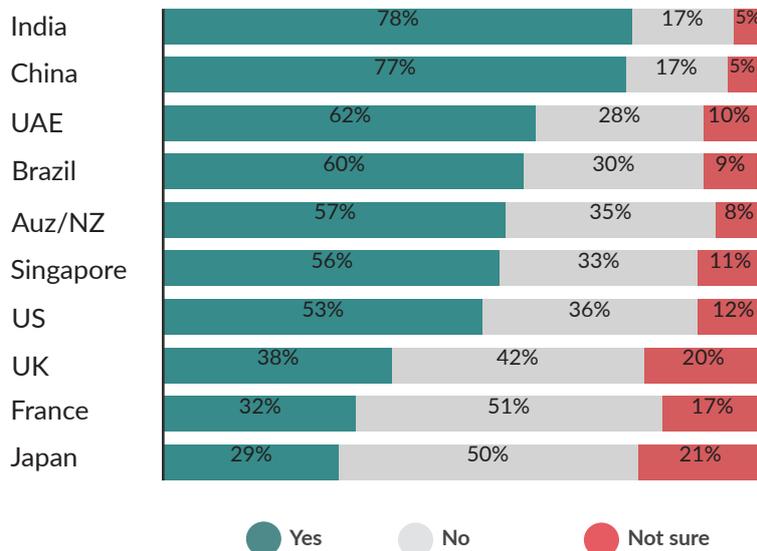
# The pace of AI adoption is accelerating. Are you moving fast enough to keep up?

In our 2018 study, workers saw the potential in using AI at work, yet they also feared how it would affect their jobs. In our 2019 study, it's evident that AI has become more prominent in the workplace, and that employees are much more enthusiastic than before about using some form of it.

Worries about complexity as well as data security and privacy could be barriers to AI adoption in the workplace. To get the most from

AI and machine learning technology, companies must explain how they are using AI ethically as well as offer solutions to address security and privacy concerns.

Organizations that move swiftly to encourage adoption of AI will be able to drive new innovation and create new markets, as well as protect and expand their footprint in current markets.

Your employees are ready to embrace AI...
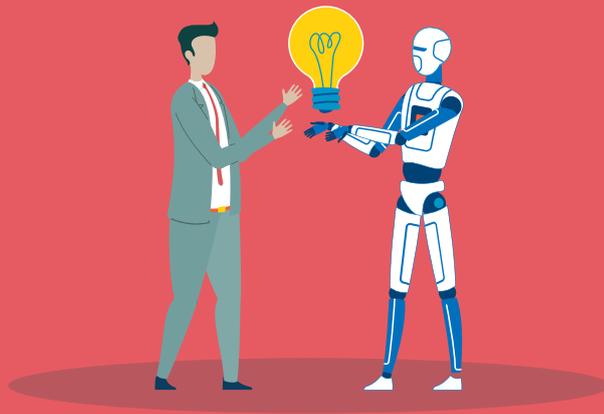
Are you moving fast enough to capitalize on the next wave of adoption?

The AI@Work Study is a joint project of Oracle and Future Workplace