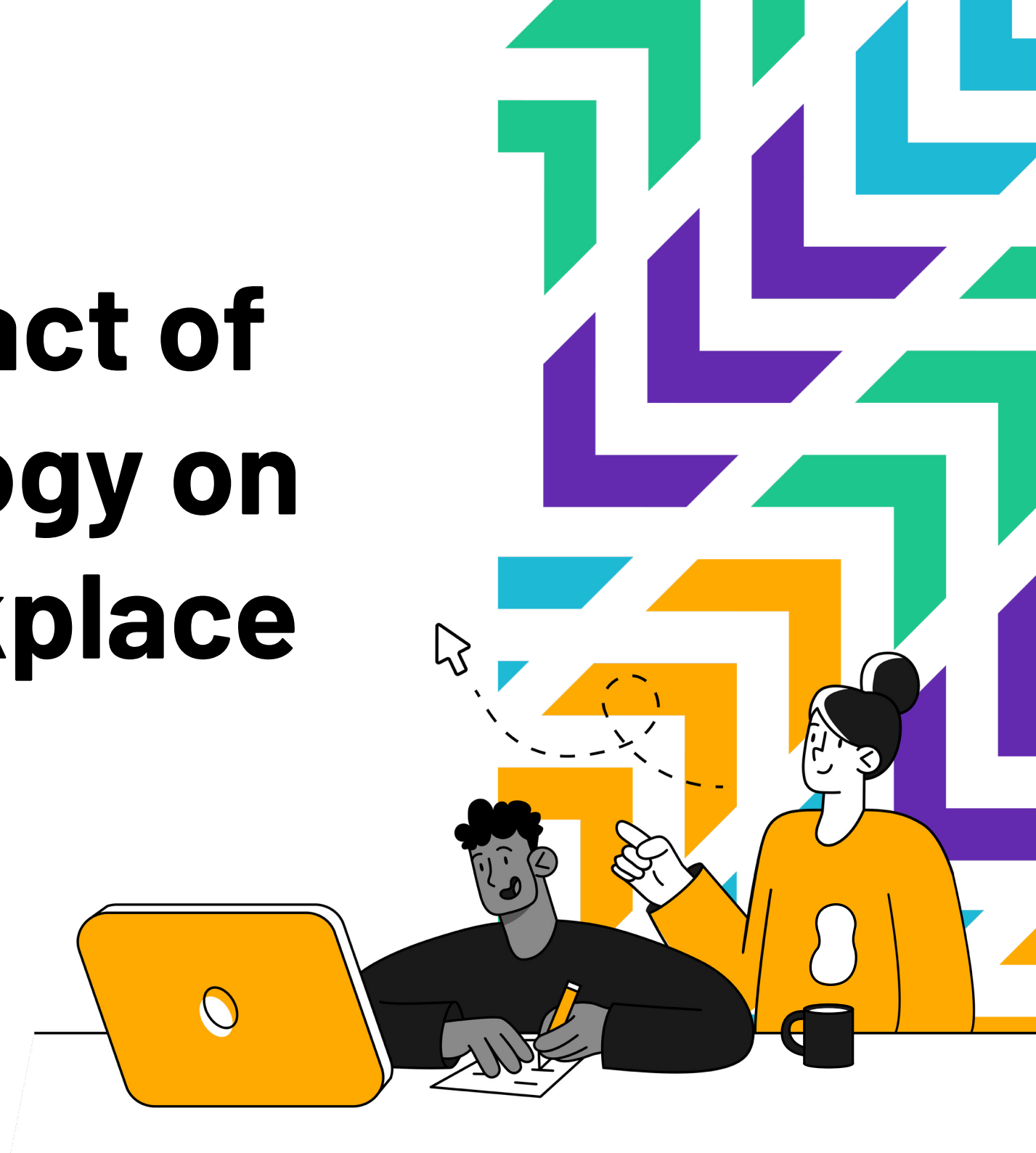


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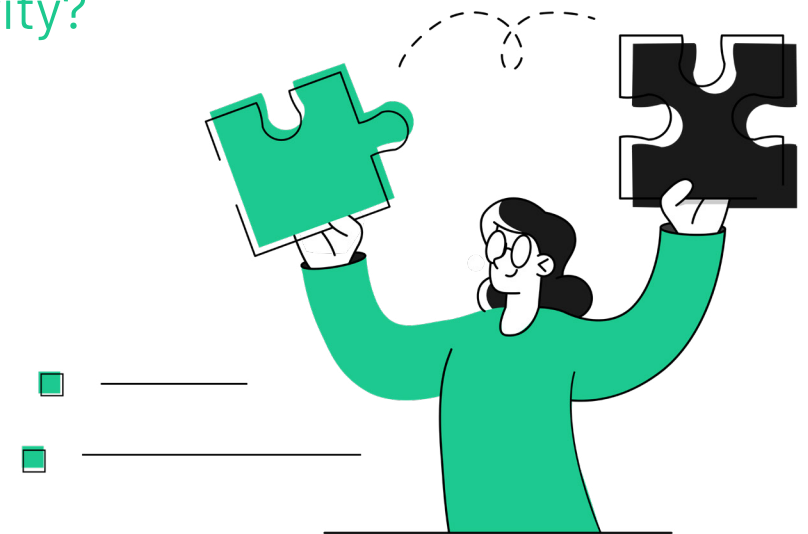
The Impact of Technology on the Workplace

2024 Report



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JENNIFER MCILVEEN

It's been a little over a year since the global tech landscape witnessed a groundbreaking shift with the introduction of ChatGPT. The subsequent surge of AI chatbots - including Bard, Claude, and ChatGPT itself - has made waves in the tech world and firmly planted technology at the forefront of business leaders' minds, as well as in the considerations of their customers and clients, when it comes to reviewing spending and performance.

As we step into 2024 amid economic uncertainties, the need for organizations to understand how emerging and established technologies could influence their employees, competitiveness, and overall performance has never been more critical.

How is AI changing and challenging job roles? Is it having the impact that the media attention suggests it might be? Are there other technologies affecting work processes, from hiring to crisis management, to a greater extent? What factors and technologies predict improvements in productivity, business growth, and job satisfaction? What tools and skills can businesses invest in to prepare themselves for the coming year?

Tech.co's inaugural report covering the impact of technology on the workplace provides an insight into these questions and more. Based on a comprehensive survey of over 1000 US-based business leaders, we will unravel the multifaceted influence of technology on the workplace of today.

Beyond the impact of artificial intelligence (AI), we'll delve into remote working trends, the challenges posed by data breaches, and reactions to the concept of a four-day workweek, among other key considerations dominating the minds of business leaders today.

If you're in the throes of planning the year ahead for your team, this one's for you.

- Tech.co Managing Editor,
Jennifer McIlveen

Research Methodology

To inform how technology is impacting the workplace in 2024, Tech.co surveyed a large sample of **senior leadership professionals** from businesses based in the United States. Senior leadership professionals had job titles ranging from manager to director.

We surveyed companies with **10 or more** employees to ensure that our data captured the experiences and perspectives of individuals holding key leadership roles within established organizations.

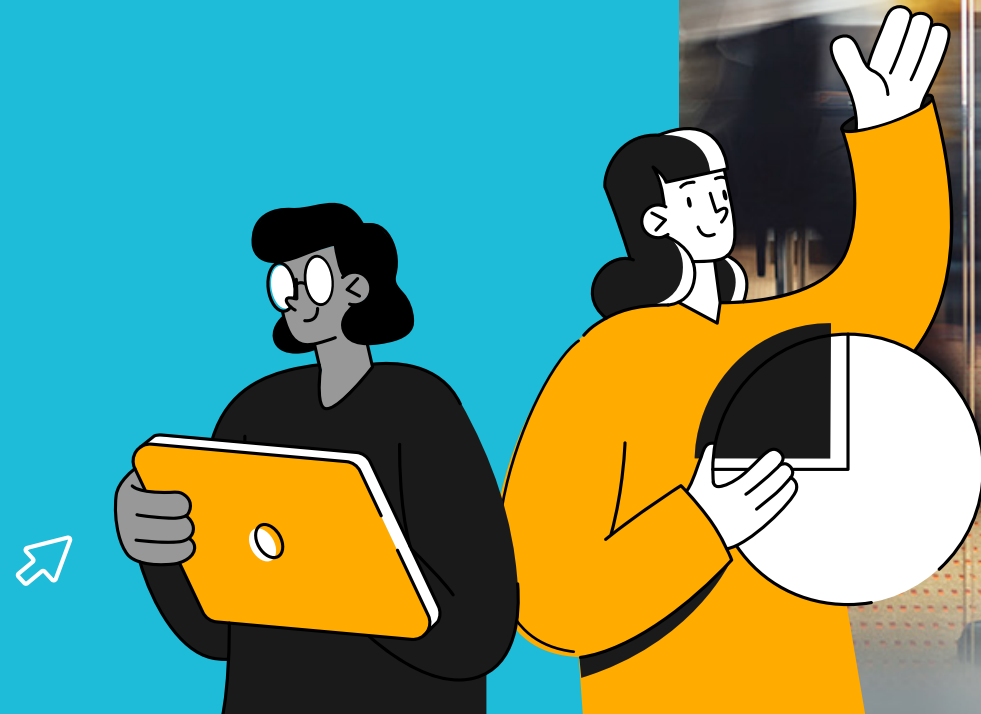
To ensure an impartial and unbiased sample, this report's data was gathered through a survey with participants selected via a third-party panel provider, in October 2023.

To guarantee an accurate reflection of US businesses, a total of 1047 responses were obtained at a confidence level of 99.9%.

99.9%



How Is Technology Helping Businesses Grow?



How Is Technology Helping Businesses Grow?

Technology has always been pivotal for business growth, whether it's by allowing companies to reach customers in new and improved ways, or unlocking new possibilities for products and services that inspire demand.

Today, a key way businesses use technology to enable growth is through increasing team connectivity by using communication and collaboration tools like video conferencing and messaging. While these kinds of tools aren't completely new, they are ever developing. In fact, we found them to be among the most anticipated business technologies of 2024.

Generative AI tools are another growing area, particularly for data analysis and writing tasks. That said, **the use of AI is not as widespread as news coverage might suggest**: 67% of respondents told us AI is never used or used to a limited extent in their businesses.

When it comes to the tech innovations that businesses anticipate boosting their organization's performance in 2024 the most, some of our key findings include:

- **Communication and collaboration tools are the most important tech innovations** for business growth, cited by 46% and 34% of respondents as having a high or very high effect on their operation in 2024.
- **80% of businesses with the most collaboration tools** also reported the highest organization-wide productivity levels.
- **5G and the Internet of Things (IoT)** are also among the most impactful technologies of 2024.
- **AI adaptation is slow**: Two out of every three respondents (67%) say that AI tools are not used at all (34%) or to a limited extent (33%) within their organizations.
- Just **4% of respondents say AI tools are "fully integrated"** within their organization.
- But **AI is helpful**: 59% of those who use AI within their own role say that it has **improved job satisfaction**, while 30% report a **significant or substantial impact** on their work processes.

The simple tools are the most impactful: communication and collaboration tools emerged as the most important tech innovations for 2024

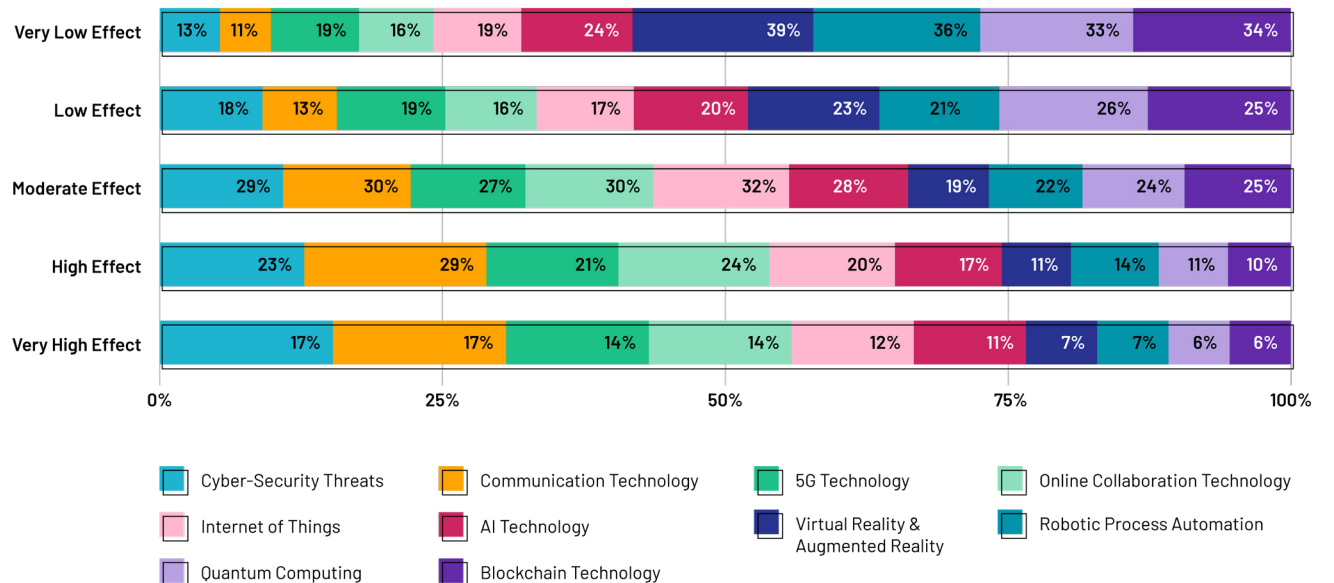
Communication and collaboration tools (such as Zoom, Slack, and monday.com) ranked at the top of our list as the most important tech innovations for business growth. 46% of survey respondents predicted communication technology would have a high or very high effect on their business in the upcoming year, while 34% said the same of online collaboration technology.

Communication and collaboration tools also ranked among the least likely tools to be judged as having a minimal anticipated impact. Just 11% of respondents said communication technology would have a “very low effect” on their organization in 2024, and only 16% said online collaboration tools would have a “very low impact” during the year.

Only one other area of technological impact rivaled the weight that business leaders gave to communication and collaboration: **cybersecurity**. 40% of business leaders predicted that cybersecurity threats would have a high or very high impact on their performance in 2024.

It goes without saying then that with the ever-present risk of cyberattacks, the security of communication and collaboration tools is a key factor to consider when it comes to choosing the right ones for your business growth, as is the case for all technologies employed to spur on company expansion.

To what extent will the following tech innovations impact your organization’s performance in 2024?



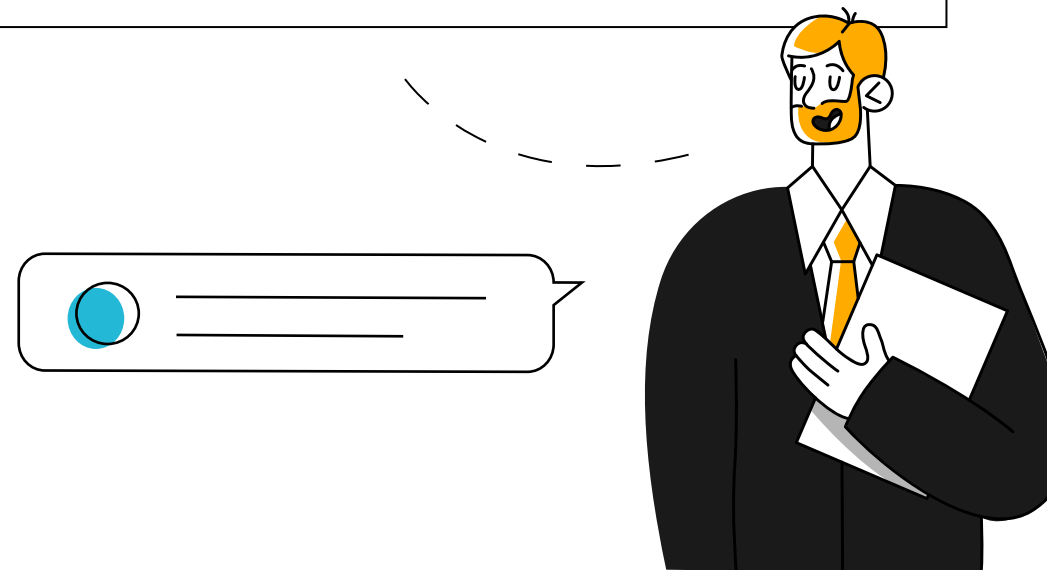
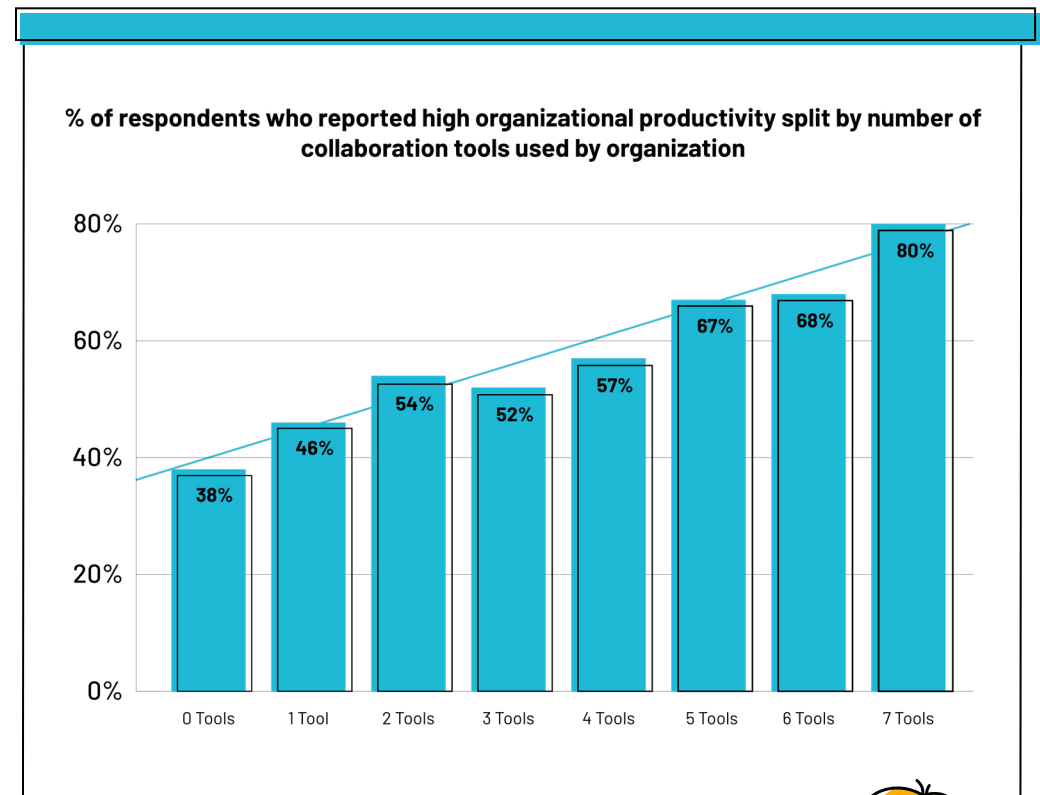
Beyond the common, foundational business tools, other exciting or highly-anticipated innovations on the list of technology being employed to support business growth include **robotic process automation, blockchain tools, and quantum computing**. However, all three ranked near the bottom when it came to business' estimations of their importance in 2024.

Unlike those technologies, communication and collaboration platforms are easy to understand and have a cross-industry appeal. Every operation needs to ensure its workers are communicating effectively – and for good reason. As our survey corroborated, organizations with more tools will report higher levels of productivity.

Businesses with the fewest collaboration tools were also the least likely to self-report high organization-wide productivity levels, with **just 38% of those with zero collaboration tools claiming high organizational productivity**.

Self-reported productivity levels kept rising as companies added collaborative tools, too. 68% of companies with six tools reported high productivity, an amount surpassed only by companies with seven tools, of which 80% reported the same.

The trend is clear and can be attributed to the many benefits collaboration tools usher in, from tracking large amounts of work across multiple teams and enabling colleagues to easily speak to one another to logging all the records of communication for future reference.



5G and Internet of Things are among the top most important tech innovations for 2024

Other significant tech developments that business leaders anticipate will impact their operations in 2024 include 5G and the Internet of Things (IoT).

The IoT refers to a collective network of internet-connected devices, from smart fridges to office building sensors. If used by customers or clients, these devices can gather anonymized data to help a company fine-tune its service plans to deliver the needed features at fair prices. 5G – the newest and best generation of cellular network technology – is delivering faster connections and higher storage capacity, making all this data collection possible.

Our research shows that collecting and transmitting data is increasingly important for modern organizations. 32% of respondents stated that the IoT would have a high effect on their organization's performance in 2024, while 35% of respondents expect the same of 5G.

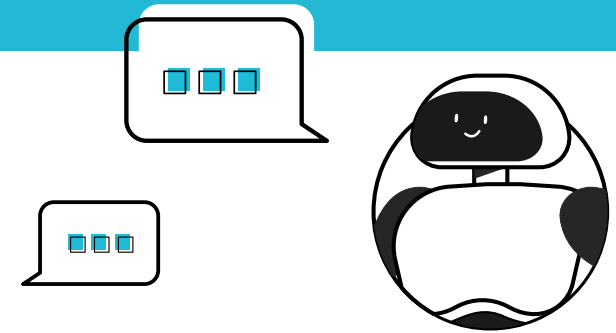


AI is extremely helpful – but not everyone knows it yet

In 1995, information technology firm Gartner created the “hype cycle,” a concept that charts the phases that emerging technologies pass through before achieving widespread adoption. After a “technology trigger” launches the process, the next step is the “peak of inflated expectations,” which marks the biggest and brightest round of publicity that this new technology will ever receive. During this period, endless news stories praise (and occasionally condemn) the latest buzzy tech concept, all while actual businesses themselves underinvest. Eventually, the bubble pops and the hype collapses before it eventually rises to reach a plateau of moderate but sustainable attention.

Tech.co’s Impact of Tech on the Workplace Report 2024 indicates that AI business tools remain at the “peak” stage of this hype cycle. Despite the prominence of generative AI in tech news across 2023, many business leaders remain unconvinced that their organization requires them. A significant amount of senior leadership professionals – **42%** – say they are indifferent towards AI. Furthermore, over a quarter of them (**27%**) have not taken steps to gain any personal experience with firsthand use of the technology.

This slow adoption of AI in some sectors extends across entire businesses, not just their leadership. **Two out of every three respondents (67%) say that AI tools are not used at all (34%) or to a limited extent (33%) within their organizations.** In contrast, just 21%



say they use AI tools a moderate amount, while even fewer rely on AI significantly. Just 7% claim “extensive” use and...

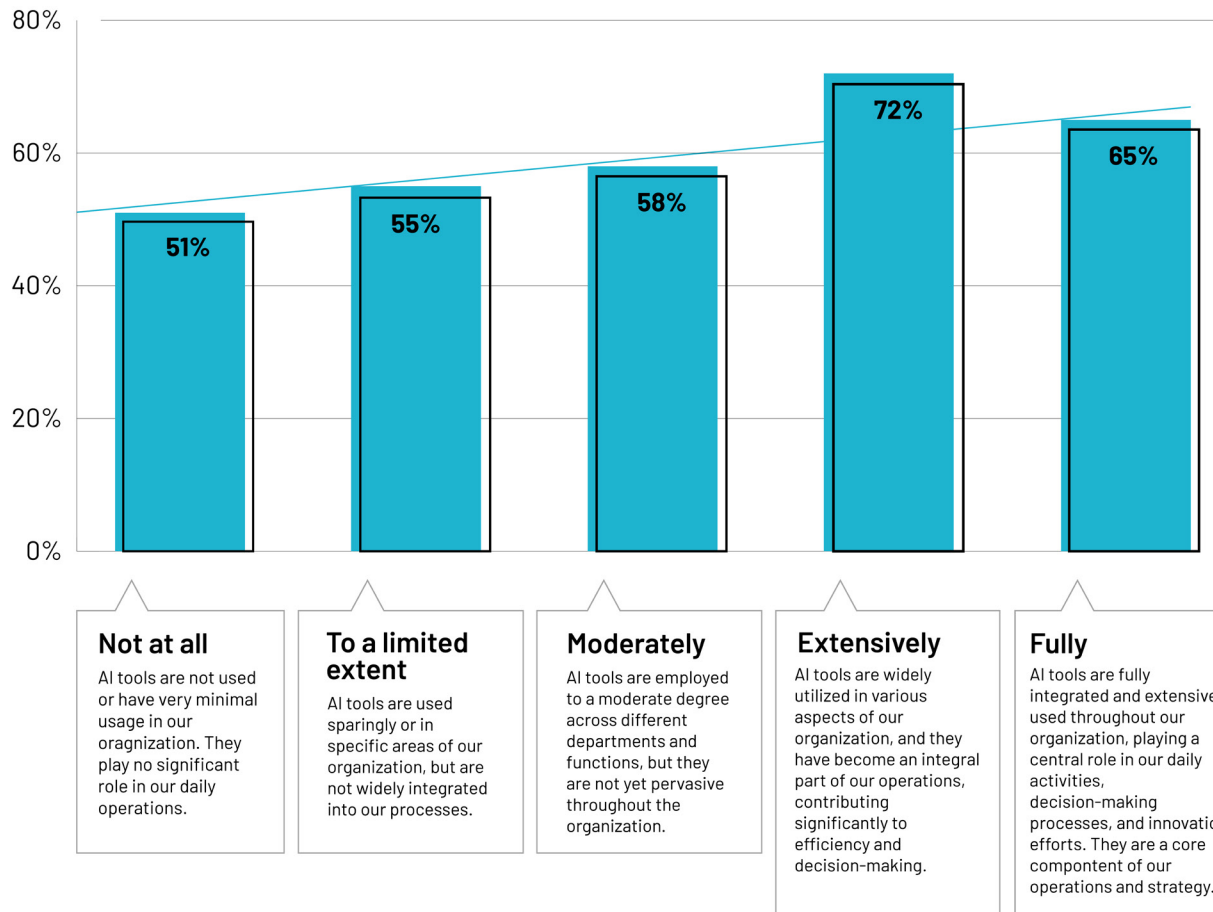
4% say AI tools are “fully integrated” within their organizations

Overall, businesses rated AI merely the 6th most important tech innovation for 2024, behind communication and collaborative tools, for example.

The largest contingent of leaders say they are either neutral (42%) regarding the use of AI tools in the workplace, approve of them (29%), or strongly approve (12%), with just 10% disapproving and 7% strongly disapproving. Business leaders are not necessarily opposed to AI just because their businesses have yet to integrate it with their workflows. In some cases, they lack a clear-cut or industry-specific business case for AI use, while in others they are waiting on more data to support a recommendation, or they simply see no upside to rocking the boat within their company.

Nevertheless, there is evidence to suggest that the nascent technology is being underrated by those not aware of what it is capable of.

% of respondents who reported high organizational productivity split by their organization's level of AI use



Organizations and professionals who use AI see overwhelmingly positive benefits

Businesses haven't been adopting AI tools as rapidly as the hype would suggest. However, the evidence says that they should be. Our research found that organizations that use AI tend to report higher levels of productivity – productivity that increases in correlation with those organizations' deepening investments in AI tools.

In addition to increased productivity, 59% of those who use AI within their own role say that it has improved their job satisfaction. Another 30% said it's had a significant or substantial impact on their work processes.

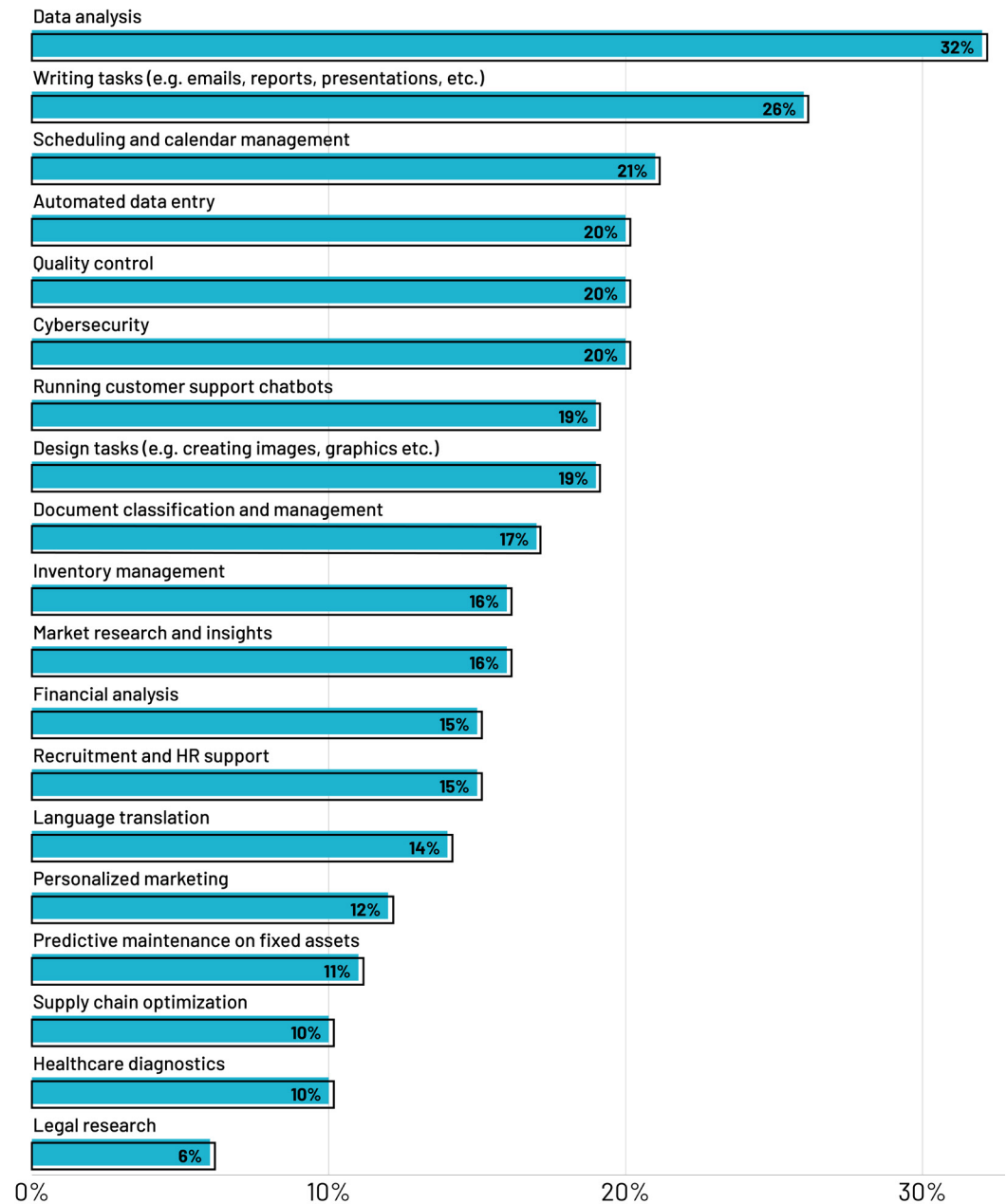


Key AI use cases

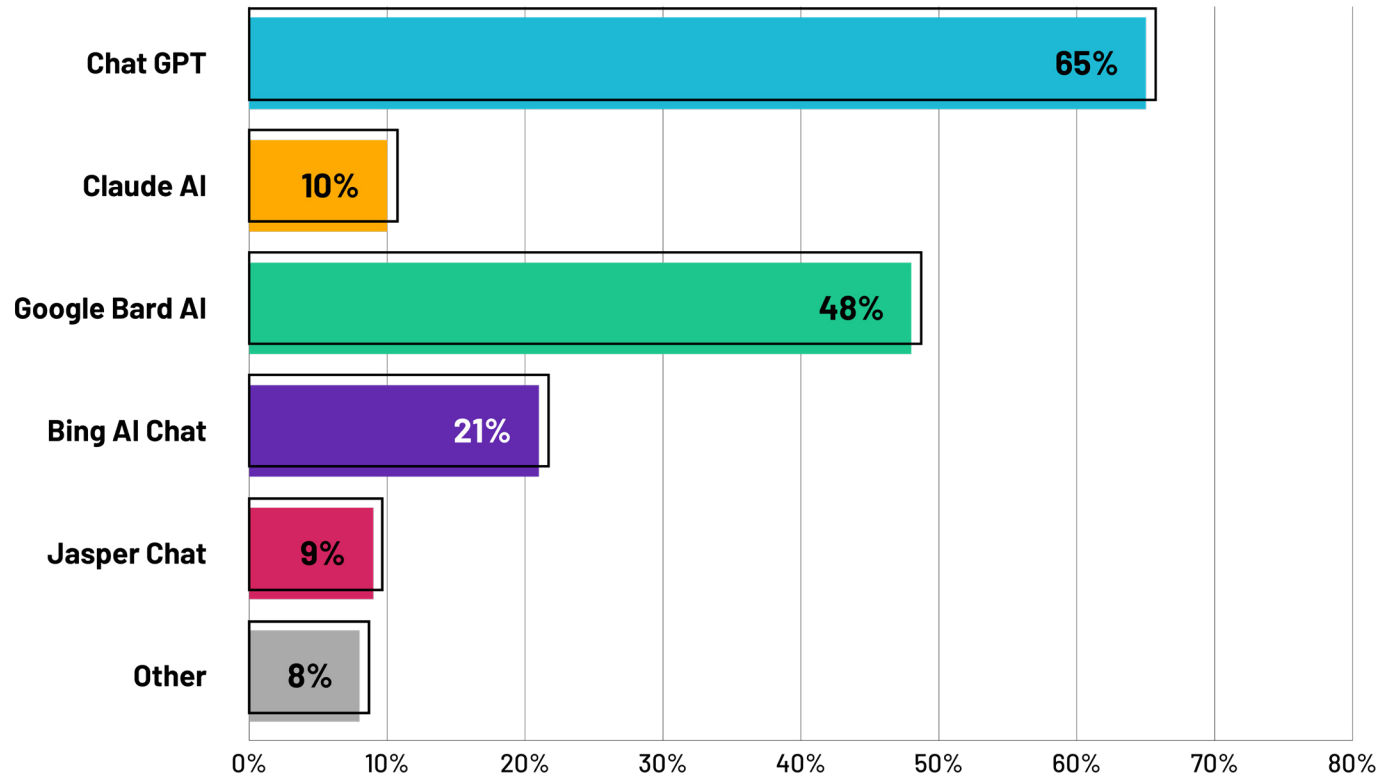
The range of tasks that businesses find AI most useful for is broad, but two tasks in particular rose to the top in our research: Data analysis and writing tasks. **Data analysis** is the biggest, with 32% of companies reporting AI use for this chore within their organization, while AI use for general **writing tasks**, from emails to reports, is common at 26% of companies. These tasks were found to be head and shoulders above other AI uses, with the next six highest use cases all clocking in at between 19% and 21% of companies.

It's also worth noting the tasks that organizations were least likely to reach for the AI button when tackling **legal research** and **healthcare diagnostics**. Both of these were at the bottom, with just 6% and 10% of companies using AI for them, respectively. This isn't surprising, given the sensitive nature of data within the legal and healthcare industries.

However, other uncommon uses of AI include **supply chain optimization** (10%) and **predictive maintenance for fixed assets** (11%) – two tasks that many software providers in relevant industries have been promoting AI solutions for in recent years. Our data shows that companies are starting to respond but have yet to fully engage with AI tools to help streamline supply chains and maintenance needs.



Organizational AI uses



Of course, when it comes to the usage of and feedback on AI, companies are not all talking about the same AI tool. So, which is most commonly used?

Top AI tools

Unsurprisingly, the most well-known generative AI platform is also the most commonly used, as OpenAI's ChatGPT has the lion's share of users with a massive 65%. A noteworthy second place is Google's Bard, with 48% of respondents saying

they use it, while Bing AI Chat was used by 21%.

Runners-up include Claude AI (10%) and Jasper Chat (9%). Google's entry into the big-tech AI arms race certainly isn't falling on its face, but for most users, AI might as well be synonymous with ChatGPT.

How Is Technology Changing Our Working Environment?



How Is Technology Changing Our Working Environment?

The world of work is constantly evolving. Since Covid-19 threw out the playbook that companies have followed for decades, flexible working arrangements have become more common than ever, enabled by the use of smart business technology.

Now the dust of the pandemic has settled, many business owners need to choose between reverting back to rigid policies, or embracing flexible solutions. With cries for a healthier work-life balance reaching fever pitch, Gen Z movements like and have become harder to ignore.

As businesses continue to lean on collaborative software and AI tools like ChatGPT, our research shows that the use of technology is shaping decisions about our working environment. This is evident when it comes to movements like remote working and the campaign for the 4-day workweek. Alongside surveying business owners, we spoke to rank-and-file employees to learn how shifting preferences could impact the employment landscape in 2024.

Key findings include:

- Technology use remains **high for all businesses**, with 97% of fully remote teams benefiting from collaborative tools, compared to **87%** of fully in-person offices.
- Remote teams face **fewer recruitment roadblocks**, with **44%** of fully remote businesses finding it **easy to recruit staff**, compared to **32%** of businesses with mandatory in-office policies.
- Fully and partially remote businesses overwhelmingly reported **higher levels of output** than those who expect workers to be in five days a week.
- Employees tend to come into the office **more than they are required to**, with **62%** of employees making the commute one day more than is expected of them.
- 42%** of business owners are considering implementing a **4-day workweek** at their organization, and **17%** are already setting the wheels in motion.
- 90%** of businesses with **AI experience** are open to introducing a 4-day workweek, compared to only **41%** of businesses who have never used the technology.
- Despite recent technology breakthroughs, **email** and **traditional landlines** are still far more popular than team messaging tools, and VoIP phones.

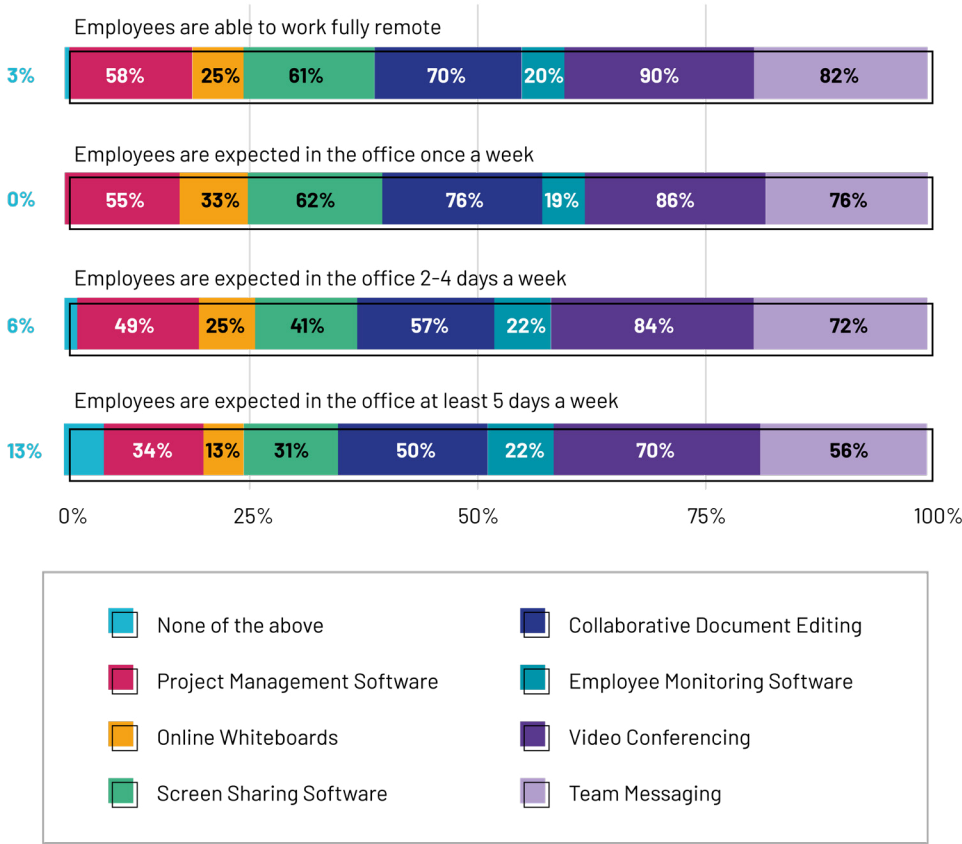
Remote working is largely unaffected by the use of technology

Due to the necessity of remote work during the worldwide pandemic, business communication tools like online whiteboards and web conferencing software have become staples in most modern businesses. However, our research shows that in 2024, the use of this technology has little correlation with a business’s decision to work remotely.

In fact, the use of this kind of technology was strikingly similar across most businesses we surveyed, irrespective of whether they managed remote, hybrid, or in-person teams. 97% of fully remote teams benefited from some form of collaborative tool compared to 94% of hybrid firms that expect workers in two to four days a week, and 87% of fully in-person offices.

These findings challenge popular assertions that the rise of these tools would usher in a new age of remote working. However, they also indicate that **the infrastructure is already there for businesses that want to reap the rewards of flexible working**, of which there are many.

Collaboration tool utility by organizations of different remote work policies



Remote businesses face fewer recruiting challenges

As we've previously reported on Tech.co, remote and hybrid work can unlock core benefits for employees - from lowering levels of stress and anxiety to having a positive impact on an individual's physical health. Flexible workplace schedules are favored even more by women and workers from minority backgrounds, which is an important consideration for employers looking to build more **inclusive and equitable** workplaces.

But the advantages of flexible working aren't limited to employees. As the hiring climate continues to cool in the US, offering the perk of remote and hybrid working has proven to be an **effective way for companies to attract top talent**, with 44% of fully remote businesses finding it easy to recruit staff when compared to only 32% of businesses requiring workers into the office five days a week.

Recruitment Difficulty Versus Organizational Remote Work Policies				
	Employees are able to work fully remotely	Employees are expected to be in the office at least 1 day a week	Employees are expected to be in the office at least 2 to 4 days a week	Employees are expected to be in the office at least 5 days a week
Recruiting is Easy	44%	29%	31%	32%
Neutral	7%	10%	10%	10%
Recruiting is challenging	46%	62%	57%	56%

As applicants continue to vote with their feet by favoring companies with policies that align with their desires, many companies with rigid 5-day in-person policies are no longer getting a look in. This was the case for many professionals we spoke to, including a Marketing and Communications Manager at Imperial College London who decided they would never choose to return to an office full time, especially after sampling the benefits of remote and hybrid working.

'I think there are many benefits to remote working, both in terms of mental health and quality of work. I would not consider a job that required me to be in the office all five days.'

-A Marketing Manager at Imperial College London

While it's still possible to draw in top talent with rigid workplace policies, these findings should be a wake-up call for companies serious about retaining their competitive advantage in the job market. But making your company more desirable to the hiring pool isn't the only reason to consider flexible options.

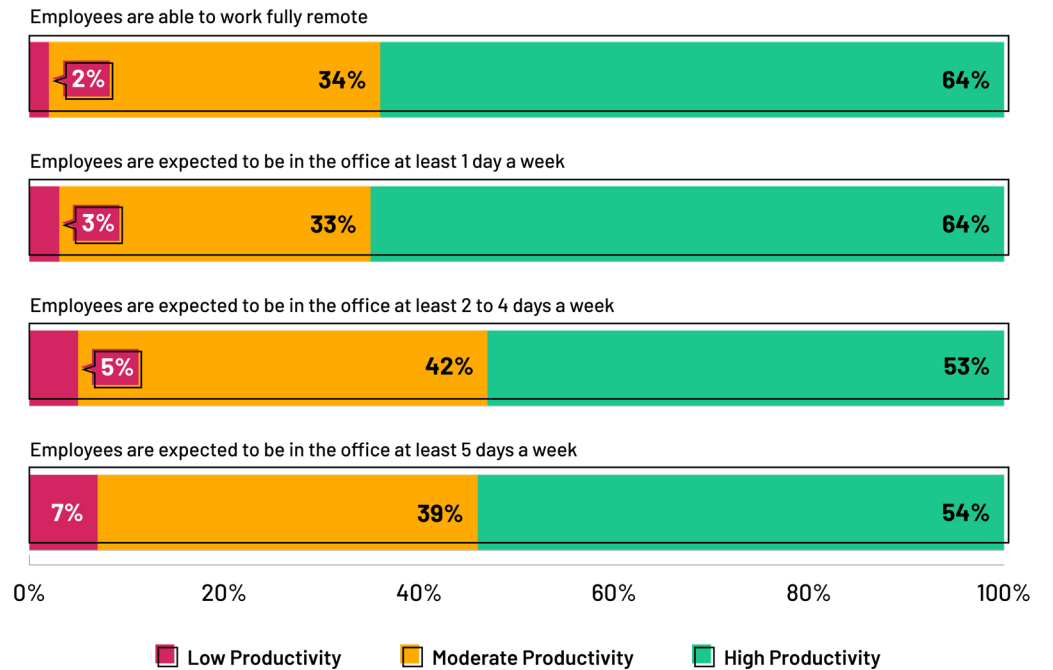


Fully remote businesses are more productive

As the tide continues to turn on remote work, a large number of companies have begun rolling out mandatory office returns, from retail giants Walmart and Amazon to leading tech firms like IBM and Dell. While many leading business figures believe the only key to a productive workforce is collaborative, in-person working, our findings tell a different story.

After asking businesses practicing a range of working models about the productivity of their teams, we found that **fully and partially remote businesses overwhelmingly reported higher levels of output.** Specifically, 64% of fully remote businesses categorized their productivity level as “high,” compared to only 54% of businesses that expected workers to be in five days a week, and 53% of businesses that requested them to be in for two to three days.

Full-time in-person businesses also reported low productivity (7%) to other businesses, with just 2% of those that managed fully remote teams marking their productivity as low.



Self-reported productivity split by organization's remote work policy

Our findings also revealed that employees tend to come into the office more than they are required to - with 62% of employees making the commute one day more than is expected of them, and 14% coming in for an extra two to four days.

The fact that workers are still reaping benefits from community working signals that the days of the physical office aren't behind us just yet. But with fully remote businesses being more productive than any other type of business we surveyed, business owners should think twice before believing that in-person working is the only pathway to effective productivity, especially when 95% of companies already rely on remote-friendly technology.

The reasons behind this productivity split are mixed. Some professionals explained that by implementing policies that prioritized worker well-being, employees were more willing to give more back, while others said that in-office distractions - such as people talking, poor equipment, and lack of private spaces to make calls - were greater than those faced while working from home.

“Whilst I enjoy seeing colleagues face-to-face, there are certainly more distractions when in the office.”

- Technical Account Manager at Hootsuite Media Limited

However, these sentiments aren't held across the board. 34% of the fully remote businesses we surveyed still grapple with productivity issues, with many workers struggling to deliver results from the home office, too. For example, a Partner with

Turner Morum LLP told us that the distractions from his young family tend to make him less productive when working from home, while another employee we interviewed found that meetings were more fruitful when they were able to talk to clients face to face.

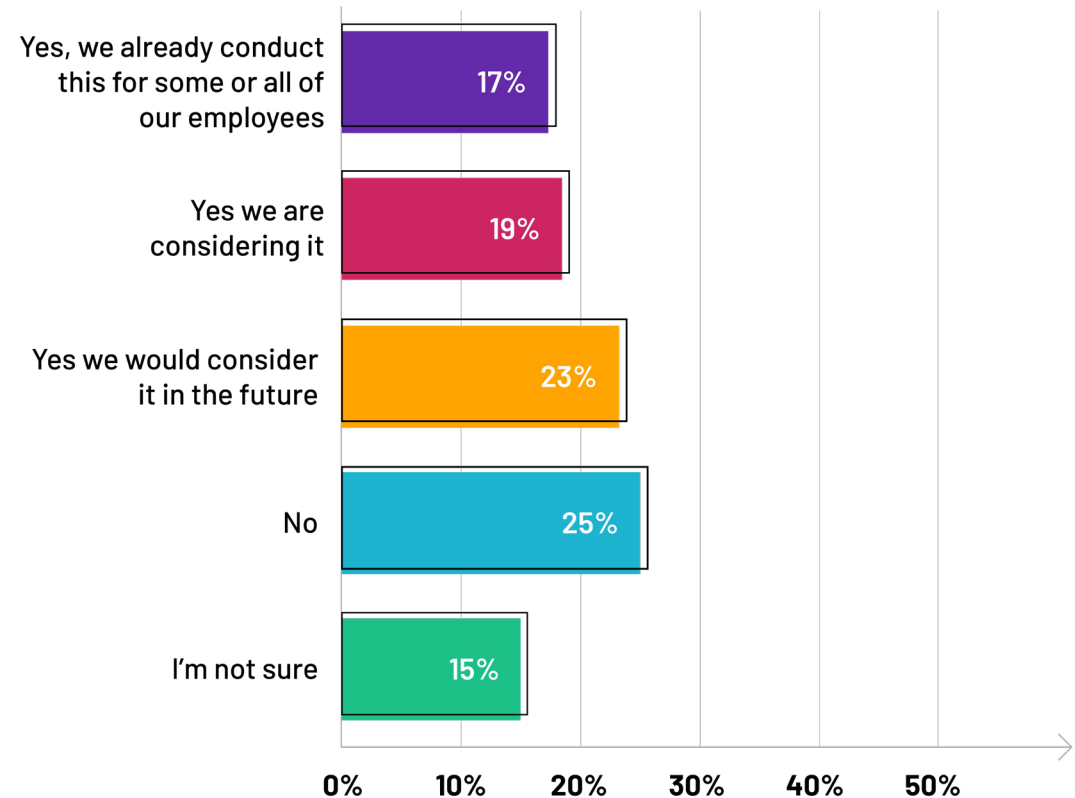
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The 4-day workweek is wildly popular, especially among younger generations

Demands for greater job satisfaction and a healthier work-life balance are also powering another major workplace movement: the campaign for a 4-day workweek.

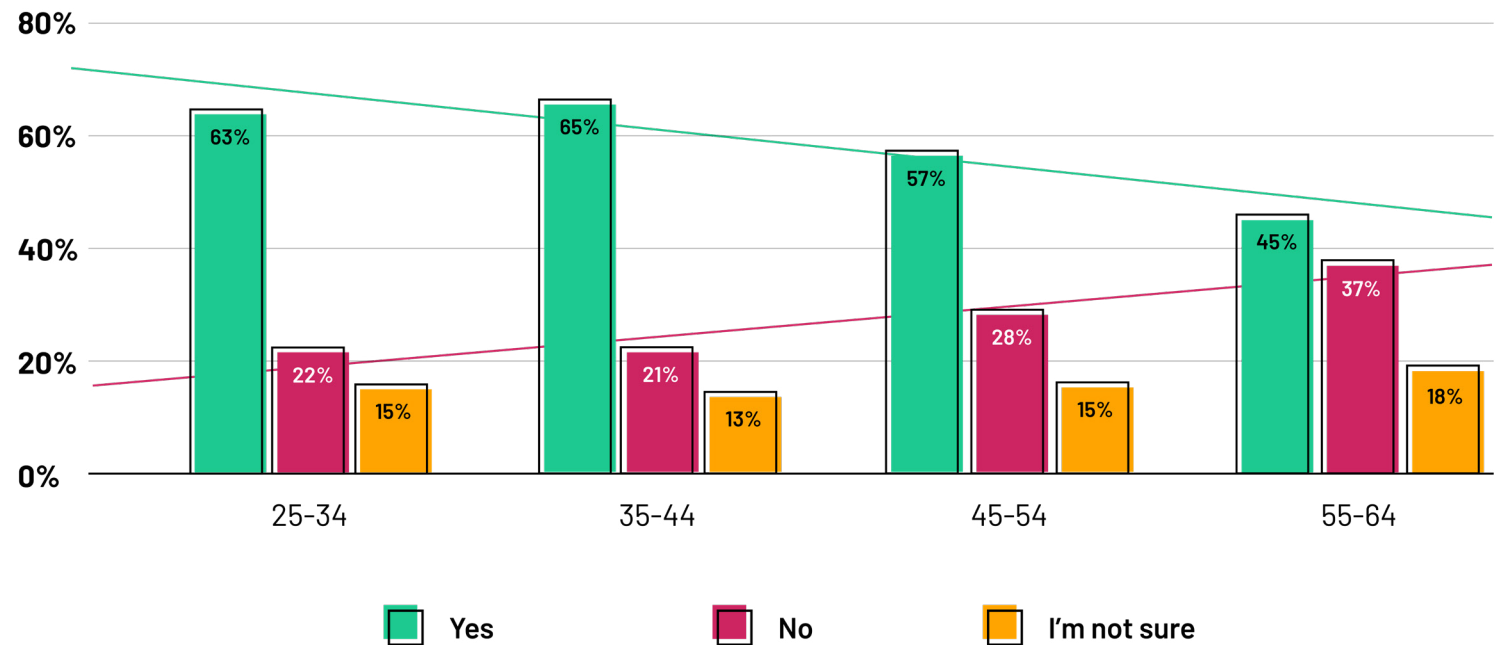
While the movement has been bubbling under the surface for years, the success of multiple global trials brought the concept firmly into the mainstream in 2023 - and for good reason. Offering employees a 4-day workweek has been proven to unlock tangible benefits to companies, with the majority of workers reporting higher levels of job satisfaction and physical and mental well-being after the trial periods, and most businesses maintaining or succeeding in productivity and profit targets.



Would you consider implementing a 4-day workweek?

“Would you consider implementing a four day working week at your organization?”

Business leader responses by age group



Ditching a working day isn't possible for businesses in all sectors and specialisms. However, the results of our report confirm that most business owners are open to the idea, with 42% of business owners considering rolling out the policy at their organization, and 17% already setting the wheels in motion. There also appears to be a stark generational divide when it comes to supporting the movement, with 65% of 35-44 year olds being willing to ax

a working day, compared to only 45% of business owners aged 55-64.

This generational split is hardly surprising. Digital natives who belong to younger generations tend to be overwhelmingly more supportive of working arrangements that prioritize flexibility and mental health than senior figures who rose through the ranks in the information age.

Age isn't the only determining factor of course, with more workers in the 35-44 age bracket supporting the 4-day workweek than workers aged 25-34. These findings do make one thing clear: flexible workplace policies like a 4-day workweek are the new currency for businesses looking to attract younger talent.

Artificial intelligence can make a 4-day workweek a reality

The results of our research also revealed a heavy correlation between a business's AI use and whether or not they'll be open to the idea of a 4-day workweek.

Almost all businesses (93%) that were fully proficient in using AI are considering implementing the flexible policy at their workplace, with no businesses in this bracket (0%) being against the idea, and only 7% saying they weren't sure. In contrast, only 41% of businesses that haven't used AI at all were on board with the idea, with 38% rejecting it altogether.

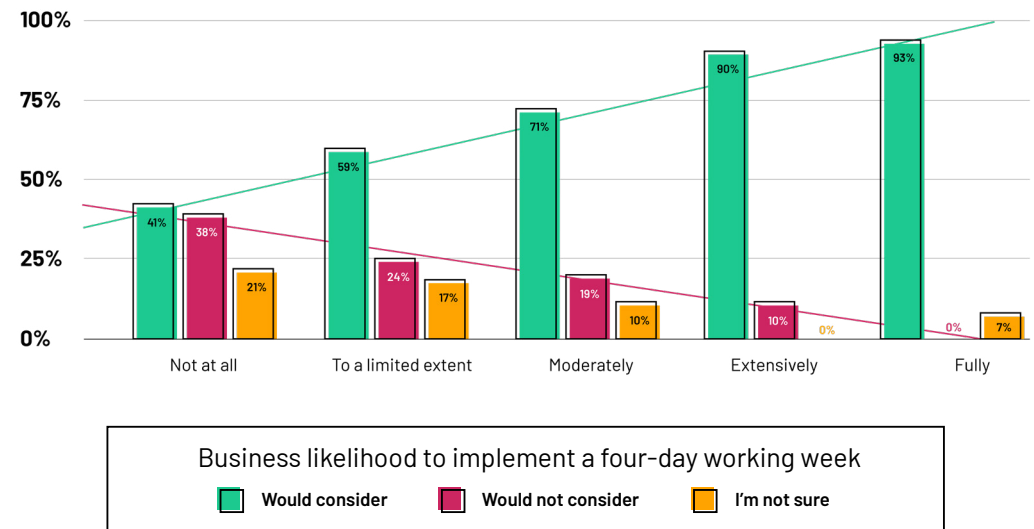
Even businesses that were only using AI to a limited extent were much more likely to welcome a 4-day workweek than those with zero exposure (59% of these respondents are considering the idea, and 17% remain on the fence).

As more businesses harness tools like ChatGPT and Google Bard to streamline processes and handle administrative duties, these responses unearth exciting

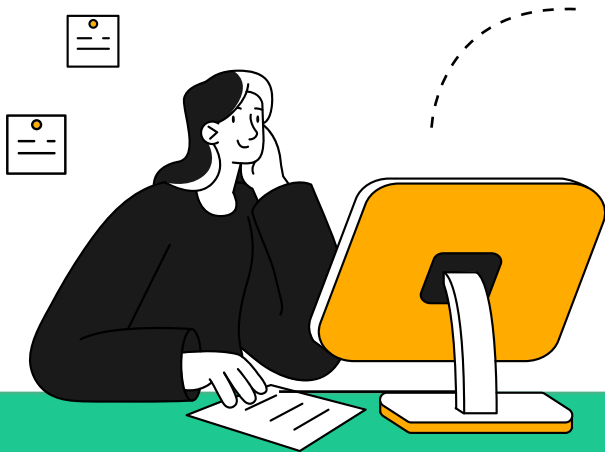
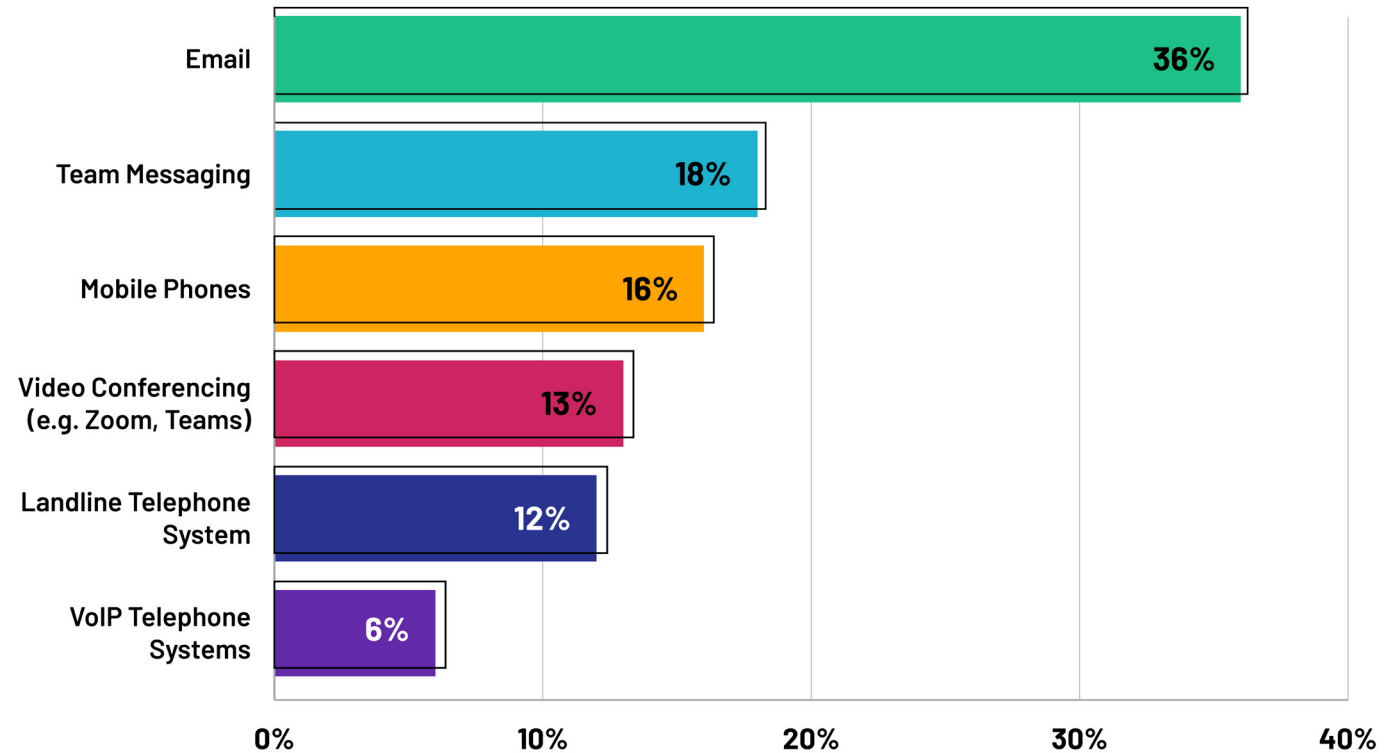
insights about AI's potential to drive up productivity. They also demonstrate how this surplus productivity can be used to benefit workers and not just business owners, by freeing up leisure time and bringing concepts like the 4-day workweek closer to reality.

While these benefits won't be felt by all businesses evenly, given a 4-day workweek remains unobtainable for many service businesses and those requiring 24/7 coverage, these findings support the case for AI optimism. The technology should be depicted less as a job-replacer and more as an aid to healthier, flexible working lifestyles.

How extensively are AI tools utilized within your organization?



Most frequently used communication tool by businesses



Old technology remains relevant

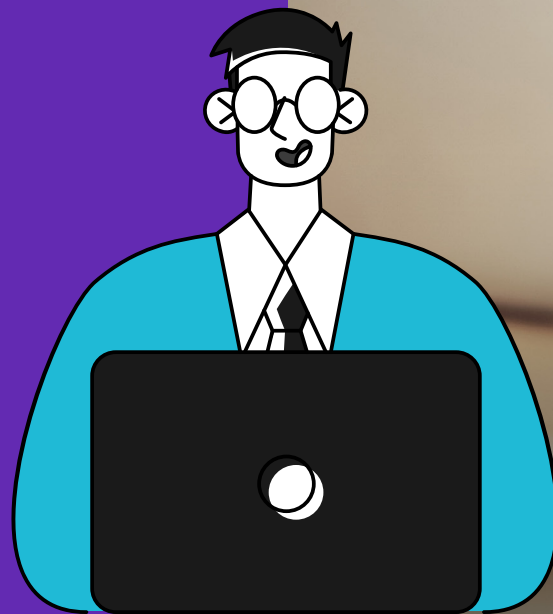
With all the talk of artificial intelligence and new forms of communication and collaboration tools enabling staff to work from anywhere in the world, you'd be forgiven for thinking that older technology is becoming obsolete. However, this is far from being the true case.

While newer tools like VoIP telephones and integrated instant messaging software

provide employees with better ways to collaborate, traditional methods remain the most commonly used as many businesses cling to what they know.

Email remains more frequently used than team messaging tools, and VoIP phones are nowhere near as common as traditional landlines.

How Is Technology Affecting Business Security?



How Is Technology Affecting Business Security?

In 2024, cyberattacks remain a key threat facing businesses of all sizes. As recently as October 2023, Google, Microsoft, and Cloudflare thwarted the largest DDoS attack ever recorded.

At the same time, data breaches are occurring across the country on an almost-daily basis. Countless businesses - from casino chains to email service providers - have had confidential information extracted from their systems and sold on the dark web or have been held to ransom until a fee is paid. Even password managers, the supposed bastion of security, have been successfully targeted.

As part of Tech.co's research into the impact of technology on the workplace, we asked business leaders whether their organization had experienced a data breach this year.

We also asked them about the source of any data breaches that had occurred, what security tools they were currently using, and whether they were confident in their company's ability to protect itself in the future.

The data paints a worrying picture for some:

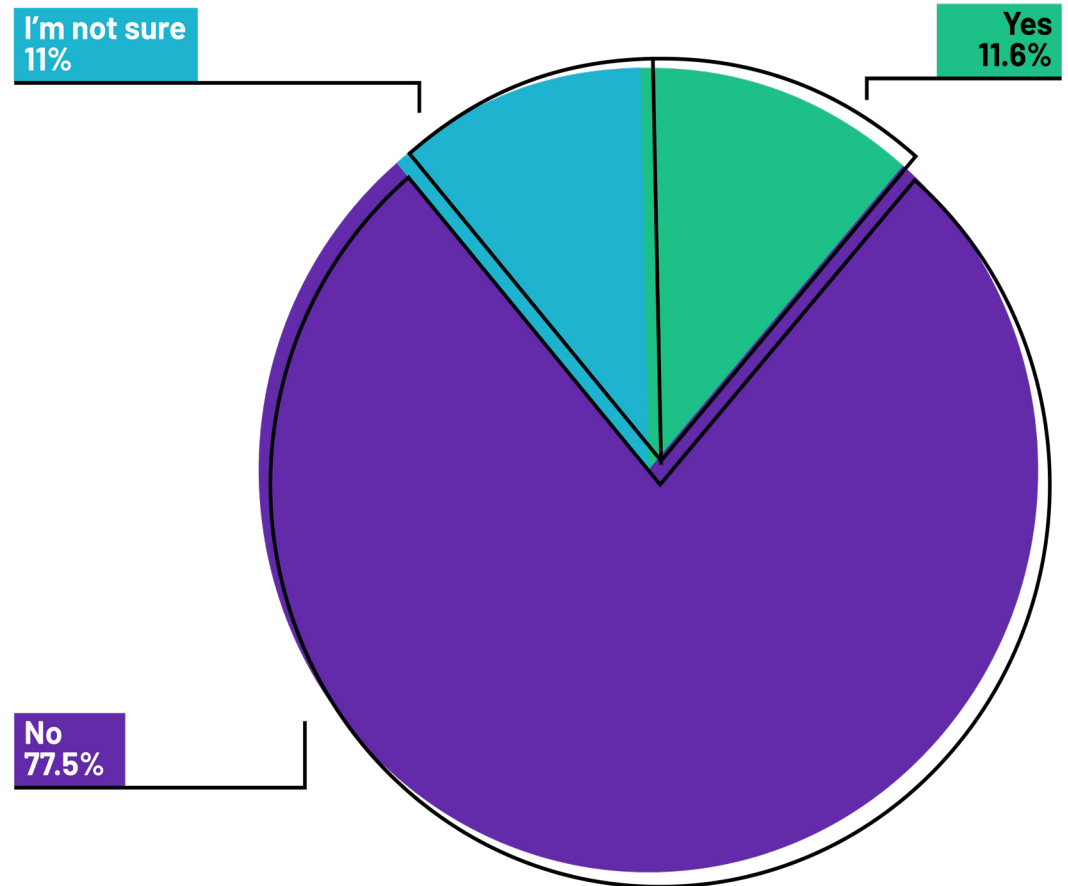
- 11% of senior business leaders **said they were unsure** whether their company had suffered a data breach in the last 12 months, indicating a worrying lack of awareness.
- A similar percentage (**11.6%**) said their company suffered a **data breach**, although more than three quarters got through the year unscathed.
- **Human errors** remain a core component of many **data breaches**, including silly mistakes such as sending documents to the wrong person.
- The majority of businesses still **aren't** taking advantage of security tools like **VPNs and password managers**.
- A concerning proportion of businesses **aren't convinced** that their company is currently capable of protecting itself against cyberattacks.
- However, **19%** of business leaders surveyed say their business is using **AI for cybersecurity**.

More than 1 in 10 senior businesses leaders are “unsure” whether they’ve experienced a data breach in 2023

Over 77% of businesses that responded to our survey said their company hadn’t suffered a data breach during 2023, but 11.6% said they had unfortunately fallen victim to a cyberattack during the last 12 months.

The remaining 11% of business leaders surveyed - representing 115 different companies - admitted they were “not sure” whether their company suffered a data breach in the last year.

Has your organization experienced a data breach this year (2023)?



After a data breach occurs, there are legal protocols that every business has to follow. For example, in California, businesses are legally required to notify any customer impacted by a breach of their systems. The US has no federal, country-wide data protection legislation that operates like GDPR does in Europe, so the steps you have to take after a data breach vary from state to state. But there are usually a significant number of steps to take.

Considering the wide range of specific actions that need to be carried out in the aftermath of a data breach - from patching vulnerabilities to sending out a data breach notification to affected customers - there shouldn't be any instances where key decision makers at a business are "unsure" of whether an attack has occurred.



This lack of certainty suggests a number of businesses may not be equipped with the knowledge, processes, training, or tools to mitigate the negative impact of such an event, despite the fact that attacks can affect any business size.

4% of businesses with fewer than 25 employees stated they had a data breach in 2023, and this jumped past 10% for businesses with more than 25 employees. Businesses just beginning to grow past the 25 employee threshold should ensure they are prepared through training and technology investments to address this increasing vulnerability rather than believing their business is too small to be targeted or to warrant adequate data security.

Has your organization experienced a data breach this year? (2023)

Business Size:	10-24 Employees	25-49 Employees	50-99 Employees	100+ Employees
Yes	4%	11%	16%	11%
No	90%	84%	77%	74%
I'm not sure	6%	5%	6%	14%

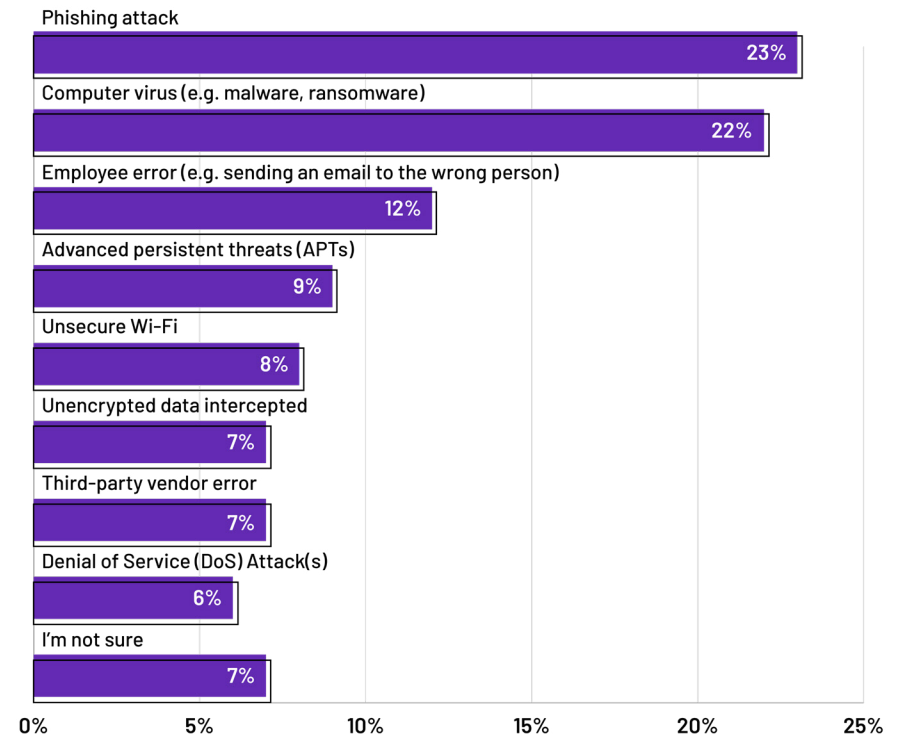
Humans are still the weak link when it comes to business security

While the threat landscape continues to diversify, one of the biggest threats to business security remains internal - specifically, the errors made by employees.

“Human error” - such as sending a document to the wrong address - is still at the center of a significant number of cyberattacks experienced by businesses. In fact, 12% of the businesses reported that the source of their cyberattack was due to some sort of employee error.

Human error also plays its part in other ways. Phishing attacks - many of which rely on employee interaction with a link or fake landing page - proved to be the source of 23% of the data breaches experienced by respondents to our survey.

One business leader who spoke to Tech.co about a phishing email attack that impacted their company revealed that the email in question was “sent on a Friday evening, exploiting the reduced vigilance typical of week’s end.” This allowed the threat actor a 36-hour window before detection. They said a “special response team” of legal, IT, and communication stakeholders had to be convened to devise a rescue plan and address impacted clients via email.



Another business leader who spoke to Tech.co about the ways in which a recent data breach impacted their company’s operations revealed that “approximately 350 customer accounts” were compromised, “exposing data such as names, email addresses, and purchase histories” and forcing the company to commit approximately 500 hours of employee time to mitigating the effects of the breach in the week after it was discovered.

A similar percentage (22%) to those who fell victim to phishing attacks reported that “computer viruses” - including attack vectors like ransomware and malware - were the source of their company’s data breach.

Despite looming cybersecurity threats, most companies aren't using VPNs and password managers

Most survey respondents reported that they weren't using a VPN (59%) - despite the technology being used by more than 1.5 billion people worldwide in 2023.

Does your organization use any of the following?			
VPN		Password Manager	
Yes	No	Yes	No
41%	59%	34%	66%

This is particularly interesting considering that 7% of businesses admitted they'd suffered a data breach in the last 12 months due to data being intercepted from unencrypted channels, and 8% of respondents put it down to unsecure Wi-Fi networks.

Both of these vulnerabilities can be alleviated by VPN encryption capabilities, which shield users from threat actors lurking in open Wi-Fi networks. The remote connections they provide to company servers also ensure data is encrypted in transit.

The majority of business leaders (66%) also confirmed that they aren't using password managers at their company to secure account credentials.

This isn't as surprising for a number of reasons. For one, high-profile password manager LastPass [suffered two data breaches](#) in quick succession last year, which led to a wider conversation about how safe the technology actually is. Secondly, a lot of businesses now utilize authentication schemes such as single-sign on, reducing the number of passwords required.

However, the advent of [passkeys](#) may prove to be the real death knell for password managers. Google made passkeys the [default sign-in method](#) for accounts in October 2023 because these are universally considered to be more secure.

Almost one in five businesses are now using AI for cybersecurity

While the percentage of companies using VPNs and password managers to secure their networks was somewhat lower than expected, 19.5% of the businesses we surveyed said they're already harnessing the power of AI for cybersecurity purposes.

More businesses reported that they were using AI for cybersecurity than other tasks and roles often associated more closely with the "AI revolution."

For instance, more businesses reported that they're using AI for cybersecurity than financial analysis (15.5%), legal research (5.8%), design tasks (18.8%), and language translation (14.2%).

More than one quarter of business leaders aren't confident that their company can respond appropriately to a data breach

We asked the senior business leaders we surveyed whether they were confident in their company's ability to defend and respond to a data breach in the future. 11% of respondents said they weren't confident, while a further 15% said they were unsure.

In total, that means that 26% of business leaders have little faith that their business has the protections in place to prevent or recover from a major cyberattack or data leak.

Do you feel confident in your organization's ability to defend and respond to a data breach?		
Yes	No	I'm not sure
74%	11%	15%

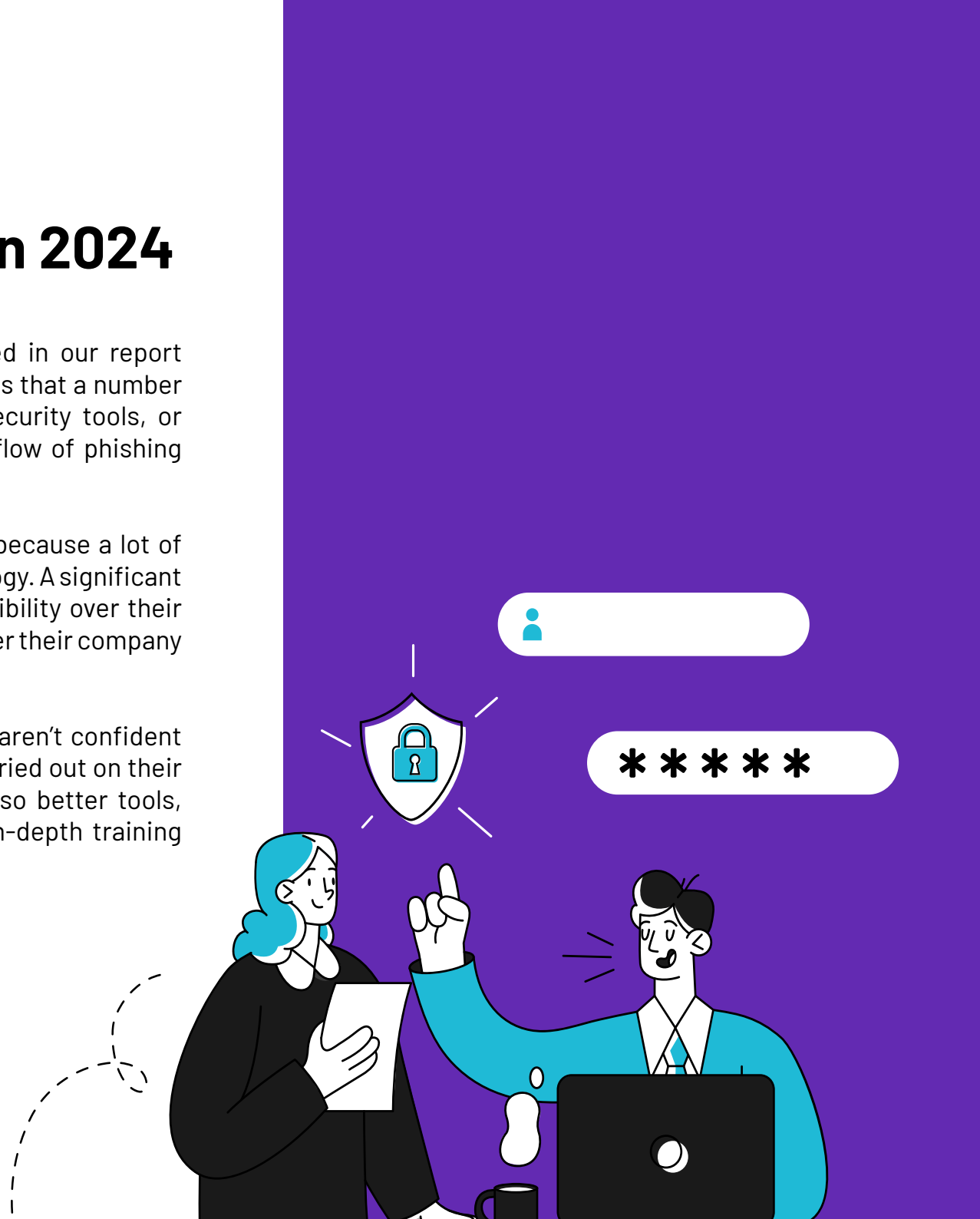
This figure is concerning considering that 40% of businesses we surveyed said they believed innovations made in the cybersecurity threat landscape will have a "high" or "very high" impact on their business in 2024. What's more, a further 28% predicted them to have a "moderate" effect on their operations next year.

Business cybersecurity in 2024

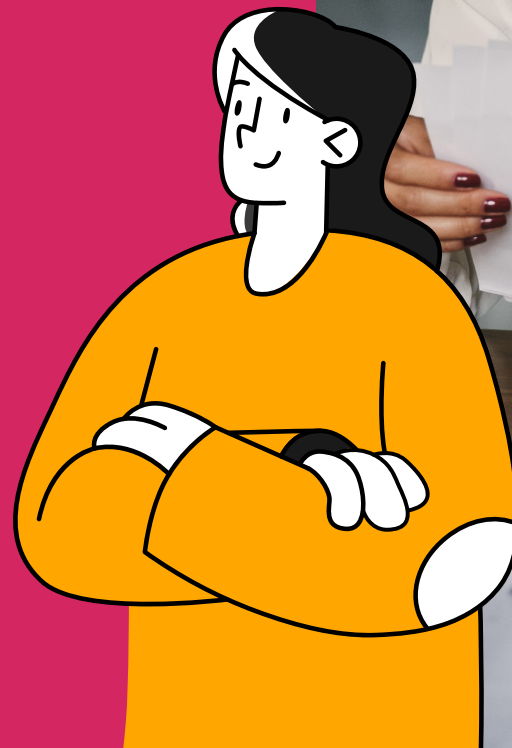
While the vast majority of businesses that participated in our report survey didn't fall victim to a data breach in 2023, it seems that a number of businesses are still putting off investing in cybersecurity tools, or providing their staff with enough training to stem the flow of phishing attacks that are targeting their networks.

Data breaches are still occurring due to vulnerabilities because a lot of businesses aren't using readily available security technology. A significant minority of senior leaders seem to not have enough visibility over their company's security and IT workflows to even know whether their company has suffered a data breach or not.

This is perhaps why more than a quarter of businesses aren't confident that their company can defend or respond to attacks carried out on their networks. Cyberattacks are unlikely to relent in 2024, so better tools, more visibility over business security processes, and in-depth training should be at the top of the priority list.



How Is Technology Changing Job Roles?



How Is Technology Changing Job Roles?

The rise of artificial intelligence in the business world has led to a wide range of changes across the global landscape. Tasks that once required a human employee are being streamlined with the help of AI chatbots and large language models, improving productivity and saving time for the business willing to take advantage of the technology.

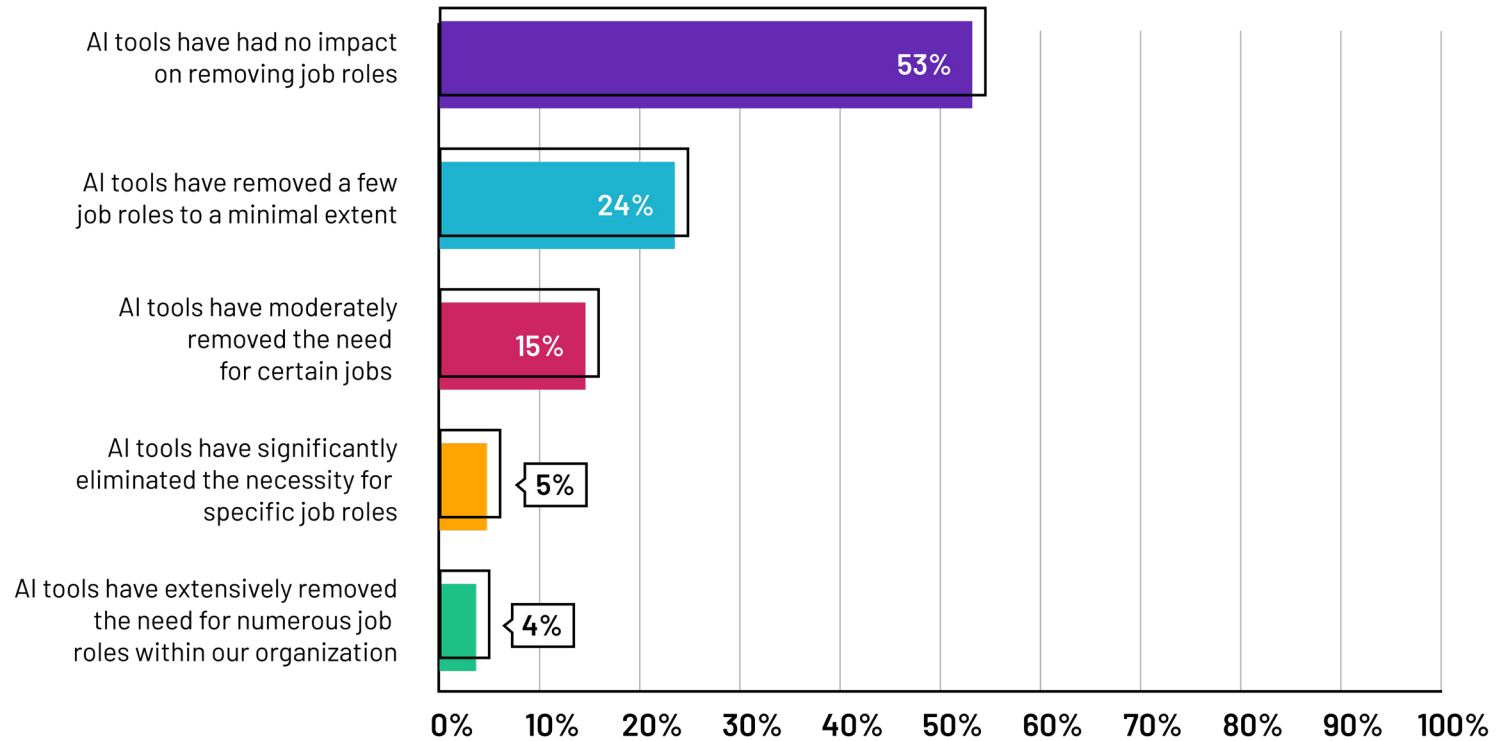
However, as with any technological advancement, the impact of AI and other technologies on job roles is a serious concern. The tech industry has already laid off a large percentage of its workforce over the past couple of years, and fears that AI could eliminate even more jobs are on the rise. So, what is the actual risk of technology when it comes to challenging job roles? And how else is technology impacting business role responsibilities and expectations?

Key findings:

- Nearly a quarter (24%) of senior leadership professionals consider **AI expertise** a very important or extremely important skill for new hires.
- Half (50%) of senior leadership professionals consider **data analysis** a very important or extremely important skill for new hires.
- 88% of senior leadership professionals consider **communication** a very important or extremely important skill for new hires.
- 63% of senior leadership professionals whose organizations who use AI for **writing tasks** state that AI tools have had no impact on removing job roles.
- 71% of senior leadership professionals whose organizations who use AI for **supply-chain optimization** state that AI tools have had an impact on removing job roles.



To what extent has your organization's use of AI tools removed the need for certain job roles?



Most businesses aren't replacing jobs with AI yet

While concerns that the rise of AI will eliminate jobs at a staggering rate are valid, our data shows that there isn't too much to worry about at the present time. Out of all responses from managers and directors across US businesses, a majority (53%) noted that AI tools have had no impact on job roles.

To further assuage professionals concerned about the rise of this technology, the impact of AI tools on job roles appears to be on a sliding scale, with 24% of respondents reporting that AI tools have impacted a few jobs, 15% saying it's had a moderate impact, 5% noting a significant effect on job roles, and only 4% stating that AI has had an extensive impact across their business.

All this to say, the problem isn't dire just yet. Obviously, technology and AI have begun having an effect on job roles, but for the majority of professionals, there's plenty of time before the need to sound any alarms.

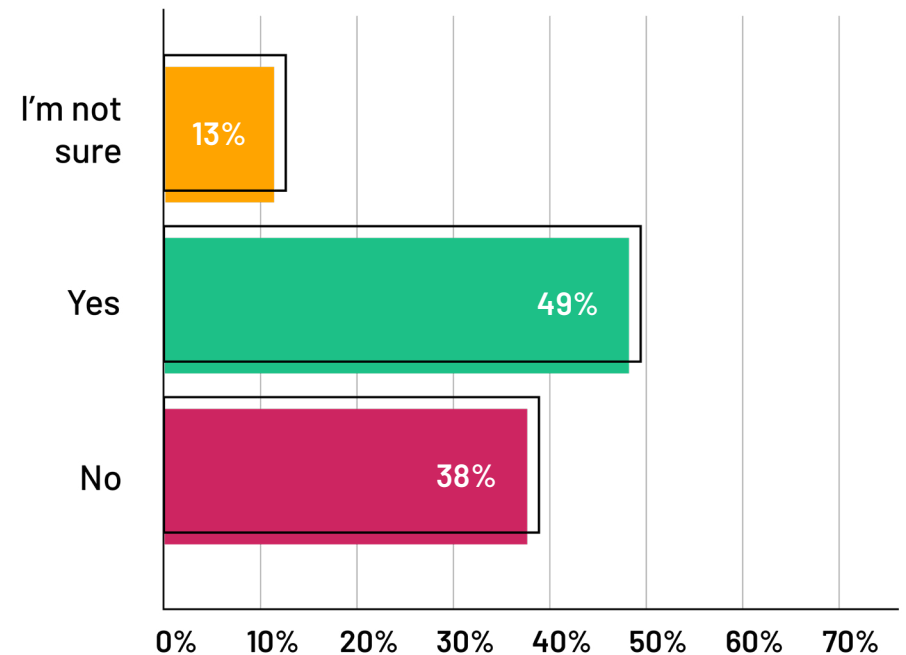
Distrust of AI could keep job replacements down

By all accounts, generative AI platforms like ChatGPT should have completely transformed the business world by now. These services are productivity machines, providing businesses with everything from content to code in seconds, without the need for full-time employees that cost money and resources. So, what's the hold up?

According to our data, one of the primary reasons could be that AI is simply not reliable enough in these early stages to be fully trusted with business operations. We found that 49% of business leaders are concerned about the risk of large language AI models like ChatGPT when it comes to generating false information. Only 39% said they were not at all concerned, with 12% saying that they weren't entirely sure.

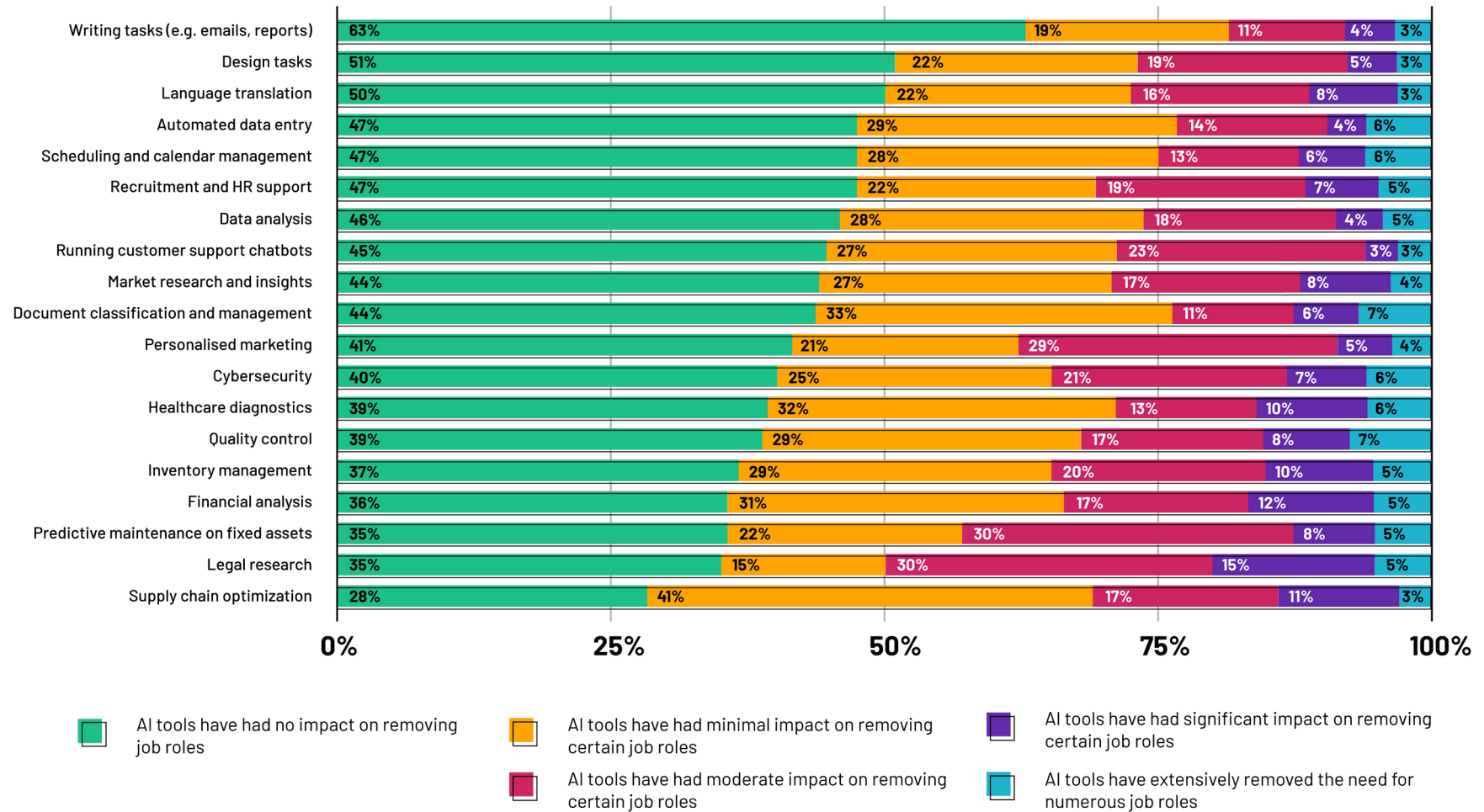
Even with recent updates to popular platforms like ChatGPT, the distrust of generative AI technology is very much warranted. The number of AI errors, mistakes, and outright failures continues to rise on a consistent basis, with everything from false accusations and plagiarism, to deepfakes and name-calling spoiling the success of the technology. Suffice to say, until AI technology becomes more consistent and reliable in business settings, job roles will remain safe for the majority of professionals.

Are you concerned about the risk of large language AI models generating false information?





What does your organization use AI for?



Some roles are safer than others from AI replacement

While the majority of professionals have nothing to worry about when it comes to AI replacing their jobs, the reality is that some professionals do have to worry, depending on their particular role at their company. Our data found AI is being used for a variety of tasks across the business landscape, but that some of these AI-performed tasks are leading to job replacements more than others.

➤ AI used for ancillary tasks like writing, design, and scheduling has limited impact on jobs

As our research shows, AI is being used for ancillary tasks like writing, design, and scheduling, but that isn't leading to job replacements at a rate some would expect. In fact, an impressive 63% of AI used for writing tasks has led to no job replacements at all, with similar results for when AI is used for design (51%), language translations (50%), automated data entry (47%), and scheduling and calendar management (47%).

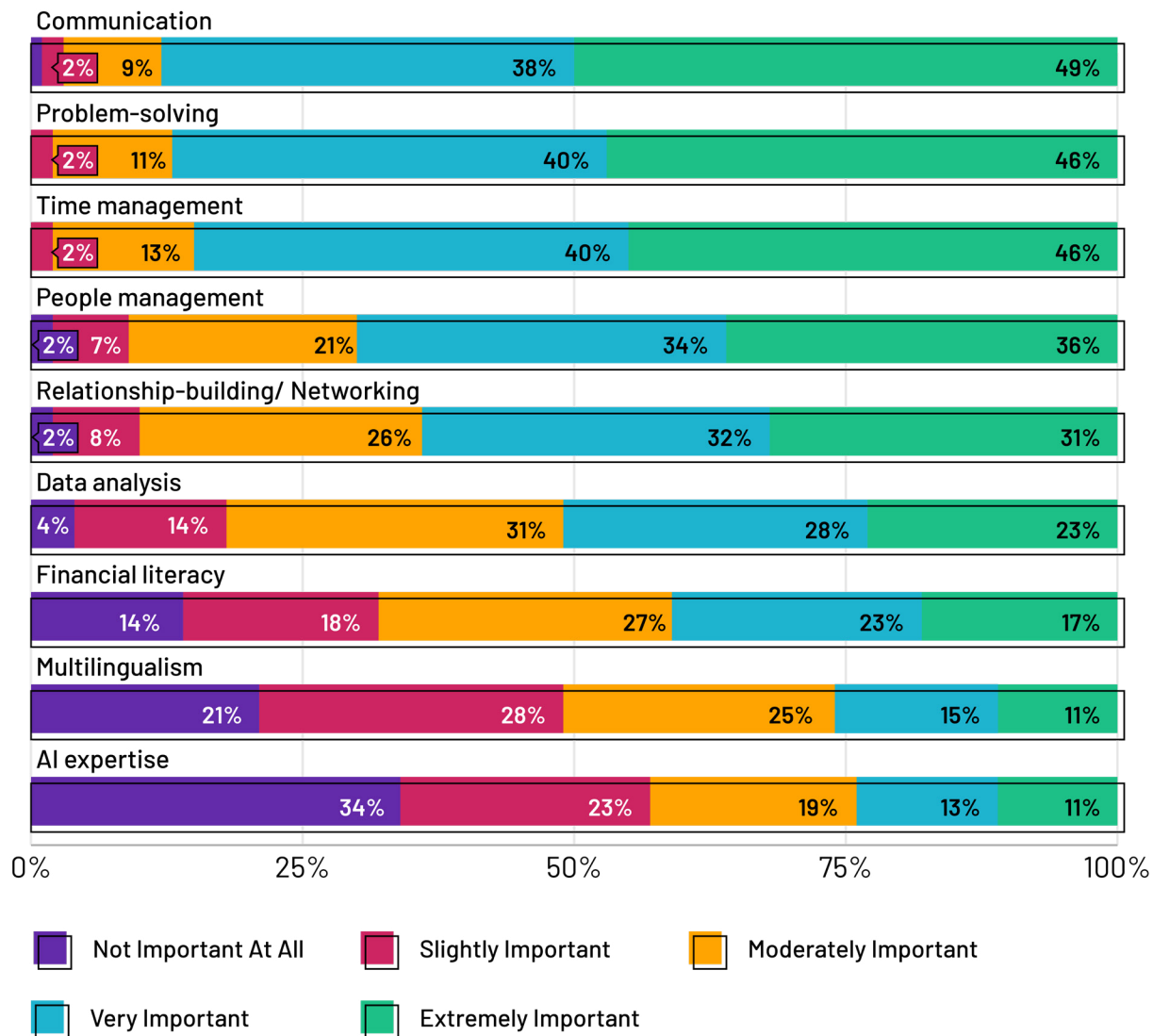
Rather than replacing jobs, this kind of AI usage is assisting current employees to improve productivity. This is likely due to the fact that these kinds of jobs are fairly standard in the day-to-day of employees that perform other tasks, so their automation isn't replacing every job role entirely. Instead, automating these areas is making life easier for employees who are also doing other projects.

➤ Business functions that require time-consuming and complex data-processing tasks are prime for job replacement by AI

When AI is used for ancillary tasks like writing, design, and scheduling, few job roles are impacted, but that isn't always the case for other roles. Our data found that time-consuming, complex data-processing tasks are being replaced by AI at quite a clip. In fact, only 28% of supply chain optimization roles have had no impact from AI, with 72% of businesses that have implemented AI for this purpose have changed or removed job roles in some way.

This is likely nothing more than a bottomline decision, with these time-consuming, complex data-processing roles costing a lot of money to fill with well-trained professionals. Subsequently, being able to replace them with an automated system will save the company the most money, which is why they're willing to risk forgoing a full-time employee to make it happen.

➤ **Rate each skill based on their importance for hiring:**



Communication, problem-solving, and time management are the most important skills for new hires

Those still worried about AI taking their job, or worse, preventing them from finding a new one, will likely be reassured by Tech.co's findings on what hiring managers consider to be the most valuable skills in a new employee.

Human skills are still very much needed in the workplace, and communication (88%), problem solving (86%), and time management (85%) are considered the top traits for choosing incoming team members.

Hiring managers are generally looking for employees that can work with people, not bots. In fact, only 1% of respondents said that communication skills weren't important, with no respondents (0%) daring to suggest that problem solving or time management weren't valuable.



AI Expertise isn't as important as soft skills – for now

While fundamentally-human skills are still considered the most valuable when it comes to new hires, the impact of technology is clear when it comes to the additional skills business leaders are looking for: 43% of managers and directors believe that AI expertise is at least moderately important.

On the other hand, AI skills were ranked lower than any other skill area for their importance, and 34% of managers and directors don't believe AI expertise is important at all – the highest level of disregard compared to any other skill considered.

As has been the story throughout our research, it doesn't appear that AI is having a massive impact on the business world yet, but the trend is certainly headed in an upward direction. This means that employees learning AI skills now will likely be ahead of the competition in the near future, as long as they've nailed the basics of communication, problem solving and time management.



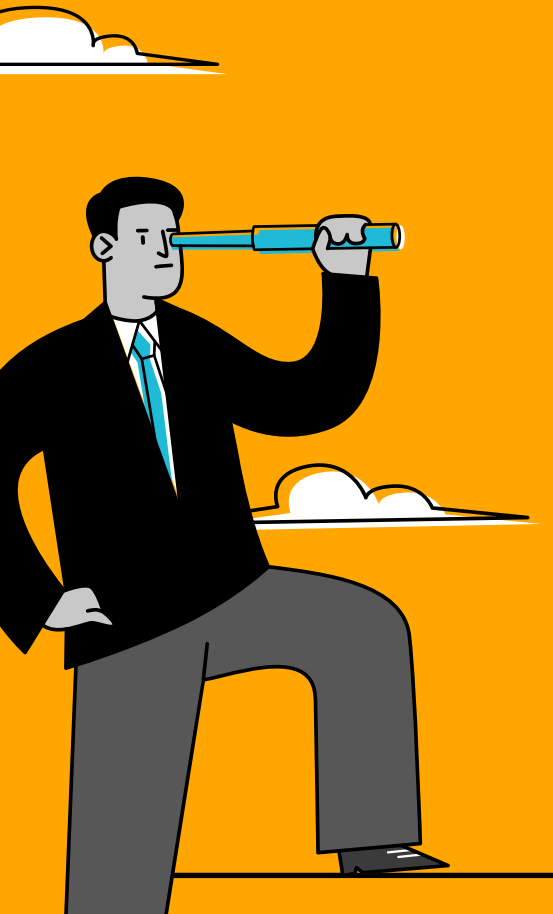
Data analysis skills are considered more valuable than specialist skills

When it comes to technology's impact on changing job roles, there is one skill that stands out as uniquely valuable to managers and directors, and that's data analysis. 51% of senior leadership professionals stated that data analysis was a very important or extremely important skill for new hires, which came in well ahead of financial literacy (40%) and multilingualism (24%).

Considering the huge amount of data that can be collected in the modern era, including the use of AI to collect it, this shouldn't be surprising. Data on customers, markets, and the competition can be an extremely valuable asset for companies of all sizes because it informs strategy and decision making, making the role of data analysis that much more important, regardless of industry.



Looking Ahead to 2024



Our research shows that as we enter 2024, the US remains in a transitional period, where the introduction of new technologies is spurring the adoption of alternatives to traditional business tools and practices. However, breaking away from established decades-old norms takes time, and the pace of this continued change may not match our immediate expectations.

The latest technological advancements have already proven they can reshape our work experience, from influencing how we interact with colleagues and safety precautions we need to take to job satisfaction and even altering the nature of work itself. However, our research highlights that we're still in an early stage of change, for many areas.

Email is still the most common form of communication, VoIP adoption is low when compared to traditional phones, and most senior leaders are indifferent to AI. Furthermore, there's resistance to hybrid and remote working, despite the benefits our research has demonstrated.

Despite slow shifts in these areas, our research has underscored the impact of ever prevalent data in driving technological advancements. IoT and 5G were highlighted among the key technologies that business leaders expect to influence their operations this year, and we

have seen the increasing value of data analysis as a critical skill. This hints at an impending fundamental shift in the job market, shaping the opportunities for generations to come.

Crucially, amid our focus on technology, our research highlights the enduring importance of the human experience in the workplace. Human skills, such as the ability to communicate well with others, are still rated as the most valuable by hiring managers. Senior leaders recognize that tools fostering closer communication, collaboration, and enhanced teamwork are poised to have the most significant impact in 2024. This makes sense, since success in organizations is facilitated by these very aspects. The most impactful technological changes are the ones which help us work better together.

- **Lead Researcher, James Macey**

"Every business is a tech business"

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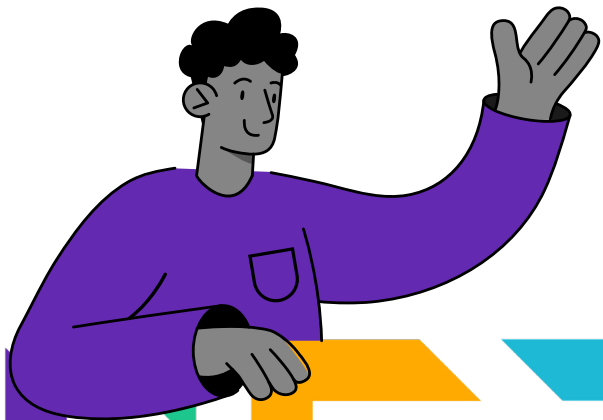
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