Diversity in Tech: Landscape Research Findings

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Introduction

The UK tech ecosystem is the natural home of innovation in both technology and people practices and has the potential to be the cornerstone of the nation's economic growth and innovative prowess. Despite its rapid growth and transformative impact, the sector grapples with significant diversity challenges. Current demographic trends show underperformance across all minority groups in tech occupations, leadership, and access to equity funding.

This lack of diversity has tangible economic implications. Companies in the bottom quartile for both gender and ethnic diversity in executive teams are, on average, 66% less likely to outperform financially [1]. This underrepresentation hampers broader innovation and reduces the sector's potential for economic growth. Importantly, it also creates societal challenges for the future adoption and inclusion of emerging technologies and limits national optimisation of available tools. The digital skills gap alone costs the UK as much as £63 billion a year [2].

In recent years, the tech sector has made incremental progress in its diversity landscape, with organisations developing a more data-led approach to inclusion that acknowledges the business benefits of diverse teams. The focus has been on enhancing organisational awareness and understanding of diverse communities. This progress is evident in a more comprehensive and intersectional approach to diversity, addressing all protected characteristics and their compounded effects. Government-led initiatives, such as digital boot camps, have played a crucial role in providing alternative pathways into tech roles, with one in six technologists[F1] accessing non-traditional routes[3].

Despite these advancements, progress remains slow and uneven; significant representation gaps persist across key under-represented demographics. While the representation of women and gender minorities in tech roles has grown from 16% to around 26-29% over the past seven years [5], this increase has not significantly impacted promotion or improved retention. Female technologists have seen only a 1% increase in senior positions over the last year [5], and retention rates are precarious, with only one in six women planning to stay in a tech role for more than a year [4]. Ethnic minorities make up around 25% of the tech workforce, but their representation in senior roles falls to just 14%[5]. Black technologists are significantly underrepresented, constituting only 5% of the workforce, with Black women accounting for just 0.07%[5]. Socio-economic diversity, foundational for broader inclusion, is also emerging as a priority with just 9%[5] of technologists coming from lower socio-economic backgrounds. Challenges remain in enhancing the perception of graduates of Skills Bootcamps and other alternative routes, resulting in uneven completion rates and mixed employment outcomes [6].

F1 - Technologist is an expert in a particular field of technology.

For entrepreneurship, progress is equally mixed. Despite numerous government and industry reports and initiatives, funding disparities are still a hurdle, with only 2%[7] of VC investments directed to female and ethnic minority-led businesses. The lack of diversity among venture capital professionals compounds the issue. Female representation in UK VC firms has remained stagnant at 30% since 2019, with only 21% of investment committee members identifying as women. Socio-economic homogeneity further exacerbates these disparities: 71% of VC partners were privately educated, and 70% hail from upper socio-economic backgrounds [8]. There is not so much a need to "fix" the under-represented individuals but to make the funding ecosystem more diverse and inclusive.

Economic downturns and shifting market dynamics have slowed progress, while resource constraints have diluted the impact of diversity, equity, and inclusion (DEI) efforts. Performative actions and risk-averse strategies further exacerbate workforce retention challenges and skill shortages, creating exclusive cultures that marginalise underserved communities.

The UK tech sector faces a critical inflection point. The data and research are available; there is a growing body of evidence of what works. Neither the government nor industry can solve this on its own; the government can utilise legislation, policies, fund springboard initiatives, use its convening power and existing systems like procurement as a catalyst to increase DEI progress. Industry must take strategic, sustained, coordinated and resourced action. Government and industry must collaborate to make sustainable progress. The focus must not just be on assisting underrepresented groups but in removing barriers and increasing accountability for biassed systems, processes and cultures. This will take intention and resources and a strong understanding of existing barriers, analysis of existing policies and initiatives and utilising opportunities for scalable, impactful opportunities. By aligning resources with goals and reinforcing sustained, impactful inclusion, the UK tech sector will have the diverse talent pipeline it needs; innovation will benefit, and be seen as a real differentiator leading to direct growth as a result

Against this backdrop, this report offers an overview, a landscape view across the three identified pillars within the tech sector**, Industry, Entrepreneurship and Skills,** and looks at each through under-represented populations and where available from a regional perspective. The opening section on Industry offers an overarching framework of what is going on across the space and then dives into a more focused examination of the remaining two pillars: Entrepreneurship and Skills within the industry. It analyses current barriers to DEI and identifies opportunities to address barriers. Our report seeks to offer key data points and insights to support future work in this vital area of the UK economy.

Methodology

Research conducted to inform the findings of this report involved stakeholder engagement, a review of existing industry resources, a comprehensive literature review, and data analysis. Primary data was collected through three distinct activities, ensuring a robust and well-rounded evidence base.

1. The first was an open market survey to elicit responses on the sentiment of the current climate and how the sector sees support moving forward.
2. Data was collected in a second series of surveys conducted as part of industry events.
3. The third involved stakeholder consultations with our advisor group, consulting groups, industry providers, employers, community groups and other representatives.

A comprehensive review of existing research was undertaken across UK and international government reports, workforce surveys (ONS, OfS, LinkedIn, etc.), quantitative data analysis, qualitative research, longitudinal studies, benchmarking and literature reviews. Additionally, a workshop was held with relevant DSIT staff to create a template for creating more inclusive programmes (see Appendix 2 Blank Framework for Inclusive Design), and based on stakeholder feedback, a further piece of analysis was compiled to identify where governmental procurement processes could be used to support DEI (see Appendix 3 Procurement.)

Where possible, focus has been given to the following demographic areas:

- Ethnicity
- Gender
- Neurodiversity
- Disability
- Orientation
- Age
- Socio-economic status

We have also accounted for regional data, career status, socio-economic background where feasible. This approach has ensured that the insights generated are evidence-based and reflect a wide range of perspectives on diversity and inclusion in the UK tech sector. To offer a landscape overview of both the pillars and the lenses, a series of heatmaps were produced to both map the availability of data/research and

progress in each area. (For an overview heatmap, see Appendix 1 DEI data heatmap.) This report is comprehensive rather than exhaustive, prioritising the inclusion of the most current data and evidence-based insights to reflect ongoing trends and emerging challenges. By focusing on the direction of travel, the analysis aims to provide a comprehensive and forward-looking perspective that informs strategic decision-making and policy development.

The project and the report were completed from October 2024 to December 2024.

Industry

Executive Summary

The UK tech industry is one of the fastest-growing sectors, contributing significantly to the economy and driving innovation across industries. Nearly all organisations now rely on digital roles to support operations, from data analysis and cybersecurity to AI development and software engineering, highlighting the extensive influence of technology across every sector. Employing over 1.8 million people, the tech industry serves as a global hub for technological advancement.[11]

However, despite its dynamism, the tech industry continues to grapple with persistent challenges related to diversity, inclusion, and skills gaps. Addressing these issues is essential for fostering sustainable growth, enhancing innovation, and ensuring equitable access to opportunities across the sector. While diversity in the UK tech industry has shown modest progress in recent years, substantial gaps remain. Recruitment of more diverse entry-level candidates has improved slowly, but beyond early-career roles, this momentum diminishes at mid-career and leadership levels, perpetuating a persistent "leaky pipeline."

Structural and cultural barriers result in poor retention and promotion of under-represented people. A national study examining why people in tech voluntarily left their jobs found that underrepresented minorities were twice as likely to leave their role because of unfair treatment rather than for a better job. Unfair treatment included unjust management practices, stereotyping, sexual harassment, bullying and hostility [12].

Unconscious and conscious biases significantly influence workplace culture, often perpetuating exclusionary environments that disproportionately impact marginalised groups, thereby hindering efforts to create equitable and inclusive organisational practices. According to the Fawcett Society's 2023 report, 20% of men in tech believe women are inherently less suited for these roles—an attitude that reinforces exclusionary practices[13]. Additionally, a pervasive "tech bro" culture, coupled with inadequate workplace flexibility, impacts women, caregivers, and individuals requiring adaptations, leading to high attrition rates among these groups. Some industry sectors see this more starkly than others; for example, 21% of data centres have no women in their technical function at all[14].

When these structural barriers are coupled with limited accountability and insufficient tracking of DEI initiatives, there is no meaningful progress. Then most recently, economic downturns and shifting market dynamics have slowed progress further, with budget cuts diluting or stopping DEI efforts altogether.

Within these overarching problems, progress for different under-represented groups varies. Gender diversity in the UK tech sector remains low, with women comprising only 21% of tech teams[17]. Attrition rates are high, with one in three women planning to leave their roles due to a lack of career progression, poor work-life balance, and an unsupportive culture [4]. Ethnic diversity, while showing some improvement (21% of IT specialists identify as Black, Asian, or as an ethnic minority), faces significant challenges at senior levels, with an eleven percent drop in representation[16]. Efforts to enhance inclusion for ethnic minorities, which gained significant momentum during the Black Lives Matter movement, have lacked consistency in implementation and longevity, highlighting the need for more sustained and strategic approaches. Barriers to socio-economic mobility in the tech industry are significant. Only 9% of tech employees come from lower socio-economic backgrounds and earn less than their peers from affluent backgrounds [5].

Disability representation has grown, with 14% of the workforce identifying as disabled[19]. However, disclosure remains a challenge due to the lack of supportive environments. Neurodivergent individuals face similar barriers. While awareness of neurodivergence in tech has increased, employer-reported neurodivergence rates differ dramatically from self-reported rates among technologists. Many neurodivergent professionals are reluctant to disclose their conditions due to stigma, and only 25% of employees feel their company culture celebrates neurodiversity[18]. There is also limited data tracking the progression of both disabled and neurodivergent technologists and significant work remains to create environments where individuals can thrive.

This trend is similarly evident within the LGBTQI+ community, where representation remains limited. Discrimination and fear of harassment continue to contribute to low disclosure rates, underscoring the need for more robust policies and cultural shifts to foster an inclusive and supportive environment.

Older professionals (50+) are underrepresented, despite making up 31% of the working-age population, they only make up a fifth of the tech workforce, which threatens to exacerbate existing skills gaps[19].

However, amidst these challenges, significant insights have emerged regarding effective strategies for driving meaningful change and fostering a more inclusive environment.

To move forward, creating an inclusive workplace culture is paramount. Promoting psychological safety, addressing unconscious biases, and improving data collection to capture the full spectrum of diversity characteristics will enable greater transparency and support. Cultivating authentic role models, avoiding tokenism, and ensuring the visibility of successful underrepresented individuals are essential steps towards fostering an environment where diverse talent can thrive. Open communication,

inclusive language, and clear DEI policies build trust and contribute to a psychologically safe workplace.

Flexibility of work options is another vital component in enhancing diversity. Equally, investing in training and upskilling, effective retention strategies, and transparent and equitable promotion practices can help bridge the pipeline gaps that have traditionally hindered diverse representation. Targeted initiatives, such as mentorship programs, equitable pay, and structured career progression pathways, offer a practical approach to supporting women and other underrepresented groups as they advance in their careers. These efforts not only facilitate individual career growth but also strengthen organisations by ensuring diversity in leadership—a key driver of innovation and long-term success. By supporting diverse talent at every level—from early education to senior leadership—the industry can ensure that opportunities for growth are available to all.

But this is not enough. For true, lasting change, industry must move from one-off initiatives and seeing (and funding) DEI as a marketing exercise. It must also accept it is not enough to "fix" under-represented individuals, it must fix cultures, processes and systems. Crucially, it must implement accountability mechanisms, ensure DEI metrics are tied to leadership performance and foster a culture that supports flexibility, disclosure, and career progression for all underrepresented groups. Clear reporting processes for discrimination and the consistent application of DEI initiatives are crucial to reducing the pervasive biases that limit diverse talent from thriving. Government policy and regulation can support this and provide valuable guardrails for industry to build upon.

While the UK tech industry has progressed, a more strategic and unified approach is required to dismantle deeply embedded barriers to inclusion. Through accountability, structural change, and a commitment to fostering a genuinely inclusive culture, the tech industry can not only enhance diversity but also foster innovation, ensuring that the UK remains competitive in the global tech landscape.

Landscape and Barriers

Despite its reputation as a driver of innovation and progress, the tech sector continues to face significant barriers to achieving diversity and inclusion. Structural inequalities, cultural biases, and a lack of accountability in implementing DEI initiatives hinder equitable access to opportunities and career progression.

These barriers manifest across multiple dimensions, including socio-economic background, gender, ethnicity, age, and disability, creating a persistent "leaky pipeline" that limits representation at senior levels. This section examines the systemic and cultural challenges that perpetuate these disparities, providing a critical foundation for understanding the areas where intervention and reform are most urgently needed.

Pipeline and Retention Challenges

The persistent underrepresentation of marginalised groups, especially women in STEM fields, has given rise to a well-documented “pipeline problem” that begins as early as primary education and carries through into the workforce, particularly in tech. Although there has been some progress in increasing representation, the pace of change remains far too slow, with BCS estimating that it will be 283 years before women make up an equal share of the tech workforce[20]. Nash Square reports that only 28% of new tech hires in 2023 were female[21]. Technologists in the sector recognise the challenge, and in recent research from BAE Digital, 83% of IT professionals and 90% of cybersecurity professionals stated that the IT industry could do more to encourage job applicants from different backgrounds [22].

Given the fragile progress that has been made, it is concerning to see the increasing challenges in retaining diverse talent. Research by Tech Talent Charter found that only one in six women who have been in their tech role for more than a year are planning to stay. Four out of five women stated that a lack of career development impacted their decision to leave their tech role [4]. Pay dissatisfaction is one of the top factors motivating women to move jobs. In addition, 40% of women agreed that caring commitments influenced their decision to leave their job, but only 11.4% of them actually left the workforce to become caregivers. [23] These challenges are compounded for other marginalised groups, including ethnic minorities and LGBTQ+ individuals, who also experience higher attrition rates.

This trend, often described as the "leaky pipeline," results in an acute scarcity of women in mid-career roles, creating a “hollow middle” in the leadership pathway. McKinsey’s report on the "broken rung" [24] highlights how failing to support and promote women and underrepresented communities at early career stages ultimately hinders their progression to senior roles, reducing the pool of role models from minority communities and limiting diversity in leadership. Ethnic diversity in top roles drops more sharply than gender diversity does (11-point drop versus 8-point drop, respectively). Whilst lower gender diversity in senior roles is partially explained by women assuming a higher proportion of caring responsibilities, the drop in ethnic diversity can’t be explained by similar practicality and highlights very troubling questions as to why this is the case [25]. Without addressing this broken rung, companies risk perpetuating an inequitable system where fewer women and marginalised communities advance, stalling efforts toward balanced representation and creating a ripple effect that discourages young women and marginalised people from considering or continuing in tech careers.

Recent tech layoffs have disproportionately impacted women[26]. Against the backdrop of ongoing challenges in fair work allocation, women find it harder to access impactful and innovative projects. Many remain vulnerable, often relegated to roles focused on legacy technology—positions increasingly threatened by advancements in AI functionality.

Addressing these pipeline gaps requires focusing on equitable promotion practices, especially at junior levels, and cultivating an inclusive culture where mentorship programmes, equitable pay and clear career progression pathways make a tangible difference in supporting women and other underrepresented groups.

Misapplication of DEI Metrics

Despite widespread acknowledgement of the importance of DEI in driving innovation and resilience, the tech industry continues to struggle with establishing robust accountability frameworks. Many organisations make ambitious public commitments to DEI, yet progress remains limited due to inconsistent implementation and a lack of rigorous outcome tracking. Often, DEI initiatives are underfunded and disconnected from leadership accountability, severely limiting their overall effectiveness.

A key reason these initiatives are ineffective is the insufficient integration of DEI metrics into leadership performance evaluations. Few organisations explicitly tie DEI goals to executive compensation or advancement, resulting in a lack of accountability at senior levels.

Amid growing societal resistance to diversity efforts, some companies are deprioritising inclusivity. This shift not only puts their reputations at risk but also exposes them to compliance issues, as failing to meet equality legislation and uphold employee rights can lead to significant legal and ethical consequences.

Additionally, many organisations place undue emphasis on policies like mandatory DEI training or establishing employee resource groups without aligning these initiatives to broader organisational goals or measuring their real impact. Effective accountability systems require clear mechanisms for reporting misconduct, ensuring leadership accountability, and evaluating DEI progress through transparent, data-driven metrics. Without these mechanisms, organisations often face retention challenges, particularly among diverse talent who may feel the company’s stated values are not reflected in its actions.

Competing Leadership Goals

One key challenge to the effectiveness of DEI initiatives is the "decoupling dynamic"[27], where organisational intentions around DEI fail to translate into consistent, effective action. Managers often face competing demands from various stakeholders, resulting in an inconsistent focus on DEI efforts.

Middle management, a vital yet often beleaguered part of organisations, is especially affected. Middle managers navigate pressures from both above and below, and many are under-empowered and stretched thin in increasingly lean and fast-paced organisational structures. A recent McKinsey Global Survey, [28] of middle managers

highlights that many organisations unintentionally hinder middle managers' ability to perform effectively by burdening them with non-managerial tasks and bureaucratic hurdles. Instead of enabling them to focus on their most crucial role—fostering talent—companies treat middle management as a catchall, leading to underutilisation and a lack of appreciation. This presents a substantial operational hurdle for implementing successful inclusion practices.

The effectiveness of DEI initiatives also depends on sufficient senior leadership buy-in and the establishment of clear goals and metrics for measuring progress. Without intentional support for diverse thought and experience, organisations risk stifling innovation and reinforcing homogeneity, marginalising non-traditional perspectives. To drive meaningful change, leadership must set actionable DEI objectives with measurable outcomes while fostering an environment that values diverse perspectives. This ensures that inclusion initiatives are substantive rather than superficial and reinforces a culture where diverse talent can thrive and contribute meaningfully to organisational success.

Moreover, the success of DEI initiatives relies on organisations establishing comprehensive accountability measures at both the institutional and individual levels. A Harvard Business Review article, "DEI Initiatives Are Futile Without Accountability, " [29] highlights the need for a structured framework to measure DEI progress. The proposed three-part framework involves educating employees on the purpose of DEI initiatives, actively listening to and incorporating feedback, iterating policies based on this feedback, and celebrating successes while addressing areas that need improvement.

Workplace Culture

Workplace culture is crucial to an organisation’s success, shaping employee satisfaction, engagement, and overall business outcomes. Defined by shared values, beliefs, attitudes, and behaviours, culture is shaped by leadership, policies, and daily interactions. Companies with strong, inclusive cultures have consistently been shown to have higher employee engagement, enhanced productivity, and a competitive edge in attracting and retaining top talent. Conversely, when inclusivity is lacking, workplace culture can adversely affect not only underrepresented groups but the entire workforce. Notably, 43% of women consider leaving their roles frequently, citing exclusionary work environments and limited flexibility [30].

Cultural silos, or "in-groups," also reinforce non-inclusive practices. A survey on race and inclusion found that 31%[31] of employees who felt their careers were stunted cited not being part of an "in-group" as a significant barrier. Such environments limit the contributions of minority groups and diverse talent, ultimately affecting organisational performance. Moreover, disparities between tech teams in tech companies and those in non-tech firms highlight that tech employees in non-tech organisations often feel isolated, impacting retention.

In her book The Fix, Michelle King explains that "simply witnessing discrimination has the same negative impact as experiencing it"[32]. This highlights how exclusionary behaviours, if normalised, create a toxic environment that negatively impacts all employees. In predominantly white, male-dominated fields like tech, underrepresented groups often face unwelcoming environments marked by microaggressions, subtle biases, and overt discrimination. Alarmingly, 72% of women in tech report experiencing sexism, ranging from wage disparities to derogatory comments questioning their expertise. For Black women, the statistics are even starker—three in four face racism, and one in three are presumed not to hold technical roles[30].

This pervasive “tech bro” culture not only hinders diverse talent from contributing fully but also impedes their advancement and retention within the industry. Tackling this issue requires a profound shift in leadership attitudes, beginning with the CEO and senior management.

An ongoing challenge in addressing workplace culture issues is the misuse of settlement agreements and non-disclosure agreements (NDAs) by large organisations. Survey respondents reported that these agreements often silenced their experiences of workplace discrimination or misconduct, diverging from their intended purpose of protecting intellectual property or proprietary market insights. Such practices can shield organisations from accountability, limiting the ability of employees to speak out about systemic issues. While recent regulations[33] have attempted to restrict the use of NDAs, employees still face constrained choices—accepting financial settlements or enduring protracted and costly legal disputes.

Poor workplace management and exclusionary practices are not only detrimental to individuals but can also have significant repercussions at the shareholder level. A striking 86% of investors indicated that if they had invested in a company embroiled in a workplace bullying or harassment case, they would seek to distance themselves swiftly. Similarly, a majority of investors expressed reluctance to invest in companies with a problematic workplace culture, involvement in public scandals, a tarnished reputation, or a history of employing numerous NDAs to silence former employees[34]. These findings underscore the critical link between ethical workplace practices and investor confidence.

Leaders must actively promote psychological safety, ensuring employees feel empowered to report unacceptable behaviour without fear of retaliation. Clear channels for whistleblowing, coupled with a welcoming attitude towards feedback, demonstrate a commitment to accountability.

Bias and Behaviour

In the tech sector, stereotyped attitudes about gender, ethnicity, and age continue to shape workplace culture and contribute to the underrepresentation of women and other marginalised groups in technical and leadership roles. Ethnic minorities often

experience compounded forms of bias, both unconscious and explicit, that limit their career progression and reduce representation at senior levels. For example, certain cultural norms or linguistic biases may influence perceptions of professionalism, affecting hiring and promotion decisions. This is evident in the pronounced decline in the representation of ethnic minorities in senior roles compared to their presence in the broader tech workforce, with research indicating a drop from 25% to 14%[25]. These compounded biases ultimately create an exclusionary environment that disproportionately affects women and ethnic minorities, reducing diverse talent retention.

A striking example of gender bias is that 19% of men in tech roles believe women are "naturally less suited" to technical work, a misconception that not only discourages women from entering the field but also reinforces barriers to their advancement [30]. Such biases contribute to a persistent perception of women as more "people-oriented" than their male colleagues, which often translates into women taking on “invisible” labour like organising social events, while men are more likely to receive stretch assignments that build core business skills and facilitate career growth.

These stereotypes also compound with broader societal expectations that can affect perceptions of women's dedication to their careers, especially those with children. According to IBM's Women in Leadership report, only 41% of male managers believe that women with children are as committed to their jobs as those without [35]. The lack of flexible work options further complicates this issue, as women who are primary caregivers may face additional challenges in balancing work and home responsibilities. Flexible working arrangements can provide critical support but remain inconsistently applied across organisations.

The impact of age-related stereotypes in tech is similarly pervasive. Ageism in the tech industry frequently pressures professionals into self-doubt, imposing limitations on perceived abilities based on age. This is particularly pronounced among individuals over 50, who make up just a fifth of the tech workforce[19]. Younger professionals may be favoured in areas considered fast-paced or innovation-driven despite the experience and insights that seasoned professionals bring.

The psychological impact of these biases is significant, often manifesting as imposter syndrome, a sense of inadequacy that disproportionately affects women and minorities. This “injustice of imposter syndrome,” identified in industry research [36] is one of the top challenges for women in tech and can be exacerbated by societal messaging and workplace culture. Women, especially those who have taken career breaks for parental leave, frequently report elevated levels of self-doubt upon re-entering the workforce. This phenomenon is one factor contributing to the high attrition rate of women mid-career.

Unconscious biases, deeply embedded in societal norms and workplace structures, require a comprehensive, multi-level approach to mitigate. Best practices for tackling unconscious bias include implementing awareness training, enhancing recruitment processes to reduce bias, and institutionalising mentorship and sponsorship programs.

Stronger governance and practice are needed to ensure that discriminatory practice is treated as such rather than individuals being isolated. Leveraging the Social element of the ESG requirement to safeguard individuals from unjust and discriminatory environments. Moreover, organisations that take a proactive approach—providing flexible work options, supporting ongoing DEI education, and fostering an inclusive culture—are better positioned to attract, retain, and elevate diverse talent, ultimately fostering innovation and growth in an increasingly competitive market.

Inflexible Working Arrangements

Inflexible work arrangements are a key barrier to retaining women, caregivers, disabled, older, and neurodivergent technologists in the tech industry. These arrangements disproportionately impact these groups and create challenges in managing work-life balance. The recent Tech Talent Charter report on attrition in tech found that work-life balance was the most important factor in women's decisions to leave their tech roles, but importantly, not the workforce altogether.[22]

During the COVID-19 pandemic, the shift to remote work highlighted the transformative potential of flexibility in the workplace. This shift was particularly beneficial for women with caregiving responsibilities, enabling them to stay in the workforce during periods when they might otherwise have been forced to step away. The Office for National Statistics (ONS) reports that the employment rate among mothers in the UK has risen to 75%[37], the highest in two decades. For the first time in 2020, households where both parents work full-time outnumbered those where one partner works full-time and the other part-time.

However, the Bennett Institute for Public Policy found that despite 88% of respondents working full-time, almost half of them still bear primary responsibility for household chores and caregiving. Nearly four out of ten women reported feeling compelled to prioritise their partner’s career over their own. Additionally, a staggering 97% of women believe that requesting flexible working arrangements could negatively impact their career advancement, and nearly 40% of women with hybrid work setups reported feeling excluded from meetings, decision-making, and informal interactions [38]

These challenges are even more acute for minorities or underrepresented groups in tech who may already feel marginalised. For them, requesting accommodations like flexible work arrangements can further isolate them from their peers and career opportunities.

While the theoretical availability of flexible work arrangements—such as remote work, hybrid setups, and compressed hours—has increased overall female workforce participation, significant gaps persist within the tech industry. These gaps are particularly evident as some tech companies increasingly mandate a return to office-only or less flexible hybrid arrangements. In sectors with stringent operational demands, such as roles requiring shift coverage in data centres, flexible working is often perceived as incompatible with business needs. However, with the right strategies, flexible work arrangements can be leveraged as a strategic advantage, boosting both productivity and inclusivity. Without broader and more equitable access to flexible work options, systemic barriers will likely continue to exacerbate underrepresentation in critical areas of the tech industry.

Additionally, with an increasing number of organisations mandating in-office presence across their workforces, there has been an anecdotal rise in disabled technologists being required to reapply for accommodations that were previously in place to meet their needs. This creates unnecessary hurdles for individuals who rely on reasonable adjustments to perform their roles effectively. Companies must ensure compliance with the Equality Act 2010 when considering mandatory office presence policies to safeguard inclusivity and meet their legal obligations.

Lack of Authentic Role Models

The barriers faced by underrepresented groups in tech lead to a significant lack of representation and visible role models. Role models play a critical role in fostering inclusivity by serving as concrete examples of success and a powerful force for social learning, which can inspire others to envision themselves in similar positions and break into challenging fields. This principle, often summarised as “seeing is believing,” is particularly important for groups historically marginalised in tech, as it not only validates their aspirations but also demonstrates that there is a pathway to success that others have navigated. CWJobs found that 60% of women working in STEM careers have been inspired by role models, compared to only 46% of men[39].

However, efforts to increase representation can be undermined by tokenism and the problematic use of “diversity mascots.” Tokenism, defined as when diverse individuals are placed in visible roles solely to fulfil diversity targets, can erode trust in an organisation’s meritocratic principles. When people perceive diversity appointments as “Didn’t Earn It” placements, it substitutes genuine DEI initiatives with superficial diversity metrics that do little to address underlying inequities. This approach can stigmatise underrepresented individuals rather than uplift them, suggesting that their positions were granted based on identity alone rather than qualifications or achievement.

The concept of "diversity mascots" exacerbates the issue of representation in the workplace. This term refers to individuals from underrepresented groups who are prominently showcased to demonstrate a company’s commitment to diversity. However,

these individuals are often not given real opportunities for influence or growth within the organisation. This approach is often evident in superficial initiatives, such as Pride publicity campaigns launched around national awareness days, which lack meaningful, sustained efforts by organisations to support the LGBTQI+ community within the workplace. Without deeper organisational commitment, such actions risk being dismissed as performative rather than genuinely inclusive. Moreover, these practices can undermine trust, reinforcing the perception that diversity is treated as a cosmetic aspect of the company's image rather than a core value embedded in its leadership and culture.

When organisations rely on tokenism or diversity mascots, they risk perpetuating a self-fulfilling cycle. Without authentic role models and pathways to advancement, marginalised individuals may increasingly view tech as an unwelcoming industry that does not prioritise or support their needs. This can dissuade diverse talent from pursuing deep tech roles or leadership opportunities, reinforcing the scarcity of diverse representation and widening the gap in the talent pipeline.

For true progress, organisations must commit to developing equitable career pathways, embedding DEI into core practices, and ensuring that all employees—regardless of background—have the opportunity to grow, contribute meaningfully, and, ultimately, serve as authentic role models for the next generation.

Lack of Guidance on Inclusive Language

The CIPD's report, Talk about Race at Work, underscores the gap in comfort and knowledge of inclusive language, revealing that only 38%[40] of employees feel comfortable discussing race at work. Notably, 20%[40] of respondents admitted to not knowing which terms are appropriate or inappropriate, illustrating the need for clearer guidance on respectful language in workplace discussions. Guidelines published under the previous Government in Inclusive Britain further emphasise that discussions around race and ethnicity must be conducted with sensitivity, accuracy, and responsibility to build trust with communities and avoid misleading the public. These principles are equally vital in industry settings where specificity is encouraged; for example, addressing individuals by their specific ethnic identity rather than relying on broader terms demonstrates awareness and respect.

Similarly, guidance on inclusive language is essential for discussing gender, sexual orientation, and LGBTQI+ identities. Inclusive terminology and respectful use of pronouns create a more welcoming environment for employees of all identities, helping dismantle stereotypes and prevent exclusionary practices. A critical enabler for enhancing diversity and inclusion is equipping people with a vocabulary that allows them to communicate openly, respectfully, and with psychological safety.

Given technology's significant influence in society, a lack of awareness in this area poses a greater risk to the integration and effectiveness of tools within the broader community.

Bias in Digital Workforce Tools

During research interviews, stakeholders raised concerns about the growing use of digital workforce tools and Algorithmic Affect Management (AAM) technologies. These tools, designed to infer human emotions and behaviours at work and integrate them into algorithmic management systems, were seen as contributing to a more opaque workplace landscape. Stakeholders highlighted the lack of robust processes to detect and mitigate biases inherent in these systems, alongside the significant privacy concerns they present. For instance, recruitment algorithms that do not account for career breaks may disadvantage candidates with non-linear career paths. More seriously, performance management tools that track metrics like eye contact during meetings or the number of active words spoken to assess performance can inadvertently discriminate against individuals for whom these attributes are not feasible—such as neurodivergent and disabled people. These practices could potentially breach the Equality Act 2010, which provides specific protections against indirect discrimination resulting from systemic approaches.

Without clear guardrails around the use and application of these tools, we risk eroding employee rights and creating a more challenging environment for underrepresented groups to thrive.

As organisations increasingly adopt digital workforce management tools for recruitment, progression, and promotion, it is essential that these technologies are designed with equality and inclusivity at their core. Equally important is providing employees with transparency about how their data is utilised within the algorithms, ensuring accountability and fostering trust in these systems.

This issue carries dual urgency for the tech industry, which must not only ensure the appropriate and ethical use of these tools but also cultivate the inclusion aptitude of the toolmakers themselves. Ensuring that developers have the necessary awareness and skills to design fair and equitable technologies is critical to preventing biases from being embedded into these tools.

Demographic Focus

A targeted review of diversity through a nuanced lens is essential to identify and address the specific challenges and opportunities faced by different demographic groups within the tech industry. Such an approach is critical to developing an evidence-based understanding of current provisions, support systems, and unmet

needs, thereby enabling the design and implementation of effective, tailored interventions that promote equity and inclusion.

It is vital to ensure that, as we assess the current positioning, an intersectional lens is applied to guarantee a holistic and inclusive approach to support. Intersectionality, a framework that examines how overlapping social identities interact to create unique experiences of privilege or disadvantage, is essential for understanding the complexities faced by individuals. By recognising these interconnected factors, we can better address the multifaceted barriers they encounter, ensuring that initiatives are both comprehensive and equitable.

Ethnicity

In 2023, the British Computing Society (BCS) reported that 20% of IT specialists were from Black, Asian, and other ethnic minority backgrounds. The further breakdown shared that 8% of technologists were reported as Indian, 3% were Black, 2% were mixed heritage, and 7% were from other ethnic minority backgrounds. This is a notable increase from 2018, when ethnic minorities represented just 15% of the tech workforce[41].

Ethnicity in the tech workforce (2023)

Ethnic Identity	IT specialists	Other occupations
White	**79%**	85%
Indian (as specifically categorised in the original dataset)	**9%**	3%
Other ethnic group	**7%**	7%
Black/African/Caribbean/Black British	**3%**	4%
Mixed/Multiple ethnic groups	**2%**	2%

Data Analysis of ONS Quarterly Labour Force Survey by BCS

Overall, the level of ethnic minority representation in the tech industry is higher than in the general working-age population. However, representation varies significantly across specific ethnic identities and regions in the UK. For example, representation ranges

from as low as 5% in areas such as Wales, the North East, and Northern Ireland to as high as 36% in London, reflecting regional demographic differences[41].

The limited granularity of ethnicity data collection by many organisations further obscures the true representation of specific groups, such as Roma and Irish Travellers, whose experiences and challenges remain largely unaddressed. Additionally, representation among different ethnic groups shows considerable variation, with Asian men being the most represented ethnic minority demographic in the tech workforce.

When examined through an intersectional lens, severe underrepresentation becomes evident. For example, Black women constitute only 0.07% of the tech workforce, compared to 1.8% in the general workforce. This highlights the compounded barriers faced by individuals at the intersection of race and gender, underscoring the need for more nuanced data collection and targeted inclusion initiatives to address these disparities effectively[41].

The distribution of ethnic diversity also varies by role type within the tech sector. According to Cord's "Ethnic Minority Representation in Tech Insights," data-related roles have the highest representation of ethnic minorities, while Asian professionals are underrepresented in product design, and Black professionals are least represented in development roles[42].

Barriers to Ethnic Minorities in Tech

Black professionals in tech continue to face significant barriers affecting their career experiences, progression, and overall satisfaction. Research by Colourintech found that 65% of Black individuals report barriers when starting their tech careers. A lack of mentorship is a major issue, cited by 70% of Black respondents, and the prevalence of microaggressions is striking—99.3% of Black professionals reported experiencing them, compared to 62% of white professionals[43].

The perception of career growth opportunities is similarly concerning, with only half of Black respondents believing there is a clear career path for them, a sentiment even lower among Black women. This lack of opportunity contributes to the underrepresentation of Black professionals in leadership positions, with the Tech Talent Charter reporting that ethnic diversity in senior tech roles drops significantly to 14% (from 25% in all roles in their dataset), a decline that lacks any clear explanation akin to the caregiving responsibilities contributing to lower gender diversity in senior roles[25].

Salary negotiation also remains a challenge, with only 44% of Black and Asian respondents feeling confident advocating for fair compensation compared to 75% of their white peers. This disparity extends to workplace authenticity—30% of Black respondents disagree with the statement, "I can be my true self at work." Those who feel less valued or authentic are more likely to leave within 1-3 years, whereas those

who feel empowered to be themselves tend to stay beyond four years, indicating that improving inclusivity could enhance retention[43].

Barriers to Data Collection and Reporting

Self-identification plays a critical role in accurately assessing ethnic diversity in the tech sector. However, individuals need to feel psychologically safe to disclose their ethnicity. The Tech Talent Charter reports that over 20%[25] of employees have not disclosed their ethnicity to their employers. This lack of disclosure often indicates a poor organisational culture and presents a significant challenge as organisations consider implementing ethnicity pay gap reporting for entities with more than 250 employees.

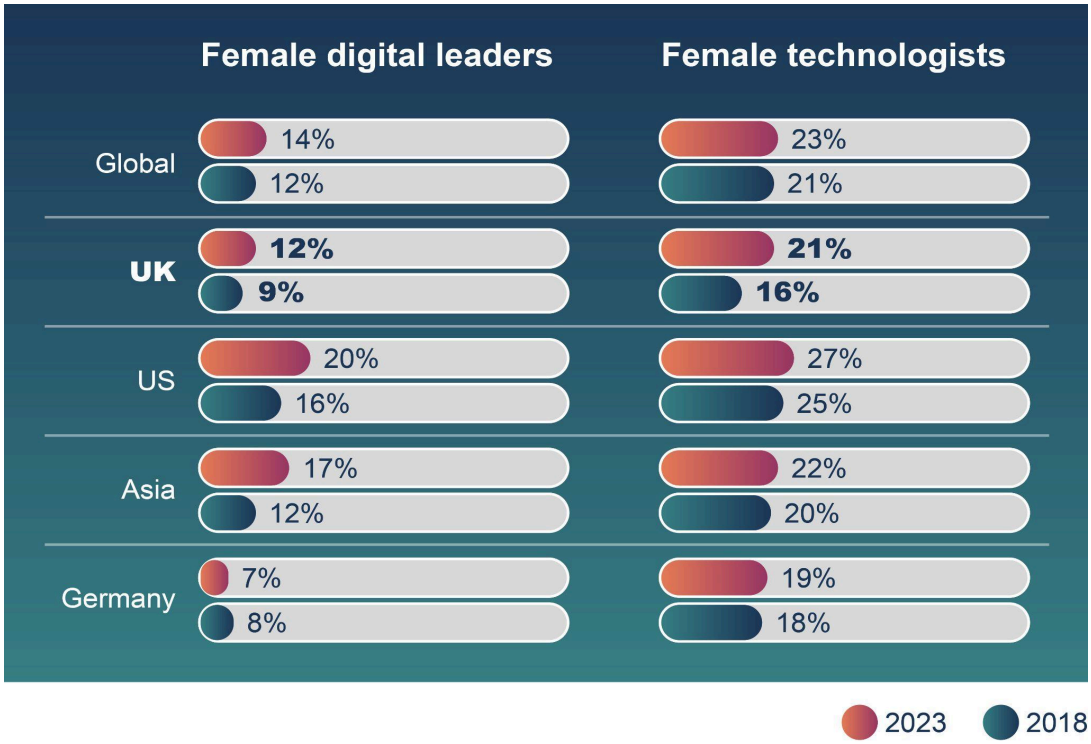
Since the emergence of Black Lives Matter movement, organisations have increased their focus on collecting this data in an effort to better support ethnic minorities. Tech Talent Charter reports that ethnic diversity is now the second most prioritised DEI area after gender. 73% of companies collect ethnicity data, and 63% take some form of action to improve ethnic diversity[25]. However, providers of specific support programmes for ethnic minorities have reported a decline in the procurement of their services, indicating a potential gap in sustained action beyond initial commitments.

Ethnic minorities, particularly Black women, face significant intersectional challenges that exacerbate their underrepresentation in the tech sector. While organisations have increasingly prioritised the collection of workforce demographic data, many still face limitations in analysing this data through an intersectional lens and industry seniority lens. This shortfall makes it difficult to address the unique and multifaceted needs of these groups effectively. Given the well-documented challenges faced by individuals with marginalised identities, it is reasonable to conclude that the compounded effects of multiple marginalisations further restrict access to opportunities and advancement in the tech industry.

For the tech industry to truly support ethnic minority talent, a consistent focus on data transparency, mentorship, cultural change, and sustainable DEI initiatives must be maintained and strengthened.

Gender

Diversity efforts in the tech sector have primarily focused on gender equity. Over the past five years, while there have been marginal gains, the UK lags behind countries like the United States, which leads in both overall representation and leadership roles. The data below illustrates the state of gender representation in the tech sector. [44, 45]



Data from Nash Squared and BCS

Representation across roles within the industry varies significantly, with female representation in IT engineering roles remaining particularly low at just 6%, while roles such as IT project/programme managers and web developers see relatively higher representation at 30%[46]

According to LinkedIn's Economic Graph team[47], the cybersecurity industry exemplifies a significant gender imbalance, with women accounting for only 17.9% of the workforce. Similarly, Uptime Institute reports that 21% of data centres have no female staff[14]. While construction has the poorest gender balance (10%), the banking and finance sectors employ the most female IT specialists (27%)[95]. The FCA's inclusion work is no doubt connected to the higher rate of representation.

The current level of female representation in the tech industry poses a risk of “assimilation,” particularly when compounded by the limited representation of other minority groups. When representation is below the critical mass of 15%-20%[48], individuals often face pressure to conform to majority norms to fit in.

Reaching a critical mass of approximately 30% can empower minority groups to influence organisational dynamics, reducing the need for assimilation. However, this impact is heavily contingent on the inclusiveness of the organisational culture. This is especially crucial in environments that depend on high levels of trust and innovation. Without a genuine sense of belonging, individuals may feel unable to share their unique

perspectives on products or services, thereby limiting the potential benefits of diverse thought. Fostering a culture that values inclusion and belonging is essential to unlocking the full value of diversity within teams.

Attrition Rates and Barriers to Career Growth

The Tech Talent Charter's *Attrition in Tech* report highlights a critical issue: one in three women are planning to leave their tech jobs, and one in four women who have left their tech roles in recent years have transitioned to non-tech positions. This challenges the often-touted narrative that women primarily leave tech due to motherhood. Instead, the data indicates that women are stepping away from the industry due to dissatisfaction with career progression and growth opportunities, as cited by four out of five women[22].

Pay dissatisfaction also plays a significant role, with 68% of women expressing concerns about their compensation, particularly those aged 25-34. Additionally, company culture is a key driver of attrition, with 50% of respondents citing it as their reason for leaving—a sentiment particularly strong among women aged 35 and older[22].

These findings are especially concerning given the tech industry's ongoing struggle to retain mid-career talent. Addressing these barriers is crucial to fostering a supportive and inclusive environment that encourages women to remain and advance within the tech sector. More broadly, the unemployment rate for female IT specialists is 2.5%, compared to 1.8% for their male counterparts in IT.[95]

As highlighted in the *Inflexible Working Arrangements* section of *Barriers for Industry*, work-life balance is a critical factor for 73% of women surveyed[22], particularly those with caregiving responsibilities. Among survey respondents who identified "work-life balance" as their primary reason for leaving a tech role, many linked this issue to caregiving responsibilities, even though caregiving itself was not explicitly listed as a cause.

One possible explanation is that women who leave roles due to the unmanageable conflict between work and caregiving may be less inclined to attribute their situation to family obligations. Instead, they are more likely to frame it as a work-life balance issue, reflecting a perception that such conflicts are rooted in workplace practices rather than personal circumstances.

Compounding this is the tech industry's reputation as a leader in flexible work, which raises expectations that are not always met by employers. This disconnect may contribute to dissatisfaction, as women feel their needs are overlooked despite the industry's promises of flexibility. Additionally, the reluctance to openly discuss caregiving roles—due to fear of negative perceptions or professional repercussions—points to a broader cultural challenge within the sector that urgently needs to be addressed.

Women in IT are also three times more likely to work part-time (10% vs. 3%), starkly contrasting to other sectors where 23% of women work part-time.[45] The scarcity of

part-time roles in the tech industry highlights a missed opportunity for improving retention rates among women, with part-time technologists reporting fewer moves and only 28% of these technologists moving roles in the last five years. Employers who actively support part-time work stand to benefit from improved retention rates and workplace cultures, which in turn enhances their ability to retain female talent.

Disability

In 2023, 14% of technologists identified as disabled, up from 9% in 2018, according to BCS. The representation of disabled IT specialists varies significantly across the UK, ranging from as low as 8% in Northern Ireland to 19% in Wales[49]. These regional disparities are shaped by a range of factors, including local demographics and regional policies, underscoring the importance of tailoring reviews and initiatives to specific regional contexts to provide appropriate support.

The disparity between the representation of IT specialists with disabilities and the broader workforce also differs by region. For instance, the East Midlands, West Midlands, South West, and Scotland show a gap of approximately five percentage points, while the North West achieves parity.[49] Progression in this area is welcomed, but it is unclear if the steady increase is the result of better reporting or a real increase in the number of disabled technologists.

High Unemployment and Pay Gap

Disabled IT specialists experience disproportionately higher unemployment rates—4.2% compared to 1.6% for their non-disabled counterparts—underscoring the substantial barriers to entry and career progression within the tech sector[49]. Many disabled technologists are self-employed, a possible indication that self-employment provides greater flexibility to accommodate and meet the individual needs of disabled technologists and to meet the autonomy needs for some neurodivergent technologists. However, the lack of access to employee benefits, such as sick pay, leaves this group more vulnerable. Within traditional employment, disabled IT specialists are more likely to be employed by larger organisations or in sectors such as banking, finance, or the public sector, suggesting a preference for workplaces with established support networks and robust adaptations.

Disabled technologists face a significant pay gap. In 2022, their average hourly earnings were £21, representing 89% of the earnings of non-disabled IT specialists (£24 per hour)[49]. The prevalence of part-time roles for disabled technologists is similar to that of the general IT workforce, but there is insufficient data to determine whether this reflects a lack of part-time opportunities or individual preferences. The recent mandates for hybrid working may have supported disabled people in maintaining full-time roles, but as companies increasingly require full-time office presence, this could potentially affect participation.

Lack of Inclusive Policies for Disabled Professionals

Similar to issues faced by other underrepresented groups, disclosure of disabilities relies heavily on psychological safety. According to the Tech Talent Charter, only 6% of technologists at their signatory organisations identified as disabled, suggesting that many are reluctant to disclose their disabilities at work when this is compared to the ONS labour force data[25]. The way disability-related questions are framed is crucial to encouraging disclosure. Many individuals covered under the Equality Act 2010, such as those with chronic health conditions, do not identify as "disabled" per se. Tailoring the language used in disclosure forms could lead to improved rates of reporting, which is essential for meaningful disability pay gap data and insights into representation.

The Access to Work scheme has been valuable, with 35% of disabled individuals stating that they would not be employed without this support [50]. However, extended assessment times and intricate application processes can delay access to necessary assistance. Additionally, the absence of sector-specific disaggregated data limits a comprehensive understanding of the scheme's impact across industries. Enhancing public awareness of the scheme, particularly among unemployed disabled technologists, could broaden its reach and effectiveness, as discussed further in this report.

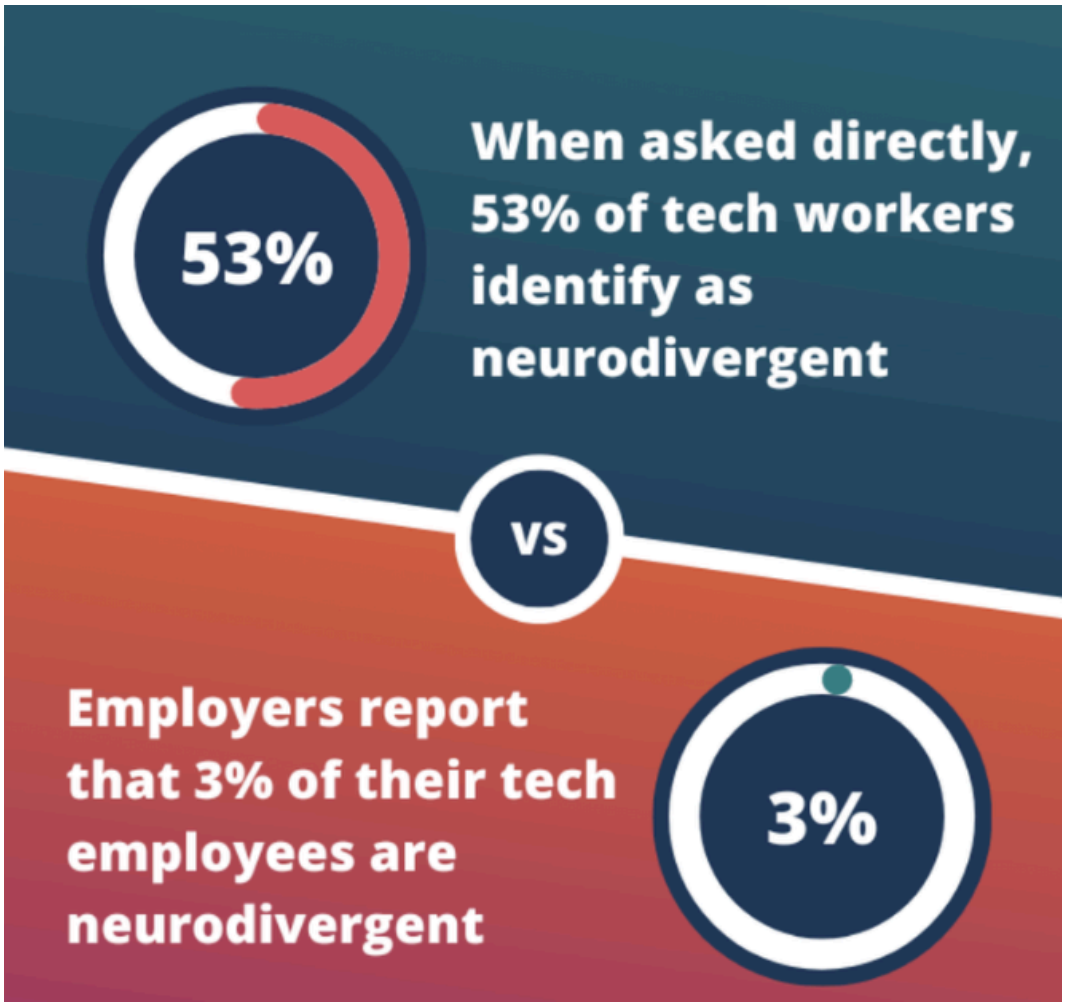
The Disability Confident scheme aims to promote inclusivity and increase opportunities for disabled individuals in the workforce. According to the Department for Work and Pensions (DWP), its 2023 survey found that 63%[141] of participating employers had recruited a disabled employee or someone with a long-term health condition since joining the initiative. This indicates some progress in encouraging employers to take action.

However, research by the Disability Employment Charter raises concerns about the scheme's effectiveness, noting that employers at the highest level of the scheme are no more likely to hire disabled individuals than those not participating[51]. This highlights a critical gap between intentions and outcomes, suggesting that the scheme's current framework may lack sufficient mechanisms for driving meaningful change.

For disabled technologists, who face disproportionately high unemployment rates, the current approach does not adequately address systemic barriers to employment. Stronger commitments, clear accountability measures, and more rigorous standards are needed to bridge the gap between raising awareness and delivering effective, actionable support. Without such measures, the scheme risks being perceived as performative, failing to translate good intentions into tangible, sustained improvements for disabled jobseekers and employees.

Neurodivergence

The availability of data on neurodivergent representation in the tech industry is inconsistent. Some sources group neurodivergence under broader disability categories, while others specifically track and report it. This inconsistency is exacerbated by challenges in disclosure rates. The Tech Talent Charter's 2024 survey revealed a significant disparity: 53% of employees self-reported as neurodivergent, compared to just 3% in employer-reported figures [25].



SourceTech Talent Charter

Employers often assume that neurodivergence will be disclosed when employees report disabilities, but this assumption is unreliable. Although most neurodivergent profiles are recognised as protected disabilities under UK law, only 16% of respondents indicated they would disclose a neurodivergent condition when asked about disabilities, with an additional 17% expressing uncertainty.

Underscoring the need for employers to refine how they inquire about disabilities and neurodivergence to ensure accurate and sensitive data collection. Furthermore, only 63% of respondents in tech roles reported that their employer explicitly asked about neurodivergent conditions. When such inquiries were made, they most commonly occurred during job applications (19%), diversity and inclusion surveys (16%), onboarding (15%), or via HR systems (13%)[25].

Growing Awareness and Persistent Gaps

Awareness of neurodiversity has grown significantly in recent years. Among Tech Talent Charter signatories, the proportion measuring neurodivergence within their workforce increased from 26% in 2021 to 68% in 2023[4]. Neurodiversity has become the fourth most prioritised area in diversity and inclusion efforts, alongside LGBTQI+ initiatives. However, the stark gap between employee and employer-reported neurodivergence rates highlights the need for more neuro-inclusive workplaces and supportive approaches to disclosure and data collection.

Conditions commonly reported by neurodivergent employees include autism spectrum disorder (15%), ADHD/ADD (15%), dyslexia, dyscalculia, or dyspraxia (9%), cognitive functioning difficulties (6%), Tourette's syndrome (4%), and other learning differences (3%)[4]. Despite the prevalence of these conditions, only 62% of neurodivergent respondents said their manager was aware of their condition. This figure drops significantly for women, with only 50% of female tech workers informing their managers, compared to 69% of male employees.[25]

Awareness among colleagues is also limited, with only 45% of respondents reporting that close colleagues knew of their neurodivergence and just 20% stating that wider colleagues were aware[25]. This lack of awareness often means neurodivergent employees miss out on necessary accommodations.

Workplace Inclusivity and Career Progression

While some employers are making progress in tracking neurodiversity, tangible actions to foster inclusivity remain limited. For example:

- Offer neurodivergence-inclusive practices around hiring (23%) and career development (25%) remain underutilised
- 22% of respondents said their workplace provided sensory relaxation spaces.
- 29% reported receiving training to support neurodivergent colleagues.
- Only 25% felt their company actively celebrates neurodiversity[4].

The Tavistock Institute of Human Relations found that 39% of neurodivergent employees struggled with salary-related discussions, and 21% faced challenges with traditional recruitment processes such as face-to-face interviews. Additionally,

neurodivergent employees are less likely to be promoted (42%) compared to their neurotypical peers (56%)[52] .

In terms of employee benefits, 25% of respondents indicated that their employer-provided health insurance covered private diagnoses for neurodivergent conditions. Flexible and remote working arrangements were more common, available to 43% of respondents. Despite these gaps in specific support measures, 69% of all respondents felt that their employer did enough to support neurodiversity[25].

While progress has been made in increasing awareness and measuring neurodiversity in the workplace, significant challenges remain. Employers must address the barriers to disclosure, improve manager and colleague awareness, and adopt more inclusive hiring and progression practices. Without these changes, many neurodivergent employees will continue to face unnecessary obstacles to career growth and workplace inclusion.

LGBTQI+

Lack of Data

The scarcity of comprehensive statistics on LGBTQI+ representation in the tech sector makes it challenging to fully understand the progress being made and the rate of change. However, an analysis of 2021 census data[53] provides some insights:

Role	Lesbian, Gay Bisexual	Heterosexual	Did not answer
Database administrators and web content technicians	8.0% (3,615)	85.8% (38,765)	6.2% (2,780)
Web design professionals	7.1% (1,160)	85.6% (13,960)	7.3% (1,185)
Data analysts	5.3% (3,490)	88.4% (57,845)	6.2% (4,085)
IT user support technicians	4.7% (4,925)	89.1% (92,815)	6.2% (6,475)

Role	Lesbian, Gay Bisexual	Heterosexual	Did not answer
IT quality and testing professionals	4.3% (745)	88.6% (15,500)	7.2% (1,255)

These figures indicate that approximately 5.8% of technologists are from the LGB+ community. However, to gain a deeper understanding of representation among other identities within this group, we need to explore alternative sources.

Tech Talent Charter's 2023 report revealed that only 0.09% of tech employees among signatory organisations identify as non-binary, and 0.17% identify as transgender, compared to 0.5% of the UK's working-age population. The report also found that only 26% of companies have data processes that allow their employees to disclose being transgender[25]. Given the historic shortage of data on LGBTQI+ representation in the tech industry, drawing meaningful conclusions remains challenging, especially regarding progression and retention rates.

Lack of Recognition

The failure to recognise more than two genders within a company's infrastructure, especially when coupled with the absence of options to self-identify gender, increasingly signals exclusion or a lack of value for non-binary individuals. Companies often encounter challenges in implementing LGBTQI+ data collection due to international legislative differences and inflexible software systems. However, overcoming these barriers is critical to fostering a supportive and inclusive workplace for LGBTQI+ colleagues.

Despite efforts to improve diversity and inclusion, LGBTQI+ representation in the tech industry remains limited. A survey by Hired found that only 29% of LGBTQI+ tech workers feel well-represented[54], while a Stonewall report indicated that only 12% of LGBTQI+ graduates would consider a career in technology[54].

Furthermore, LGBTQI+ individuals in the tech industry also face pay disparities and more limited career progression opportunities compared to their non-LGBTQI+ peers. Total Jobs found that LGBTQI+ professionals earn, on average, £6,703 less per year than non-LGBTQI+ counterparts, while Hired found that LGBTQI+ employees are less likely to be promoted to leadership positions[55], further discouraging the community from embarking on a career in the tech sector.

Lack of Inclusive Policies for LGBTQI+ Professionals

While it may be easy to assume that discrimination against the LGBTQI+ community occurs primarily in other parts of the world, the past year has seen a significant increase in reported hate crimes against these groups in the UK compared to previous years[54]. Employers have a critical responsibility to safeguard their employees and prevent discriminatory actions in the workplace.

A lack of clear policies and support systems for LGBTQI+ employees further exacerbates the challenges they face. Without these resources, individuals struggle to report incidents of discrimination or access essential mental health support. Discrimination and harassment remain pervasive in the tech sector, with many survey respondents reporting experiences of exclusion, hostility, and microaggressions that contribute to unsafe and unwelcoming work environments.

Corporate pride activities have become common fixtures in the industry calendar, reflecting greater awareness of LGBTQI+ issues. However, systemic actions to address workplace barriers are still lacking. Meaningful change requires more than visibility—it demands tangible, sustained efforts to foster equity and inclusion.

Employers must establish and prominently communicate support structures and policies to ensure LGBTQI+ professionals feel psychologically safe and supported. Simply asking employees to self-identify their gender or sexual orientation without creating a sense of workplace safety will likely cause reluctance to disclose such identities.

Age

A CWJobs study highlights pervasive ageism within the UK tech and IT sector. 41% of tech employees report age discrimination—significantly higher than the 27% average across other industries[56]. Age-related bias is particularly acute in tech, with 61% of technologists perceiving prejudice against older employees, making it one of the UK's most age-affected sectors.

Notably, ageism in tech manifests unusually early, with professionals experiencing bias as young as 29 and being considered "too old" by 38. This sharply contrasts with the broader workforce, where ageism is typically reported closer to 47 years of age[56]. These findings underscore the urgent need to challenge stereotypes and foster inclusivity for professionals across all age groups.

Challenges Faced by Older IT Specialists

The 2024 BCS report highlights disparities affecting older IT specialists. Although individuals aged 50+ comprise 31% of the UK's working-age population, they account for only 22% of IT specialists, suggesting an equitable workforce would include an additional 148,000 older IT professionals. Representation is particularly low in regions like London and the East Midlands, where only 17% of IT professionals are over 50[57].

Older IT specialists are more likely to hold managerial roles (45% vs. 40% of younger colleagues) and earn higher median wages (£28/hour, 17% above the industry median). However, they face higher unemployment rates (2.9% vs. 1.6% for younger workers) and are twice as likely to be self-employed or work part-time. Educational differences are evident, as would be expected in this sector,with only 67% of older IT workers holding degrees compared to 77% of younger workers and just 6% possessing IT-specific qualifications[57]. Furthermore, older professionals often rely on in-work connections for employment opportunities, indicating barriers in traditional recruitment pathways.

Industry Efforts and Persistent Gaps

According to the Tech Talent Charter's 2023 report, age is the third most commonly collected diversity metric (after gender and ethnicity), with 89% of organisations collecting age-related data. However, only 35% reported taking concrete actions to improve age or generational diversity[58].

Industry stakeholders stress that experienced technologists are indispensable for maintaining critical infrastructure, such as telecommunications and data centres, particularly where succession plans are inadequate. Generational stereotypes, such as assuming younger "tech-native" workers are more innovative, lack substantive evidence. Research suggests that intergenerational diversity and inclusion provide essential context for understanding attitudes and behaviours toward technology[59]. Factors such as personality, gender, and individual preferences for technology play a more significant role than generational affiliation.

Career Limitations and Health Impacts

Within the IT sector, 36% of workers report career limitations due to age, frequently accompanied by active discrimination:

- 47% were denied roles,
- 28% faced social exclusion, and
- 31% were overlooked for promotions.

Age-related microaggressions further compound these challenges, with 64% of affected employees choosing not to report incidents and a third avoiding complaints to "not cause a fuss." This culture of silence significantly contributes to high attrition rates, with 51% of tech workers experiencing ageism eventually leaving their roles. Additionally, 76% of those affected report negative mental health impacts, including stress (31%) and demotivation (28%)[56]. These personal impacts are often accompanied by broader organisational challenges, such as increased sickness absence, reduced productivity, and, ultimately, higher turnover.

Broadening Support for Aging and Health Journeys

Menopausal women represent one of the fastest-growing demographics in the workplace, yet research by CIPD shows that 1 in 4 menopausal women feel unsupported by their manager[60]. In recent years, reproductive health has emerged as a critical area of focus for organisations prioritising gender inclusivity. Given the importance of retaining gender minorities and advancing gender diversity in senior roles, investing in menopause inclusion is a vital strategy for supporting and retaining colleagues during this life stage.

The Tech Talent Charter reports that only 6.32% of companies have specific initiatives to support menopause[58]. Notably, organisations with such policies demonstrate stronger overall gender diversity. Many of these efforts adopt an intersectional approach, addressing the experiences of cisgender employees, LGBTQ+ individuals, and the interplay of age and reproductive health.

Expanding workplace support for mental and physical health journeys associated with ageing—including menopause and other life stage changes —is essential for fostering retention and inclusivity. These initiatives align with opportunities to advance disability inclusion, as ageing-related health issues frequently intersect with accessibility needs. By providing targeted support, organisations can empower technologists navigating these challenges to remain productive and engaged members of the technology workforce.

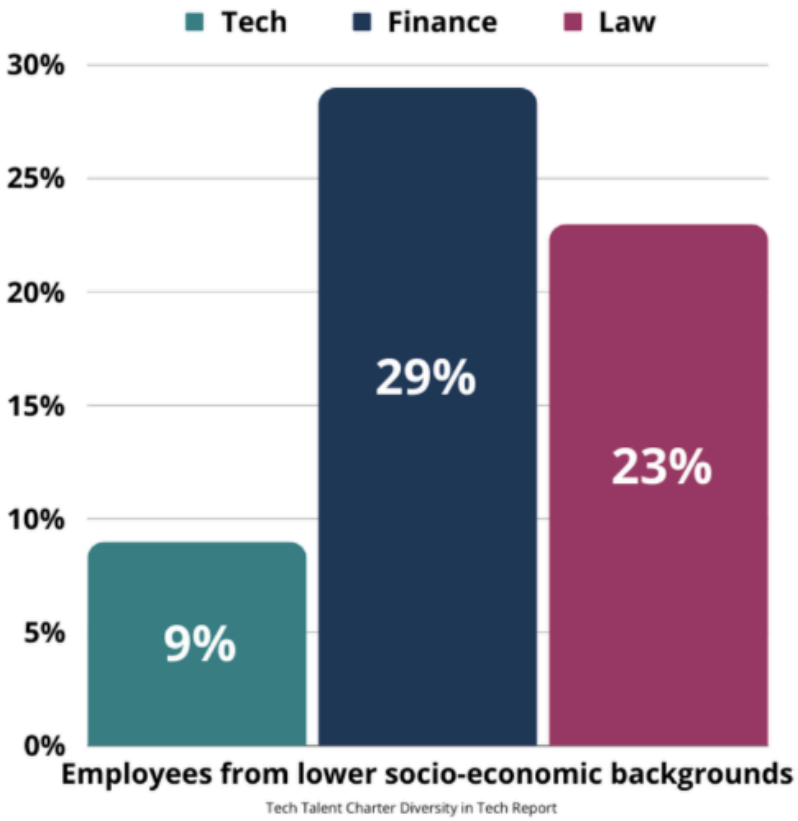
The Importance of Intergenerational Collaboration

The workforce now comprises up to four distinct generations—Baby Boomers, Gen X, Millennials, and Gen Z—with Generation Alpha poised to join within the decade. Ensuring cohesive collaboration across these groups is critical, particularly as AI-enabled tools and productivity aids become more widespread. Facilitating knowledge transfer and legacy information sharing will be crucial for building a robust understanding of critical areas such as cybersecurity, safeguarding both organisational resilience and innovation. Little sustained focus is being given to this area across the industry, which exacerbates the mid-career and higher skills gap that we are experiencing and runs the risk of creating more polarised workplaces. By fostering intergenerational collaboration, the tech industry can bridge skill gaps, retain vital talent, and address emerging risks.

Social Mobility

The tech sector is still in the early stages of comprehensively understanding, engaging, and supporting individuals from lower socio-economic backgrounds. While there have been some efforts to reassess educational prerequisites for role descriptions and expand access routes into tech, progress remains limited. A recent report by the Tech Talent Charter revealed that only 12% of 710 surveyed companies collected and shared

data on their employees' socio-economic status, with just 9% of tech employees identified as coming from lower socio-economic backgrounds. This contrasts starkly with 29% in finance and 23% in law[25]. Additionally, unpublished findings from the Social Mobility Foundation's Employer Index suggest that very few tech firms actively measure their employees' socio-economic backgrounds.



Barriers to Data Collection

Industry stakeholders report uncertainty around methods for socio-economic data collection, particularly for employees who finished school before the introduction of the pupil premium or those raised outside the UK. These challenges limit the identification of factors used to measure social mobility. This lack of reliable data is a critical barrier, as it prevents companies from fully understanding and addressing the challenges faced by employees and applicants from lower socio-economic backgrounds.

Socio-Economic Disparities in the Tech Workforce

Analysis by the Sutton Trust highlights that the socio-economic backgrounds of tech employees align with traditional elite professions, such as journalism. Approximately 67% of tech employees come from professional or managerial backgrounds, and 21% attended independent or fee-paying schools[61]. Moreover, research by the Government's Social Mobility Commission found that the tech sector has the third-largest pay gap by socio-economic background, with individuals from working-class backgrounds in

professional roles earning, on average, £4,736[15] less per year than their peers from more affluent backgrounds [62].

The Sutton Trust also identifies limited science and technology capital as a significant contributor to unequal access to the sector. It is not merely “who you know” but a deeper understanding of the tech landscape—its roles, pathways, and overall structure—that facilitates entry and progression. This lack of knowledge presents challenges not only at the point of entry but throughout technologists' career trajectories.

Intersectionality and Broader Impacts

Although socio-economic status is not a legally protected characteristic, its intersection with other factors such as disability, age, ethnicity, sexual orientation, and regional disparities has profound implications. The Tech Talent Charter found that companies implementing social mobility interventions also demonstrated higher diversity levels across other characteristics. For example, the proportion of ethnic minority tech employees at such companies was, on average, 6% higher than the overall UK tech workforce. This suggests that improving socio-economic diversity can positively impact broader diversity and inclusion efforts.[25]

Enhancing access and support for individuals from lower socio-economic backgrounds offers significant opportunities to drive progress in other areas of underrepresentation, such as disability and ethnicity—especially for women. Addressing these barriers and improving data-driven interventions will contribute to a more inclusive tech sector that fosters innovation, equity, and diversity.

Key Opportunities

Building on the identified barriers to diversity and inclusion, this section explores opportunities to drive meaningful change in the tech sector. The industry’s unique position at the forefront of innovation offers significant potential to address underrepresentation and foster equity through targeted interventions, inclusive talent pipelines, and data-driven strategies.

Research highlights the positive impact of diversity on innovation, organisational performance, and resilience. By embedding evidence-based practices and fostering multi-stakeholder collaboration between government and industry, the tech sector can create sustainable frameworks for inclusion, positioning itself as a leader in advancing diversity while meeting the demands of an evolving digital economy.

Addressing Structural Barriers

Creating a Transparent Career Framework

Across dimensions such as gender, socio-economic status, disability, and neurodivergence, the absence of transparent career frameworks significantly limits

many individuals' ability to envision themselves in roles within the tech industry and to navigate pathways for growth and progression throughout their careers.

To effectively address these intersectional barriers and improve the recruitment, retention, and development of diverse talent, the tech industry must implement comprehensive and transparent career frameworks. These frameworks should outline clear routes for progression, required competencies, and promotion criteria, enabling all employees to understand the steps necessary to advance their careers. As automation and emerging technologies create non-traditional pathways, these frameworks must also adapt to reflect evolving roles and skills.

Transparent career frameworks reduce ambiguity and minimise bias in promotion decisions, particularly benefiting those who may lack access to informal networks that traditionally aid career advancement. Research indicates that men are often promoted based on potential, while women are more frequently promoted based on proven experience[63]. Such disparities underscore the importance of clearly defined benchmarks to ensure fairness, consistency and pace in career progression.

The adoption of transparent frameworks not only bridges gaps at junior and mid-career levels but also creates a pipeline of diverse talent poised for leadership. These benchmarks enable organisations to identify and address unintended biases and ensure equitable access to opportunities. Implementing a nationally adopted skills framework would provide a unified structure from which organisations could align their internal frameworks, fostering consistency and inclusivity across the sector. Many organisations are working to create their own internal facing frameworks, organisations such as Sky, Vodafone and IBM all have sophisticated career pathway tools that not only value pathways to management but also as individual technology contributors. Although most are not available publicly, you can see an example of the type of provision from IBM's diverse empowered teams framework.

When we look to the near future, a report by Oliver Wyman, envisions a future working environment that will see a broad collapse in entry-level roles due to automation and a "juniorisation" of the remaining tiers[64], with first-line management roles being held by entry-level employees who take on some of the tasks that we see within management, how this translates across tech is to be determined and offers a significant opportunity to redress historical biases in the promotion frameworks within our organisations. However, for this to be viable, clarity must be established in the existing career and skills frameworks.

Further exploration of skills frameworks and their role in addressing these challenges is discussed in the *Skills* section of this report.

Improve Data Literacy

To build a more inclusive and supportive environment for underrepresented groups, robust data collection and reporting, particularly on underrepresented groups' experiences in leadership and more specific tech roles like cybersecurity, is required.

Organisations must enhance data collection efforts to better understand social mobility and LGBTQI+ representation in the tech sector, especially considering the intersectional challenges faced by individuals within this community.

Reporting and Recognising Best Practices

A number of organisations are excelling in their efforts to support and advance underrepresented groups, addressing not only tactical challenges but also tackling strategic and structural barriers to equity. These organisations employ systemic approaches, creating impactful interventions that act as pipelines of support and fostering meaningful, sustainable progress. By integrating efforts across the organisation, they avoid piecemeal or surface-level actions, instead driving significant change through a cohesive strategy.

However, distinguishing these leading organisations from others who are taking less comprehensive approaches remains challenging. Without a clear mechanism to identify and promote best practices, the risk persists that progress will remain slow and fragmented. Industry feedback has increasingly highlighted the need for a standardised framework for DEI in tech. Stakeholders have advocated for the development of a maturity model and benchmarking standards, including a “leaders’ grade” to generate and disseminate best practices. An open survey conducted by Tech Talent Charter found that 30% of respondents organically called for mandatory DEI reporting[65]. Establishing a kitemark or accreditation system to recognise organisations that are deeply addressing these challenges could be a powerful tool for systemic change.

Government support for such an initiative would enable a more joined-up approach, ensuring consistency, credibility, and alignment with broader diversity and inclusion objectives. By incorporating learnings from existing schemes, such as the Disability Confident Scheme, this kitemark system could be designed with robust validation and rigorous criteria. This would ensure it reflects genuine organisational maturity and commitment to inclusion.

A well-supported kitemark system would not only provide organisations with a structured pathway for growth but also signal to underrepresented groups that these employers are genuinely committed to fostering inclusion and equity. By showcasing and celebrating impactful practices, the tech industry can establish benchmarks for excellence, inspire others to adopt effective strategies without repetition, and address some of the sector-specific challenges.

A specific approach to mandating DEI and tackling intersectional barriers would be mandating tech companies to meet minimum standards through existing ESG frameworks. This would make DEI an essential part of responsible business practice. On a broader scale, embedding this visibility would provide policymakers with valuable insights into industry progress. Enabling more informed policy development to address specific areas of need within the tech sector. It could be linked to other levers, such as restricting government procurement eligibility for companies that fail to meet these benchmarks. More research on the format and delivery is needed to explore this in greater detail.

Implementing DEI Metrics into Organisational Performance

Survey respondents have consistently emphasised the importance of establishing DEI goals as key performance indicators (KPIs) for senior leaders. Tying performance reviews, compensation, and promotions to these metrics promotes greater accountability for inclusive practices. To ensure success, senior executives should be equipped with comprehensive training on inclusive leadership, explicitly outlining their roles and responsibilities in achieving DEI objectives.

Organisations should consider forming cross-functional inclusion committees representing all major business areas to coordinate DEI efforts and maintain alignment with broader organisational goals. This approach ensures that DEI initiatives are integrated into business operations and do not compete with wider organisational demands. It also ensures that a joint organisational accountability approach is established. To further institutionalise DEI practices, annual audits and progress reports should be published detailing specific goals, achievements, and areas for improvement. These reports could align with existing pay gap reporting frameworks, including gender and the incorporation, the new ethnicity, and disability, to provide a holistic view of organisational progress.

There have been calls to mandate the inclusion of individuals from underrepresented communities on senior leadership teams. Proposals range from ensuring boards reflect society's demographic composition to setting specific quotas, such as requiring at least two women on every board. Proponents suggest that failure to meet such requirements could result in restrictions, such as losing eligibility for government procurement opportunities (similarly to the restriction mentioned above), thereby incentivising organisations to prioritise diverse leadership representation.

This transparency is critical in building trust within the workforce and the broader community, demonstrating a genuine commitment to fostering inclusion. Ensuring that DEI is recognised as a fundamental aspect of people management rather than a discretionary or ‘nice to have’ initiative.

By analysing these metrics, organisations can identify departments or teams with high turnover rates, employee dissatisfaction, or other indicators of cultural toxicity. Tailored

interventions can then be implemented to address specific challenges, fostering a healthier and more inclusive work environment.

Establishing clear and measurable DEI goals not only enhances organisational accountability but also drives systemic change, ensuring that policies and strategies remain responsive to evolving workforce dynamics and societal expectations.

Creating and Strengthening Industry-Wide Partnerships with Visible Support Routes

Industry stakeholders report difficulty in identifying suitable providers and partners to support and execute plans and partnerships to reach underrepresented groups due to an unstructured marketplace. Helping to create greater visibility in tailored inclusivity work, diversity and skills initiatives would allow for wider collaboration.

Best practice case studies have been widely produced, but industry stakeholders remark that it is often challenging to contextualise these to their sector and specific circumstances. They need more specific support but are unsure how to acquire it. For SMEs, this can also be due to cost restrictions in accessing specific tools and forums.

Creating partnerships between private companies, public bodies, and non-profit organisations can help develop targeted initiatives to reach underrepresented groups and support the industry. This could include investing in targeted reskilling and upskilling initiatives in collaboration with educational institutions to empower diverse talent for tech careers, especially in regions with low representation or adapting inclusion tools to fit more nuanced circumstances.

Implementing Bias Auditing Mechanisms

As the adoption of AI-enabled productivity tools accelerates, it is imperative to ensure transparency regarding their specific functions, programming, and foundational data. Without deliberate efforts to design and implement these tools responsibly, there is a risk of perpetuating existing biases, limiting access, and stifling growth. Establishing robust and regular auditing processes to identify and correct biases within algorithms and tools is essential to ensure both transparency and explainability, thereby addressing intersectional barriers. For example, recruitment algorithms must be calibrated to account for non-linear career paths, avoiding the penalisation of career breaks and ensuring fair treatment for all candidates. Similar scrutiny is needed for internal workforce management tools and HR systems, ensuring that these tools provide clarity on how they inform decision-making processes and that they are appropriately scrutinised to prevent discrimination and ensure alignment with organisational goals.

Governments should consider implementing guardrails to safeguard employee rights and data protections as the use of these tools becomes more widespread. Ensuring

compliance with existing legal frameworks while addressing potential gaps in regulation is critical to fostering trust and equity in their deployment.

Given that these tools are employed across the digital workforce and developed by this same workforce, it again highlights the pressing need for inclusivity to be embedded deeply within the tech design processes. This ensures that tools are built to meet their intended purpose and serve the diverse needs of the industry, fostering innovation and equity in tandem.

Strengthen Wider Workforce Policies to Foster Inclusion and Participation

To create more inclusive environments and increase participation among marginalised groups, policymakers could consider implementing legislative frameworks that standardise progressive workplace policies. One key area of focus could be enhanced parental support. For example, introducing full maternity coverage from day one would provide financial security and continuity for women in the workforce, helping to prevent maternity leave from becoming a career barrier. Additionally, mandatory parental leave for parents could normalise shared caregiving responsibilities, reducing the disproportionate impact caregiving often has on women's careers and fostering a more balanced workforce.

Reproductive and family support policies could also play a vital role in enhancing inclusion. Standardised leave provisions for IVF treatments and adoption processes could acknowledge and support diverse family-building journeys, allowing employees to navigate these paths without fear of professional setbacks. Support packages tailored to individuals from socio-economically disadvantaged backgrounds, such as scholarships, mentoring programs, and accessible training opportunities, could address systemic inequities and open new pathways into careers in tech and other industries.

Beyond the scope of flexible work policies, systemic improvements in social infrastructure could significantly enhance inclusion and participation. Better access to affordable childcare, particularly for families with children with special educational needs and disabilities (SEND), and more reliable social care infrastructure would provide critical support for those balancing work and caregiving responsibilities. These changes would enable more individuals from underrepresented groups to participate fully in the workforce and advance in their careers, particularly in demanding sectors like tech.

Policymakers might also consider making menopause awareness and training a standard requirement for all employees. This could normalise conversations about menopause, reduce stigma, and ensure that affected colleagues receive the understanding and support needed to thrive in their roles. Similarly, addressing domestic violence through comprehensive workplace policies could be transformative. Employers with over 100 employees could be encouraged to implement policies that include financial support for individuals escaping financial control, paid leave for addressing legal, housing, or medical needs, and access to counselling services.

Training managers and employees to recognise and respond to signs of domestic violence could further strengthen workplace support.

Addressing Workplace Practices

Building a Positive Workplace Culture in Tech

Progress in increasing the representation of underrepresented groups in the tech industry has been slow, and high levels of attrition persist, particularly among those facing compound challenges. Many individuals encounter systemic barriers within organisational structures, creating restrictive, prohibitive, and often damaging work environments. This highlights the urgent need for comprehensive strategies to support inclusion and retention across all demographics.

While mentoring and coaching programs can provide critical support networks, enhance skills, and boost confidence, organisations must move beyond solely fostering individual resilience. Addressing systemic cultural issues is key to reducing attrition rates. This requires robust governance structures and leadership accountability. CEOs, boards, and senior leaders must take ownership of employee well-being and actively drive the creation of inclusive workplace cultures where all employees can thrive.

A strong workplace culture is built on clearly understanding an organisation's vision, mission, and values, underpinned by a well-defined code of conduct. Targeted coaching and training for management can cultivate self-awareness and reinforce accountability at all levels. Recruitment and promotion processes should prioritise interpersonal skills alongside technical expertise, ensuring alignment with organisational values. Evidence-based approaches, such as analysing turnover rates, can identify departments with toxic cultures and guide targeted interventions.

Survey insights reveal ongoing issues like "DEI fatigue", performative actions, and inconsistent leadership accountability. Addressing these requires embedding DEI initiatives into the organisational ethos, moving away from siloed or temporary efforts to sustained, strategic interventions. Organisations must adopt a forward-thinking approach, integrating inclusivity into daily operations and ensuring it is reflected in leadership behaviours.

The Government's Employment Rights Bill will provide a new baseline of security for workers including through day one protection from unfair dismissal and a right to flexible working by default. This is part of the efforts of the Government to support employee rights that help safeguard when culture does not meet the required expectations. A proactive approach is planned to monitor the Bill's impact and assess whether additional measures are required to enhance workplace culture further. More industry effort is now needed to ensure that workplace culture is inclusive for all.

Engaging Middle Management and People Managers

Middle managers in the tech industry are navigating an evolving landscape where the demands for efficiency, innovation, and inclusivity intersect. Recent trends, including a flattening of organisational hierarchies, have intensified the challenges faced by this group. In the U.S., middle management layoffs have nearly doubled their share of total workforce reductions compared to the previous five years, increasing the workload and responsibilities of remaining managers[66]. This reduction in layers often leaves middle managers balancing operational demands with the need to implement inclusive practices, which can be deprioritised under pressure. Moreover, many middle managers lack adequate training to recognise and address systemic biases, further complicating their ability to foster equitable and inclusive environments.

Despite these challenges, middle managers are uniquely positioned to drive meaningful change. Their proximity to frontline employees enables them to act as advocates for diverse perspectives and to cultivate an inclusive culture through team engagement and equitable resource distribution. Empowering middle managers with targeted training on inclusive leadership and equipping them with tools to address disparities in pay, representation, and advancement opportunities can yield significant organisational benefits. Additionally, the flattening of hierarchies presents an opportunity to foster more collaborative and transparent decision-making processes, aligning inclusivity with business objectives.

Critically, supporting the well-being of middle managers is paramount. More than three-quarters of UK workers report experiencing burnout, with 35% indicating high or extreme levels [67]. Without appropriate support networks and manageable workloads, middle managers may be unable to champion inclusivity effectively. By addressing these systemic challenges and empowering middle managers as pivotal change agents, organisations can embed inclusive practices across all levels, enhancing productivity, innovation, and employee well-being.

Adopting Inclusive Language

Industry leaders and policymakers alike should adopt inclusive communication practices, signalling that respect for diversity is not only a workplace standard but a societal one. Making such vocabulary mainstream—from internal policies to public discourse by politicians and community leaders—can significantly normalise inclusive language, encouraging a broader cultural shift toward equity.

Implementing wide-reaching education on inclusive language and DE&I policies can foster a psychologically safe environment where employees feel empowered to raise concerns, discuss race and identity confidently, and ensure their language choices align with evolving norms and preferences. Inclusive language practices also play a pivotal role in improving data disclosure. By normalising inclusive terminology and framing

questions respectfully around race, gender identity, sexual orientation, and socio-economic background, organisations can create an environment where individuals feel safe and supported to share sensitive information.

This increased trust and openness enable organisations to collect more accurate and representative data, which is essential for identifying disparities, tracking progress, and implementing effective interventions. Inclusive language not only drives cultural change but also strengthens the foundation for data-driven DE&I strategies, allowing organisations to address inequalities and promote equity with greater precision and accountability.

Addressing Unconscious Bias

Mitigating unconscious bias (unconscious bias refers to implicit attitudes or stereotypes that influence decisions and actions, often unintentionally, leading to inequitable opportunities and outcomes) in the tech sector requires systemic strategies to ensure equitable opportunities for all employees. Organisations should adopt bias-aware performance reviews and structured feedback processes with standardised criteria to minimise subjective judgment. Inclusive training programs for leadership and staff can provide actionable strategies to identify and address bias in decision-making, fostering equitable team dynamics and performance goals.

Inclusive recruitment practices, such as anonymised evaluations, can remove bias-triggering identifiers and focus hiring decisions on candidates' skills and qualifications. Leveraging AI-powered analytics can further identify inequities in promotions, pay, and project assignments, but these tools must be regularly audited for bias to align with equity goals.

Implementing work allocation tracking mechanisms can monitor the distribution of "stretch" assignments and high-visibility projects, ensuring they are equitably shared to support growth and career advancement, particularly for underrepresented groups. A culture of transparency and accountability is essential. Publishing metrics on work allocation and pay equity builds trust and highlights areas for improvement, enabling organisations to refine strategies.

Organisational leaders should prioritise bias-mitigating processes to ensure compliance with existing equalities legislation, recognising that the persistent application of effective mitigation strategies is integral to strong ESG practices. Policymakers might consider strengthening these requirements to integrate them more closely into ESG frameworks, promoting greater accountability and inclusivity.

Ensuring Zero Tolerance for Discrimination

Establishing and consistently enforcing zero-tolerance policies for discrimination is essential for fostering an inclusive environment. Companies must ensure that all

employees, regardless of background, have access to clear and effective mechanisms for reporting discrimination and that these reports are treated with seriousness and accountability. At an industry level, collective action, such as sharing best practices for managing discrimination complaints and promoting inclusivity training across all levels, can help create a more welcoming tech industry for ethnic minorities.

In addition, guidance and best practice sharing on implementing authentic DEI initiatives that foster psychological safety are essential to improving disclosure rates and building inclusive organisational cultures. This will be particularly important to maximise reporting in Ethnicity Pay gap reports.

Reinforcing Flexible Working Arrangements

To encourage underrepresented groups into the tech sector, organisations should not only offer flexible working options but also work actively to dispel the negative unconscious bias associated with them. Flexibility should be viewed as an opportunity rather than an organisational hurdle, especially in sectors that require working unsociable hours. This involves creating an environment where employees can take advantage of flexibility without worrying that it will be seen as a lack of commitment or a hindrance to their career advancement.

Flexible work arrangements are particularly beneficial for groups such as caregivers, older employees, disabled workers, and neurodivergent individuals, as they enable these employees to manage their work environments and schedules to suit their specific needs.

Expanding the availability of part-time and flexible roles at all levels, including leadership and technical positions, offers an opportunity to attract and retain diverse talent. Organisations should clearly promote flexibility as a viable option during recruitment and career progression, particularly by including transparent information about location, working hours, and flexibility expectations in job postings. This transparency ensures candidates can assess whether a role aligns with their needs, improving accessibility and enabling organisations to attract the right talent.

Policymakers should consider extending flexible working provisions to the recruitment process, enabling individuals to secure roles that accommodate their circumstances from the outset. Additionally, introducing a statutory right to appeal flexible working decisions would enhance transparency and fairness, fostering stronger alignment between employers and prospective employees. These measures would support the development of equitable workplace practices, ultimately promoting inclusivity and enhancing the participation of underrepresented groups in the tech sector.

Addressing Social Mobility Barriers

While social mobility is not a legally protected characteristic, it represents a critical area of focus with the potential to address compound barriers faced by individuals across protected characteristics. By prioritising social mobility, organisations and policymakers can tackle systemic inequities, foster greater inclusion, and create pathways that benefit underrepresented groups, particularly those experiencing intersectional challenges. This approach can unlock opportunities for broader diversity, equity, and inclusion initiatives, amplifying their impact across the workforce.

Implementing Mandatory Data Collection

The Social Mobility Foundation advocates for organisations with over 250 employees to collect data on their workforce's socio-economic background. Without comprehensive data, the scale of the workplace challenge cannot be fully understood. In the interim, the Government could commission research akin to the financial services sector's deep dive to address the current data gaps in tech.

This mandatory requirement would help clarify the challenges employees face, assess the scale of social mobility issues in the industry, and enable targeted interventions.

Supporting the Social Mobility Tech Future Taskforce.

In addition, work to broaden and support the Social Mobility Tech Taskforce to prioritise enhancing data literacy within organisations and increasing the adoption of effective workplace policies to support employees from lower socio-economic backgrounds. The Social Mobility Foundation has proposed the creation of a membership body, similar to "Progress Together" in the financial services sector, that would focus on employee progression, retention, and socio-economic diversity.

Conclusion

The UK tech industry holds tremendous potential as a driver of innovation and economic growth. However, achieving diversity, equity, and inclusion across the sector requires considered and sustained efforts to address systemic barriers. Challenges such as inequitable representation, unconscious bias, and limited access to flexible working arrangements and promotion continue to disproportionately affect underrepresented groups, creating persistent inequalities in recruitment, retention, and career progression.

By implementing transparent career frameworks, embedding DEI metrics into organisational performance and expanding flexible working options, the industry can build a more inclusive and supportive environment. Strengthening accountability through robust governance structures and exploring opportunities such as a kitemark system or mandatory reporting can further accelerate progress. In addition, addressing

intersectional barriers—particularly those tied to socio-economic mobility—offers a pathway to amplify DEI efforts and create broader opportunities for underrepresented groups.

Policymakers also play a crucial role in fostering systemic change by introducing legislative measures that enhance workplace equity, including provisions for flexible working, social mobility initiatives, and protections for marginalised communities. Industry-wide collaboration, supported by visible access routes and data-driven strategies, is essential to achieving a more equitable, innovative, and resilient tech sector.

While progress has been slow, a more unified and strategic approach can dismantle entrenched barriers, ensuring that the UK tech industry reflects the diversity of the society it serves and thrives in an increasingly competitive global landscape. By fostering an environment where diverse talent can thrive, the sector can unlock its full potential to drive technological advancement and social progress.

Entrepreneurship

Executive Summary

The United Kingdom has established itself as a global leader in the startup ecosystem, valued at over $1.1 trillion and ranking as the third most valuable globally. Home to more than 150 unicorns and 25,000+ funded startups, the UK benefits from world-class education hubs, a robust job market, and a favourable regulatory environment[68]. This vibrant ecosystem presents significant opportunities for entrepreneurship.

Entrepreneurship in the UK sector not only offers a prosperous outlook but provides a vital alternative to traditional employment models, enabling individuals from marginalised groups to overcome systemic workplace barriers and unlock the potential of innovation.

However, significant challenges temper these opportunities. Entrenched biases in investment decisions, including “pattern-matching” processes and stereotypical expectations, disproportionately disadvantage minority entrepreneurs. For instance, 92% of angel investments in 2022 were allocated to all-white teams, reflecting a stark inequity[69]. Similarly, women-led startups secured just 2% of annual venture capital (VC) funding[55], a figure that shows no improvement in the first half of 2024, according to Debbie Wosskow, Co-Chair of the Invest in Women Taskforce[70]

The Organisation for Economic Cooperation and Development highlights the immense potential of inclusive entrepreneurship, global efforts to promote diversity often fall short, overlooking its transformative impact[71]. Access to essential resources, including funding, networks, and mentorship, remains a significant obstacle for diverse founders. These barriers are often exacerbated by a lack of representation within the investment sector itself. Despite some improvements—such as a 100% growth in ethnic representation among UK venture capitalists since 2019[72]— the low starting point means even with this growth, substantial gaps persist in gender and ethnic diversity within investor networks, limiting the accessibility and inclusivity of capital. This disparity is further intensified by the elitist nature of venture capital, where 71% of partners in VC funds are privately educated [72], highlighting systemic barriers that disproportionately exclude underrepresented groups.

Challenges extend beyond gender and ethnicity to include intersectional and regional disparities for founders. Black, neurodivergent, and disabled founders face unique obstacles, such as limited access to tailored resources and industry knowledge. This is exacerbated by the lack of specific data about founders from these communities being available. Regional inequalities exacerbate these barriers, with investment disproportionately concentrated in metropolitan hubs, leaving ventures in other areas underserved.

Simply put, founders from underrepresented groups currently have too little capital and access to viable growth environments. Progress in this regard is slow, which impacts the overall economic opportunities for growth. The majority of the focus on inclusion in the space has focused on female founders, with little specific action for other demographics.

Despite these systemic barriers, green shoots of progress are emerging. The Invest in Women Taskforce recently raised over £250 million, to be invested through female-led investing teams to support female entrepreneurs across the UK. Backed by major institutions such as Barclays, M&G, and the British Business Bank, this funding aims to address historical investment gaps and support women-led businesses through initiatives like the “Women Backing Women” fund. Programmes are realising that as well as funding, tailored (rather than just targeted) wider business support are essential for these entrepreneurs to thrive.

Further, gender-based initiatives such as the *Investing in Women Code,* a collective of funders who pledge to improve and report on their gender-based funding approach, and government-backed grants like the *Help to Grow* fund are beginning to expand access to capital for female founders. Extending the effort garnered by female-founded start-ups to a wider field of diversity, especially ethnic minorities, disabled, neurodivergent, and founders from lower socio-economic backgrounds, will ensure that the UK economy does not miss innovation and growth.

Policymakers also have a vital role in driving DEI via targeted interventions. This includes funds, requiring reporting to enhance accountability and inclusivity with the VC industry, adoption of diversity-focused codes such as the Investing in Women Code, and measures to ensure diverse representation on boards, among limited partners (LPs), and senior leadership.

These efforts have the potential to create a foundation for broader opportunities and innovation, driving progress for underrepresented founders and thus the overall UK economy.

Landscape and Barriers

Diverse entrepreneurship has immense potential to drive innovation. Yet, systemic barriers persist, disproportionately impacting underrepresented groups across access to funding, scaling support and wider actions to support a broader pool of entrepreneurs.

Lack of Diversity in the Venture Capital (VC) and Funding Sector

Representation Gaps and Homogeneity

As founders strive to grow and scale their ventures, access to funding often becomes the pivotal factor determining their pace of progress. Venture capitalists (VCs) and other

funders play a crucial role in enabling this growth, yet systemic biases and structural barriers frequently hinder equitable access to resources. Underrepresented founders face significant challenges in securing funding, often due to entrenched practices like “pattern-matching,” where funders favour characteristics resembling previous successful ventures. These biases are amplified in environments dominated by homogeneous groups setting risk criteria, further limiting access to capital for diverse entrepreneurs.

The lack of diversity among venture capital professionals compounds the issue. Female representation in UK VC firms has remained stagnant at 30% since 2019, with only 21% of investment committee members identifying as women. Socio-economic homogeneity further exacerbates these disparities: 70% hail from upper socio-economic backgrounds[72]. This uniformity reinforces systemic barriers, narrowing the lens through which risk and potential are assessed and stifling opportunities for diverse founders.

Despite promising news that ethnic minorities have seen a 100% increase in VC representation since 2019. The low starting point means that there is still low representation, especially of women from ethnic minorities in investment roles, which remains minimal[72]. The sector is aware of this issue. Many funds are taking active steps to draw representation challenges into focus; however, progress is slow and raises questions about whether the narrative and sentiment around action are aligned. More disruptive behaviour in recruiting, growing and promoting all underrepresented groups is needed in the sector.

Persistent pay gaps undermine efforts to foster an inclusive environment, making it challenging for diverse populations to feel valued. In recent reporting, the British Business Bank disclosed a 15% ethnicity pay gap and a 25% bonus pay gap. These disparities are attributed to a lack of diversity in senior roles[74]. Addressing these issues demands a focus on increasing senior representation, ensuring equitable compensation, and fostering inclusive practices, particularly in influential organisations.

Investor surveys reveal a significant disconnect in perceptions of inclusivity within the tech ecosystem. While 70% of male investors believe their fund contributes to a more inclusive ecosystem, only 56% of ethnic minorities share this view[72]. This gap highlights the need for more tangible and effective diversity initiatives in the investment sector.

A survey of over 400 investment professionals across Europe by the diversity working group Reboot revealed that over 21% of UK fund managers acknowledged that a lack of ethnic diversity in their workforce has hindered their ability to attract new clients[67]. Furthermore, 38% of institutional investors indicated they would decline to work with a fund manager due to insufficient diversity, directly impacting investment growth[75]. These findings highlight a pressing business case for funds to prioritise inclusivity, ensuring not only ethical alignment but also the maximisation of opportunities and long-term stability.

Research underscores that diverse teams outperform homogeneous ones. For instance, VC firms that increased female partner hires by 10% saw annual fund returns rise by 1.5% and experienced 9.7% more profitable exits [76]. Moreover, data from Beauhurst (2018-2022) reveals a positive correlation between gender-diverse founding teams and gender-diverse investors, reinforcing the business case for diversity[77].

However, a persistent negative narrative about the lack of representation continues to deter individuals from diverse backgrounds from seeking capital. This highlights the urgent need to reframe the conversation around diversity—not just as a social good but as a strategic business advantage. Clearly articulating how inclusivity drives innovation and financial performance can serve as a compelling motivator for reluctant stakeholders to adopt more inclusive practices. Such reframing can play a pivotal role in reshaping the investment landscape and fostering greater participation from underrepresented groups.

Data and Reporting

Inconsistent Data Collection

Currently, there is a lack of a standardised approach to data collection of diversity data from founders. This has led to a mixed effort in understanding movement in space. This issue has become more of a focus in light of the change mandated in California. Effective March 2025, Senate Bill 54 requires Venture Capital firms to annually report diversity metrics for the founders they support, marking a significant step towards increased DEI. The VC Diversity Reporting Law mandates that covered entities report, in aggregate, the gender identity, race, ethnicity, and disability status of each founding team member in businesses they've invested in. The requirement will fall on funders who have any presence in California. This reporting will have a ripple impact on UK investment firms.

In the UK, Diversity VC is taking proactive steps to address this issue. Its efforts to standardise data collection and establish the Diversity Data Alliance reflect a commitment to aligning reporting processes with the nation's unique diversity needs. This initiative holds immense promise for ensuring consistent and actionable data collection, enabling improved transparency, and enabling better decision-making.

The Investing in Women Code (IWC) further exemplifies progress in this space. By requiring signatories to adopt transparency measures that support female entrepreneurs, the IWC venture capital signatories have consistently outperformed equity market averages in supporting female founders. Aligning IWC data with the Diversity Data Alliance could result in the most comprehensive dataset on diversity in funders and startups to date. Such a unified approach has the potential to uncover previously hidden connections between funders and founders and identify critical trends.

However, as these efforts evolve, it is crucial to ensure that the data collection framework includes opportunities to capture information on all protected characteristics and socio-economic backgrounds. This expanded scope will not only enhance inclusivity but also deepen insights into broader structural barriers. These advancements could significantly inform and support other initiatives, such as the Invest in Women Taskforce, driving transformative changes across the entrepreneurial and funding ecosystems.

Funders

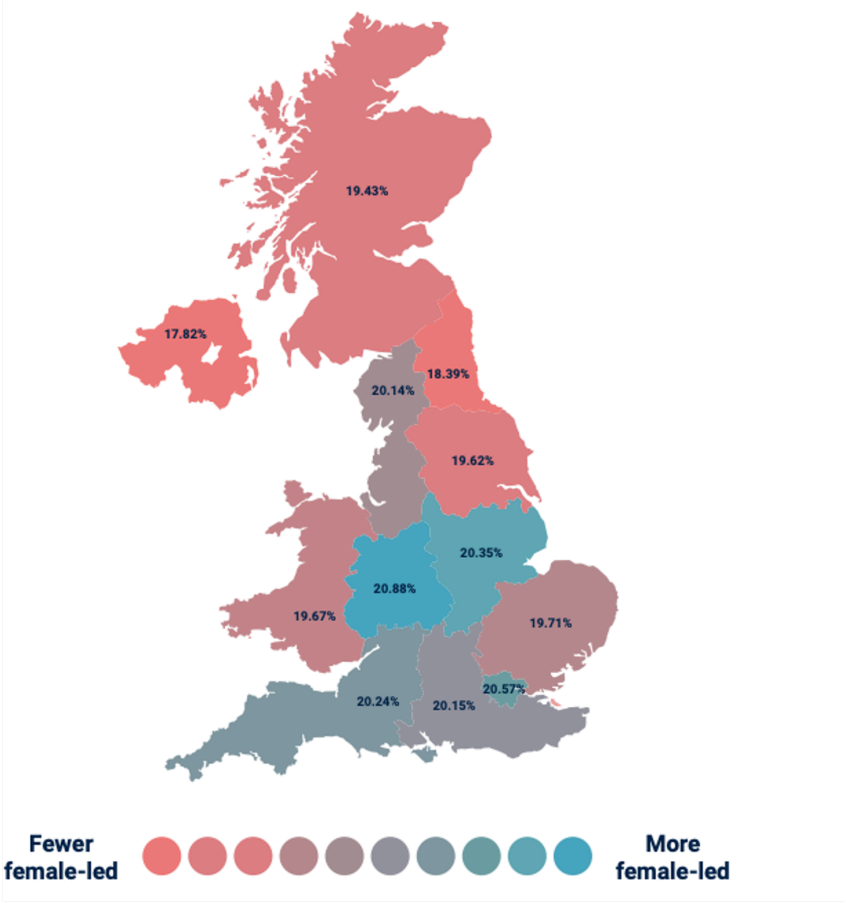
Better reporting is needed not only on founders but also on the funding space. The Women-led High Growth Enterprise Taskforce highlights the need for better data on directors and people of significant control (PSCs) in UK high-growth enterprises, focusing on gender. It advocates for collecting gender data on directors and PSCs through Companies House or similar bodies, which could be cross-referenced with information about enterprise growth stages, including companies accessing the Enterprise Investment Scheme (EIS) and Seed Enterprise Investment Scheme (SEIS). This data would support efforts to address gender disparity in equity shareholding and leadership roles, ensuring a fairer representation of women in top positions such as CEO, CFO, or CTO[78].

Regional Disparities

Across the UK, regional disparities in productivity, employment, venture capital investment, and business creation rates are significant. Regions like Greater London, Cambridge, Oxford, Bristol, and Manchester, which benefit from well-developed local resources and universities, consistently outperform other areas. Regional input is one of the many intersections that connect socio-economic and ethnic barriers. However, targeting geographical areas does not necessarily capture diverse groups within those areas, which is often a misunderstanding in regional-focused interventions.

London remains the UK's primary tech hub, but regional start-up activity is slowly accelerating. The UK saw a record 22% increase in new tech company registrations last year, totalling 51,017 entries[79]. Despite this momentum, the representation of female-led businesses remains slow. In 2022/23, active female-led companies now make up 20.1% of all UK companies. This share remains the same as last year but has grown from 16.8% in 2021/22. The highest share of female-led companies was found in England (20.3%) and the lowest in Northern Ireland (17.8%)[80].

Percentage of active female-led companies by region



Data The Gender Index 2024

The share of female-led, fast-growth companies varies significantly across regions. In 2023, in England, 12.3% of high-growth companies were female-led, similar to Scotland (12.9%) but lower than in Northern Ireland (13.0%) and Wales (15.9%). Wales has notably higher engagement from the Development Bank of Wales, likely contributing to the region's higher share of female-led Enterprise Investment Scheme (EIS)-qualifying companies attracting Angel Capital (20.1%, compared to a UK average of 16.3%)[80].

Funding dynamics further emphasise regional inequities. In 2023, none of the UK's Home Nations saw increased funding for female-led businesses, with England experiencing the largest decrease (-1.6%). London dominates funding allocations, capturing 23.3% of investments, followed by the South East (15.8%) and North West (10.1%). Male-led companies continued to attract the majority of funding, with a 62.9% share in 2023[80].

Investment in ethnic minority-led companies also shows regional variation. In 2023, Northern Ireland had the lowest proportion of ethnic minority-led businesses (15.2%), yet leads in ethnic minority female leadership, alongside the South West, each with

23.9%. Generationally, Northern Ireland's company leadership is dominated by Gen X (45.6%), followed by Millennials (28.9%)[80].

This inconsistent access to funding has left many companies ready to scale but lacking the capital to do so. As a result, they take longer to establish themselves and often exceed the upper company age limits required to qualify for investment through the Enterprise Investment Scheme (EIS) and Venture Capital Trusts (VCTs) schemes[80], limiting their opportunities for sustained growth.

Geographical Distance from Investors

Distance from investors is a considerable barrier for businesses outside major hubs, as 82% of equity investments are made within two hours of the investor's location and 61% within one hour[81]. This geographical bias limits opportunities for many founders to engage with investors early on. Efforts are being made to address this through a number of government-backed incentives. One such scheme is the British Business Investments' regional Angel program, which holds promise, but it is still too early to measure its impact. The British Business Bank's Angel co-fund offers potential for a regional boost, though impact data is currently limited.

When examining the supply chain, it's clear that Angel investors collaborate closely with various components of the venture supply chain. They often co-invest alongside other funding sources. In fact, over 50% of Angel-syndicated deals may involve additional forms of financing, including other Angel syndicates, Venture Capital funds (VCT), British Business Bank (BBB) regional funds, crowdfunding, Innovate UK grants, regional grants, and relevant loan funds, according to the Business Angels report [82]. By focusing on this regional supply chain, we are likely to be able to isolate and improve opportunities for more inclusive practice, both directly for start-ups and also for key relationships between funders. In addition, we can also look to support more angel investors from diverse backgrounds if we can create awareness of routes and tools to investment.

Universities also play a significant role, particularly in regions where the Angel and investment community is less developed, outside the London-Oxford-Cambridge Golden Triangle. Universities should be encouraged to serve as regional knowledge hubs, facilitating access and engagement for investors in key scientific and research projects. They can provide expert insights and knowledge to investors and other universities, support due diligence to effectively evaluate investment opportunities, and help develop expert Angel communities through alumni connections and broader industry links.

Lack of Diversity in University Spinouts

A spinout is a start-up created within another organisation, usually an academic or research institution. The current approach within the university system for supporting spinouts does not enforce inclusivity. Spinouts remain predominantly male-led, with nearly 75% of high-growth companies featuring all-male leadership teams—a trend reflected in university spinouts as well. Despite progress in female representation, with female-only founding teams increasing from 7.37% in 2017 to 13.3% in 2022, there is substantial scope to advance diversity, particularly at the leadership level[83]. This lack of representation restricts the diversity of perspectives in spinouts, ultimately limiting innovation and reducing minority groups from the most dynamic deep tech spaces.

Universities must adopt more inclusive practices to broaden participation in university spinouts and embed diversity across research communities. This means not only providing targeted entrepreneurship and commercialisation training for a broader range of students but also expanding access to critical resources, such as mentorship, business-building programs, and professional services. The UK Government's 2023 Independent Review of University Spin-out Companies underscores the need for more focused support to improve spinout outcomes, emphasising that universities should prioritise diversification within research communities and leadership[20].

Embedding inclusivity at each stage of the spinout process—from idea generation through to commercialisation—will help ensure equitable distribution of opportunities across a wider array of backgrounds. Additionally, enabling less prominent universities to access proven strategies for fostering innovation would support a more inclusive and balanced ecosystem for entrepreneurial development across the UK.

Demographic Focus

Ethnicity

Funding Inequities

The findings from the British Business Bank's 2024 *Investing in Ethnic Minority Entrepreneurs* reveal significant inequities in investment for ethnic minority founders. Ethnic minority teams secure more deals when evaluated by mixed-ethnicity investment committees, achieving success rates similar to other teams in contrast to committees with just white evaluators. Given this, it is disappointing to see that currently, ethnic minority teams receive only 8% of total funding, with 92% of 2022 angel investments going to all-white teams. The underrepresentation extends to additional follow-on funding, where minority teams receive just 4% compared to 14% for first-time deals. Additionally, only 12.2% of investment teams are ethnically diverse, with diversity diminishing at senior levels, highlighting the need for systemic change[69].

When considering the stages of finance needed in a start-up's life, we see that at no stage in the process do ethnic minority founders experience equal access to funding. This disparity is particularly pronounced at the critical early pre-seed stage, where systemic, structural, and cultural factors intersect to create significant barriers.

Angel investment serves as a foundational link in the equity supply chain, providing not only crucial early-stage capital but also invaluable business experience, strategic advice, market contacts, and introductions. These resources play a pivotal role in nurturing early-stage businesses, acting as a bridge to subsequent funding rounds, customer acquisition, and talent recruitment. Enhancing the availability of angel investment for ethnic minority founders is therefore essential, as it directly influences their ability to scale and attract venture capital or Series A funding.

Access to comprehensive data on angel investments in ethnic minority founders is essential for addressing inequities in early-stage funding. This information would provide valuable insights into existing investment patterns, highlighting gaps and identifying opportunities for targeted interventions to mitigate market failures.

Recent findings from twelve angel groups, signatories of the *Investing in Women Code*, have shared a detailed breakdown of their funding activities, offering a foundation for further analysis and strategies to foster inclusivity in angel investment. [84]

	Asian or Asian British	**British Black, African, Caribbean or Black British**	**Mixed or Multiple Ethnic groups**	**White**
Female	2%	1%	1.5%	23%
Male	4%	3%	1.5%	63%
Overall	6%	4%	3%	87%

Source: British Business Bank

There are, however, some nascent signs of progress, with 10% of first-time equity deals being made going to all ethnic minority teams in 2022 (19% of investment value), an improvement on previous years, as reported by *Finding What Works: Pathways to Improve Diversity in Venture Capital Investment*[85].

According to the report: *Barriers to Capital Flow for Black Female Entrepreneurs*[86], Black women in the UK face significant challenges when accessing financial capital. Key challenges include limited access to influential business networks, institutional biases in funding processes, and a lack of representation of Black women in senior positions within venture capital and financial institutions. Black female entrepreneurs are often forced to rely on personal savings or informal funding due to lower approval rates from traditional lenders. Additionally, negative stereotypes can diminish investor confidence in Black female-led businesses. These complexities have resulted in only 0.02% of funding going to Black female-led businesses in the decade to 2019[87], and with very little data or improvement, we are still seeing high barriers in place for Black female entrepreneurs.

Lack of a Distinct Approach for Differing Communities

A persistent challenge in supporting ethnic minority entrepreneurs is the tendency to group diverse communities—such as Black, Asian, Mixed Heritage, and other distinct ethnic groups—under a single umbrella. This approach assumes uniformity in their needs, which limits the effectiveness of tailored support and fails to address the unique challenges faced by each group. It also hampers the ability to effectively disseminate valuable information and reach those who may face more complex, intersectional challenges within these communities.

Many initiatives operate under the assumption that all groups can be accessed via similar methods, leading to missed opportunities for engagement. A more integrated approach, connecting private and public efforts at both national and local government levels, could unlock untapped growth and entrepreneurial potential. This requires moving beyond generalised hubs to develop deeper, data-driven insights from local governments, with transparent reporting to the Department for Science, Innovation, and Technology (DSIT).

Such an approach would allow for more targeted outreach, the design of nuanced programmes, and the nurturing of entrepreneurial skills across varied communities, paving the way for more inclusive economic development.

Similar to women entrepreneurs, founders from ethnic backgrounds have cultivated numerous networks, such as Asians in Tech, to connect with peers who share their experiences and challenges. These organic support systems often play a critical role in fostering collaboration and providing guidance, which can influence the industries these communities gravitate towards. The presence of such networks within specific sectors may encourage founders to pursue opportunities where support and shared experiences are readily available.

Sector type significantly shapes the entrepreneurial journeys of underrepresented founders, influencing both the challenges they face and the opportunities they encounter. Conducting a more detailed analysis of how different sectors impact the

experiences of minority groups would be invaluable for developing more targeted and effective programmes and reporting mechanisms.

However, persistent narratives around limited funding access for ethnic minority founders continue to erode confidence in seeking financial support. Addressing these perceptions requires not only reshaping the narrative but also implementing targeted initiatives to enhance funding accessibility and transparency, ensuring that underrepresented founders feel supported and empowered in their entrepreneurial pursuits.

Underrepresentation and Data Scarcity

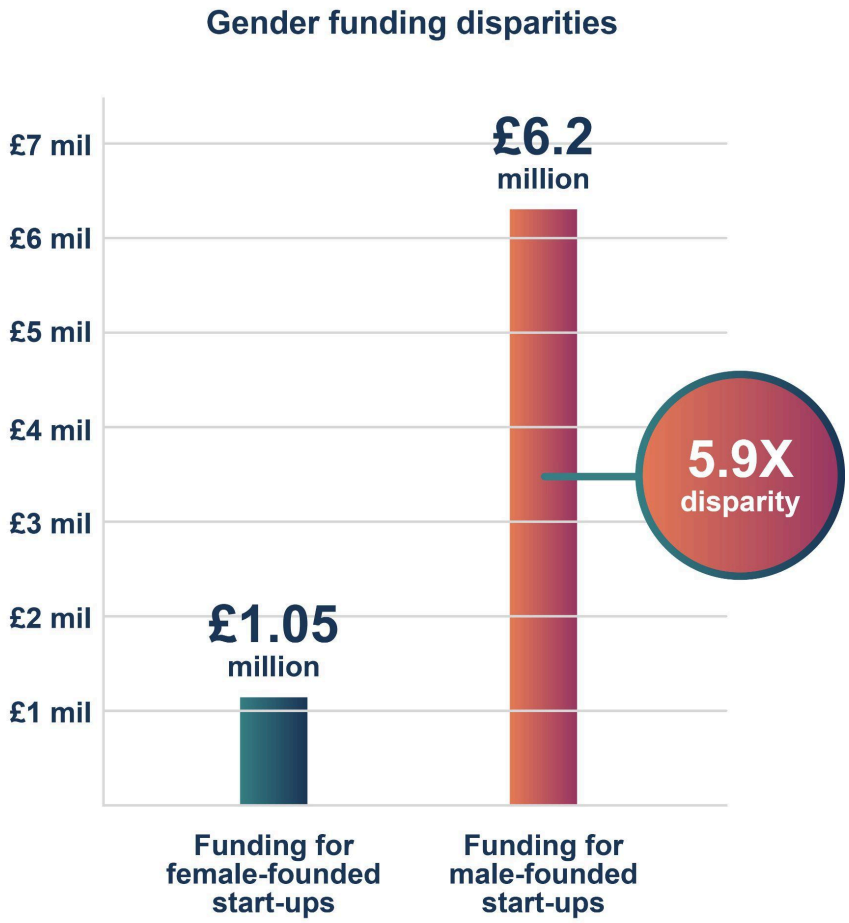
Although ethnic minorities represent approximately 18% of the UK population, they lead only 5–8% of small businesses. Research suggests Ethnic Minorities in the UK are more entrepreneurial than the white population but are less likely to run established firms that generate stable income, according to *Investing in Ethnic Minority Entrepreneurs*[69].

While significant attention has been given to the underrepresentation of women in venture capital and the funding disparities faced by female founders, comprehensive data on ethnic minority entrepreneurs and the various maturity stages remains limited. This gap is particularly pronounced at the intersection of gender, disability, socio-economic status, and ethnicity. Furthermore, the lack of disaggregated data on specific ethnic identities hampers efforts to design targeted interventions and measure progress effectively. This persistent challenge underscores the need for a more nuanced approach to addressing underrepresentation and inequity in entrepreneurship.

Gender

Funding Inequities

Significant funding inequities exist for female founders. Female-founded businesses receive an average of £1.05 million in funding, compared to £6.2 million for male-owned startups, marking a 5.9x disparity[88].



Data from Startups 100 Index

This is also reflected in the most emerging tech spaces, with the average deal capital raised by female-founded AI companies (£1.3 million) being 6x lower than the average capital raised per deal by an all-male founder team in AI (£8.6 million). Adding at least one male founder pushes the average amount of funding received up to £4.12m in 2024, suggesting that a male partner is still required for female founders to secure early-stage investment [88]. This has been a persistent pattern facing female founding teams. However, despite the disparity, funding has been on an upward trajectory, with a 64.4% increase over the last two years[88]. While this growth is encouraging, it must be contextualised against an extremely low starting point, emphasising the need for a nuanced analysis to assess the impact and sustainability of such progress accurately.

When considering scaling, The Times surveyed 7,800 businesses employing fewer than 250 people. Their survey found that in 2023, just 15% were led by women. The figure has been decreasing year-on-year from 19% in 2021. Estimates indicate that the 2024 number will follow this trajectory[89].

More concerning, the Alan Turing Institute reports that female-founded AI startups account for only 2.1% of such VC deals. All female-led AI startups raised only 0.8%

(£136.3m) of the total capital invested across all AI sectors in the UK, accounting for just 4.1% of the total number of companies funded. In contrast, all-male founding teams raised 76.7% of total capital invested (£13.5bn). The gender gap is starkest in AI Business/Productivity Software. Here, all female-led startups represented 3.8% of the total number of companies and raised only 0.5% of the total capital invested (£34.4m) in AI software[90]. Without focusing on this area, we risk further entrenching homogenous behaviour in critical future innovations.

Angel investors play a pivotal role in supporting female-led businesses; however, women remain significantly underrepresented among angel investors. Of the 36,800 angels in the UK, only 14% (5,064) are women, and fewer than 0.5% (157) have achieved a portfolio of 10 or more investments.

Female angel investors are active across all UK regions, yet over two-thirds of their investments are concentrated in businesses located in London and the South East, compared to just 5% in the North West and South West and only 1% in Northern Ireland. Notably, nearly 25% of companies backed by female angels are female-founded, compared to 19% among the broader angel community[91].

This outsized impact underscores the need to engineer support measures and avoid detrimental measures, such as last year's proposed changes to the angel investor earnings threshold, which would have disproportionately affected female angels and hindered their ability to invest. Government leadership in signalling the importance of female founders and funders is critical to addressing the systemic barriers inhibiting female progression in entrepreneurship. Strengthening partnerships with organisations such as investHer could provide valuable insights into the female investment landscape while reinforcing a commitment to fostering inclusivity.

Bias and Perception Issues

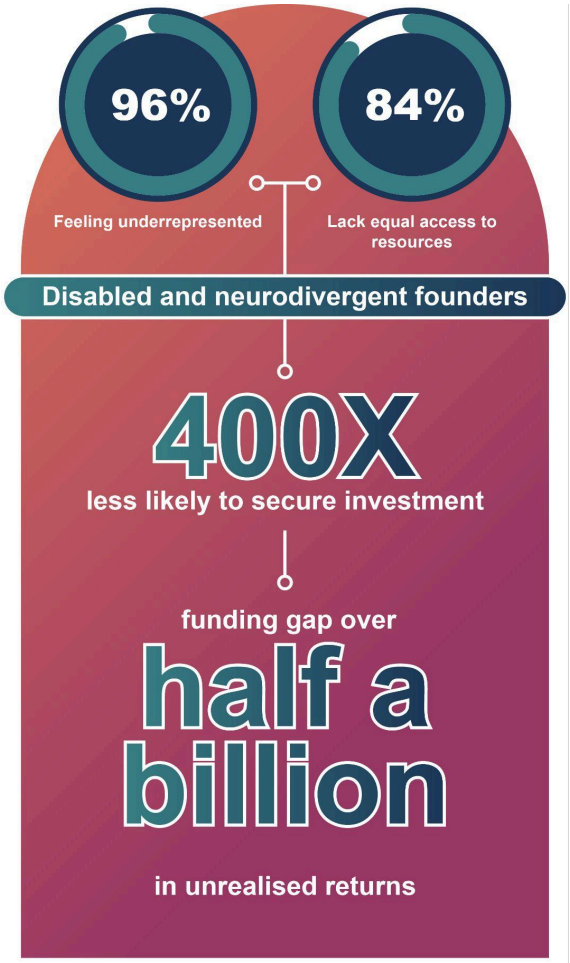
Researchers at the London Business School uncovered a misperception among investors that female founding CEOs represent a lack of fit with their ventures when catering to male-dominated industries, without a comparable misperception for male founding CEOs catering to female-dominated industries [92]. Addressing these biases will be critical to fostering growth among female-founded businesses, ensuring that opportunities for investment and scaling are equitable and reflective of the potential within this demographic.

Mere awareness of the scale of gender inequality in the entrepreneurship space is insufficient to catalyse meaningful behavioural change. Research from Oxford University reveals that benevolent sexism–attitudes that appear positive toward women but suggest inferiority through fragility or need for protection—can advantage men-led startups. Even when evaluators reviewed identical proposals, they favoured men, suggesting that this subtle form of sexism disproportionately benefits men while

seemingly having no direct impact on women's evaluations. This insight challenges traditional interventions focused solely on combating blatant negative stereotypes or training women to succeed in "masculine" industries[93].

The research demonstrates that gender inequity is not only perpetuated by the disadvantages women face but also by the advantages men receive despite equal qualifications and ideas. To address this, we must shift from a "fix the women" approach to a system-based one. This involves scrutinising evaluators' attitudes and behaviours and promoting transparency and accountability in the startup evaluation process. Ultimately, raising awareness of benevolent sexism and its harmful effects is the starting point for fostering a truly inclusive and equitable entrepreneurial ecosystem. This is where we must build banks of case studies and success stories, ensure that assessment criteria are equitable and that we are mindful of imagery. [93]

Disability and neurodivergence



Data from Access2funding

Neurodivergent and disabled founders face unique challenges, with Forbes reporting 96% feel underrepresented and 84% reporting they lack equal access to resources. Despite making up 25% of the UK's small business owners, they account for just 8.6% of turnover. Neurodivergent and disabled founders could be up to 400 times less likely to receive VC funding, potentially leaving over half a billion pounds in unrealised returns[94].

Funding Inequities and Lack of Targeted Support

Neurodivergent and disabled entrepreneurs face funding inequities often due to biases about their capabilities and inadequate physical and digital accessibility. Access2Funding surveyed disabled and neurodivergent entrepreneurs and found over 96% feel underrepresented, with 84% also saying that they do not have the same access to opportunities and resources as non-disabled entrepreneurs[94].

In assessing the investment stages of disabled founders, the research found that the majority are still in the earliest stage. This low level of progression illustrates the struggles in scaling even when initial funding has been secured.

Investment Stage	Current Stage of Investment
Angel/ Friend and Family Stage	59%
Pre-Seed	18%
Seed	13%
Series A-E	9.1%

Data from Access2Funding

Furthermore, 50% of respondents in the survey agreed that there was a lack of support and advice for disabled entrepreneurs, with 33% stating that they could not find any relevant information for disabled entrepreneurs.[94]

Disabled entrepreneurs encounter pervasive and persistent challenges across all stages of the investment process. These include issues such as inaccessible physical spaces and materials, ableism, and misguided risk management perceptions. Additionally, many investors and service providers lack understanding and awareness of

disabled business owners, perpetuating misconceptions about their capabilities and potential.

Targeted support

As with other characteristics, it is vital to understand the specific communities being represented by an umbrella term such as disability or neurodivergence. When we disaggregate the representation of founders, we are able to uncover that a high number presents with non-visible conditions and multiple conditions.

Disability Diversity Representation	Percentage Identified
Neurodivergence	**44%**
Non-visible condition	**44%**
Physical condition	**36%**
Mental health condition	**36%**
Chronic health condition	**24%**
Sensory condition	**16%**
Other	**8%**
Hearing condition	**4%**

Data from Access2Funding

Using this data insight, considerations should be made on how specifically to allocate resources and ensure that suitable provision is made to meet needs.

Traditional business networks, accelerators, incubators, and business support services often lack the flexibility to address diverse needs, leaving many disabled founders struggling to access suitable mentorship and business services. Respondents to our research highlighted that mentors frequently lack the training necessary to provide accessible and tailored support to disabled founders' needs.

Furthermore, fund assessors often have a binary view of disability. Stakeholder conversations with fund managers revealed challenges where limited understanding hampers risk assessments, introduces bias, and creates barriers to funding access. To address these issues, fund managers and mentors are recommended to undergo

mandatory training in the social model of disability and neurodivergence. Such training would foster more inclusive practices, reduce bias, and support equitable opportunities for disabled entrepreneurs.

Creo is a pioneering initiative in the UK specifically designed to empower disabled and neurodivergent entrepreneurs and those innovating in the field of disability. This joint effort by Tech Nation and Motability Operations delivers a comprehensive programme that includes industry expert-led workshops, curated content, peer-to-peer learning opportunities, and personalised coaching sessions. Scheduled to run from September to December 2024, the initiative seeks to address critical gaps in support for these underrepresented entrepreneurs.

Despite its innovative approach, the programme's limited scale poses challenges, as only a small cohort of founders is selected for participation. This recurring constraint underscores the need for policymakers to design broader systemic support mechanisms that facilitate more inclusive and widespread access to resources and opportunities within this space. Leveraging insights from established community groups, such as Global Tech Advocates - Tech for Disability, could ensure the deep integration of the unique needs of disabled and neurodivergent entrepreneurs into policy and programme development.

In parallel, Small Business Britain is spearheading efforts to review and reform access to business support for disabled entrepreneurs through the *Lilac Review*. The interim report recommends simplifying access to business support by radically streamlining processes, forms, websites, and programme requirements. It advocates shifting to a trust-based approach for assessing disability rather than the traditional proof-based model and reassessing assumptions regarding the suitability of entrepreneurs based on their disabilities.

The review also emphasises the importance of involving disabled entrepreneurs in the design and evaluation of business support programmes. This inclusive approach ensures that the diverse access and support needs of these entrepreneurs are fully addressed, paving the way for more equitable and effective support frameworks.

The scope and scale of the current support available to disabled and neurodivergent founders is too small to ensure that we are creating environments for innovation for these communities.

LGBTQI+

Funding, Data and Disclosure Barriers

LGBTQI+ founders face significant disparities in fundraising, with gay founders raising 22.25 times more funding than bisexual founders and 22 times more than lesbian founders. Similarly, cisgender men raise 2.5 times more than cisgender women and 10

times more than transgender founders. Despite growing interest from VCs in supporting LGBTQI+ founders, many are unsure how to provide meaningful support, with only a third actively taking steps[95].

As previously discussed, data collection is in its infancy. However, efforts have been made to collect insight. Proud Ventures offers useful data in that they found many LGBTQI+ founders and investors aren't comfortable sharing their identities with others, with 75% of LGBTQI+ founders and 79% of LGBTQI+ VCs withholding their identity to some degree from other investors in the ecosystem.[95] For founders, concealing their identities can create barriers to accessing networks, mentorship, and funding opportunities that thrive on trust and authenticity.

The lack of opportunity to be open undermines a sense of belonging, which is critical for founders navigating the demanding entrepreneurial journey. When LGBTQI+ founders feel they must hide their identities, they may hesitate to engage fully with investors or showcase their unique ideas and experiences, ultimately impacting their growth potential.

As mental well-being becomes increasingly recognised as essential for founders, addressing the root causes of identity withholding and fostering environments where disclosure feels safe and supported is critical to creating a more inclusive and innovative entrepreneurial ecosystem.

Proud Ventures calls for more visual support from the community and explicit statements on the diversity policies on funders' websites, as well as for the measurement of diversity metrics in deal-flow and investments to track progress[95]. Implementing targeted anti-bias training and encouraging open dialogue led by senior leadership can help teams identify and mitigate biases. Furthermore, creating spaces for funders and investors to build their understanding and adopt inclusive language safely is important as without such an approach to maturing understanding, there will be no change in risk appetite.

Socio-Economic Status

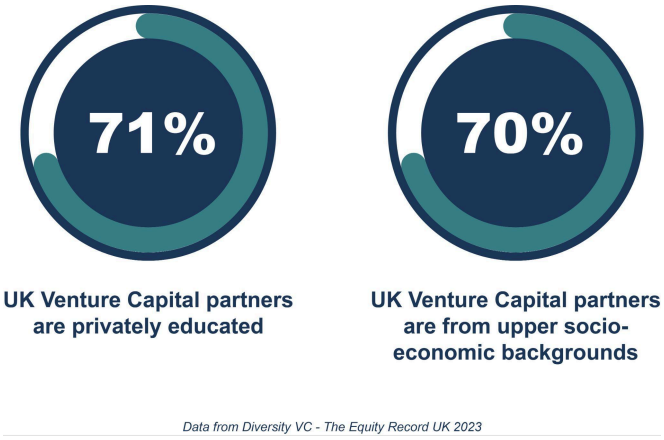
Fundraising Barriers

Founders from lower socio-economic backgrounds face a unique set of barriers that can hinder their ability to start and scale businesses. However, as for many other groups, this manifests with the same outcome of significant challenges in accessing capital.

This group often lacks personal savings or a robust financial safety net, making it challenging to secure initial funding. Traditional financial institutions frequently perceive these entrepreneurs as high-risk due to limited credit histories or insufficient collateral. Compounding this, they often lack the networks necessary to connect with investors,

further limiting their access to critical funding opportunities. Especially given the compound challenges often faced when there are intersections between characteristics.

One of the key challenges identified is the mismatch between founders from lower socioeconomic backgrounds and venture capital (VC) funders. According to Diversity VC, 71% of VC partners are privately educated, and 70% come from upper socioeconomic backgrounds[72].



This disparity often results in a lack of shared experiences and perspectives, which can hinder rapport-building and mutual trust during funding discussions. Additionally, VC funders may unconsciously favour founders who fit traditional moulds of success, perpetuating biases and reducing opportunities for those from less privileged backgrounds.

Mission Ventures conducted research with the founders of 50 Fast-Moving Consumer Goods businesses under five years old. Which found that over two-thirds of SMEs spent up to £20,000 in the first year, and the source of this funding is telling: 55% of founders used personal savings, 17% used friends and family loans, and 12% received friends and family investments[84] options that are often not available to founders from lower socio-economic backgrounds.

70% of SME's spend up to £20,000 in the first year

Data from Misson Ventures

Friends and family investment often serves as more than financial support; it also provides critical 'social capital.' Entrepreneurs from wealthier backgrounds gain access to established networks of mentors, industry leaders, and potential collaborators who offer guidance and open doors to new opportunities. Additionally, disparities in educational access further restrict entrepreneurs from disadvantaged socio-economic backgrounds, limiting their ability to acquire the high-quality training and professional development necessary to manage and grow their businesses effectively.

This disparity is reflected in findings from the *Cornerstone Report into Diversity*, which highlights that three-quarters of founders come from advantaged socio-economic backgrounds, with very few originating from families reliant on welfare entitlements[96]. However, the absence of consistent, high-quality data on these dynamics continues to obscure the true scale of the issue, making targeted interventions and policy solutions more challenging to design and implement.

Although there are funds specifically targeting gender and a smaller number aimed at supporting ethnic minorities and disabled founders, there remains a significant gap in tailored financial support for founders from lower socio-economic backgrounds. Grants and awards often lack mechanisms to address inherent biases, limiting equitable access for these founders. This oversight is particularly concerning given the intersectionality with other characteristics, which compounds the barriers faced and further restricts opportunities for these underrepresented groups.

Key Opportunities

The UK's vibrant start-up ecosystem presents a pivotal opportunity to champion diversity and inclusivity as cornerstones of entrepreneurial growth. By addressing intersectional challenges and fostering equitable access to critical resources, the UK can unlock a reservoir of untapped talent, catalysing innovation and positioning itself as a global leader in inclusive entrepreneurship.

Refining Key Government Interventions and Targeted Funds

The UK government has recognised the need to focus on expanding inclusive entrepreneurship through start-ups and scaling. In pursuit of this, they have introduced several initiatives directly and through public bodies aimed at fostering a more diverse and inclusive startup ecosystem. These have included targeted funding often focused on gender delivered by institutions such as the British Business Bank and Innovate UK. The Innovate UK Women in Innovation programme, launched in 2016, addresses gender disparities by encouraging women entrepreneurs to engage in innovation through financial grants, mentorship, and visibility opportunities. The programme provides up to 50 annual awards, each offering £75,000 and business support, focusing on women-led ventures addressing societal, environmental, or economic challenges. Since its inception, over £10 million has been awarded to 200 women entrepreneurs, cultivating a community of over 10,000 members[97]. The 2024/25 competition saw the highest response rate to date, with 1,452 applications submitted, indicating the scale of desire from female founders[98]. Most of this year's awards went to London-based founders (15); this has been a trend since 2018 (2019 data unavailable)[99].

However, despite its impact, the programme has faced some feedback around inconsistent assessment practices and specific challenges in the 2024 award. Recent data also highlights significant barriers for women and minority groups in accessing Innovate UK funding. After the initial controversy, Innovate UK has made inroads in re-engaging with its community through direct communication and roundtable events. Lessons have been learned and they emphasise the crucial need for greater transparency, more focus on engagement with minority groups, and improved scale of these initiatives, including ensuring full access to their mainstream provision.

The Digital Growth Grant, a £12 million initiative over two years, is focused on diversity and regional development by supporting tech startups and scale-ups through national initiatives, mentoring, and partnerships. Administered by Barclays Eagle Labs, the programme has exceeded its diversity targets, with 65% of participants identifying as belonging to underrepresented groups[100]. Specific programmes are in place for female founders and Black founders. The programme demonstrates significant potential, with opportunities to further enhance its impact by fostering greater transparency, deepening ecosystem engagement, and expanding its focus on underserved communities, such as disabled and neurodivergent founders.

Additionally, the Invest in Women Taskforce and the Investing in Women Code (IWC) represent significant steps toward closing the equity funding gap for female-led businesses. The Invest in Women Taskforce has successfully secured over £250 million to support female entrepreneurs across the UK, and is now working to create fund management ahead of distribution[101]. In parallel, the Investing in Women Code (IWC) promotes financial equity by encouraging signatory organisations to appoint senior leaders responsible for supporting equality in access to finance. The IWC also

enhances data transparency concerning support for female entrepreneurs, aiming to improve funding accessibility and outcomes for women-led businesses. IWC signatories consistently outperform market averages in supporting female founders, with 32% of their venture capital deals directed toward women-led businesses in 2023[102]. Building on these successes, there is a significant opportunity to expand these initiatives to better address intersectional challenges, including those faced by Black women and individuals from lower socio-economic groups.

By sustaining policymakers' focus, enhancing existing programmes, and encouraging greater collaboration across organisations, significant strides can be made toward reducing systemic barriers and fostering a more inclusive and dynamic entrepreneurial ecosystem. These efforts can create a foundation for broader opportunities and innovation, driving progress for underrepresented founders.

Building an Equitable Landscape for Entrepreneurial Success

Utilising Mandates and Reporting

There is growing momentum for mandated actions to enhance accountability and inclusivity within the VC industry. Key proposals include the establishment of targeted funds, adoption of diversity-focused codes such as the Invest in Women Code, and measures to ensure diverse representation on boards, among limited partners (LPs), and senior leadership. Inclusive training practices and transparent reporting are also emphasised as essential steps toward systemic change.

Many of these initiatives share a common theme: there must be more data, intentionality, and transparency to drive change. Given that the State of California has now passed a law effective from March 2025 requiring VC firms to report annually on the diversity of the founders they support, there is discussion for more affirmative action in the UK.

Specifically, the Alan Turing Institute[90] calls on the following which would make for real instrumental change.

- The Department for Business and Trade and HM Treasury to mandate that any Defined Pension Contribution funding going to VC firms has a minimum allocation to diverse fund managers, particularly in technology fields.
- In agreement with the House of Commons Treasury Committee (2023: 14-15) that: "'HM Treasury should make provision of diversity statistics a requirement for eligibility to receive EIS, SEIS and VCT tax reliefs. Firms should be required to disclose the gender and ethnic breakdown of both recipients of their funding and their own staff', since '[VC] firms do not have consistent policies on diversity or associated reporting… The most urgent course of action is to improve data transparency and consistency. This will allow more informed action to be taken

by the Government, arm's-length bodies and industry. Disclosure will also shine a light upon firms which are both best and worst in class, providing a reputational incentive to address diversity in the sector"'.

- As part of due diligence, LPs should require the disclosure of data about the ownership of funds by gender and role.

Furthermore, a joint report commissioned by the Foreign, Commonwealth, and Development Office and Department for International Trade[86] highlights the potential of inclusive investment models, such as leveraging catalytic capital, to address systemic disparities. Catalytic capital—defined as funding designed to generate impact and attract additional investment that might not otherwise occur—could be particularly impactful for Black female entrepreneurs. Support at the seed stage through a broader range of early-stage funding options and first-time fund managers focusing on minority-led businesses could help address inequities while fostering a more inclusive investment ecosystem[86].

The Organisation for Economic Co-operation and Development (OECD) further underscores that while governments possess numerous policy tools—structural policies, budgets, regulations, and procurement processes—these are not always applied equitably. Implementing regulations to assess the gender equality of entrepreneurial funding measures can help identify and mitigate gender disparities[103]. Such efforts should also be extended to ensure fair representation for all underrepresented communities, thus promoting a broader and more inclusive systemic change.

From an industry perspective, the adoption of stronger diversity and inclusion policies is urgently needed in the VC and investment space. Integrating inclusive practices for all protected characteristics into workplace Environmental, Social, and Governance (ESG) objectives has the potential to improve both accountability and transparency significantly. By embedding diversity and inclusion as core elements of ESG frameworks, organisations can align their business goals with ethical and socially responsible practices, ensuring measurable progress in creating equitable opportunities and fostering a culture of inclusivity. Such an approach would also facilitate the advancement of underrepresented talent into senior roles while promoting equitable recruitment practices. This alignment of DEI with ESG goals has the potential to foster a more inclusive and innovative entrepreneurial ecosystem, as outlined in the industry-focused section of this report.

Furthermore, a mandated review of due diligence processes is essential to ensure that risk management frameworks do not inadvertently discriminate against non-traditional business models, target markets, or geographies. Revising these processes would enable a broader acceptance of diverse entrepreneurial approaches, addressing systemic biases that currently restrict access to funding for underrepresented groups. By reconstructing due diligence protocols to prioritise inclusivity and equity, the

investment sector can unlock untapped market opportunities, diversify portfolios, and drive sustainable business growth within the entrepreneurial ecosystem.

Encouraging Mixed Teams

With caution, we should look to platform mixed teams; the intense polarisation of the space makes for a harder inclusive landscape and discussion. We have seen improvements in the amount of funding going to mixed-gender teams. It should not be a prerequisite to find a male partner to join female founders to access funding, but it is positive to see the performance of mixed-gender teams, the strengths that this creates within a start-up and the resilience in the skills that will be offered. This could also help to lift some pressure for gender fluid, non-binary and trans people who may feel isolated with such a binary description and support offered currently. Promoting the successes of mixed-gender teams offers an opportunity to advance inclusive practices and create maturity steps to challenge entrenched biases, such as pattern-matching tendencies in funding decisions.

Targeting Funding

Creation of Specific Funds and Assistance

Equitable access to funding remains a critical challenge for underrepresented groups, particularly during the scaling phase of business development. One potential solution is to create, expand and maintain targeted funds and assistance programs. These initiatives not only provide direct support to diverse founders but also shift the balance by fostering diversity among funders, which can catalyse systemic change.

As highlighted in this report, both public and private efforts are emerging to address these disparities. The British Business Bank's Enterprise Capital Fund serves as a key example, reducing barriers by directing funds to managers from varied backgrounds who focus on investing in diverse founders. Broader awareness and promotion of such initiatives could amplify their impact, signalling a strong commitment to structural change in venture capital allocation. Similarly, if the government's Venture Capital Skills Fellowship Programme continues, providing a specific allocation for underrepresented groups could further diversify the sector while setting a precedent for inclusion. Internationally, programs like Germany's Emerging Manager Facility, which allocated €200 million to gender-diverse VC funds, offer instructive models for fostering diversity at scale.

The need for targeted support is particularly acute in certain sectors. For instance, the Alan Turing Institute has identified a pronounced funding gap for female founders in AI-focused startups, particularly within software ventures[92]. Addressing this disparity through dedicated funding initiatives could significantly enhance diversity and innovation in this field, driving meaningful contributions to both technology and gender equity.

While early-stage funding initiatives, such as the Digital Growth Grant, offer vital resources, it is essential to evaluate their impact beyond initial support. This includes measuring outcomes such as post-program funding success to ensure sustained progress. Similarly, expanding funding opportunities for specific communities—including LGBTQI+ founders, disabled entrepreneurs, and ethnic minorities—is critical. Initiatives such as Proud Ventures and Pink Salt Ventures, alongside substantial international investments such as Canada's $200 million Women in Tech Venture Fund and the U.S.'s First Close Partners, demonstrate how targeted funding models can bolster underrepresented founders and promote growth.

Presently, most support initiatives target the very early stages of business development, providing entry-level guidance for start-ups. However, there is a pressing need for scalable funding, particularly for businesses founded by individuals from underrepresented communities. According to the OECD, a "scale-up" is a company that grows its revenue by 20% annually[104], a rate that is often insufficient to attract venture capital or private equity, where much higher growth rates or immediate profitability are expected. This funding gap leaves mid-stage businesses, which fall between the requirements for private equity and venture capital, with limited options. Developing new financial instruments tailored for these growth-stage companies, such as additional tax reliefs through Venture Capital Trusts (VCTs), could provide a much-needed boost.

Mapping the existing provision for specific communities alongside inclusive mainstream funding initiatives could significantly demystify the pathways to securing capital and elevate aspirations among underrepresented groups. Currently, signposts to available resources are fragmented and siloed, making it challenging for entrepreneurs to navigate the ecosystem effectively. Developing a centralised and meaningful hub that consolidates this information could streamline access to both current and future funding opportunities, increasing the uptake and impact of such provisions.

Support tailored to individuals from lower socio-economic backgrounds remains particularly limited, leaving a critical gap in fostering equitable entrepreneurial growth. Adopting best practices from successful initiatives can help bridge this divide. For instance, the Growth Impact Fund, a social investment fund focused on fast-growth early-stage social businesses to grow their impact.

However, there is a dual-edge effect to targeted funds, as discussed in "Finding What Works: Pathways to Improve Diversity in Venture Capital Investment." When inclusive practices are embedded within broader funding frameworks, targeted funds can inadvertently reinforce the misconception that diverse founding teams need unique conditions to thrive. Overreliance on these funds may narrow the investment focus, potentially leading to underperformance due to limited investment opportunities, which could misrepresent the performance of diverse founders[85].

Prioritising mainstream improvements alongside targeted options ensures a balanced and sustainable approach, fostering a more inclusive and innovative entrepreneurial ecosystem.

Accelerator Programmes

Accelerators serve as a critical mechanism for identifying and supporting high-potential businesses, playing a pivotal role in enhancing diversity within the entrepreneurial pipeline. Approximately one-third (35%) of venture capital-backed companies funded between 2018 and 2022 had participated in an accelerator. The proportion is even higher (54%) among companies led by teams that include both women and ethnic minorities, indicating that accelerators are an effective tool for increasing diversity in the pipeline[85]. According to the British Business Bank's Finding What Works Report, supporting entrepreneurs who have attended accelerators has proven to be an efficient means of identifying high-potential businesses from underserved groups[85].

However, the limited availability and scope of targeted accelerator programs mean that only small cohorts of entrepreneurs benefit, leaving untapped potential among those not included. Expanding these programs and addressing gaps in accessibility is essential. In addition, a broader approach would allow for the cultivation of "nearly-there" talent, ensuring that promising entrepreneurs who narrowly miss inclusion are not overlooked. Furthermore, building regional ecosystems of support, including alum[1]* networks, could help inform program design, provide mentorship, and strengthen local entrepreneurial communities.

With 65%[85] of venture capital firms reporting no differentiated approach in sourcing underrepresented founders, incorporating inclusive and targeted accelerators, incubators, and similar channels into their pipelines offers a valuable means of surfacing high-potential, diverse candidates for investment. Proactively utilising these opportunities would ensure that a broader, more representative talent pool is consistently highlighted to venture capitalists.

A blank label-inclusive design framework has been developed and can be found in Appendix 2.

Providing Business Support for Underrepresented Entrepreneurs

Assumptions have influenced programme design as we look at the type of support available. A general diversity approach is often taken to support the objective of boosting a specific community. Without a deeper consideration of design programmes and support alongside a robust evaluation framework, we will continue to see a limited impact. An example of this can be found with Project GATE (Growing America Through Entrepreneurship), a large-scale randomised experiment in the US, that illustrates why

[1]*Gender-neutral term.

business support programmes should be evaluated with a specific target group in mind. The GATE project offered free entrepreneurship training to those interested in starting or growing a business. Applicants were randomly assigned to a treatment group (which received the training) or a control group (which received no services). Surprisingly, the training did not have long-term effects on business ownership rates, earnings or growth. In fact, those in the treatment group were as likely as those in the control group to have started or grown a business. What's more, the project perpetuated existing gaps in entrepreneurship, as White entrepreneurs were more likely to benefit from the training compared to Black entrepreneurs. White entrepreneurs who received the training had better access to finance, which enabled them to start a business following the training. If the training had been complemented with financial assistance, perhaps the project could have supported more Black entrepreneurs in starting a business. These findings demonstrate that interventions can have counterproductive effects on some entrepreneurs if they are not designed with their needs in mind and the pathways post-program to enable successful application of the learnings or awards. [106]

Even when business support is available, women and minority ethnic entrepreneurs may hesitate to engage with it. The What Works Centre for Local Economic Growth identifies several reasons for the low uptake of support, many of which present greater challenges for these entrepreneurs. They may struggle to meet requirements that do not consider the systemic barriers they face, or they may not view the support as relevant to their needs.[107] Additionally, some entrepreneurs may distrust external advisors or the support may be difficult to access due to its location or timing. Lastly, there can be social stigma associated with seeking help. By fully understanding these issues instead of relying on generic approaches, we can improve and design new programmes that are potentially low-cost yet high-impact. The key approach must prioritise specificity in addressing unique barriers, combined with a robust pipeline of support embedded throughout programme design and delivery. This ensures targeted solutions while fostering sustained engagement and success for underrepresented groups.

Conclusion

Underrepresented entrepreneurs in the UK face systemic barriers to accessing tailored business support, which remains a critical determinant of success. While diversity-focused interventions have been introduced, many initiatives adopt a generalised approach that fails to consider the unique challenges faced by specific communities. Without tailored and targeted programme design and robust evaluation frameworks, such initiatives risk delivering limited and uneven impact.

The ongoing challenge lies in the scale of this work and its fragmented progress. While pockets of effective support are being offered, they are mainly focused on female representation. The various programmes are not connected or with a wide enough lens.

Without a coordinated approach and sufficient investment, there are isolated pockets of effective practices and valuable insights that lack significant overall progress.

The investment sector and wider funding ecosystem need to be more diverse, representative and inclusive. Policymakers can assist with this through mandated actions to enhance accountability and inclusivity within the VC industry. Key proposals include the establishment of targeted funds and the adoption of diversity-focused codes and measures to ensure diverse representation on boards, among limited partners (LPs), and senior leadership.

Establishing clearer accountability is critical to ensure best practices in angel support, accelerators and other initiatives are consistently implemented. Furthermore, creating a more optimistic narrative grounded in focused efforts could energise local and regional initiatives, motivating potential founders to take the next step. To drive meaningful change, the most urgent need is to substantially increase the amount of funding and wider business support awarded to underrepresented founders and ensure that, in doing so, a more complex environment is not created around them, preventing the successful growth of their organisations.

Skills

Executive Summary

Inclusive skills development efforts by the tech industry and policymakers have made modest progress in engaging underrepresented communities in technology pathways. However, significant barriers persist in ensuring equitable access to digital skills and career opportunities for these groups.

Women, ethnic minorities, and individuals from lower socio-economic backgrounds continue to face systemic challenges, including unequal access to formal training pathways and limited progression opportunities. Additionally, the persistent lack of accessible and tailored learning pathways for disabled and neurodivergent individuals highlights a critical gap in current initiatives. These barriers not only hinder the participation and advancement of underrepresented groups in the digital economy but also exacerbate broader inequalities within the sector, potentially stifling innovation.

This disparity is set against the broader backdrop of the UK's pressing digital skills shortage, with 93% of businesses reporting a significant gap in IT skills within the job market. Rapid technological advancements, such as those in artificial intelligence, data analytics, and cloud computing, are outpacing current training and education frameworks, with 42% of businesses attributing the skills gap to this accelerated evolution. The Government estimates that the digital skills deficit costs the UK economy £63 billion annually, underscoring the urgent need for inclusive and effective solutions to bridge this critical gap.[2]

This is now becoming even more urgent, particularly for minorities. With the half-life of some technical skills indicated by tech leaders being as little as 6 months [123] and AI-enabled technologies set to be more likely to impact roles held by women[109], technology leaders that do not make upskilling initiatives a strategic priority may find they lock even more women out of the sector if attention is not focused on creating methods for regular skills development. There is also the economic risk that without being able to staff the growing technical needs in the UK economy, companies may look to offshore more advanced digital roles, impacting the entire tech workforce.

Women and ethnic minorities, despite often possessing higher qualifications than their white male counterparts, remain overrepresented in lower-paid, junior roles and underrepresented in emerging fields such as cybersecurity and AI. Mid-career women frequently report stagnation, as limited opportunities to transition into high-demand roles further entrench existing inequalities.

Emerging solutions highlight potential pathways for fostering a more inclusive digital skills ecosystem. Skills Bootcamps, which attract a promising 44%[110] female

participation rate, and conversion courses in AI and data science offer accessible entry points for diverse groups. However, these non-traditional pathways often lack the industry recognition of conventional qualifications, limiting participants' career progression. Local Skills Improvement Plans, along with reforms to the apprenticeship levy and the establishment of Skills England, demonstrate promising frameworks for addressing accessibility challenges and supporting diverse talent pipelines.

To maximise impact, lifelong learning networks offering modular, competency-based programs tailored to industry needs could provide smoother career transitions for individuals from diverse backgrounds. Standardised competency frameworks such as SFIA (Skills Framework for the Information Age) or DDAT (Digital Data Analytics Taxonomy) could establish a shared language for measuring and defining technical skills, enhancing program reliability and alignment with industry needs whilst creating the viability for those outside the sector to see how they access and develop. For SMEs, which often lack resources for structured long-term skills planning, government-backed standards tied to funding provisions could be transformative.

Addressing data gaps—particularly around social mobility, LGBTQI+ representation, and neurodivergence—is essential for designing targeted interventions. Stakeholders must move beyond viewing skills as inventory challenges to focus on capabilities essential for sustained growth. A coordinated, strategic approach to digital skills planning, combined with greater visibility, mentorship networks, and financial support, could foster a transparent, competency-driven ecosystem that aligns skill development with individual aspirations and industry needs. Alongside these efforts, raising awareness of educational inequality will help dismantle barriers to accessible pathways at both entry-level and mid-career stages, paving the way for a more inclusive and innovative tech industry.

Landscape and Barriers

Educational Inequality

There is a significant underrepresentation of women (especially black women), gender minorities, disabled people, and those from lower socio-economic backgrounds across all skill pathways and routes into the tech industry. While progress has been made, it has been slow, and significant disparities persist. Notably, computer science degrees and apprenticeship programmes continue to demonstrate low levels of gender equity, further limiting access to digital careers for these groups.

A 2023 Wiley Edge[46] report found that hiring processes in tech disproportionately favour candidates from prestigious educational institutions, creating further barriers for individuals from intersectional socio-economic backgrounds. The report found that 92% of businesses faced challenges when recruiting for entry-level roles. Irrespective of this, 70% reported they are likely to hire from top-ranked universities, which also face their

own diversity challenges. Similarly, the Social Mobility Foundation's *Young People on the Barrier* report revealed that 53%[111] of respondents identified "knowing the right people" and "obtaining the right qualifications" as the biggest barriers for young people from lower socio-economic backgrounds.

While alternative pathways to tech are making incremental progress in improving representation, the pace remains too slow to ensure sustainable change. A targeted approach is urgently needed to address systemic barriers within formal education systems and improve visibility around the skills and qualifications required for tech roles. This focus will be critical to creating equitable access and fostering a more diverse talent pipeline for the sector.

The lack of flexibility in training options remains a significant challenge, limiting accessibility for individuals with diverse responsibilities or needs. For example, in the early stages of the AI Conversion Course, more flexibility was offered in response to COVID-19[112,] with this being reduced over time. This rigidity disproportionately impacts underrepresented groups, including caregivers—who are often women—individuals from lower socio-economic backgrounds balancing work commitments and disabled or neurodivergent learners who require tailored support.

While some Skills Bootcamps have introduced more flexible timings and online course content to enhance participation, these measures only partially address the issue. The additional energy capital required for disabled and neurodivergent individuals to balance employment while pursuing training remains a significant barrier to entry and retention in tech pathways.

Even funded courses often carry hidden costs, such as travel, materials, or lost income, which are particularly burdensome for those from lower socio-economic backgrounds. Research found that the financial burden of pursuing higher education in tech deterred 29% of people, particularly Asian women and neurodivergent men.[22] This challenge is compounded by uncertainty around post-course employability and guarantees of course quality, further deterring participation. Addressing these barriers through targeted subsidies, support mechanisms, and transparent quality assurances is essential to fostering equitable access.

Underrepresented individuals often find themselves in the minority within training cohorts, which can lead to exclusionary dynamics if inclusive practices are not prioritised. Despite efforts from organisations like the Institute of Coding to create standards for supportive environments, these programmes risk perpetuating biases that extend into workplace behaviour if all training provisions do not adopt minimum inclusion standards.

Addressing educational inequality in tech skills pathways requires a multi-faceted approach: dismantling systemic barriers in formal education, enhancing flexibility and

accessibility in training, alleviating financial burdens, and embedding inclusive practices into all programmes. By prioritising these actions, the tech sector can create a more equitable and diverse talent pipeline capable of driving innovation and meeting the evolving demands of the digital economy.

Participation in Formal Skills Pathways

The tech industry's preference for traditional qualifications, combined with persistent systemic inequities in formal education, underscores critical challenges that demand urgent attention to foster equitable participation in skills pathways.

Examining UCAS data, for the academic year 2024/25, 2,940 women were admitted to university to study computer science at the degree level. This figure is up 8% from 2023/24, offering a ratio of 4:1 men to women in computer science. Overall, 15,530 UK-domiciled students were accepted into computing degree programmes[17]. Despite the improvement in the picture, participation is still low.

Looking forward, the pipeline for underrepresented groups gaining higher education continues to look weak. Data from the Higher Education Statistics Agency shows that only 3.4% of all UK computer science undergraduate students are black students, and black women make up a mere 0.2%[113]. The proportion of students with a known disability enrolled in science subjects has increased by just one percentage point annually since 2019/20.[113]

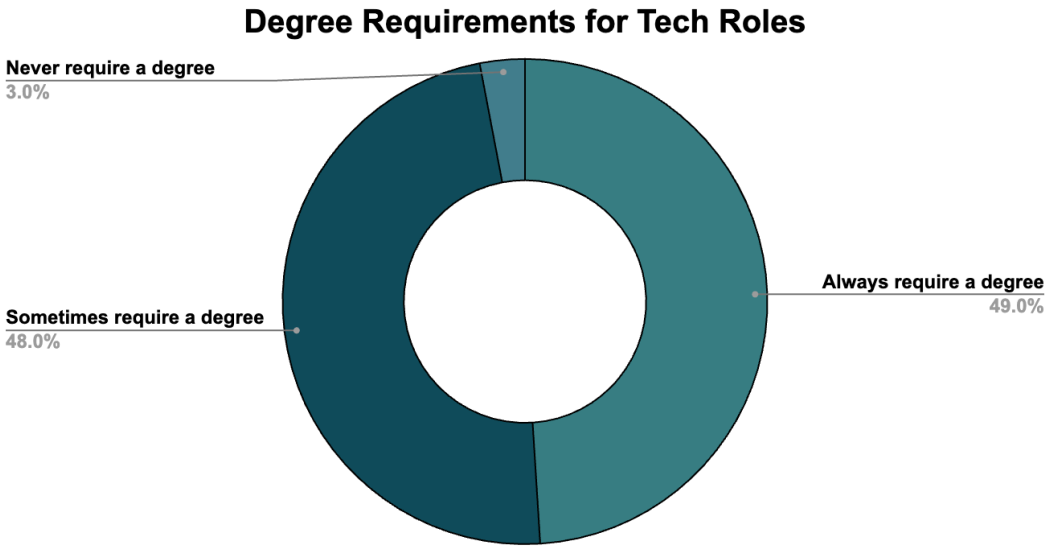
Research indicates that most digital sectors have a higher propensity for degree-educated professionals in their early career populations, with AI and Quantum computing having the highest rates.

Sector	Proportion of early-career workers that completed their education through a higher education pathway
AI	72%
Critical Technologies	61%
Digital and Computing	64%
Future Telecoms	63%
Quantum	67%

Sector	Proportion of early-career workers that completed their education through a higher education pathway
Semiconductors	47%
All sector comparison	40%

Source: DfE Unit for Future Skills - Jobs and Skills dashboard

Research discovered that almost one in three (27%) of businesses exclusively hire from the top universities, and 44% report that they are at least more likely to do so.[46] Only 4% consider all types of higher education qualifications[46]. Half of businesses (49%) stated that they 'always' require tech role candidates to hold a bachelor's degree, with the remaining majority of 48% saying that it was required sometimes[46].



Source: Wiley Edge

This reliance on formal education as a hiring criterion in the tech industry has implications for diversity, particularly for minority groups and women. According to Wiley Edge Research, 53% of surveyed businesses reported increased roles requiring a degree, compared to just 33% [46] observing a decline. This trend highlights a continuing barrier, as access to computer science degrees remains unequal, particularly for women and other underrepresented groups, despite increasing enrollment rates. Additionally, degree programs, more broadly, can be less accessible for certain marginalised groups, especially for those navigating intersectional challenges due to holding multiple protected characteristics.

In 2023, only 7% of female IT specialists held a degree in an IT-related discipline compared to 14% of their male counterparts. Paradoxically, a higher proportion of women in tech (80%) hold a degree or higher-level qualification compared to men (73%)[17]. Despite this, the preference for formal qualifications in hiring has not resulted in improved female representation in the sector. Even accounting for the higher number of men with technical degrees, this disparity cannot be fully explained, pointing to systemic barriers in recruitment processes that disproportionately affect women and perpetuate gender inequities in the industry.

Reviewing other underrepresented groups, BCS data reveals that ethnic minorities in the tech sector are more likely to be highly educated, with 88% holding higher education qualifications compared to 71% of their white counterparts[16]. As with gender, this educational advantage has not translated into equitable career progression or retention, suggesting that structural barriers extend beyond access to formal education.

Disabled technologists report lower levels of higher education attainment overall, with 63% holding HE qualifications. However, 9% hold IT-related degrees—a proportion comparable to other groups[114]. This indicates that while educational attainment is a critical factor, systemic challenges related to accessibility, workplace inclusivity, and equitable career progression remain significant obstacles for disabled individuals in the tech sector.

A lack of intersectional data further obscures the relationship between these factors, limiting visibility into how multiple characteristics intersect to influence outcomes. As with gender disparities, while barriers to computer science degrees and broader access to higher education persist, these factors alone do not fully explain the limited career progression and retention of underrepresented groups in tech. This points to systemic issues in workplace structures and practices that require targeted interventions.

Apprenticeships

Due to their funded nature and formal qualification, apprenticeships are viewed as a powerful means to engage underrepresented groups and develop relevant skills. Between August 2023 and January 2024, there were 15,000 starts in 30 digital and IT-related apprenticeships. Of these, 6,400 were at an advanced level (level 3), while 8,700 were at a higher level (level 4 or higher), including 2,800 at degree level (level 6 or 7). One of the most popular courses at this level is the Digital and Technology Solutions Professional.[115]

Despite overall growth in participation, significant disparities remain. Men currently undertake nearly 70% of digital apprenticeships, according to the Institute for Apprenticeships and Technical Education (IfATE). Despite the disparity in gender, there are signs of improvement in ethnic diversity, as the proportion of ethnic minority apprentices has risen from 8% to 12% between 2017 and 2022[116]. While this shift is

encouraging, as with other skills provision, the pace of change is slow, limiting wider improvements in diversity in the sector.

Concerningly, the Minority Youth Outcome Review by the Learning and Outcomes Committee and Work Institute[117] found that there is general agreement among young minority ethnic groups that apprenticeships are not a viable option for them and are not currently an accessible route for many minority ethnic young people. Further, attention is needed to fully understand the motivations for these feelings.

Degree apprenticeships remain among the most well-regarded pathways for obtaining funded, high-level qualifications, but access to these opportunities is highly competitive. The Sutton Trust shares that just 13% of degree apprenticeships come from neighbourhoods in the bottom fifth of deprivation. Over twice as many (27%) come from the most advantaged backgrounds[118]. Awareness is a key barrier and financial considerations also pose a significant barrier. Research from Glasgow Caledonian University found that women often weigh the financial feasibility of degree-level apprenticeships heavily when making decisions [119]. The relatively low salaries associated with apprenticeships create challenges for individuals to sustain themselves, particularly in urban areas with higher living costs.

Beyond addressing the entry-level skills gap, stakeholders increasingly use apprenticeships for leadership development and upskilling minority groups, such as women in tech and LGBTQI+ professionals. However, feedback from providers reveals superficial employer support for these initiatives, particularly in terms of allowing time for apprentices to complete their programs. This lack of support negatively affects outcomes and disproportionately impacts underrepresented groups. Additionally, the lack of time available to apprentices continues to be a challenge, with stakeholders and providers alike indicating that the mandated minimum term for apprenticeships limits appetite, especially in a skills space that moves quickly. This challenge should not be dismissed as a singular challenge for apprenticeships but should be considered across how a better industry balance can be created and the expectations regarding the need for skills development. If the industry continues to resist factoring in the time required for skill programmes, any in-work provision will lack impact.

A 2024 YouGov poll indicated that 66% of businesses view digital apprenticeships as effective for addressing skills shortages, yet 55%[121] believe better financial incentives—such as government grants or tax breaks—could enhance their appeal to employers and apprentices alike. For SMEs, the 5% co-funding requirement for non-levy-paying organisations poses a significant barrier, disproportionately limiting their participation in apprenticeship programs.

The introduction of the Growth and Skills Levy-Funded Offer, funded by the Apprenticeship Levy, will offer businesses greater flexibility in the allocation of funds. This reform seeks to reduce restrictions, enhance the effectiveness of apprenticeships,

and thereby support the tech industry in addressing persistent digital skills shortages. As the Growth and Skills Levy-Funded Offer develops, ensuring the accessibility and quality of pathways for individuals from lower socio-economic backgrounds will be essential. Skills England will play a crucial role in determining which training will be eligible within the flexibilities, in line with its assessment of skills needs and future demand, and through extensive engagement with its partners in the skills system.

Public discussions on these reforms must aim to maintain confidence in apprenticeship programs and avoid perpetuating an outdated academic–vocational divide. A coordinated, inclusive approach is crucial to harnessing the potential of apprenticeships to close the digital skills gap and create equitable opportunities across the tech sector.

Skills Programmes

Alternative Routes to Tech

While 41.2% of tech professionals have historically gained their skills through university study, there is an emerging trend, with a growing number embracing alternative routes—14% through Skills Bootcamps and 7.6% via apprenticeships [3].

Method of learning	% who gained skills with this method
University Study	41.2%
Learned on the job	20.2%
Self-taught	13.2%
Government-funded tech Skills Bootcamp	8%
Apprenticeship	7.6%
Alternative tech Skills Bootcamp	6%
School Study	3.4%
Taught by family or friends	0.4%

Source Tech Talent Charter Routes to Tech

This wider approach to talent offers an opportunity for inclusivity, particularly for individuals from lower socio-economic backgrounds who may lack access to formal higher education.

However, simply expanding these pathways will not automatically result in a more diverse workforce. To maximise the potential of these approaches, intentional engagement with underrepresented communities is essential. This must be accompanied by thoughtful supply chain management and the development of recruitment policies that actively address systemic barriers. Such measures will ensure that alternative credentials genuinely contribute to creating equitable opportunities across the tech sector.

Some access routes, such as self-taught pathways, present significant barriers to socio-economic mobility due to limited access to technical equipment, software, and dedicated 'play spaces' for skill development. These challenges hinder individuals from cultivating their abilities to the level required for career entry. On-the-job learning offers valuable opportunities for reskilling and upskilling but often depends on internal relationships, which can be influenced by workplace biases and systemic restrictions, further limiting equitable access to career progression.

Skills Bootcamps: Accessibility and Perception Challenges

Skills Bootcamp have provided a viable pathway to access for underrepresented groups, with some of the most established providers offering not only skills experience but also focusing on industry exposure and work readiness. A DfE evaluation report for Skills Bootcamps, published in March 2023, found the DfE programmes enabled participants to train in areas that were previously inaccessible and helped some employers to fill vacancies. Figures were announced that highlighted a positive move towards diversity among participants: 44% were women, 10% identified as disabled, 22% identified as having Black heritage, and 17% identified as having Asian heritage. Most participants are based in London (21%) and the North West (20%).[108]

However, the absence of detailed demographic data—such as information on participants' socio-economic backgrounds, intersectional identities, and destination outcomes disaggregated by course type—limits the ability to fully assess the true impact of these programmes on social mobility and the compound barriers faced by specific groups.

Financial sustainability challenges for providers have created tensions between prioritising diverse recruitment and selecting candidates perceived as more likely to succeed. Implicit biases in admissions processes often act as barriers for underrepresented groups. While some targeted Skills Bootcamp providers successfully engage specific communities through strong regional initiatives, anecdotal evidence suggests an overemphasis on certain types of diversity. This focus can inadvertently

marginalise individuals facing intersecting barriers, further entrenching inequalities. Addressing these systemic biases and enhancing data collection efforts are critical to ensuring equitable access, inclusivity, and meaningful outcomes for all participants.

DfE data also showed that 21%[110] of participants felt insufficient time was provided to learn critical skills, especially in intensive fields like coding and cybersecurity. Survey respondents also noted the rigidity of Skills Bootcamp schedules, which makes balancing responsibilities such as paid work or caregiving difficult. Providers shared that although part-time options exist, requests for breaks often lead to learners not returning to complete the program, highlighting the need for more flexible models.

From an employer perspective, misconceptions about graduates' skill levels remain an issue. For example, Lancashire Council[122] found that employers often overestimate the technical expertise of Skills Bootcamp graduates, creating mismatched expectations and limited opportunities for placement. Additionally, inconsistencies in course curricula—stemming from the lack of a regulatory framework—can undermine confidence in program outcomes. These challenges are particularly pronounced for underserved communities, who already face increased barriers to entry.

Mentorship has been a critical factor in fostering psychological safety and improving retention, especially when mentors share similar demographic backgrounds with learners. However, employer engagement in mentorship remains limited, with barriers such as unclear benefits and overstretched resources hindering long-term commitments. Ensuring guaranteed interviews for participants has also yielded mixed results; while 81% view this as a motivating factor, inconsistencies in implementation and suitability have negatively impacted participant satisfaction and enrollment.[110]

Returner Programmes

The rapid evolution of technology has significantly shortened the half-life of technical skills, with some now becoming outdated in less than two and a half years and, in certain cases, as quickly as six months. This accelerated pace of change poses substantial challenges for individuals returning to the tech industry after career breaks, as their previously acquired skills may no longer align with current industry standards. Interviews conducted by techUK with sector leaders reveal that professionals are now expected to update their skills biannually to remain competitive.[123]

To address this, targeted returner programmes, particularly those focused on women, have shown promising results. These initiatives have been associated with increased confidence, enhanced skills, and smoother reintegration into the workforce following career breaks.

Our research of publicly available data reveals that 80–90% of participants in such programmes report improved confidence levels. [124] The launch of over 30 tech-focused returner programmes highlights a notable industry interest in facilitating these pathways.

For participating companies, these programmes unlock access to a previously untapped talent pool, making them a valuable strategy for addressing workforce diversity and skills shortages in the tech sector.

However, challenges persist, including inconsistent availability across sectors and regions, as well as restricted access for SMEs. While returner programmes have successfully bridged some employment gaps, their limited scale and broader implementation constrain their long-term impact. These initiatives often focus on workplace readiness rather than refreshing technical skills, primarily due to the difficulty of maintaining up-to-date curricula in a rapidly evolving tech landscape.

In 2023, 23% of Tech Talent Charter Signatories reported running a career development initiative designed to support better D&I. One quarter[58] of these initiatives specifically targeted the progression of underrepresented groups, including mid-career employees, returners, and high-potential individuals from minority backgrounds. These programmes typically incorporate networking, mentoring, coaching, and sponsorship activities.

Despite their potential, research[58] uncovered that several prominent returner programmes by major tech companies were inactive, indicating a potential decline in the availability of these pathways. This reduction is concerning, as returner programmes often provide critical support for gender minorities and refugee talent seeking to re-enter the workforce. The lack of widespread adoption highlights the need for deeper research into the challenges limiting the scale and sustainability of these initiatives and underscores the importance of reinvigorating their use to ensure equitable opportunities for mid-career professionals.

Industry Reskilling and Upskilling Programmes

Industry-led reskilling and upskilling programmes play a pivotal role in enabling employees to adapt to technological advancements, advance their careers, and transition non-technical professionals into tech roles. These initiatives not only address the pressing skills gaps in the UK tech sector but also contribute to sustainable growth by fostering a more adaptable and inclusive workforce. By reskilling individuals into entry-level tech roles or upskilling existing employees for more advanced positions, these programmes are essential for maintaining high employment levels and ensuring the UK remains competitive in an evolving digital landscape. However, success for minority groups often depends on company culture, access to mentorship, internal mobility opportunities, and sustained support. The lack of tailored programmes that address the unique needs of specific minority groups can undermine the psychological safety necessary for deep learning.

Research highlights the prevalence of upskilling and reskilling initiatives in businesses, with 48% offering such programmes to existing tech employees and 49% extending them to all employees, regardless of their current roles [46]. Conversely, only 3% of companies have either never provided or discontinued these programmes, underscoring

their widespread adoption as a strategic approach to workforce development [46]. These initiatives yield tangible benefits for businesses: 59% report improved recruitment efforts, 56% note enhanced employee retention, and 37% observe increased workforce engagement [46].

However, the *Code First Girls* report, *Fix the Broken Rung*, reveals a concerning gap in equitable access to these opportunities. Only 3% of their learners reported being offered reskilling opportunities[125]. Additionally, data from the Tech Talent Charter indicates that just 17%[58] of their signatories provide tech skills programmes specifically designed for early-career professionals from underrepresented backgrounds. Among these programmes, socio-economically underprivileged individuals were the most commonly targeted demographic, receiving roughly double the focus compared to initiatives aimed at gender or ethnic minorities [58]. This disparity suggests that while such programmes are prevalent, they may not be equitably distributed, disproportionately affecting underrepresented groups and impairing career stability and progression. Addressing this imbalance is critical to ensuring the full potential of upskilling and reskilling initiatives is realised for all employees.

Industry leaders and stakeholders often approach skills development as a logistical challenge, framing it as an “inventory issue” and cost rather than an opportunity to invest in cultivating critical capabilities for future growth. Cost concerns, limited provider capacity, and insufficient senior leadership buy-in are frequently cited as key barriers to progress. This perspective, compounded by ineffective skills mapping and poor improvement planning—particularly among smaller organisations—has created a fragmented reskilling landscape. Furthermore, the lack of best-practice guidance for digital skills planning leaves organisations increasingly vulnerable to the demands of an evolving industry. Stretched teams often prioritise immediate productivity over long-term planning, a trade-off that disproportionately affects minority groups, particularly as AI-driven capabilities continue to replace traditional roles.

Within the tech sector, major companies have embraced upskilling as standard practice. However, the availability and accessibility of such programmes remain inconsistent. Barriers such as cost, provider capacity, and insufficient leadership support further limit their impact. Providers have also flagged the lack of allocated time for employees to engage in these programmes as a major obstacle. Compounding these issues, the absence of comprehensive industry data on the scope and effectiveness of reskilling efforts hampers efforts to scale and refine these initiatives. Addressing these systemic gaps is critical to ensuring that reskilling programmes deliver equitable and sustainable outcomes for all employees.

To overcome these challenges, targeted incentives for reskilling and robust support for programme development are essential. Incorporating universal design principles will ensure inclusivity in programme implementation while clearly demonstrating the productivity gains associated with reskilling. This could alleviate concerns about the

short-term costs of allocating training time. These steps are critical for building a more adaptable and inclusive workforce capable of meeting the needs of a rapidly evolving tech landscape.

While financial services organisations have taken the lead in reskilling efforts, some face difficulties maintaining the pace required to meet advanced digital demands, with offshoring emerging as a potential risk in addressing skill and talent shortages. To identify effective practices, the EU Digital Skills Awards is compiling case studies on reskilling efforts, which could provide valuable insights into successful strategies.

Meanwhile, the City of London Corporation has launched a two-year pilot taskforce, Women Pivoting to Digital, aimed at transitioning experienced women into technical roles, involving over 200 collaborating organisations. Early observations indicate that differing interpretations of what constitutes advanced digital skills present a significant barrier to effective programme design and implementation. Establishing a shared and universally understood definition of these skills could play a pivotal role in improving outcomes and aligning training initiatives with industry needs.

Stakeholders representing gender, ethnic minorities, and disability groups emphasise that tech leaders and employers must also 'upskill' themselves to ensure they are actively fostering inclusive environments. Without this commitment to cultural change, the benefits of internal mobility created by reskilling initiatives risk being undermined, leaving highly skilled employees disadvantaged by biased processes and limiting the overall impact of these programmes.

Limited Visibility of Career Pathways

An enduring barrier to access and retention within tech careers is the limited visibility of career pathways, particularly for women, ethnic minorities, and individuals from lower socio-economic backgrounds. Research consistently highlights a widespread lack of clear, accessible information about potential career trajectories, required skills, and progression opportunities within the tech sector[22]. This gap hinders individuals' ability to envision and navigate sustainable careers in technology, exacerbating existing inequalities. Addressing this issue is crucial for fostering a more inclusive and diverse workforce.

Recent research by BAE Systems revealed that 29% of respondents identified a lack of understanding about available opportunities as a key barrier to pursuing tech careers, with this figure rising to 33%[22] among Asian women. Additionally, the financial cost of pursuing higher education in tech was seen as prohibitive by many respondents, further deterring underrepresented groups from entering the field.

Compounding these challenges, 42% of respondents pointed to inadequate tech education in primary and secondary schools[22]. In Hackney, 56.6% of Black residents

and 12.9% of Mixed-heritage residents reported low confidence in finding opportunities in the tech sector[130]. While, insights from the Social Mobility Foundation's *Young People on the Barrier* report revealed that 53%[112] of respondents believed "knowing the right people" and "obtaining the right qualifications" were the most significant barriers for young people from lower socio-economic backgrounds. These findings underscore the systemic nature of these barriers and highlight the urgent need to improve awareness of career pathways and address foundational gaps in tech education to ensure equitable access to the industry.

For Gen Z professionals, the pathway into tech can be fraught with obstacles. A recent study found that 21% of Gen Z[46] individuals report difficulty identifying entry-level programs. Moreover, a review of 17,815 job advertisements revealed that more than half (52%) of so-called "entry-level" tech positions required prior professional experience, with IT technician and junior software engineering roles demanding an average of 2.5 years of experience[23]. Among Gen Z respondents, 54% reported it took four to nine months to secure their first digital role, while 18% took ten months or longer[46].

The challenge extends beyond entry-level positions. A combined report from *Breaking Barriers: Tech Returners* by Reframe WIT, Tech Returners, and Sage identified the lack of visible career pathways as the most significant challenge for women in mid-career transitions[126].

Ensuring accessible, transparent career pathways is essential to empowering a diverse array of candidates, particularly for groups without traditional entry routes or industry connections. Equally critical is aligning expectations around skill acquisition with the pathways to industry employment or progression. This alignment ensures that systemic barriers are addressed holistically rather than shifted along the talent pipeline, creating sustainable solutions that genuinely improve access, equity, and retention across the tech sector.

Lack of Relevant Skills for Entry-Level

Industry is increasingly highlighting an emerging gap between skills programmes and employability. Stakeholder interviews conducted as part of our research revealed that despite candidates possessing the necessary technical skills, many struggle to secure entry-level positions. This challenge is compounded by 42%[46] of businesses reporting a shortage of candidates with appropriate formal qualifications and 43%[46] expressing concerns about insufficient applications from historically underrepresented groups, including individuals from ethnic minority backgrounds, LGBTQI+ communities, neurodivergent individuals, and disabled people.

A study involving 300 companies further underscored the disconnect between formal education and workplace demands. While 45% of businesses noted that candidates for entry-level positions often lack core technical skills despite holding relevant degrees,

26% cited a deficiency in soft skills[46]. This gap indicates that qualifications alone may not suffice, leaving room for biases based on perceived professional polish and personal affinity to influence hiring decisions[46].

With the rapid advancement of AI functionality and increasing expectations for prior experience, the tech job market is becoming even more challenging to access. These shifts risk exacerbating barriers for individuals seeking entry-level roles. Bridging the gap between skills programmes and employability must remain a priority. Stakeholders have emphasised the need for enhanced quality assurance mechanisms for informal skills pathways to foster greater market confidence and ensure that candidates are better equipped to meet industry demands.

Contextual Skills Barrier

The skills shortage in the tech industry extends beyond technical expertise, encompassing the functional soft skills required to maximise technical success. A significant gap exists in complex problem-solving tailored to specific roles, with 35%[19] of organisations identifying this as a critical need. This issue is not confined to recruitment alone but is also evident within existing workforces, highlighting the importance of applying skills effectively in context.

Approximately 50%[19] of organisations report skills deficiencies across professional, technical, and operational levels, illustrating the breadth of the challenge. Additionally, 34%[127] of businesses cite gaps at the apprentice and trainee levels, underscoring the need for targeted interventions to address these foundational gaps and ensure a well-rounded workforce capable of meeting industry demands.

Much of the existing focus of skills interventions and support has been on entry-level access. However, there is an increasing need for mid-level talent that is not being addressed through skills creation within the industry. This delta will only increase as we adopt more AI-generated tools to assist in entry-level functions, reducing the opportunities to grow these skills naturally.

Financial Burden

For Small to Medium Enterprises (SMEs)

Economic barriers are even more pronounced for SMEs. While 58% of large organisations provide digital skills training for their employees, only 27%[128] of SMEs offer similar opportunities. SMEs face higher relative costs for training due to their limited economies of scale, compounded by a lack of access to flexible programs tailored to their unique needs. Nearly half (47%)[128] of SME employees have received no formal training in the past five years, further limiting workforce mobility and innovation within these businesses.

SMEs often lack dedicated learning and development resources, making it difficult to navigate existing training options or build custom pathways that address specific skills gaps. Modular, personalised training approaches—such as bite-sized curricula offered by industry providers—would allow SMEs to align training with their operational needs, increasing both accessibility and uptake.

The recent AI upskilling pilot program, although promising, presents challenges. It had a narrow application window and a requirement for matched funding (50% covered by the program) to test how Government could increase employer investment in upskilling. While the application window was extended due to feedback from applicants and the General Election, stakeholder interviews suggest that the matched funding and application timeframe discouraged some SMEs from applying. Though efforts have been made here, more work is required to expand support structures and simplify access to these programs to enable more SMEs to engage in upskilling, fostering a more inclusive tech workforce and supporting small businesses in adapting to industry demands.

Lack of Industry Confidence in Skills

Industry skills providers have also expressed some concerns about unclear expectations from the tech industry regarding the specific skills required and anticipated to be needed to fuel future developments, particularly in AI. This uncertainty hampers the creation of effective skills programmes, such as Skills Bootcamps. Providers are also experiencing hesitation from the industry regarding investing in training, which can be attributed to the current economic climate as well as the lack of focus on the expected scale and pace of upcoming changes. Without clearer guidance and specific insights, providers worry they will be unprepared to support the needs of the industry adequately. Providers have also shared through our research that in response to this uncertainty, organisations are more likely to rely on traditional pathways (via, for example, university degrees or five years of experience) as they offer comfort and predictability, which risks disadvantaging underrepresented groups' employability.

Without more direction and assurance, a passive industry approach may remain. Across Scottish tech employers, the University of Strathclyde found that total training expenditure fell to £4.1 bn in 2022 from £4.8 bn in 2017 [129]. Reports show that only 21% of Scottish companies feel equipped to meet their digital needs, and 46% of businesses are taking no action to develop employees' digital skills[129]. While there is undoubtedly the desire to acknowledge the skills gap, without the focus to address it, there continue to be difficult challenges for underserved communities to navigate.

Key Opportunities

In the skills space, fostering inclusion lies in addressing the entire career journey—from initial access to skills pathways, through securing entry-level roles, to sustaining

mid-career progression with tailored reskilling, upskilling, and returner support. A pivotal enabler of this journey is the establishment of a comprehensive skills framework, which acts as both a roadmap for navigating tech careers and a communication tool for aligning industry, education, and policymakers. By enhancing accessibility, transparency, and inclusivity across each stage of this journey, the tech sector can better support diverse talent and create sustainable pathways for underrepresented groups. Building trust in outcomes and supporting a more equitable development space.

Refining Traditional Pathways

Higher Education

Higher education remains a cornerstone for developing the highly skilled professionals necessary to sustain the UK's global leadership in technology and innovation. However, systemic challenges must be addressed to create equitable and inclusive learning environments, particularly for women and other underrepresented groups. Educational institutions must take deeper responsibility for diversifying STEM courses by enhancing existing widening participation programmes and implementing robust support systems to recruit and retain underrepresented individuals.

Acknowledging that participants from underrepresented groups frequently find themselves in cohorts without underrepresented peers is essential. Building on foundations that communities such as the Institute of Coding have built to provide reflective support. Such support ensures that individuals retain their unique identities and perspectives while feeling valued and included, ultimately contributing to a more innovative and cohesive learning or working environment.

Inclusive practice with higher education could be a tool to improve workplace culture and build not only technical skills but also practices for innovation. Daniel Coyle's *The Culture Code*[131] emphasises that successful teams thrive when they foster psychological safety, share vulnerability (including acknowledging failures), and establish a strong sense of purpose—approaches that lead to the most innovative and effective outcomes. Applying these principles in educational settings encourages greater participation and collaboration while nurturing habits that maximise integration within learning environments. These practices could also serve as a catalyst for broader workplace improvements, bridging the gap between education and employment and driving inclusivity and innovation across sectors.

The rise of T-shaped skills reflects the growing demand for professionals who can combine deep expertise in a specific field with a broad understanding of complementary disciplines. This approach is particularly vital in navigating rapid technological advancements such as artificial intelligence and machine learning. To meet this demand, higher education curricula should prioritise interdisciplinary approaches, such as integrating creative problem-solving with programming. This not only broadens the

appeal of tech pathways but also enhances engagement and prepares students for the multifaceted challenges of the modern workplace.

Financial incentives, like those used successfully in the AI Conversion Course, and tailored cohort support can further reduce barriers for socio-economically disadvantaged students and have the potential to encourage better age inclusion. These strategies are critical for ensuring that higher education pathways attract and retain a diverse talent pool, equipping the tech sector with the ethical and innovative expertise needed to thrive in a complex digital economy.

Apprenticeships

The introduction of the Growth and Skills Levy-Funded Offer presents a unique opportunity to address persistent challenges in the digital sector. One of the enduring issues is achieving a balance between addressing the immediate skills gap and fostering a pipeline of highly skilled professionals for long-term workforce capability. To bridge this gap, a more adaptive and scalable digital skills ecosystem is needed—one that combines short-term upskilling with long-term capability development. Developing modular programs that integrate boot camp-style intensives with the depth of Level 4 apprenticeships could offer a viable solution. By blending core competencies with specialisation pathways, these programs can meet immediate technical demands while equipping learners with the skills necessary to progress into leadership roles within the tech industry.

Ensuring equity in access routes for underrepresented groups is vital to creating an inclusive digital skills framework. Recognising and accommodating the pathways these groups take to access skills training is critical to establishing equitable standards. Any expansion of levy flexibilities must be balanced with a commitment to maintaining high-quality provision.

Designing Programmes for Inclusivity

Skills Bootcamps

Skills Bootcamp represent a critical opportunity to improve access to the tech industry for underrepresented groups. The Department for Education (DfE) evaluation of Skills Bootcamp has already shown promising results, with positive trends indicating progress[110], but further efforts are needed to ensure these outcomes are sustained and expanded.

Skills Bootcamps' inherent flexibility and industry-focused design have made them one of the most accessible pathways for individuals seeking entry into digital careers. However, challenges persist in ensuring these programmes are both equitable and impactful. Establishing a kitemark to signify the quality and standard of skills provision, alongside alignment with a broader industry skills framework, could enhance confidence among both learners and employers. This would also create a more structured

approach to skills recognition, ensuring Skills Bootcamp graduates are equipped for meaningful employment while supporting the overall inclusivity of the tech sector.

Against the backdrop of increasing industry acceptance, alternative pathways such as Skills Bootcamps have gained significant traction, with 54%[131] of hiring managers now reporting experience interviewing or hiring Skills Bootcamp graduates. Many employers regard these graduates as more work-ready than those from traditional educational routes[131]. Despite this progress, perception challenges continue to pose barriers to employment for Skills Bootcamp graduates. These include a lack of structured onboarding processes and mismatched expectations among colleagues, which can hinder integration and long-term success. This reinforces the need to better integrate alternative routes into established hiring practices and career development frameworks, fostering broader acceptance and recognition of diverse educational pathways.

Although Skills Bootcamps provide one of the most flexible pathways into the tech industry, they still fall short for some communities, which struggle to find options that align with their specific circumstances. Expanding the variety of flexible offerings could significantly enhance participation. Options such as training programs with childcare support, remote learning with recorded modules to accommodate diverse cognitive needs, and out-of-hours or weekend sessions would make Skills Bootcamps more accessible to a broader range of individuals, particularly those balancing work, caregiving, or other commitments.

To maximise the transformative potential of post-course employment opportunities for underserved groups, cultivating strong partnerships between educational providers and the tech industry is essential. Such collaborations can yield significant advantages, particularly by aligning training with employer needs and creating more sustainable career pathways for graduates.

According to the Tech Talent Charter, Skills Bootcamp graduates are 38% more likely to stay with a company than traditional graduates (37% vs. 22%).[3] This statistic is particularly compelling for small and medium-sized enterprises (SMEs), where workforce retention is a critical challenge. Strengthening relationships between Skills Bootcamp providers and industry participants offers a valuable opportunity to tailor training programs to workforce needs, fostering a committed, work-ready talent pipeline. For SMEs, this alignment can expand access to tech careers for underrepresented groups while addressing immediate skills shortages.

A critical opportunity to enhance the inclusivity and effectiveness of alternative pathways lies in strengthening data collection and longitudinal research. Significant gaps exist in tracking participant demographics, career outcomes, and the progression of Skills Bootcamp graduates, limiting the ability to assess the long-term impact of these programmes fully. These data gaps risk perpetuating systemic barriers, impeding

informed policy and organisational decisions, and undermining efforts to evidence the value of such provisions robustly.

To address this, targeted investments in comprehensive data collection and analysis are essential. Improved data frameworks would provide the insights needed to refine alternative pathways, ensuring they remain inclusive, impactful, and aligned with industry demands. Additionally, this information would support the development of sustainable career opportunities for participants, fostering long-term success in the tech industry.

Establishing an Industry Skills Framework

A central barrier to increasing diversity in the tech industry is the absence of widely adopted skills frameworks, particularly for advanced digital competencies. Providers and industry stakeholders often emphasise a disconnect between the skills demanded by organisations and those cultivated through existing programs, particularly in fast-evolving areas like AI. This gap is further compounded by the lack of professional standards, which creates ambiguity in how skills are defined, assessed, and rewarded. Without clear frameworks, discussions around individual capabilities often become subjective, leaving room for significant direct and indirect biases to influence hiring, promotion, and development decisions.

The enduring challenge lies in the fragmented communication between industry, providers, policymakers, educational institutions, and technologists. The absence of a shared language around in-demand and utilised skills perpetuates a lack of clarity, hindering the development of targeted training programs and leaving many potential candidates at a disadvantage, which will have the heaviest impact on existing marginalised groups.

Established frameworks, like the Skills Framework for the Information Age (SFIA) or Digital Data Analytics Taxonomy (DDAT), offer a structured system to identify, define and categorise skills for different roles in the tech sector. They are underutilised, leaving both employers and job seekers without clear standards for skill validation. Unlike professions with well-defined progression models, such as healthcare and accounting, tech lacks a universal unified professional structure that could facilitate career advancement for individuals from diverse backgrounds. For example, in the UK accountancy industry, it is common practice for employers to fund training fees as individuals reach chartered status.

Establishing a UK government-backed standard, would enhance visibility and provide employers with a reliable framework to assess individual competencies. The Australian Government's successful adoption and recent extension of SFIA underscores the potential impact of such frameworks in workforce planning. In the UK, the British Computing Society (BCS) actively supports organisations in leveraging SFIA, offering

opportunities to build real-world case studies that demonstrate the framework's utility. These efforts could inform the development of a national standard, addressing industry needs and promoting consistent application.

The framework could act as a validation tool, to help assess the quality of provision considered for boot camp funding, flexibilities considered in the Growth and Skills Levy-Funded Offer and initiatives under the new Lifelong Learning Entitlement Loan. Competency-based frameworks, which emphasise adaptability alongside technical skills would be highly beneficial, especially as the industry increasingly values T-shaped skills that combine deep technical knowledge with soft skills like collaboration and creativity.

A UK-wide, government-supported skills framework would significantly enhance the ability of recruiters to identify transferable skills, creating a reliable standard for the recruitment process. This would address an emerging challenge, as reported by stakeholders, where transferable skills within the tech industry are frequently overlooked by recruiters and the tools they employ, leaving individuals transitioning from other sectors struggling to secure roles. Such a framework would provide clarity and consistency, enabling candidates to better demonstrate their capabilities and easing the transition into tech for a more diverse talent pool.

Additionally, a robust skills framework would facilitate more sophisticated data collection, offering organisations and policymakers valuable insights into the current levels of skill availability and the readiness to meet future demands. This data would not only support targeted investment in skills development but also inform strategic planning to ensure the tech workforce is equipped to thrive in an evolving industry landscape.

As we look for future skills planning, adapting and adopting a framework similar to SFIA with agile functionality will be necessary to stay forward-focused on the skills needed for a competitive UK workforce. The industry will require more cross-functional collaboration and an understanding of AI technology's wider impact. A T-shaped model is naturally more open to inclusive practice, as not only technical skills but also creativity and emotional intelligence are prized. This shift in expectations would create space for the natural movement to a more inclusive culture of practice.

In tandem with the industry skills framework Government-backed lifelong learning initiatives, supported by competency validation through a UK framework that mirrors that of SFIA, would help ensure equitable skill-building opportunities and create smoother, more transparent career pathways that enable diverse candidates to navigate and thrive within the tech sector. Flexible, modular lifelong learning networks offer an effective approach to skills development that could align with the needs of diverse candidates and support ongoing growth within the workforce.

Mobilising a Skills Assessment Tool

A recurring challenge in fostering inclusivity within the tech sector is the need to create a sense of belonging, particularly in environments lacking relatable role models. This gap can reinforce societal perceptions that lead individuals—especially gender minorities, people from lower socio-economic backgrounds, and disabled people—to underestimate their skills and potential. Numerous studies indicate a persistent misalignment between individuals' perceptions of their abilities and the actual requirements of roles in tech, further deterring underrepresented groups from pursuing these opportunities.

To address this, the development or extension of a UK-wide, government-backed skills assessment tool could be transformative. Such a tool could evaluate an individual's current skill level and recommend tailored programmes to bridge identified gaps, thereby improving the visibility and accessibility of pathways into the tech industry. By offering targeted content and resources designed to meet the needs of specific groups, this initiative could significantly enhance engagement and create more equitable access to opportunities in the sector.

Currently, there are several entry-level skill tools, including industry-backed ones, such as Sky's programme finder or broad mapping like BCS's Tech Career Quiz and Tech Skills. The EU offers a more comprehensive tool to align a specific level of technical confidence, starting from a digital literacy level, but allows for an alignment to advanced digital roles.

This approach enables a clearer progression map, bridging skill levels to career opportunities.

There is an untapped opportunity to refine and expand these tools into more dynamic platforms that empower individuals to see how their existing transferable skills can be leveraged for tech roles. Instead of relying solely on linear pathways, such tools could function as interconnected networks—akin to a cargo net—showing multiple routes to success and enabling lateral movement across roles and sectors. By providing clear insights into further opportunities enabled by tech skills, these tools can make career development feel more accessible and achievable for diverse candidates.

Areas of tech with historically low visibility, such as data centres and digital architecture roles, continue to suffer from significant underrepresentation. Improving visibility through skills assessment tools that highlight specific role types and sectors can address these gaps. This visibility is particularly critical for creating regional opportunities, as potential candidates become more aware of the kinds of work available within their geographic areas.

The NHS provides a compelling example of how such an approach can succeed. Its comprehensive hub integrates quizzes, training routes, funding options, and career

mapping, including for less visible roles. Adapting a similar model for tech could transform entry-level pathways, providing tailored insights and equitable access to a wider array of roles while fostering diversity across the sector.

Capitalising on Reskilling and Upskilling Programmes

There is an opportunity to capitalise on the willingness for reskilling and upskilling. A report by Gallup and AWS found that two-thirds (67%) of British digital workers are "extremely interested" or "very interested" in obtaining digital skills training[132]. Specifically in a recent BAE study, 90% of neurodivergent men and 73% of neurodivergent women indicated they were prepared to switch careers to pursue a job in tech, alongside 81% of Asian men and 86% of black people[22]. In the research, 56% of those who were very interested in additional training reported that their digital skills were self-taught[132]. A willingness to access a tech career and a personal commitment to learning create a warm environment for the right initiatives to engage and develop communities.

Developing Modular, Lifelong Learning Networks

Flexible, modular lifelong learning networks represent a transformative approach to skills development, offering inclusivity by aligning with the diverse needs of candidates and enabling ongoing workforce growth. These networks, grounded in competency-based frameworks, prioritise adaptability alongside technical proficiency, meeting the industry's increasing demand for T-shaped skills that combine deep expertise with essential soft skills such as collaboration and creativity. By emphasising lifelong learning, these frameworks can create equitable, accessible, and sustainable pathways for diverse candidates to thrive within the tech sector.

To enhance engagement with underrepresented communities, visibility around the financial aspects of these programmes is crucial. Structured information on programme costs and the availability of grants, welfare support, childcare access, and Disability Support Allowance (for degree-based programmes) would address financial barriers. Mapping these options clearly for both learners and providers would demystify access routes and increase participation among communities that have historically faced exclusion from formal learning opportunities.

As the introduction of the Lifelong Loan Entitlement and Lifetime Skills Guarantee for England approaches in September 2025, opportunities for modular adult education at Levels 4–6 are expected to expand significantly. However, these schemes are currently limited to courses delivered by Further Education (FE) and Higher Education (HE) institutions. This restriction risks excluding many potential learners, particularly those for whom traditional institutions are either inaccessible or impractical due to geographic, financial, or logistical barriers.

To address this gap, modular learning could be extended beyond traditional institutions to include diverse providers, such as industry-led Skills Bootcamps or community-driven initiatives, to ensure broader accessibility. Given widespread concerns about student loan debt, targeted communication strategies must be developed to raise awareness among specific communities about the flexibility and potential benefits of modular programmes. Tailored outreach efforts, addressing unique community needs, would be key to fostering inclusivity and encouraging participation across the socio-economic spectrum.

Modular lifelong learning networks, supported by strategic investments and inclusive communication, offer a powerful opportunity to address systemic inequities in tech. By creating flexible, accessible, and competency-driven pathways, these networks can not only meet the evolving demands of the tech industry but also ensure that opportunities for advancement are accessible to all, fostering a more diverse and innovative workforce.

Designing for Mid-Career Talent

There is an increasing need for reskilling and upskilling of mid-career talent that is not being addressed through skills pathways within the industry. The modular lifelong learning and skills frameworks do offer some opportunities to continue to drive innovation and economic growth through mid-career talent however more could be done.

Given the scale of the UK government's digital public service operations and ambitions for growth, a mid-career incubator for training material and examples could be made available. These would both support organisations offering training and create clarity in what this training looks like. Specific schemes for Cyber could also include targeted support for underserved communities and wider industry rotations. This would benefit not only the technical capabilities of the government department but also allow for the close iteration of training tools.

Financial services organisations are leading the way in the scale of their programmes. However, stakeholders report that they are struggling to maintain the pace needed to prevent the offshoring of roles to meet the advanced digital demands of the organisations.

There are International examples that the government could learn and mirror. The Singapore Skillsfuture provides an enhanced subsidy for citizens aged over 25 years, including financial support for mid-career support and career transition programmes. This resulted in 540,000 individuals and 14,000 enterprises benefiting from the Skillsfuture Singapore initiative in just one year. Enrollment for tech-related courses such as “Artificial Intelligence for Everyone” and “Data Analytics Begins with Me”

remained among the most popular[123], a skill set the UK tech industry is aligned with increasing.

Similarly the US recent policy 'Stronger Workforce for America Act', which mandates the reskilling support employers are expected to offer. This significant signalling of the importance of upskilling could also act as a catalyst for internal and external investment. The Act was announced in April, so it is too early to judge performance. The UK has an opportunity to follow the impact of this type of policy to learn which policy levers could improve not just the skill level of the tech workforce but potentially benefit the wider economy.

Beyond technical upskilling, it is important that there is an environment to enable any reskilled/upskilled individuals to thrive. Upskilling programmes can be useful vehicles to support underrepresented communities with specific support in navigating barriers and progressing to mid-level. Schemes like those offered by Upskill Universe have been successful in supporting ethnic minorities. These programmes are most successful when inclusive training work is underway with majority groups to ensure that workplace cultural challenges are addressed. The internal mobility that reskilling creates is lost without the cultural change required to prevent highly skilled employees from missing out due to biased processes.

Retaining Talent through Returners Programmes

While successfully bridging some gaps, returner programmes frequently need broader implementation to create lasting, large-scale change. The returners programmes usually offered to technologists are generally centred around readiness to return to the workplace rather than refreshing their technical skills. This is often due to the challenges in keeping the course curriculum applicable.

Refining AI and Data Science Conversion Courses for Increased Inclusivity

The government has recognised and acted on the significant emerging need for a qualified and experienced tech workforce in the areas of Artificial Intelligence and Data Science. With support from the Department of Science, Innovation and Technology, grants have been available to Universities to develop and deliver postgraduate AI and data science conversion courses. The postgraduate AI conversion courses are for those students who have completed their undergraduate in a non-STEM subject and wish to learn skills to work in or with AI. These courses have been well received by learners overall, allowing for the development of specific course curricula. Over two-thirds of course graduates surveyed would recommend their course to somebody who had not previously studied data science or AI, with strong interest from students in the developed courses[112]. The direction of travel of this initiative is positive, and as it iterates, refinements will offer opportunities to increase impact and raise matched industry sponsorship.

Of the 581 UK-domiciled students awarded scholarships, 72% were women, 35% of Black ethnicity (and a further 21% of other ethnic minority backgrounds), and 25% had declared a disability. It is reported that, in a number of cases, awardees have characteristics that place them in more than one reporting category, and this intersectionality is a positive outcome[112].

Survey results suggest one-third of the government grant scholarship awardees would not have enrolled in their course without the financial support available[12]. Non-scholarship students funded their course fees and costs from personal funding sources, with almost none financed by an employer. According to the Office for Students, employers currently encourage only around 10% of students to participate[112]. Many of the self-funding candidates declared they were working at the same time as completing the course[112] which in part explains why there is a low percentage of employers encouraging this type of study. From a duty of care perspective, employers cannot support individuals having full-time jobs and full-time study. With better alignment between industry and education, we could see extended uptake of course such as these.

In the first year of the scheme, the post-pandemic landscape fostered increased flexibility, enabling broader participation. However, a shift towards reduced flexibility—such as requiring in-person attendance and full-time commitments—risks narrowing the diversity of participants. Flexibility is frequently identified as a critical barrier to access, particularly among minority groups. Future iterations of the scheme present an opportunity to reassess and enhance flexibility levels, ensuring pathways remain accessible to the widest range of candidates. This need is especially pressing for disabled students, as the number of awards granted to this group has steadily declined year after year[112].

From stakeholder interviews with female mid-career technologists, there is a significant appetite to develop AI-specific skills among those who feel they do not have a viable pathway to do so. Often, suitable courses include unnecessary basic technical skills (which are already securely known) that extend the length of the course, or they are via business school, where some feel the technical quality of the course is not assured. Given this group's well-established technical expertise, a suitable course or adaptation of these courses could accelerate AI expertise into more senior positions. Increasing the visibility of this type of pathway for mid-career female technologists could support a pipeline of mature and diverse contributors and leaders for AI topics, thus helping to de-risk levels of bias in the UK’s adoption of AI.

Improving Board-Level Competency

A recent AndDigital poll revealed that 64% of CEOs identify as “analogue leaders in a digital age,” with 34% expressing doubts about their digital expertise to lead their companies through future growth phases. This concern is especially pronounced among

female CEOs, with 46%[133] sharing these reservations. Beyond CEOs, company boards are facing escalating pressure to demonstrate digital competency, particularly as organisations increasingly adopt AI-enabled workforce tools. Without a comprehensive understanding of these technologies' potential, biases, and risks, boards may inadvertently foster discriminatory practices or operational inefficiencies.

The mass digitalisation of businesses necessitates a heightened level of digital diligence within company boards. According to a 2024 KPMG report, board education on generative AI is primarily ad hoc, with 68% of directors self-teaching, while 48% rely on management presentations or third-party training[134]. Alarmingly, only 5% of boards are actively recruiting for Gen AI expertise[133]. This lack of structured learning presents a critical gap, particularly as organisations explore how to maximise productivity through AI-enabled tools.

To address this, establishing a regulatory framework that mandates digital competency at the board level is recommended. Such a framework would safeguard underrepresented groups by ensuring leadership understands the advances, potential, and biases of emerging technologies, reducing the risk of discriminatory practices. Furthermore, regulatory levers could empower boards to lead their organisations with a well-informed approach to technology adoption, fostering ethical decision-making and sustainable growth.

Expanding existing legislative frameworks to include digital competency as a core requirement for boards would be a logical next step. By setting this expectation, organisations can future-proof their strategies, equipping leadership with the skills to navigate an increasingly complex digital landscape. Simultaneously, organisations can create targeted upskilling opportunities for employees at all levels, ensuring a comprehensive understanding of AI and other technologies to mitigate risks and maximise productivity.

Building a culture of digital fluency from the top down will not only protect employees but also position companies to fully harness the opportunities presented by emerging technologies. By prioritising this agenda, we can ensure that innovation drives inclusion, ethical practice, and long-term growth.

Improving Data

The skills landscape is undeniably complex, particularly when evaluating progress toward a more equitable and accessible ecosystem. Significant efforts by industry, education providers, and government bodies have generated some momentum, but the pace of change remains unclear, largely due to a lack of comprehensive, consistently collected, and systematically analysed data to inform and drive further progress.

Currently, data gaps persist in tracking how individuals enter the tech industry through various pathways and in understanding the long-term impact of alternative career

routes. This lack of longitudinal insight poses a challenge in advancing underserved communities into leadership roles, as many enter the industry through accessible but less traditionally valued pathways. Without deliberate consideration and targeted interventions, today's decisions on skills provision may inadvertently perpetuate barriers at mid-career stages for underrepresented groups.

To address this, a stronger commitment to data collection, monitoring, and evaluation is essential. This should include a focus on disaggregated data by demographic groups, career progression, and role types to ensure an evidence-based approach that supports equitable outcomes. By addressing these gaps, stakeholders can better understand and anticipate the evolving needs of diverse communities, ensuring that all pathways lead to meaningful and sustainable career growth.

Conclusion

The journey towards a truly diverse and inclusive UK tech sector has seen encouraging strides, yet critical barriers persist, and progress is not equal across different underrepresented groups. This unequal progress is further threatened by economic downturns, shifting market dynamics and resource constraints. The UK tech sector is at a significant crossroads, with diversity and inclusion increasingly acknowledged as essential contributors to innovation and competitiveness. Sustained efforts in this space are crucial to retaining a diverse talent pool, fostering innovation, and supporting economic growth. Without continued commitment, there is a risk that underrepresented groups may disengage from the sector, potentially leading to a contraction of the talent pipeline, reduced innovation, and broader economic challenges. Concerted and coordinated effort, commitment and resourcing can accelerate progress, innovation and economic growth.

As highlighted at the outset, addressing these challenges requires a collaborative approach; neither the Government nor industry can tackle them in isolation. A coordinated effort that leverages the strengths of policymakers, educators, employers, and community organisations is essential to drive meaningful and sustainable change. However, if the Government uses its available levers of policy initiatives and legislation, funds springboard initiatives and uses its convening power, it will serve as a powerful catalyst to increase DEI progress. (For examples and recommendations on how this can happen, see Appendix 2 Blank Framework for Inclusive Programme Design and Appendix 3 Procurement.) Then if industry utilises these to drive both internal and cross-sectoral change, embedding DEI in its core business opportunities, removing barriers to employment and advancement and seeing inclusive skills development as a core business investment (not cost), the UK will see genuine progress, not just in the diversity of its workforce, but its skills pipeline, innovation and economy.

Policies, initiatives, and programmes must be data-driven and impact-focused, aiming not only to support underrepresented groups but also to fundamentally transform existing approaches, processes, and organisational culture. The focus must shift from siloed diversity efforts to fostering inclusion, equity, and intersectionality across all levels. This is not simply about hiring for diversity or expecting underrepresented individuals to adapt to existing systems; it is about organisations evolving to embed inclusivity into their core business processes. Such an approach ensures not only diverse hiring but also equitable retention, development, and promotion, fostering a truly inclusive workforce

Enduring challenges in recruitment practices, limited access to training pathways, and socio-economic hurdles continue to disproportionately affect women, ethnic minorities, LGBTQI+ individuals, disabled people, neurodivergent talent, and those from lower-income backgrounds. Biassed cultures and unfair treatment including stereotyping, microaggressions, sexual and racial harassment and hostility, result in stalled careers and growing attrition rates. Entrenched bias in hiring and promotion within the industry, investment and funding decisions in entrepreneurship, and lack of structural aid for businesses to build skills improvement plans for their teams are significant barriers to inclusivity in the tech sector. These issues highlight the need for innovative, data-driven, targeted and scalable interventions to bridge persistent gaps.

Mentorship programs, structured career pathways, psychological safety measures, and workplace flexibility represent critical interventions aimed at addressing the challenges experienced by marginalised groups in the tech sector. Similarly, initiatives such as targeted funding, tailored support for underrepresented founders, and specialised training through Skills Bootcamps and AI conversion courses have demonstrated potential in widening access and enabling diverse candidates to build sustainable career foundations. While evidence suggests a clear understanding of effective strategies, the limited scope, fragmented implementation, and lack of sustainability of current efforts underscore the need for a more unified approach.

To advance inclusion within the tech industry, several strategic opportunities emerge. Standardising competency frameworks could help reduce barriers to entry and progression, providing a transparent structure for career development. Enhanced data collection and benchmarking are essential to deepen insights into the lived experiences of underrepresented groups, enabling evidence-based decision-making. Furthermore, investing in modular, lifelong learning frameworks—quality-assured and aligned with industry demands—has the potential to significantly expand access to high-demand areas such as AI and cybersecurity.

Encouragingly, there is a growing industry appetite for accreditation schemes to track and validate progress in inclusion efforts. This signals a promising commitment to

systemic change. However, to realise meaningful and sustainable outcomes, it is imperative that future initiatives are comprehensive, scalable, and aligned with both industry and policy priorities. A cohesive strategy integrating these elements will be instrumental in fostering a more inclusive and innovative tech sector.

The report aims to enhance the Department's understanding of the industry's inclusion needs, providing valuable insights to inform strategies for fostering a more equitable and diverse tech sector.

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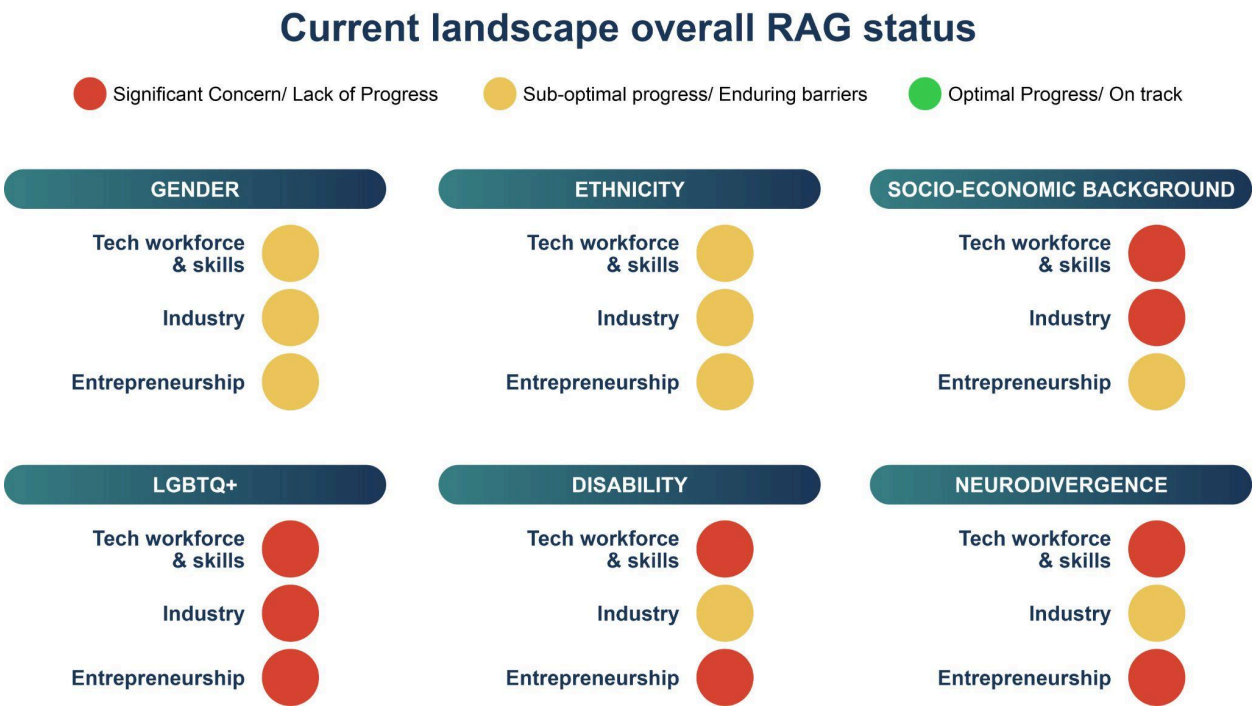
Appendices

Appendix 1 DEI data heatmap

The consolidated heatmap provides a visual representation of the current state of diversity across three key pillars: Tech Workforce & Skills, Industry, and Entrepreneurship and across the key DEI lenses: Gender, Ethnicity, Socio-Economic Background, LGBTQI+, Disability and Neurodivergence. This tool is designed to provide a quick and intuitive overview, highlighting both areas of progress and persistent challenges. By visually mapping these dimensions, the heatmap supports a deeper understanding of the findings presented in the accompanying landscape report, enabling stakeholders to pinpoint priorities for action and track advancements effectively.

The heatmap utilises a colour-coded system (Red, Amber, Green) to indicate the status of various diversity dimensions. Green signifies strong performance or/and readily available data, Amber indicates moderate progress or/and some challenges, and Red highlights areas of significant concern and/or data scarcity. This visual approach enables stakeholders to prioritise interventions and allocate resources effectively, focusing on the most critical areas for improvement in the UK tech sector's diversity landscape.



Appendix 2 Abridged Blank Framework for Inclusive Programme Design

This framework was developed to support the Department in its pursuit of equitable programmes and partnerships, providing a structured methodology to design and evaluate initiatives that advance inclusion and diversity. Recognising the pivotal role that inclusivity plays in fostering innovation and equitable outcomes, the framework aims to address systemic barriers encountered by underrepresented groups and to embed equity into every stage of programme development and delivery.

By prioritising principles such as inclusivity by design, measurable impacts on diversity, equity, and inclusion (DEI), and continuous evolution through feedback, this framework seeks to create programmes that are both targeted and adaptable. It emphasises the importance of understanding intersectionality, fostering a sense of belonging, and tailoring interventions to address the specific challenges faced by marginalised communities.

Additionally, the framework integrates tools for assessing the suitability of inclusive versus targeted programme designs, ensuring that initiatives are contextually relevant and effective in their objectives. With a focus on accessibility, representation, and regional needs, the framework provides a roadmap for building robust, inclusive programmes that align with both community needs and industry goals. This approach not only seeks to dismantle existing inequities but also aims to create scalable, sustainable solutions that contribute to systemic change across the ecosystem.

Essential Principles of the Framework

Inclusivity by Design

Adopting this approach requires an equity-first mindset that informs every stage of program design and implementation. Solutions should be proactively developed to dismantle barriers encountered by underrepresented groups, aiming to level the playing field and ensure that inclusion is integrated at both strategic and operational levels. The focus is on understanding intersectionality and how overlapping identities shape unique experiences of inequity, which in turn guides outreach, design, and support mechanisms.

Diversity and representation are central. Leadership, mentors, and participants must reflect the communities they serve to build trust, foster a sense of belonging, and inspire innovation.

Measurable Impact on Diversity, Equity and Inclusion

Baseline metrics on diversity are essential to evaluate progress. With transparent reporting mechanisms, DEI targets should focus on recruitment, retention, and success outcomes. Goals should evolve with participant needs, emphasising scalability and sustainability while holding stakeholders accountable for progress.

Continuous Evolution for DEI

Programme design and delivery must remain adaptive. Feedback loops, community input, and third-party equity audits ensure that DEI efforts are refined over time. Sharing insights with industry stakeholders promotes collective learning and broader systemic change**.**

Targeted, Tailored and Inclusive

Specificity regarding the program's required focus must be a key factor to ensure efficacy and impact. Inclusive programming is a minimum standard necessary to comply with equality regulations and laws, and it is often suitable when the objective is to benefit a wide range of participants while mainstreaming provisions. A targeted approach addresses specific challenges or barriers experienced by a particular demographic. However, without a tailored approach to programs in this category, the curriculum, support, and tools may not meet the intended purpose. Close attention is required to ensure that targeted actions are based on informed processes and designs that effectively address the needs of the community being served.

Programme Design Framework

Directly supporting the design of a suitable inclusive program requires consideration of several factors. Two key considerations are approach to design and intent. The frameworks below are provided for inclusivity by design approach methodologies and a decision metric for tailored vs. inclusive program design.

Inclusivity by Design

Inclusive design is a methodology that aims to make products and environments usable by people of all backgrounds and abilities. It's based on the principle that designing for the widest range of people creates better designs and benefits everyone. General principles centre on the following.

- ☐ **Identify Needs:** Consider the community and user. Consider who will use the product or service and who might feel excluded. Use data to inform the needs and opportunities of specific communities.

- ☐ **Equity-First Mindset**: Proactively dismantle barriers faced by underrepresented groups by designing solutions that level the playing field.

- ☐ **Intersectional Focus**: Recognise and address compounded challenges faced by individuals at the intersection of multiple forms of marginalisation (e.g., disabled women from low-income backgrounds).

- ☐ **Representation Matters**: Ensure leadership, mentors, and participants reflect the diversity of the communities served. Representation fosters trust, belonging, and a culture of innovation.

- ☐ **Accessibility:** Use platforms compliant with Web Content Accessibility Guidelines and physical venues that allow physical accessibility, including space for support personnel. Consideration should be given to hybrid implementation and the creation of delivery vehicles that illustrate best practices to influence the broader ecosystem.

- ☐ **Adaptive Learning**: Use ongoing feedback and external DEI audits to refine programme design.

- ☐ **Transparency and Sharing**: Publish DEI outcomes and share best practices and key learnings to influence industry-wide change.

Measurable Impact on DEI

- ☐ **Baseline Metrics**: Conduct a pre-program demographic audit to establish baseline levels of diversity.

- ☐ **Progressive Targets**: Set ambitious, clear, and measurable goals to increase participation and success rates among underrepresented groups.

- ☐ **Accountability Mechanisms**: Regularly report progress on DEI metrics to stakeholders and adjust strategies as needed.

Targeted vs Inclusive Programmes

The decision to implement a targeted and tailored initiative versus a broad, inclusive design depends on the context, objectives, and needs of the intended beneficiaries. Here's how to approach this decision-making process:

Understand the Objectives of the Programme

- Targeted Programmes: Best suited for addressing specific challenges or barriers experienced by a particular demographic (e.g., women entrepreneurs, ethnic minority-led startups, disabled founders).

  Example: A funding initiative exclusively for Black-owned tech startups to address systemic disparities in access to capital.

- Inclusive Programmes: Appropriate when the goal is to benefit a wide range of participants while embedding equity and accessibility mechanisms for all.

  Example: A national accelerator programme open to all founders, with built-in support for underrepresented groups, such as childcare support or digital skills training.

Conduct a Needs Assessment

- Use demographic data, surveys, and stakeholder consultations to determine whether certain groups face disproportionate barriers.
- A targeted programme may be necessary to level the playing field if specific groups are severely underrepresented or face unique challenges. The more specific the program, the more likely it will be to service the community's needs.
- If barriers are more general (e.g., lack of awareness or connectivity), an inclusive programme with tailored support for diverse groups may be sufficient. Designing programmes without inclusivity risks legislative breaches.

Assess Stakeholder Expectations

- Engage with funders, partners, and community stakeholders to understand their priorities.

Align Impact Visualisation

- An impact visualisation should be created to address the needs identified in the needs assessment. This will align the expected impact with the delivery model and provide visibility into the metrics and approaches being utilised. Examples will include impact measurements such as economic indicators like growth, human capital volume/number of participants, or social returns on investment. The anticipated outputs and impacts will guide the development of focused and targeted programs.

Universal Design Framework

When considering specific inclusive program design, the following factors should be considered.

Needs Assessment with a DEI Lens

- ☐ **Demographic Mapping and Gaps**:

- ☐ Analyse underrepresentation across gender, ethnicity, disability, including neurodivergence, orientation, and socioeconomic lines in target sectors and/or regions. If a targeted programme is to be delivered, this should be considered the primary need; however, intersectional barriers should be considered to maximise participation.

- ☐ Identify barriers unique to specific groups (e.g., cultural norms preventing women's participation in tech, accessibility barriers, financial barriers), including a lack of relevant or available provision.

- ☐ **Engagement with Underrepresented Communities**:

  - ☐ Partner with advocacy groups, non-profits, and community leaders to gain trust and insights into suitable programmes to meet objectives. This allows exploration around routes to deepen participation.

  - ☐ Host culturally safe focus groups and interviews with lived experience experts.

- ☐ **Equity Audits**:

  - ☐ Review historical participation and outcomes to understand systemic exclusions.

  - ☐ Apply an intersectional analysis to tailor outreach and programme design.

Programme Structuring

Participation Models:

- ☐ Offer fully virtual, hybrid, and in-person pathways to remove geographic, financial, and caregiving barriers.

- ☐ Design asynchronous learning modules for participants with restricted schedules.

- ☐ Focus on the structure of delivered content, available resources and focused development to ensure maximum effort is focused on delivering impact.

Accessibility-First Design:

- ☐ Ensure compliance with international accessibility standards (e.g., WCAG for digital tools).

- ☐ Include funding for assistive technologies and interpretation services as a default.

- ☐ Use inclusive language. Use real-world success stories that demonstrate equity and representation in practice.

- ☐ **Tailored Curriculum for Underrepresented Groups:**

  - ☐ Incorporate workshops addressing systemic inequities, such as navigating bias in venture capital spaces.

  - ☐ Recruit instructors and mentors who mirror the diversity of participants to inspire and build confidence.

Regional Needs

- ☐ **Understanding Regional Disparities**

  - ☐ Collect data on local economic conditions, unemployment rates, business density, and key industries in each region.

  - ☐ Analyse regional disparities in infrastructure, access to resources (e.g., high-speed internet, transportation), and education levels.

  - ☐ Identify underserved areas where programme support could have the most impact, such as rural or economically disadvantaged regions.

- ☐ **Community Engagement**

  - ☐ Engage local stakeholders, including businesses, educational institutions, and community leaders, to understand regional priorities and challenges.

  - ☐ Conduct surveys, focus groups, and town hall meetings to collect qualitative data.

  - ☐ Partner with local chambers of commerce, regional clusters, and economic development agencies for insight into regional business ecosystems.

  - ☐ Use partnerships to adapt programmes to the unique demands of the local economy, ensuring relevance and sustainability.

  - ☐ Partner with local accelerators, incubators, and co-working spaces to deliver programmes within familiar and accessible environments.

  - ☐ Use local networks to enhance outreach and engagement with underrepresented groups in the area.

  - ☐ Encourage partnerships between local suppliers and programme participants to stimulate regional economies.

- ☐ Support initiatives that connect startups with established local businesses for mentorship and resource sharing.

- ☐ **Mapping Resources and Gaps**

  - ☐ Develop a geographic resource map to identify existing business support networks, training facilities, and incubators.

  - ☐ Pinpoint areas lacking these resources and prioritise them for programme delivery.

- ☐ **Fostering Regional Collaboration**

  - ☐ Encourage cross-sector collaboration among businesses, educational institutions, and local governments to create an integrated support ecosystem.

  - ☐ Promote knowledge sharing between regions to replicate successful programmes and innovations.

DEI-Centered Resources and Support

Engagement

- ☐ **Outreach and Communication**: Consider the appropriate industry and community engagement in design. Co-producing programmes can improve the reliability of successful adoption. Identify and utilise channels tailored to effectively reach marginalised communities, including social media campaigns, community organisations, and cultural networks.

- ☐ **Community Building**:

  - ☐ Establish peer support networks that prioritise inclusion and share learning across diverse groups.

  - ☐ Engage and support ecosystem relationships to ensure that programmes have the right level of exposure and engagement from specific communities. Create transparent messaging around the programme to enable buy-in.

  - ☐ Create alum (the gender-neutral term for alumni) groups focused on mentorship and advocacy for new participants.

- ☐ **Map Barrier Mitigation**: Based on the barrier identification, develop targeted solutions and map mitigation for potential barriers to participation, such as physical, technological, financial, or language challenges.

- ☐ **Equitable Access**: Design activities to accommodate diverse needs, including but not limited to accessible formats, flexible scheduling, and culturally sensitive practices.

- ☐ **Financial Equity**: Consider the economic impact of involvement on underrepresented groups. Funding allocation may need to be segmented to ensure that financial assistance is available to cohorts to enable participation. Partner with microfinance institutions to provide equity-free funding for underfunded entrepreneurs. Consider the timings and formats of provision and the suitability for participants.

- ☐ **Inclusive Mentorship**:

    - ☐ Develop a diverse mentor network that includes women, disabled professionals, and leaders from ethnic minorities.

    - ☐ Financial compensation should be made available for mentors or pro bono relationships are established to enable corporate mentors to participate.

    - ☐ Train mentors in cultural competence, inclusive coaching, and recognising unconscious bias.

Outreach and Recruitment Through a DEI Lens

- ☐ **Strategic, Inclusive Partnerships**:

    - ☐ Collaborate with advocacy organisations (e.g., women's networks, and disability groups) to extend reach.

    - ☐ Partner with local institutions like community centres and targeted business groups in underserved areas.

- ☐ **Culturally Relevant Messaging**:

    - ☐ Develop recruitment materials in multiple languages, personas and formats.

    - ☐ Highlight success stories of participants from diverse backgrounds in marketing campaigns.

    - ☐ Be clear about the programme's offer.

- ☐ **Metrics-Driven Recruitment**:

    - ☐ Monitor application diversity and retention by demographic group.

    - ☐ Set diversity quotas or benchmarks to ensure balanced representation in the cohort. Make this regionally appropriate and focused on the programme's overall goal.

- ☐ **Accessibility**
    - ☐ **Disability-Inclusive Design**: Ensure the program is accessible to individuals with various disabilities, such as physical, sensory, and cognitive impairments, by integrating universal design principles.
    - ☐ **Eliminating Participation Barriers**: Identify and address issues such as inaccessible locations, inadequate language support, and technological limitations that may exclude participants.
    - ☐ **Flexible Delivery Methods**: Incorporate multiple modes of delivery, including in-person, online, and hybrid options, to ensure inclusivity.
    - ☐ **Assistive Technologies**: Provide tools such as screen readers, captioning services, and assistive listening devices where necessary.
- ☐ **Cultural Awareness and Sensitivity**
    - ☐ **Cultural Competency**: Incorporate diverse cultural perspectives into program materials and activities, ensuring they are respectful and relevant to all participants. Event planning reflects religious needs, and venues offer appropriate spaces for practice.
    - ☐ **Safeguarding Practices**: Implement robust safeguarding measures to protect the well-being of all participants, particularly vulnerable groups and higher-risk communities.
- ☐ **Support Systems**
    - ☐ **Tailored Support**: Offer mentorship, financial assistance, and available accommodations designed to meet the specific needs of diverse participant groups.
    - ☐ **Responsive Mechanisms**: Regularly assess the adequacy of support mechanisms and make adjustments based on participant feedback and evolving needs.
    - ☐ **Representative Leadership**: Ensure facilitators, mentors, and program leaders reflect the diversity of the communities being served.
    - ☐ **Inclusive Environment**: Foster an environment where all participants feel valued, heard, and supported throughout their journey. Specifically, look to measure this sentiment.
- ☐ **Monitoring and Evaluation**
    - ☐ **Inclusivity Metrics**: Develop comprehensive metrics to measure the effectiveness of the program's inclusivity, such as demographic participation data, satisfaction rates, and equity outcomes.

- ☐ **Application Data Analysis:** Review applications and acceptances to measure reach and identify and eliminate barriers hindering diverse participation.

- ☐ **Participant Feedback**: Collect regular feedback from participants through surveys, interviews, and focus groups to continuously improve inclusivity practices.

- ☐ **Impact Analysis**: Evaluate the program's impact across different demographic groups to ensure equitable benefits and outcomes.

- ☐ **Ethical Data Collection**: Use methods that respect participants' privacy and dignity, ensuring transparency about how data will be used and stored.

- ☐ **Longitudinal Tracking**: Establish processes for long-term data collection to assess the sustained impact of inclusivity measures over time.

- ☐ **Outcome Measurement**: Define clear indicators of program effectiveness and ensure they align with the anticipated goals and inclusivity benchmarks.

- ☐ **Fit for Purpose Outcomes:** Most programmes focus on increasing access to skills, funding or employability.

☐ **Stakeholder Collaboration**

- ☐ **Expert Partnerships**: Engage with stakeholders and partners who can offer insights on inclusivity best practices and identify potential gaps in the program design.

- ☐ **Alignment and Accountability**: Foster alignment among partners to uphold inclusivity standards and maintain accountability throughout the program lifecycle.

☐ **Sustainability**

- ☐ **Evolving Inclusivity**: Integrate mechanisms to regularly review and adapt inclusivity measures to meet emerging needs and challenges.

- ☐ **Knowledge Sharing**: Document and disseminate lessons learned to improve future program designs and inform broader departmental practices.

- ☐ **Setting Standards**: Define and enforce minimum inclusivity standards to ensure consistent application across all program iterations.

- ☐ **Best practice collection:** Use programmes as a vehicle for best practice collation and business case evidence to inform and support wider practice in the ecosystem.

Tailored Programme Elements			
	Incubators	**Accelerators**	**Skills Bootcamps**
Stage	Early-stage ideas or startups that are just beginning their journey.	Early-stage startups already in operation, companies scaling up	Early-stage startups
Aims	Provide strategic guidance during the early stages to transform ideas into viable business ventures and develop product market fit. Legal, business, and funding approaches are key elements. Facilitate connections and support in identifying and collaborating with the right co-founder. Typically, offer some physical workspaces. Incubators are more likely to require equity in the business, often a fixed amount for every programme participant.	Startup accelerators provide early-stage companies with a minimum viable product (MVP) with the education, resources, and mentorship needed to accelerate what might otherwise be several slow years of growth into a few short months. Accelerators provide a unique ecosystem offering networking opportunities with established companies, funders and influencers, personalised mentorship from seasoned founders and investors, potential funding from angels or venture capitalists, and collaborative partnerships with other innovative startups to navigate shared challenges and drive growth. Accelerator programs typically accept startups cyclically in cohorts that are less likely to require an equity	To rapidly upskill participants in a specific topic or skill, such as product development, marketing or pitching To prepare for a particular task such as taking investment or joining an accelerator

Tailored Programme Elements			
	Incubators	**Accelerators**	**Skills Bootcamps**
		stake and are more varied in duration and content.	
Duration	Usually offer longer-term support, sometimes over several years	Usually short, lasting typically three to six months	
Key factors to consider	These programmes can be considered to be more nurturing due to the longer timeframe of support and offer opportunity for remedial backing that may have been neglected in underrepresented communities.	Companies that have attended accelerators raise 44%[140] more money than those that have not. Those who have attended Accelerators have ranked mentoring as one of the top benefits of the programmes, in addition to financial investment, business advice, and office space.	
Specific factors for inclusion	**Protection of Intellectual Property and Transparent Equity Practices** ● Establish clear policies to protect participants' intellectual property (IP), ensuring founders retain control of their ideas. ● Provide informed, transparent information about equity shares and ownership to build trust and empower founders in making informed decisions. **Skills Development for Marginalised Groups** ● Prioritise foundational and industry-specific skills that marginalised groups need to thrive in high-demand sectors, with tailored training that matches participants' backgrounds. ● Include content on advocacy, understanding rights, and strategies for navigating workplace discrimination or exclusion.		

Tailored Programme Elements			
	Incubators	**Accelerators**	**Skills Bootcamps**
	Accessibility and Inclusion ● Ensure all content, materials, and venues are accessible, including formats for those with disabilities, such as captioning, sign language interpretation, and screen reader compatibility. **Quality Assurance** ● Implement quality assurance measures for all support services, ensuring consistency, professionalism, and alignment with participants' needs. **Clear Value Proposition for Underserved Communities** ● Define a clear value proposition for underserved communities, articulating the benefits, opportunities, and support they will receive through participation. **Diversity, Equity, and Inclusion (DEI) Audits** ● Audit participant pools, mentors, advisory boards, and networks regularly to ensure representation aligns with DEI goals and that underserved communities are adequately supported. **Compensation and Training for Mentors** ● Compensate mentors for their time and expertise. ● Provide training on safeguarding, ethics, and inclusion to ensure all mentors are equipped to provide supportive and culturally aware guidance. **Fair Recruitment Practices** ● Implement fair and unbiased recruitment approaches for both participants and mentors to foster an inclusive environment and minimise barriers to entry. ● Audit the behaviour of funders, supporters and ecosystem partners to ensure inclusive practice. Have a risk register to create a watch brief on any relationships that need to be improved. **Investor and Business Support Fit for Purpose**		

Tailored Programme Elements			
	Incubators	**Accelerators**	**Skills Bootcamps**
	• Build a pool of investors and business support that is committed to investing in underrepresented founders and aligned with the incubator's mission of inclusion. • Ensure that there are viable relationships to build. **Equitable Risk Profiling** • Ensure clarity in approaches to risk profiling of funders and adopt equitable methods that recognise the potential of diverse founders without being overly risk-averse. **Tailored Support for Overcoming Barriers** • Provide community-specific support, such as pitch training tailored to unique cultural or communication styles, to help participants navigate barriers effectively. **Inclusive Guardrails and Compliance** • Collaborate with the broader ecosystem to create inclusive guardrails throughout all processes and ensure compliance with equality and anti-discrimination laws.		

Appendix 3 Procurement

During the research for this report, stakeholder interviews repeatedly identified procurement as a pivotal governmental process that can drive diversity and inclusion across the supply chain while delivering impactful, skills-focused social value. Particularly in large-scale digital and cloud-based projects, procurement offers a unique opportunity to embed measurable social value outcomes directly into project delivery. Industry stakeholders, particularly those providing digital services to government, have shown significant interest in understanding how to meaningfully integrate diversity and inclusion initiatives and have more fitting Model Criteria Awards in social value via procurement strategies. Aligning procurement practices with diversity objectives not only supports systemic change but also ensures organisations meet social value commitments in national projects, enabling a more inclusive and equitable digital economy. Government can become a thought leader and blue-print creator for industry on how to refine existing processes to drive DEI within their supply chain. What follows is an evaluation of 5 key areas within the government's procurement process, listing **Challenges**, **Impact** and **Recommendations.**

Overview

Over the past decade, the UK's social value system has evolved through international frameworks, national legislation, and local strategies. Despite success stories, the system remains complex and fragile, leading to missed opportunities in public procurement to enhance diversity, equity, and inclusion (DEI) in the tech sector. In 2023-24, public procurement accounts for £407 billion in gross public spending. If social value were more effectively embedded across all public sector contracts, the UK could have unlocked an estimated additional £762 billion in social, economic, and environmental value between 2010 and 2020 [135]. Improvements in data and the reclassification of the Model Award Criteria would allow for targeted support to maximise digital inclusion and support inclusive supply chain management for digital projects.

The current social value landscape is complicated by a web of national and devolved legislation, voluntary standards, and measurement tools. Suppliers may need to navigate up to five different regulatory frameworks when providing goods or services to central government departments, including the Public Contract Regulations, the Social Value Act, and the National Procurement Policy Statement (PPN 06/20). These complexities lead to inefficiencies and confusion for both public bodies and suppliers, particularly impacting underrepresented groups trying to enter the tech industry.

In all UK regions except Scotland, social value must comprise at least 10% of each procurement's total award criteria, with the possibility of increasing this weighting at the contracting authority's discretion. Regional strengths have emerged; for example, Northern Ireland excels in system transparency, while Scotland offers strong support to

partners. Leveraging these regional best practices can help improve national DEI by making procurement processes more accessible to diverse suppliers.

Central government has made progress in procuring data and technology solutions for its own internal systems. In 2022, 8 out of 10 techUK members reported improvements in the government's commercial knowledge and understanding of data and tech, highlighting strong leadership from the Crown Commercial Service (CCS)[136]. This progress is vital as the UK pursues large-scale digitisation of public services. However, as procurement methods have evolved to consider the latest tech developments, social value opportunities —particularly relating to inclusion—have not kept pace.

Measurement and standardisation

Challenge: Quantifying social value is complex due to its diverse areas like environmental sustainability, community well-being, and diversity. The lack of standardised measurement methods hinders comparison of bids and assurance of promised impact. Specifically, the absence of nuanced guidance for digital projects hampers efforts to improve inclusion in tech. Suppliers often develop their own approaches, leading to inconsistent scoring across projects and missed opportunities to enhance diversity.

The current Social Value Model and model award criteria. provides general guidance on supporting skills development and enhancing opportunities for growth. However, it lacks specific directives for addressing skill shortages in national digital projects and does not clearly align with overarching digital inclusion and skills strategies.

Impact: Inconsistent metrics cause confusion for suppliers and procurers, potentially minimising impact that could promote inclusion. Ambiguities in guidance make it challenging for SMEs, especially those led by minorities or women, to evidence their proposed social value as there is less insight on the expectations.

Recommendations for Improvement

- **Review Performance:** techUK members have called for the Public Accounts Committee and National Audit Office to evaluate how the social value model is performing against its objectives, including DEI enhancement, and providing value for money. The recommendation is this assessment should consider how easily different sectors can deliver social value objectives related to diversity and inclusion.

- **Develop a Comprehensive Social Value Guide:** A standardised guide outlining duties and expectations under various laws and standards would help public bodies and suppliers integrate social value into procurement decisions more

effectively. Clear examples for social value in digital products should be set, focusing on long-term DEI goals rather than a contract-by-contract approach.

- **Develop Impact Assessment Tools and Frameworks:** The APMP UK Social Value Group found that 87.7% of survey respondents agreed there should be a standardised format for reviewing social value[137]. Such standardisation would improve performance oversight and allow for hyper-localised impact reports per department, aligning better with long-term DEI goals. The framework should accommodate the multifaceted ways suppliers engage in public procurement, promoting innovation in enacting social value and improving diversity in the tech sector.
- **Enhance Social Value Through Targeted Digital Skills Development:** A cross industry challenge is digital skills development across sectors. Government's ambition to improve digital skills from literacy to advanced skills could be enhanced from specific social value guidance on digital skills delivery for digital project delivery. Utilising skilled digital organisations to support the development and implementation of digital skills provision would allow for an appropriate model award criteria for a national cloud based project for example.

Strengthening Supplier Engagement

Challenges: Larger suppliers may have resources to track and deliver social value, but SMEs and social enterprises—often led by underrepresented groups—lack the capacity for comprehensive strategies. However, SMEs report challenges meeting complex social value requirements, hindering DEI progress.

There is a perception from small businesses that the government does not understand how to engage effectively with them, with only 27% feeling the government is helping small companies break into the public sector, while 92% don't think they understand how small businesses can meet its needs[138]. This has led to misinterpretations of pre market phases and post contract awards, with organisations of all sizes reporting that Government buyers need better training to formulate appropriate and relevant questions.Strengthening internal capacity and expertise in these areas would not only improve procurement processes but also support the effective integration of social value principles, particularly in driving DEI initiatives. These efforts have the potential to unlock significant contributions from small businesses, fostering innovation and inclusivity within the public sector.

Stakeholders have reported that siloed engagement leads to a lack of meaningful interaction between officials and suppliers to identify tech-sector-relevant, measurable, and deliverable social value criteria that promote diversity.

Impact: Without engaging a wider pool of suppliers, including those from underrepresented groups, risks reducing both resilience and innovation within supply chains. This could significantly limit the pool of potential bidders and hinder progress in advancing DEI in the tech sector. Given the nature of the tech industry—where innovative approaches and targeted specialist expertise often drive success—diverse perspectives are particularly valuable.

As the UK embarks on ambitious national projects to modernise public services, ensuring transparency in upcoming plans is critical. Without clear communication and advanced notice, diverse organisations may face barriers to readiness, potentially excluding them from tendering processes. This exclusion could cause delays in delivering social value objectives and missed opportunities to integrate DEI into the fabric of these projects. Proactively addressing these issues will ensure a more inclusive and innovative approach to building resilient, future-focused supply chains.

Recommendations:

- **Mandate Training on Social Value for Procurement Officers and Suppliers:** Government-supported training for procurement teams and suppliers, especially SMEs and social enterprises led by underrepresented groups, will improve the consistency and quality of social value delivery, levelling the playing field and promoting DEI.
- **Standardise Measurement Tools:** Introducing accredited, government-endorsed measurement tools will help SMEs and other suppliers measure and report their social value contributions more easily, ensuring contracts are awarded and monitored based on consistent data that reflects DEI outcomes.
- **Establish Stakeholder Networks and a Social Value Hub:** Create networks to disseminate departmental information and develop feedback loops. Open engagement will give diverse SMEs better access to create consortium bids, fostering inclusion.
- **Provide Targeted Support:** Offer focused support to underrepresented groups, not only in bid submissions but also in discussions about what social value means in their communities. Engaging with these communities enhances impact, builds public trust, and directly improves DEI in tech.

Enforcement and Compliance

Challenge: Ensuring that contractors deliver on social value commitments, particularly those related to DEI, is challenging. There's often a gap between promises made during bidding and actual delivery. Providers report that only 12% are routinely held

accountable for social value delivery, and only 4% have faced contractual penalties for non-delivery [135].

Many stakeholders feel that current criteria, including themes like COVID-19 recovery, are no longer relevant or measurable, limiting the inclusion of more impactful interventions that could enhance DEI.

A significant barrier is the lack of robust, up-to-date data. For instance, the Unit Cost Database developed by the Greater Manchester Combined Authority is widely used but contains outdated data focused solely on cost savings to the public purse, neglecting DEI metrics.

Impact: Without robust enforcement mechanisms, social value risks devolving into a procedural box-ticking exercise, undermining its potential to drive meaningful community impact and advance diversity, equity, and inclusion (DEI) goals. The lack of centralised and transparent data further complicates accountability, creating barriers to effectively tracking outcomes and maximising the funds that could be allocated to diversity-focused initiatives. Addressing these gaps is essential to ensure that social value policies achieve their intended transformative impact.

Recommendations:

- **Expand and Update Social Value Data Sources:** Invest in updating the Unit Cost Database and similar resources to include current data and a broader range of social impacts, including DEI outcomes like community well-being and representation in tech. Review successful models like those implemented by Bristol City Council.
- **Leverage Digital Tools for Real-Time Tracking:** The digitization of public services offers an opportunity to use real-time data reporting systems, such as blockchain, to track social value commitments across the supply chain. This improves transparency and ensures commitments, especially those enhancing DEI, are delivered.
- **Stakeholder management:** Develop and implement Key Performance Indicators (KPIs) to ensure the accountable delivery of social value commitments. These KPIs should be designed to measure progress against DEI goals, fostering a culture of responsibility among stakeholders while aligning initiatives with broader societal and industry objectives.

Promoting Collaboration and Networks

Challenge: The social value system is heavily weighted toward the public sector, which spends £300 billion annually on procurement. Large private businesses also spend

£114 billion annually on procurement [136]. Despite this overlap, there's little coordination between public and private sectors on social value goals, particularly those aiming to improve inclusion in tech. This coordination is crucial as tech providers develop best-in-class practices that require agility in social value propositions.

Recommendations:

- **Create a Central Social Value Hub:** Establish a hub that brings together public bodies, private companies, and social enterprises to facilitate knowledge-sharing, align practices, and strengthen the ecosystem for embedding social value across sectors. This hub can focus on inclusion initiatives, promoting diversity in tech through collaborative efforts.
- **Encourage Private Sector Adoption:** Incentivise large businesses to adopt social value principles through co-funded initiatives, encouraging best practices to flow between public and private sectors. The digital sector is uniquely positioned for this due to its cross-sector presence and potential to drive DEI improvements.

Legislative Developments and Future Opportunities

The upcoming Procurement Bill, scheduled for launch in February 2025, presents an opportunity to enhance DEI in tech through procurement. Currently, the Public Contracts Regulations 2015 require procurement teams to reward the Most Economically Advantageous Tender (MEAT). The Procurement Act will amend this standard, requiring contracts to be awarded to "the most advantageous tender (MAT)" that satisfies requirements and best meets the award criteria.

Section 12 of the Act mandates that contracting authorities consider "maximising public benefit," while Chapter 5, Section 52 requires publishing annual key performance indicator (KPI) statistics for all suppliers on contracts over £5 million. As social value commitments often form a contractual KPI, supplier performance on social value—including DEI metrics—will receive greater monitoring and oversight [139].

The Labour Party's "Plan to Make Work Pay" mentions forming a Social Value Council. Industry voices are calling for the introduction of a Trusted Social Value Data Taskforce to standardise social value data measurement and encourage tech innovation. This would help build public trust, create a clearer measurement framework with industry experts, and specifically target improvements in DEI within the tech sector.

Enhancing diversity, equity, and inclusion in tech through procurement and social value requires addressing complex challenges and seizing opportunities. By standardising measurement methods, strengthening supplier engagement, enforcing compliance, promoting collaboration, and leveraging legislative developments, the UK can create a

more inclusive tech industry. Investing in data, training, and targeted support will not only optimise social impact but also build public trust and drive innovation across the sector.