

DIVERSITY IN TECH REPORT:

A FOCUS ON GEN Z IN 2023



An overview of the current landscape and actionable recommendations for change.



2023

US Version

Please note:
Wiley Edge rebranded to mthree in June 2024

Report Intro

The US technology sector continues to be a driving force behind the global economy, with forecasts indicating that it is set only for further growth. However, against increasing market dominance, the sector has yet to fully address an ongoing problem – a marked lack of workforce diversity.

As levels of income inequality reach new **highs**, the tech sector's diversity dilemma puts it under added pressure to discover new ways of introducing more Gen Z professionals, especially women and historically underrepresented groups into its workforce - despite a widely publicized digital skills shortage.

In 2022, we published our ***Diversity in Tech and its Role in Future Equality*** follow-up report to our 2021 study into the relationship between tech sector diversity and equality in the US. The report highlighted the need to encourage more Gen Z professionals to pursue careers in tech amid the economic uncertainty sparked by the Covid-19 pandemic.

To gain a deeper insight into how the tech sector is confronting these diversity challenges, we conducted a detailed survey of senior IT decision makers and 21-25-year-olds working within a range of US-based medium to large enterprises.

This report explores the survey's findings and what progress – if any – the sector has made over the last year. It also looks at the gap between education and employment, the impact of a surge in remote working on workforce diversity, the measures that businesses are taking to attract and retain talent, and the importance of reskilling initiatives for creating more diverse entry-level talent pipelines.



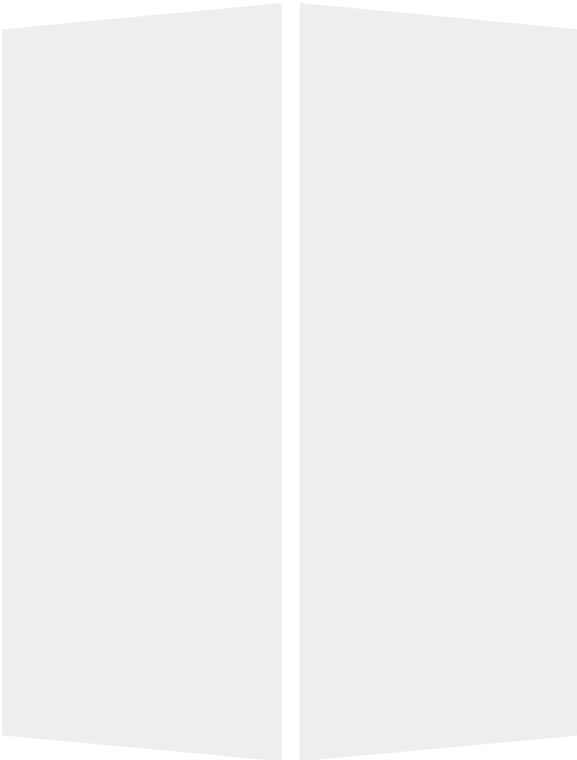
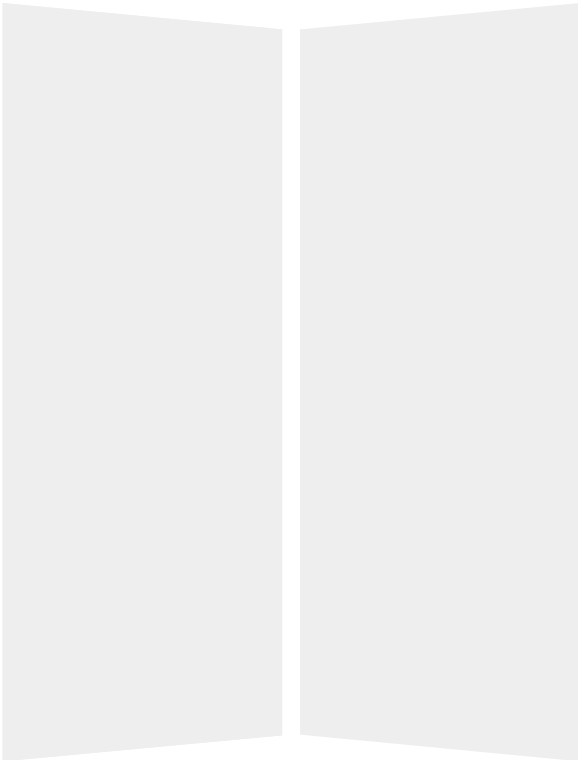
Key
Findings



GEN Z

ORGANIZATIONS

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Foreword from
Todd Zipper
EVP & GM, Wiley Edge

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At Wiley Edge, increasing diversity in the worlds of tech, banking, and business provides a central impetus to our work. However, despite making great strides, tech, in particular, continues to face difficulties in cultivating a diverse and inclusive workforce.

Over the past few decades, we have seen that organizations that are prioritizing a diverse workforce reap the benefits across multiple levels. This latest research shines a light on the ongoing efforts of firms to diversify their tech teams and the barriers preventing quicker progress.

Although we can see that further work is needed, diverse and inclusive workforces remain both an admirable and realistic business objective. As is often the case, we also see that across-the-board education holds the key to unlocking a sector that has seemed impenetrable to so many for so long.

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Executive Summary

By embracing diversity and creating inclusive workplaces, **businesses can improve commercial performance** and play their part in creating a more just and equitable society. However, a lack of diversity continues to be a challenge, **with 59% of US businesses stating that they struggle to retain diverse tech talent, despite 86% believing their DEI strategies to be working well.**

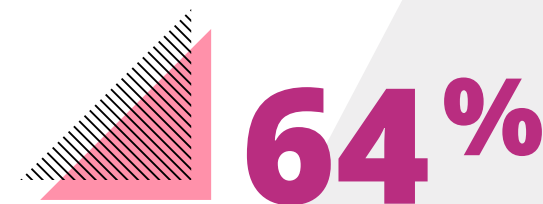
This report provides an overview of the current state of diversity in tech. It highlights the methods businesses use to create more inclusive workplaces and the results these methods produce.

Also outlined are the persistent barriers to achieving diversity within the tech industry, including fierce competition for talent at a time when Big Tech is slowing or freezing recruitment. **Our research shows that more than a third of Gen Z tech workers (35%) took more than six months to find their first role, and 64% said it was more challenging than expected.**

A preference for candidates who attended top-ranked universities may also be hindering diversity efforts, with 90% of businesses facing challenges when recruiting for entry-level roles. Irrespective of this, 45% of businesses report that they continue to primarily hire from top-ranked universities, which also face their own diversity challenges.

The pandemic's legacy of a shift toward remote and hybrid working remains strong: **89% of businesses report making more remote roles available since the pandemic, with 94% claiming that this strategy has helped to increase the diversity of candidates.** However, 62% also conceded that remote roles are more at risk for layoffs.

The report provides actionable recommendations for senior leaders to diversify their workforces, including implementing diversity-focused recruitment, retention and reskilling practices, fostering inclusive cultures, and preserving some remote roles.



of Gen Z workers said finding their role was more challenging than expected.

CANDIDATE EXPECTATIONS VS REALITY



CHAPTER

1

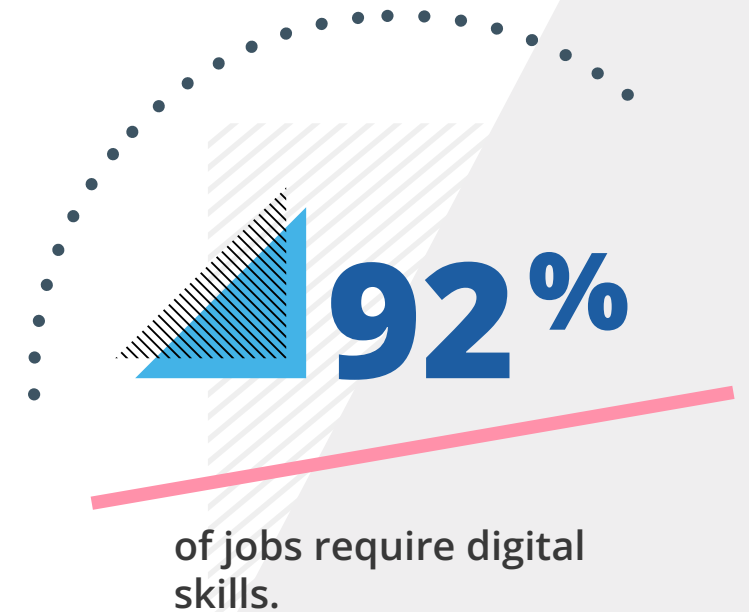
Termed the 'digital skills shortage', companies have been challenged to find employees with the required IT competencies.

Research conducted in 2023 by the National Skills Coalition (NSC) in partnership with the Federal Reserve Bank of Atlanta found an overwhelming demand for digital skills in the labor market, with **92% of jobs requiring digital skills.**

This surging demand is evident across all industries, and small businesses are just as likely as their larger counterparts to seek workers with digital skills. Yet, earlier **research** from the National Skills Coalition found that nearly one-third of US workers lack even basic digital skills, with workers from historically underrepresented groups falling disproportionately into this category due to structural inequities.

In light of the disparities between tech requirements and tech talent, there is an opportunity to ease entry-level pathways into the tech sector. However, our research found many Gen Z professionals said they struggled to secure an entry-level role, with more than a third (35%) needing up to 6 months to find their first role after graduating from college and almost one in ten (8%) needing more than a year.

Overall, two in three respondents (64%) said securing their first role was harder than they had expected, while 9% claimed it was every bit as hard as they had anticipated.





The Big Tech layoffs

Although multiple causal factors have raised the barriers to entry for Gen Z tech workers, two look to be pivotal: First, **our research shows that almost half (47%) of Gen Z tech specialists want to work for Big Tech businesses over any other sectors.** Second, the increasing gravitational pull of the tech sector comes at a time when Big Tech firms are slowing or freezing recruitment and conducting layoffs.

In the last year alone, Google, Meta, Amazon, and other tech companies laid off over **100,000 employees.** Fierce competition for tech vacancies is contributing to an environment in which Gen Z professionals are struggling to secure roles.

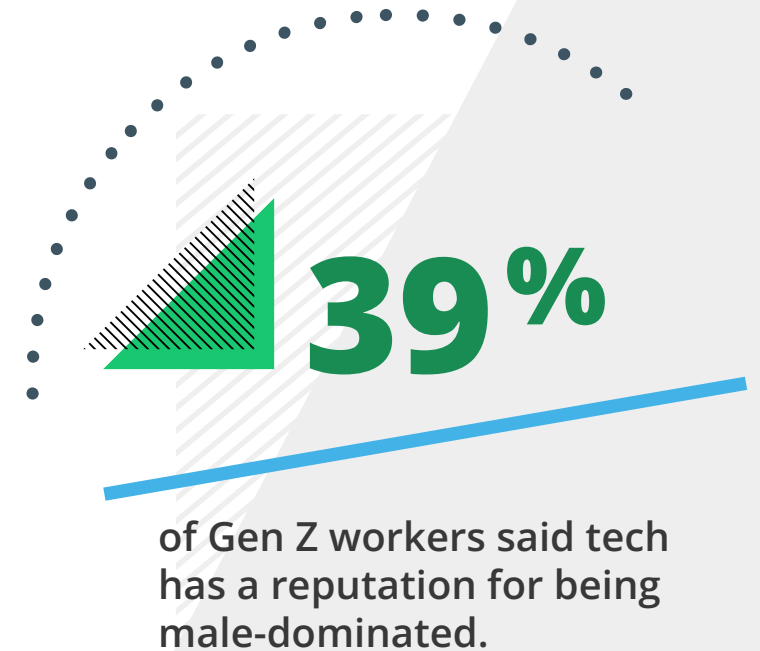
Here, education becomes paramount. **Gen Z professionals need to be aware of the rewarding and good-paying tech roles outside of Big Tech.** Whether in smaller tech firms or sectors such as retail, healthcare, finance and manufacturing, **opportunities** for skilled tech workers are abundant, but knowledge of them is less so.

Gender diversity perception & other barriers to job application

Candidate expectations of tech roles are clouded by perceptions that the industry lacks gender diversity: 39% of all Gen Z workers surveyed claimed the industry has a reputation for being male-dominated (including 42% of Gen Z women), with 28% pointing to a lack of female role models in the industry, rising to 32% of Gen Z women alone. **Thirty percent believed a gender pay gap existed, including 33% of Gen Z women, and 31% said there had been a lack of information about the tech sector within their schools and colleges (29% of Gen Z women).** Businesses have more work to do to address these issues, so perceptions improve.

As we will see in chapter 2, although the importance businesses place on candidates holding a relevant degree remains strong, there are signs that degree requirements could be in decline. In light of this shift, businesses should consider that only 17% of non-tech workers stated that their lack of qualifications would deter them from applying for a role and only 16% said they didn't know how to break into the industry. Moreover, just 9% of respondents were put off by a belief that tech companies are unwelcoming environments, 6% that they have a poor reputation, and 5% by a belief that they are not ethnically diverse.

By communicating with students earlier in their education and advertising the fact that skills are more important than qualifications, businesses could attract a wider pool of talent.



BRIDGING THE GAP
BETWEEN EDUCATION
& EMPLOYMENT



CHAPTER
2

Next, we will examine why so many Gen Z professionals find it hard to secure an entry-level role despite the shortage of available talent. What are businesses looking for, and why can't they find it?

A tech sector that remains popular with candidates despite becoming increasingly inaccessible is a significant reason many Gen Z tech specialists feel locked out. It is not, however, the only reason. Notwithstanding a shortage of available talent, it seems businesses are not finding what they are looking for when trying to fill entry-level roles.

Our research exposed a gap between formal education and the working world, **with 59% of businesses stating that candidates for entry-level positions often lack core technical skills despite holding a relevant degree, and 31% said they lack soft skills.** Fifty-seven percent of businesses also reported a scarcity of candidates with the right formal qualifications, with 32% saying the same about candidates from historically underrepresented groups. Only 10% reported this to be an area that offered no challenges.





45%

of businesses
exclusively hire
from top universities.

The importance of degrees

Although it's evident that there is widespread dissatisfaction among tech leaders on the proficiency of recent graduates, a university degree remains desirable to most. **Our research discovered that almost half of businesses (45%) exclusively hire from the top universities**, and 27% report that they are at least more likely to do so. Only 6% consider all types of higher education qualifications.

A preference for university-educated candidates also remains strong: **72% of businesses state that they 'always' require tech role candidates to hold a bachelor's degree**, while 26% claimed that a bachelor's degree is required only 'sometimes'. One percent reported that they never require a degree. Moreover, 68% of surveyed businesses claimed the number of roles requiring a degree has increased, with only 17% claiming the opposite.

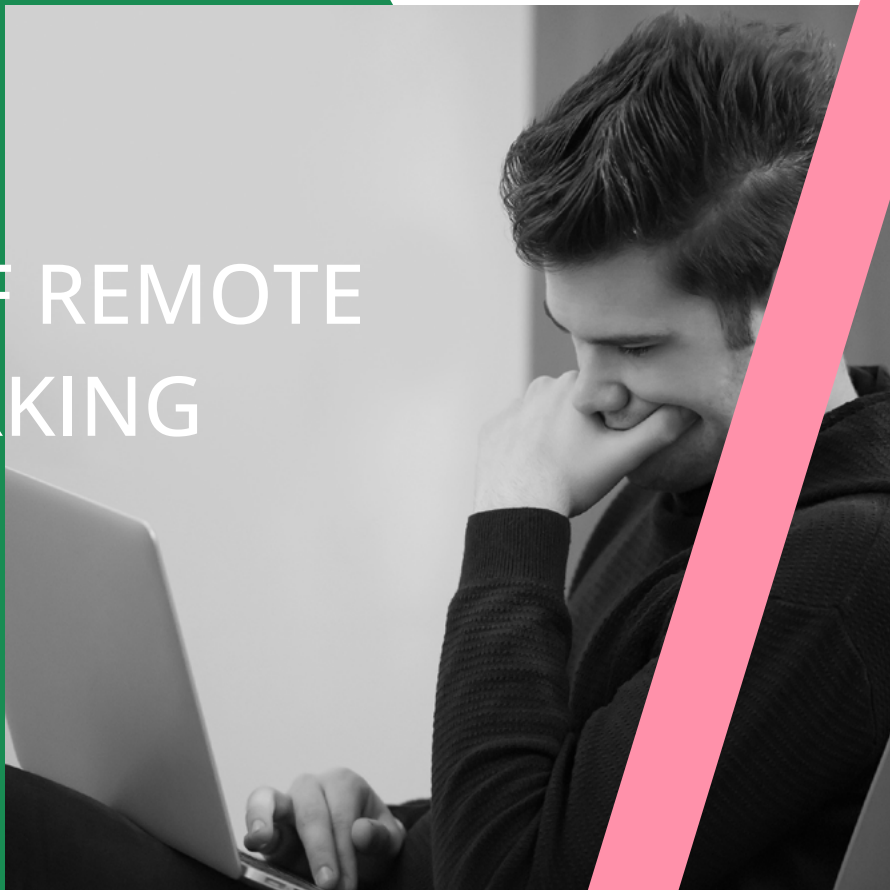
However, evidence suggests the allure of candidates with a university degree is beginning to wane. Indeed, 46% of businesses that have cut the number of roles requiring a degree said it was to expand their talent pool, and 77% because they wanted to consider candidates with alternative credentials. **Offering some encouragement to those championing equality in the tech sector, 25% of businesses are expanding qualifications in place of degree requirements specifically to increase the diversity of applicants.**

If greater diversity in tech is to be achieved, Gen Z candidates must be provided with more explicit and pragmatic guidelines for accessing tech roles. Ongoing discussions surrounding the 'digital skills shortage' has helped fuel a **proliferation of tech-focused boot camps** and courses that could be misleading Gen Z to believe a tech career is easy to access for all candidates post completion.

Equally, many Gen Z professionals could enter the job market believing that a computer science degree is enough to secure a role. As our findings demonstrate, not only is this not necessarily the case, but the importance attached to degrees is beginning to fade. **In fact, 58% of surveyed businesses are considering dropping the degree requirement from certain roles over the next year to open the door to more candidates who don't have the opportunity to go to college.**



THE IMPACT OF REMOTE & HYBRID WORKING ON DIVERSITY



CHAPTER 3

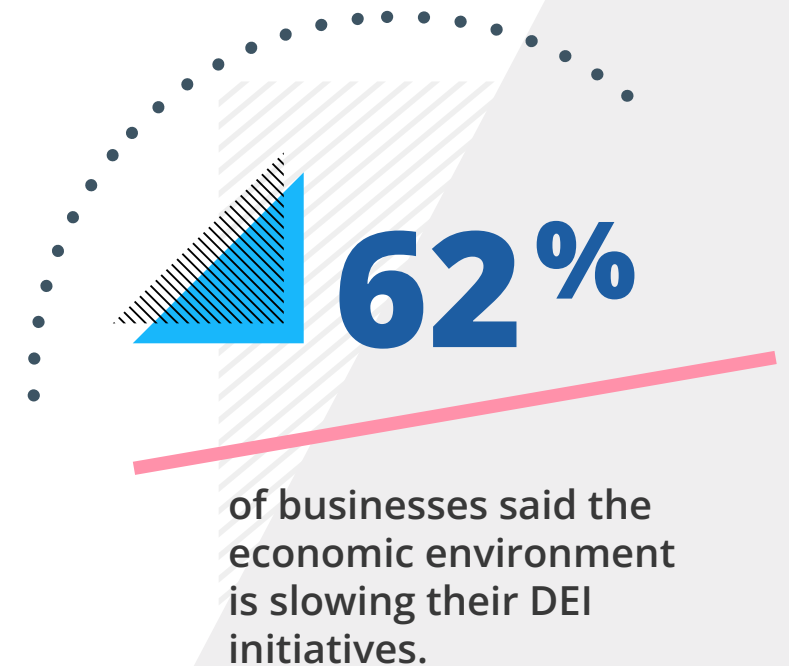


The Covid-19 pandemic prompted a massive shift to remote and hybrid working models across multiple sectors worldwide, not least within the tech sector. Though the age of social distancing may be over, remote and hybrid working is not. **Our research shows that 89% of businesses have made more remote roles available since the pandemic, and only 25% of Gen Z tech workers stated that their role is completely office based.** The remaining Gen Z workers work in a role that is either hybrid (43%) or fully remote (32%).

A growing prevalence of remote working appears to be proving beneficial to businesses and candidates alike. From a diversity perspective, 78% of businesses claimed that increasing the number of remote roles has led to greater gender diversity among candidates. 44% said it had led to greater ethnic diversity, 26% to greater neurodiversity, and 32% to greater socio-economic diversity. At the same time, 27% of Gen Z tech workers in remote roles said the practice had helped them financially, 39% geographically, and 43% said it made them more comfortable working outside of an in-person office setting.

However, external factors threaten this mutually beneficial arrangement. Amidst an uncertain economic landscape, 52% of the surveyed businesses plan to slow down tech recruitment, with 62% admitting that remote roles are more at risk of layoffs. **Sixty-two percent of businesses also affirmed that the current economic environment is slowing DEI initiatives.**

Our findings show that remote working has been a net positive for the tech sector from a diversity perspective. The danger is that macroeconomic uncertainties lead businesses to offload both remote working models and diversity initiatives as a cost-cutting exercise. Doing so could result in inadvertent discrimination against underrepresented groups who make up a sizeable proportion of remote workforces or reduce the number of such applicants where new roles are either hybrid or office-based.



ACHIEVING GREATER
DIVERSITY THROUGH
RECRUITMENT



CHAPTER
4



With much uncertainty surrounding the future of remote working in the tech sector and how it could impact diversity, pressure is mounting on businesses to find other ways of nurturing a more representative pool of applicants.

Of the businesses we surveyed, **almost one in four (24%) claimed to have no diversity issues. However, 43% accepted that they lacked socio-economic diversity, 41% lacked gender diversity, 37% lacked ethnic diversity, and 30% lacked neurodiversity.**

This may seem concerning at a glance, but positives can be extracted the deeper we dig. First, the figures show that businesses are keeping track of their demographic composition. Indeed, 96% of the businesses we surveyed claimed to do so, compared to 69% in 2022.

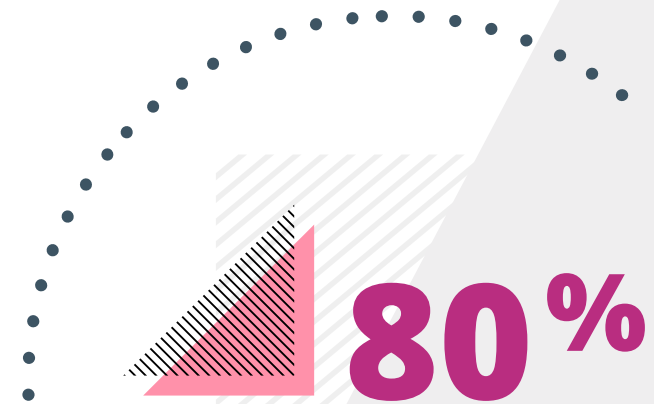
Eighty-four percent also reported implementing a recruitment initiative designed to increase the number of women on their tech teams in the past three years, with increasing available talent as the most common driver. **Measures to attract underrepresented groups included updated benefits packages (75%), advertising roles in different places (42%), and offering flexible working policies (34%).**

More promisingly, businesses explained that the reason for tracking demographic composition was specifically to either benchmark recruitment activity (47%) or create new programs aimed at different groups (53%).

Ultimately, this sector-wide prioritization of diversity provides hope. When asked about the level of diversity within their tech teams, a minority of firms (8%) claimed to be aware of a lack of diversity but making no attempts to address it: 5% knew they lacked diversity but didn't know how to address it, and only 4% had never considered the issue. These figures, while small, still impact the way in which the industry is viewed.

Although a fifth of businesses appear uninterested in overcoming their diversity challenges, don't know how to, or have never even thought about it, such businesses have become the industry outliers. **The majority (61%) of businesses knew they lacked diversity and were actively seeking to achieve greater balance, while 13% claimed to have already resolved their lack of diversity, and 10% claimed to have always been diverse.**

To improve gender diversity, businesses are also taking steps to address perceptions of a pay gap. Seventy-three percent stated that they list salary expectations in job descriptions, 61% regularly evaluate compensation bands for current roles, and 42% hold company-wide meetings to gather employee feedback on pay gap progress. Indeed, four in five (80%) Gen Z tech employees were satisfied with their company's pay transparency.



of Gen Z tech employees are satisfied with their company's pay transparency.



Motivations are shifting

Advocates of DEI initiatives have long asserted that diversity enhances commercial performance. **Gartner** recently found that **75% of organizations with frontline decision-making teams reflecting a diverse and inclusive culture will exceed their financial targets.** Yet, concerns linger that imposing DEI initiatives could be counter-productive. It is therefore a mild concern that over half of all the businesses surveyed (51%) pointed to stakeholder pressure as a primary factor in driving their diversity initiatives: 27% also identified addressing legal reporting requirements around the gender pay gap as key.

Elsewhere, the motivations behind diversity initiatives were more progressive: **57% of businesses implemented initiatives to expand the available talent pipeline, 44% to increase productivity, and 51% to promote innovation and creativity.** These mostly larger numbers suggest that the commercial potential of a diverse workforce is becoming more recognized within the tech sector.

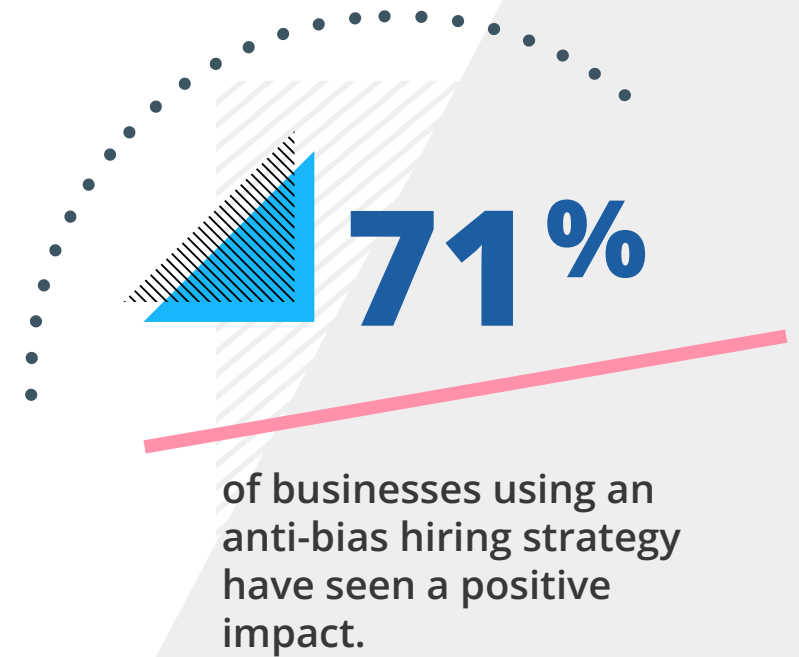
Enhancing diversity is also proving to have other positive benefits as well: 47% of businesses identified improved employee engagement and satisfaction as a core factor behind their diversity initiatives, while 42% pointed to an improved reputation and 29% to enable better customer service.

The impact of anti-bias recruitment strategies

According to our findings, **the most widely used anti-bias hiring strategy is the provision of anti-bias training for hiring managers and other staff (60%)**. Setting diversity targets is used by 55% of businesses (up from 43% last year), while 46% complete blind resume/CV reviews (up from 22% last year), 41% publish neutral job descriptions (about even from 42% last year), and 35% request diverse shortlists from recruiters (up from 33% last year).

Although the overall implementation of anti-bias hiring strategies is relatively low, most businesses report using at least one. Moreover, **71% of those using a strategy have noticed a positive impact on workforce diversity, and 25% have seen a mild improvement**.

Efforts have not gone unnoticed by employees either, with only 8% of Gen Z tech workers feeling that diversity was not a priority for their employer during their own recruitment journey. **Elsewhere, 35% believed that diversity has always been a significant recruitment focus at their company, and 38% had noticed more efforts**





The university question rears its head again

In chapter 2, we discussed the widespread dissatisfaction among tech leaders as to the competencies of recent graduates despite a university education remaining desirable to most. Our research also shows that those businesses preferring to hire candidates from leading universities face greater difficulties than those that adopt a more flexible approach.

For example, **whereas 53% of businesses that hire from the top-ranked universities struggle to find candidates with the necessary production support skills, this is true for only 23% of businesses that explore a wider talent pool.**

Across nine identified skill sets, businesses that recruit graduates from the top-ranked universities face less difficulty with only one skill area: DevOps: 20% vs 21%.

We can conclude that the overall picture of diversity within recruitment processes is positive. Businesses that either don't deploy some form of recruitment initiative or don't see the value in diversity drives have become industry exceptions. Meanwhile, the majority of those that do are reaping the benefits.

Further progress is achievable by amplifying the evidence that a diverse workforce offers much more than placated stakeholders and of the value that can be leveraged by widening talent searches beyond leading universities.

ENHANCING EMPLOYEE RETENTION THROUGH INCLUSION



CHAPTER 5

With significant strides being made to cultivate more diverse teams at the outset, looking at the endeavors to retain existing employees belonging to underrepresented groups is necessary.

Here, the picture is more troubling: **59% of businesses reported that they struggle to retain diverse tech talent, despite 86% believing that their DEI strategy is working well, up from 77% last year.** Moreover, more Gen Z tech workers are reporting feeling uncomfortable in a role (69%), with 29% attributing this to their neurodevelopmental condition or disability, 24% to their ethnicity, 21% to their gender, and 15% to their socio-economic background.

The reasons identified by Gen Z tech workers for their feelings of discomfort vary, with 20% attributing them to a lack of diversity in their team/department (19% of men vs 21% of women); 28% also indicated a missing sense of belonging, and 22% blamed an unwelcoming company culture (19% white vs 26% Black/African American). **For 25% of respondents, this lack of belonging or unwelcoming culture manifested as biased treatment from managers (19% of men vs 33% of women) and for 28%, it resulted from aggressions/microaggressions from colleagues (26% of men vs 31% of women).**

Otherwise, discomfort appears to stem from more structural deficiencies. For example, 22% of Gen Z tech workers experienced a lack of mentoring, 21% a lack of support for additional needs, 21% a poor benefits packages, 20% a lack of career advancement opportunities, and 16% poor onboarding processes. Overall, 36% of respondents cited a lack of personal support as the primary cause of their negative experience, with an equal split of 35% among both male and female respondents.





77%

of businesses have introduced a mentorship program for younger employees.

Beneath the surface, a more positive picture

In contrast to these figures, **71% of Gen Z tech workers still claimed to have had a positive or mostly positive experience in the industry so far, with 54% attributing it to enjoyment of their work and 42% finding their work interesting. Fifty-five percent also reported having received either professional or personal support.**

There is also evidence that businesses are investing resources into improving the retention of underrepresented groups. Seventy-seven percent of the businesses surveyed have introduced a mentorship program for younger employees, and 50% have implemented a system to identify whether additional support may be needed for entry-level employees from different backgrounds.

Employee resource groups (ERGs), where employees form groups based on shared characteristics or life experiences, were present in 51% of the businesses surveyed, up from 38% last year. An onboarding process considering feedback from previous hires from underrepresented groups featured in 38%. Slightly less common is the use of diversity retention targets (37%) and unconscious bias training (17%).

The general retention picture of underrepresented groups in tech is one of gradual progress but more work is needed to create supportive, welcoming environments for all. Of those Gen Z tech workers who reported feeling uncomfortable in a role, 44% described their team as being 'very diverse.' Conversely, of those who reported having never felt uncomfortable, 51% described their teams as 'very diverse.'

THE ROLE OF RESKILLING
IN INCREASING DIVERSITY
IN TECH



CHAPTER
9

Lastly, we explore the importance of reskilling to advance diversity in tech. While the recruitment and retention of underrepresented groups continue to be works in progress, reskilling initiatives will become a vital tool in cultivating more diverse entry-level talent pipelines.

Our research shows that a significant majority of businesses provide upskilling and reskilling programs, **with 60% offering one or the other to existing tech employees and 36% to all employees, regardless of their current role.** Only 2% have previously offered such programs but since abandoned them.

The prevalence of upskilling and reskilling initiatives reflects their effectiveness in producing tangible results for businesses, with 82% stating they helped improve retention, 53% saying the same about recruitment drives, and 53% reporting that they had enhanced workforce engagement.

Reskilling could also provide a compelling answer to the problem businesses face with locating the requisite skills from degree-holding candidates. The 59% of businesses claiming that candidates lack technical skills despite holding the relevant qualifications suggests many may be expecting too much of recent graduates. **Therefore, introducing entry-level post-graduate reskilling programs could be an effective means of preparing qualified candidates for the rigors of real work.**





76%

of businesses reported that they lack diversity within their teams.

Closing thoughts

In light of the findings from our research, what can we say about diversity in the US tech industry in 2023?

First, businesses that neither prioritize nor engage in diversity initiatives are now clear industry outliers. Moreover, where a lack of diversity exists, most businesses are at least aware of the situation and are taking active steps to address the imbalance. Steps are not limited to recruitment processes either. Businesses are implementing various initiatives to protect the retention of underrepresented groups and are providing opportunities for upskilling and reskilling. More importantly, however is that these initiatives are working.

As welcome and advantageous as these initiatives are, it is also clear that the journey toward a tech industry that accurately represents wider society is far from complete. **Incorporating businesses that are trying to address it and those that aren't, 76% reported that they still lack diversity within their teams.**

To expedite progress toward more diverse tech teams, businesses should give similar weight to activity beyond diversity initiatives. With 62% of businesses stating that remote roles are more at risk of layoffs, careful consideration should be given to how this will impact diversity objectives. Eighty-nine percent of the businesses surveyed have added more remote roles since the pandemic, with 94% noting uplifts in job candidate diversity. Workers themselves clearly value remote working too - only 2% claimed not to want a remote position. In short, reducing remote roles could have the effect of reducing workforce diversity.

The role of academic pedigree must also be examined. **Though 72% of businesses either exclusively hire from top-ranked universities or are more likely to, there is scant evidence that this approach helps acquire the desired skillsets or improves diversity.** However, businesses seem to be recognizing this fact and moves to widen talent searches are increasing. **Notably, 58% of businesses are considering dropping the requirement for candidates to hold a bachelor's degree for certain roles over the next year.**

As we look to the future, the most significant challenge may become providing a more level playing field for entry-level tech roles. As competition for roles intensifies at a time when Big Tech is shedding them, an entire cohort of talent risks being disenfranchised. **It is therefore vital that work goes into drawing attention to those sectors where candidates can apply their skills and where there is a greater abundance of opportunity.**





Report methodology

Employee: The employee sample consisted of 1,000 respondents comprised of individuals ages 21-25. Individuals working full time in a tech or IT based role represent 43% of respondents; individuals not working in a tech or IT based role represent 57% of respondents. To recruit for the employee/consumer sample within the US, a panel of consumers from across the nation were asked to participate in an online survey. All respondents resided in the United States at the time they participated in the survey.

Employer: The employer sample consisted of 303 respondents who were serving in senior IT leadership roles within medium to large enterprises at the time they completed the survey. Respondents needed to be serving in C-suite, director-level or HR manager positions in order to participate. To recruit for the employer sample within the US, a panel of individuals from across the nation were asked to participate in an online survey. All respondents resided in the United States at the time they participated in the survey.

About Wiley Edge

Wiley Edge is an emerging talent and reskill training partner for public and private organizations across the globe.

For employers, we build pipelines of diverse talent through our Hire Train Deploy model, and for graduates, we help turn degrees into careers through graduate training and support. To date, we've launched 4,000 careers at global organizations, helping employers create a more diverse workforce for the future.

An increasing pace of change is widening the gap between required skills and their availability in the workforce, meaning future-proofing has become more important than ever. To meet this challenge, more than 40 institutions in North America, EMEA and APAC, from government agencies to tier-one investment banks to fintech, have turned to Wiley Edge.

We bridge the skills gap in technology and other high-demand disciplines by connecting education to the working world while our adaptive industry-led Academy meets ever-changing requirements.

With an Alumni offering focusing on emerging talent, our Hire Train Deploy model places outstanding graduates into a client's team for 12 to 24 months, after which they can convert to full-time employees at no extra cost. 90% of Alumni make this conversion.

Diversity underpins everything we do for our clients. Through our Reskill offering, we open up new demographics, tackling biases from age to education. Of the Alumni placed with companies by Wiley Edge in 2022, 40% were women and 51% were Black, AAPI or from another historically underrepresented group. Reskill also creates training for existing employees, enabling clients to retain valuable organizational knowledge while evolving with the industry landscape.

Together, Alumni and Reskill help to build pipelines of diverse, custom-trained talent – complementing traditional hiring strategies such as internal graduate programs and reactive recruitment.



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