

DIVERSITY IN TECH REPORT:

A FOCUS ON GEN Z IN 2023



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



2023

CANADA Version

Please note:
Wiley Edge rebranded to mthree in June 2024

Report Intro

The 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 a backdrop of 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 Canada. 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 survey of senior IT decision-makers and 21-25-year-olds working within a range of Canada-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 in creating more diverse entry-level talent pipelines.



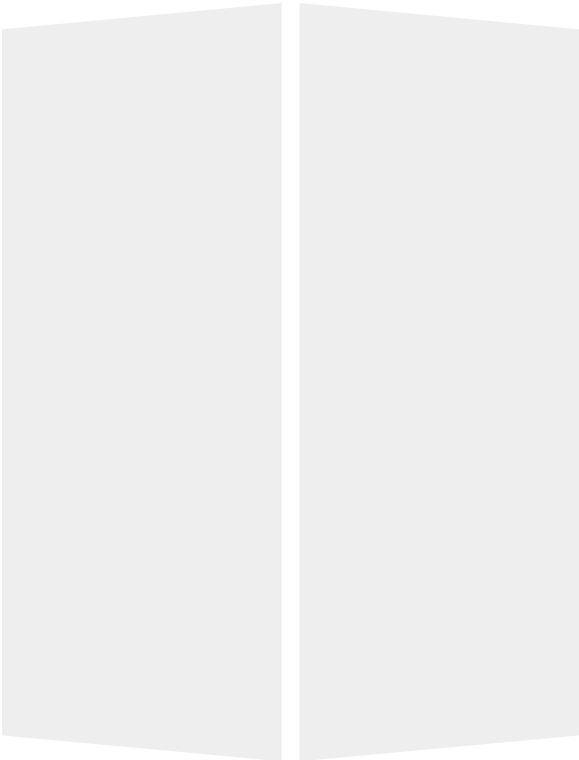
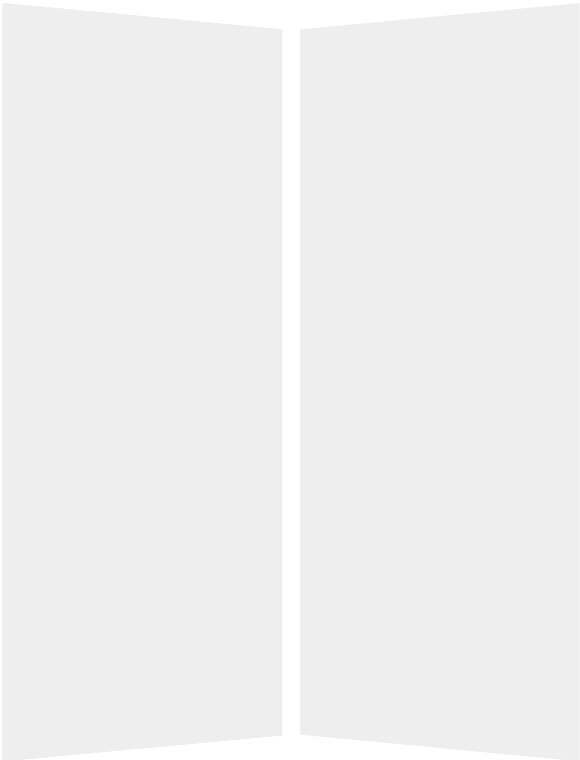
Key
Findings



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 **55% of Canadian businesses stating that they struggle to retain diverse tech talent, despite 77% believing their DEI strategies are 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 ongoing barriers to achieving diversity within tech, including fierce competition for talent at a time when Big Tech is slowing or freezing recruitment. **Our research shows that more than a third (39%) of Gen Z tech workers took more than six months to find their first role, and 58% said it was more challenging than expected.**

A preference for candidates who attended top-ranked universities may also be hindering diversity efforts, with **91% of businesses facing challenges when recruiting for entry-level roles, as 56% reported hiring primarily from top-ranked universities, which also face their own diversity challenges.**

Regarding the after-effects of the pandemic, 80% of businesses have since made more remote roles available, and 91% say this has helped increase the diversity of candidates. Nevertheless, 44% concede that remote roles are at greater risk of layoffs compared to those that are office-based.

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



55%

of businesses
struggle to retain
diverse tech talent

CANDIDATE EXPECTATIONS VS REALITY



CHAPTER

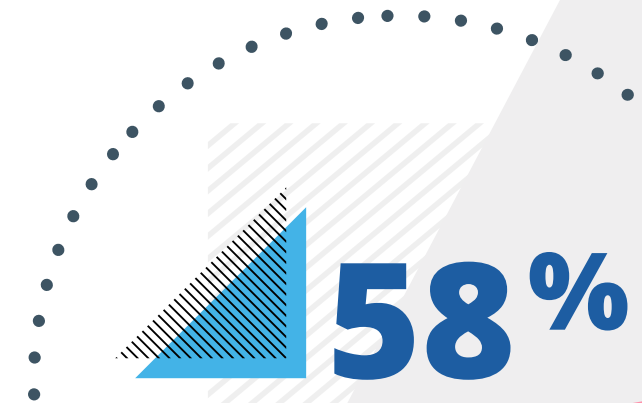
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Termed the 'digital skills shortage', companies have been challenged to find employees with the required IT competencies.

Research conducted in 2022 by the **C.D. Howe Institute** found that employment in the Canadian digital economy outperformed all other sectors in terms of post-pandemic employment recovery. Indeed, there are approximately 2.19 million workers in the Canadian digital economy, and unemployment rates among ICT professionals are low. **However, increasing job vacancies suggest that the existing digital skills shortage is worsening.**

In light of growing 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 (39%) taking up to 6 months to find their first role after graduating from college and one in 10 (10%) taking more than a year.

Overall, more than half of young people (58%) found it harder to secure a role than they had expected.



of Gen Z found it harder to secure a tech role than they expected



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 over half (56%) of Gen Z tech specialists want to work for Big Tech businesses over any other sectors.** By contrast, the second favored sector, Engineering, was the preferred choice for only 14%.

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.

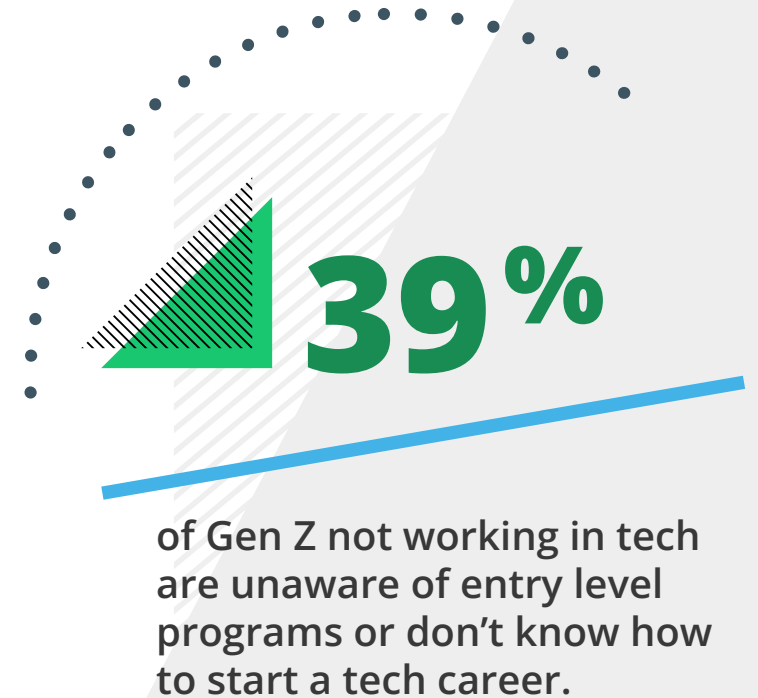
Here, education becomes paramount. **Gen Z professionals need to be aware of the rewarding and good-paying tech roles outside of Big Tech.** Whether in smaller tech firms or sectors such as retail, healthcare, finance and manufacturing, **opportunities** for skilled tech workers are abundant, but knowledge 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. **Thirty-five percent of all Gen Z tech workers surveyed claimed the industry has a reputation for being male-dominated (an increase from 11% last year)**, and another 35% pointed to a lack of female role models, including 43% of Gen Z women. Thirty percent said there had been a lack of information about the tech sector within their schools and colleges and 28% believed a gender pay gap existed.

Businesses have more work to do to address these issues, so opinions improve. However, education must also extend to businesses and their need to know what prevents potential recruits from applying for roles. As we will see in chapter two, the importance businesses place on candidates holding a relevant degree is declining, yet **52% of non-tech workers stated that their lack of qualifications or right educational background would deter them from applying for a role.** Of the deterrents non-tech workers provided, this was by far the most prevalent. It was also concerning that 20% were unaware of any entry-level programs and 19% don't know how to start a tech career.

However, businesses can take some heart from these findings. Only 9% of respondents were put off by a belief that tech companies have a poor reputation, 9% that they are not ethnically diverse, and 10% that they are unwelcoming environments. **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

A tech sector that remains popular with candidates despite becoming increasingly inaccessible is a major reason many Gen Z professionals 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 47% of businesses stating that candidates for entry-level positions often lack core technical skills despite holding a relevant degree, and 25% stating they lack soft skills.** Forty-seven percent of businesses also reported a scarcity of candidates with the right formal qualifications, with 46% saying the same about candidates from historically underrepresented groups.





56%

of businesses exclusively hire or are more likely to hire from top-ranked 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 21% of businesses exclusively hire from the top-ranked universities (compared to 27% last year),** and 35% report they are at least more likely to do so. However, just 4% consider all types of higher education qualifications.

A preference for university-educated candidates remains strong. More than two in five businesses (44%) state that they 'always' require tech role candidates to hold a bachelor's degree, while 53% of businesses state that a bachelor's degree is required only 'sometimes.' Three percent report that they never need a degree. Despite the apparent weakening influence of bachelor's degrees, 54% of surveyed businesses claimed that the number of roles requiring a degree has increased, with only 27% claiming the opposite.

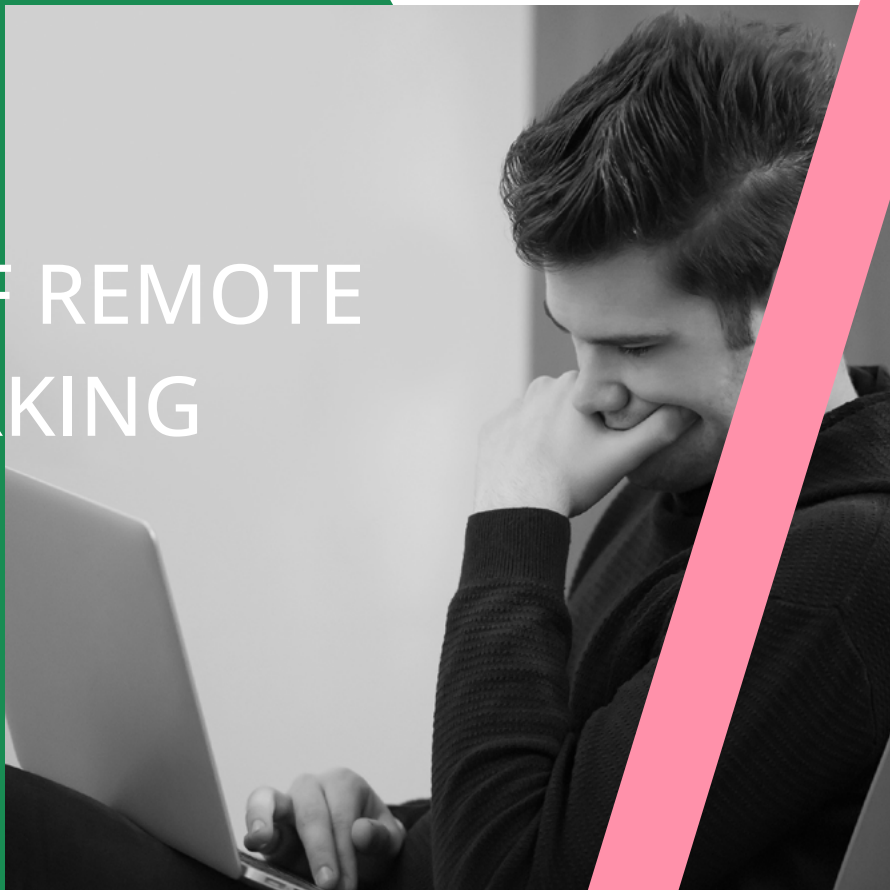
However, evidence suggests the allure of candidates with a university degree is beginning to wane. Indeed, **49% of businesses that have cut the number of roles requiring a degree said it was to expand their talent pool, and 70% because they wanted to consider candidates with alternative credentials.** Offering some encouragement to those championing equality in the tech sector, 21% of businesses are expanding qualifications in place of degree requirements specifically to increase applicant diversity.

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, 38% 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 university.**



THE IMPACT OF REMOTE & HYBRID WORKING ON DIVERSITY



CHAPTER 3

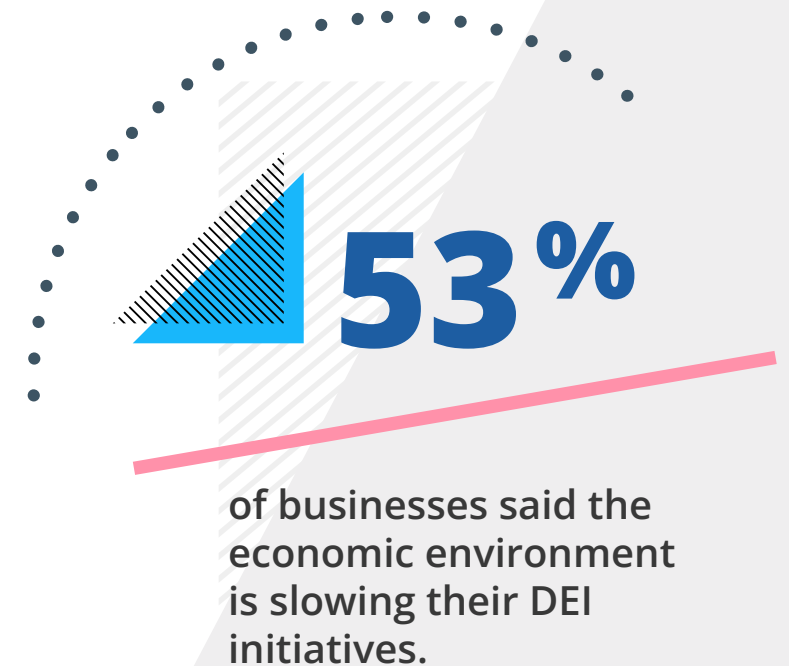


The Covid-19 pandemic prompted a massive shift to remote working models across multiple sectors worldwide, not least within the tech sector. Though the age of social distancing may be over, remote working is not. **Our research shows that 80% of Canadian businesses have made more remote roles available since the pandemic, and only 22% 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 (52%) or fully remote (26%).

A growing prevalence of remote and hybrid working appears to be proving beneficial to businesses and candidates alike. From a diversity perspective, **59% of businesses claimed that increasing the number of remote roles has led to greater gender diversity among candidates.** Fifty-four percent said it had led to greater ethnic diversity, 22% to greater neurodiversity, and 21% to greater socio-economic diversity. At the same time, 98% of Gen Z tech workers in remote roles said the working model had helped them secure a job, with 46% saying it helped from a geographical perspective, 43% that it helped socially, and 31% saying it was more feasible financially.

However, external factors threaten this mutually beneficial arrangement. Amidst a turbulent economic landscape, 49% of the surveyed businesses plan to slow down tech recruitment, with 44% admitting that remote roles are more at risk of redundancy. **Fifty-three 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 the practice 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, **48% accepted they lacked gender diversity (44% last year), 42% lacked ethnic diversity (36% last year), 33% lacked socio-economic diversity (35% last year), and 31% lacked neurodiversity (30% last year). Less than one in 5 (17%) claimed to have no diversity issues.**

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, **95% of the businesses we surveyed claimed to do so, compared to 73% last year.**

Eighty-nine 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 advertising roles in different places (50%), updated benefits packages (53%), and offering flexible working policies (34%).

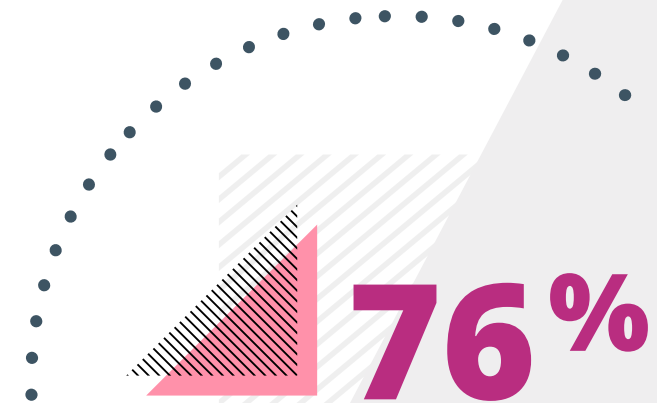
More promisingly, businesses explained that the reason for tracking demographic composition was specifically to either benchmark recruitment activity (58%) or create new programs aimed at different groups (42%).

Ultimately, this sector-wide prioritization of diversity provides hope. When asked about the level of diversity within their tech teams, a minority of firms (18%) claimed to be aware of a lack of diversity but were making no attempts to address it. Fourteen percent knew they lacked diversity but didn't know how to address it, and only 3% had never considered the issue. These figures, while small, still impact the way in which the industry is viewed.

Although a third of tech 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 biggest proportion (44%) of businesses knew they lacked diversity and were actively seeking to achieve greater balance, while 8% claimed to have already resolved their lack of diversity and 12% claimed to have always been diverse.

To improve gender diversity, businesses are also taking steps to address perceptions of a pay gap. Fifty percent stated that they list salary expectations in job descriptions, 66% regularly evaluate compensation bands for current roles, and 32% hold company-wide meetings to gather employee feedback on pay gap progress. Indeed, 76% of Gen Z tech employees were satisfied with their company's pay transparency.



76%
of Gen Z tech employees
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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 a quarter of businesses (28%) pointed to stakeholder pressure as a primary factor in driving their diversity initiatives; 23% also identified addressing legal reporting requirements around the gender pay gap as key.

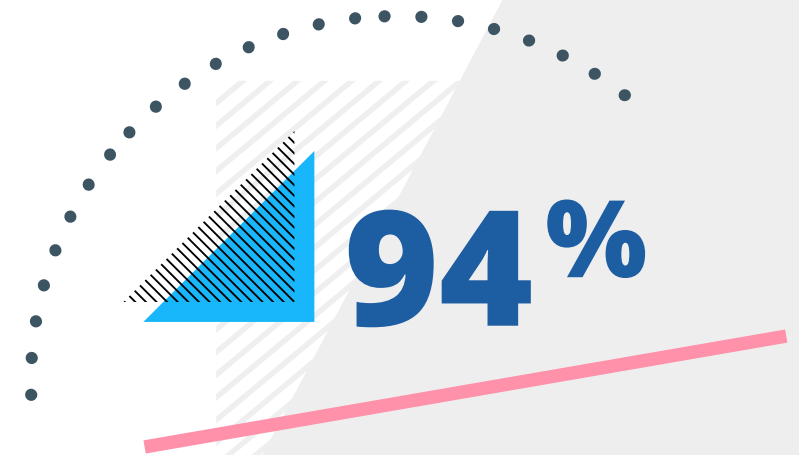
Elsewhere, the motivations behind diversity initiatives were more progressive: **37% of businesses implemented initiatives to expand productivity, 48% to increase the available talent pipeline, and 47% to promote innovation and creativity.** These larger numbers suggest that the commercial potential of a diverse workforce is becoming more recognized within the tech sector.

Enhancing diversity is also proving to have reputational benefits: 37% of businesses identified an improved reputation as a core factor behind their diversity initiatives, while 42% improved employee engagement and satisfaction and 28% to enable better customer service.

The impact of anti-bias recruitment strategies

According to our findings, **the most widely used strategy is anti-bias training for interviewers, with 56% of businesses offering some form of guidance (up from 42% last year)**. The setting of diversity targets is used by 50% of businesses, while 49% publish neutral job descriptions (49% the same as last year), 32% prioritize diverse shortlists (40% last year), and 26% complete blind resume/CV reviews (23% last year).

Although the implementation of anti-bias hiring strategies is relatively low, most businesses report using at least one, and 94% of those using a strategy have noticed a positive impact on their workforce diversity. Efforts have not gone unnoticed by employees either, with only 8% of Gen Z workers feeling that diversity was not a priority to their employer during their own recruitment journey. **Elsewhere, 34% believed that diversity has always been a significant recruitment focus at their company, and 39% had noticed more efforts recently.**



of businesses using an anti-bias strategy have noticed a positive impact on workforce diversity



The university question rears its head again

In Chapter two, 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 using a more flexible approach.

For example, **whereas 34% of businesses that hire from the top-ranked universities struggle to find candidates with the necessary production support skills, this is true for only 24% 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 in only three skill areas: Software engineering: 43% vs 48%, Cyber: 46% vs 61%, and DevOps: 21% vs 32%.

We can conclude that the overall picture of diversity within recruitment processes is mostly positive. Businesses that either don't deploy some form of recruitment initiative or 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 to 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. Despite making strides from last year, **over half (55%) of businesses reported that they struggle to retain diverse tech talent (70% in 2022), despite 77% claiming to believe that their DEI strategy is working well.**

Although only 17% of Gen Z tech workers say they have felt uncomfortable in a role due to their gender, there is a marked gap between males who have felt this (9%) and females (28%). 23% stated that their ethnicity had played a part in them feeling uncomfortable, 23% their neurodevelopmental condition or disability, and 15% their socio-economic background. However, it is important to note the 39% of respondents who claimed none of these factors had ever led to them feeling uncomfortable at work.

The reasons identified by Gen Z tech workers for their feelings of discomfort vary, with 26% attributing them to a lack of diversity in their team/department. Thirty-five percent also indicated a missing sense of belonging, and 19% blamed an unwelcoming company culture (15% of White respondents vs 24% of Black/African American). For 25% of respondents, this lack of belonging or unwelcoming culture manifested as biased treatment from managers, and for 24%, it resulted from aggressions/microaggressions from colleagues (19% of White respondents vs 35% of Black/African American). Interestingly, there was a negligible difference between male and female respondents reporting to have experienced biased treatments and microaggressions.

Otherwise, discomfort appears to stem from more structural deficiencies. For example, 17% of Gen Z tech workers experienced a lack of mentoring (15% of men vs 21% of women), 21% a lack of support for additional needs, 21% a lack of career advancement opportunities, 10% poor onboarding processes, and 16% poor benefits packages. **Overall, 43% of respondents (46% of men vs 38% of women) cited a lack of personal support as the primary cause of their negative experience.**





49%

of businesses have introduced a mentorship program for younger employees

Beneath the surface, a more positive picture

In contrast to these figures, **77% of Gen Z tech workers still claim to have had a positive or mostly positive experience in the industry so far, with 56% attributing it to enjoyment of their work and 47% finding their work interesting. Fifty-two percent also reported having received either professional or personal support.**

There is also evidence that businesses are investing resources to improve underrepresented groups' retention figures. Forty-nine percent of the businesses surveyed have introduced a mentorship program for younger employees, and 58% 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 36% of the businesses surveyed. An onboarding process considering feedback from previous hires from underrepresented groups features in 39%. Also commonly used are diversity retention targets (35%) and unconscious bias training (18%).

The general picture of retention 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, 41% described their team as being 'very diverse.'** Conversely, of those who reported having never felt uncomfortable, 58% described their teams as 'very diverse.'

With some good work being done to increase the diversity of candidates and ensure they are treated fairly throughout the recruitment process; we can now turn our attention to retention.

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 39% offering one or the other to existing tech employees and 57% to all employees, regardless of their current roles.** Only 4% have either never offered such programs or did but have since abandoned them.

The prevalence of upskilling and reskilling initiatives reflects their effectiveness in producing tangible results for businesses, with 69% stating that they helped improve employee retention, 52% saying the same about recruitment, and 47% reporting that they had also 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 fact that 47% of businesses claim candidates lack technical skills - despite holding the relevant qualifications - suggests that many may be expecting too much of recent graduates. **Introducing entry-level post-graduate reskilling programs could therefore be an effective means of preparing qualified candidates for the rigours of actual work.**





77%

of businesses lack diversity
in their teams.

Closing thoughts

In light of the findings from our research, what can we say about the status of diversity in tech 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 provide 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, 77% 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 44% of businesses stating that remote roles are more at risk of layoffs, careful consideration should be given to how this will impact diversity objectives. Four-fifths of the businesses (80%) surveyed had added more remote roles since the pandemic, with 91% noting increased diversity amongst job candidates. Workers themselves clearly value remote working too - only 2% claimed to specifically not want a remote position.

The role of academic pedigree must also be examined. **Though 56% 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, 38% 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 41% of respondents; individuals not working in a tech or IT based role represent 59% of respondents. To recruit for the employee/consumer sample within Canada, a panel of consumers from across the nation were asked to participate in an online survey. All respondents resided in Canada at the time they participated in the survey.

Employer: The employer sample consisted of 300 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 Canada, a panel of individuals from across the nation were asked to participate in an online survey. All respondents resided in Canada 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. Ninety percent 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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