

# Diversity in Tech 2021

An annual report tracking diversity in technology across the UK



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# Follow the data

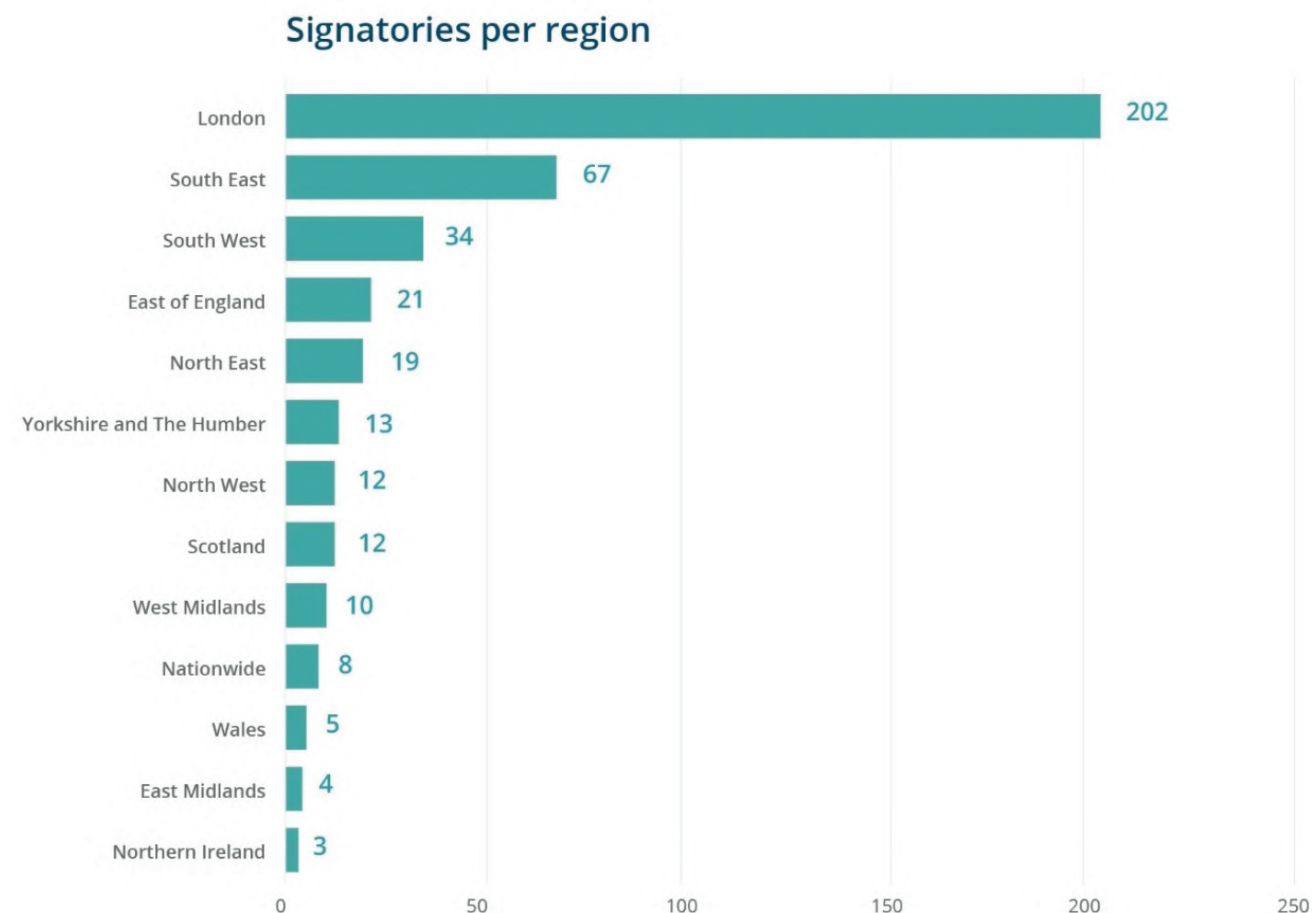
When a company signs up to Tech Talent Charter (TTC), it must commit to four things — chief among them: submitting diversity data. Data is the way in which we cut through our assumptions. It enables us to have tough conversations in an informed and productive way. This is why submitting diversity data is one of four things a company must commit to when signing up to the TTC. We know that simply having this data recorded does not result in a more diverse workforce. It's a vital first step but must be linked to action.

Many organisations are already tracking diversity characteristics beyond gender. Characteristics protected by the Equality Act 2010 were most likely to be measured, whilst few collect data on neurodiversity and socio-economic diversity. Our intention is to support uptake of effective D&I data strategies to enable organizations to become as inclusive as possible.

# Our Signatory base

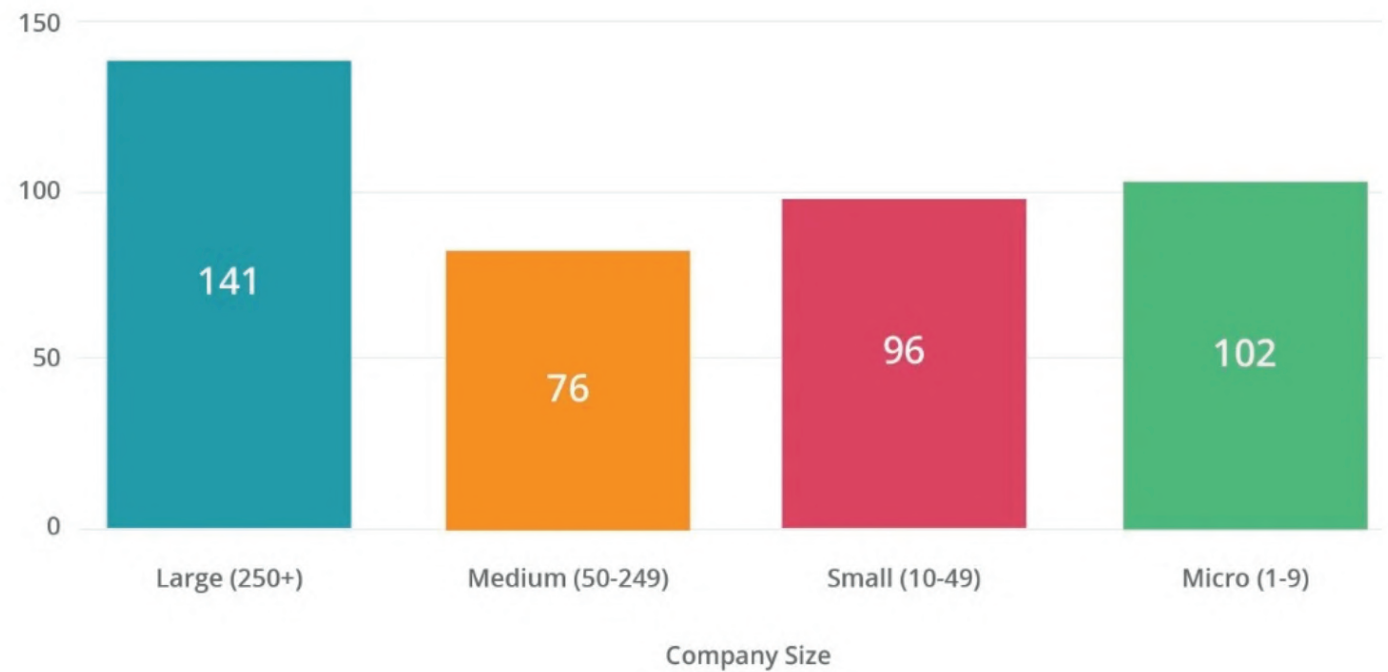
This report uses data from 418 organisations, an increase of nearly a hundred organisations since 2019. Our dataset covers 161,859 people working in technical roles in the UK and we estimate this represents around 13-14% of the current UK tech-skilled labour force, now making TTC's dataset comparable in size to the equalities datasets provided by the ONS.

These businesses are also located across various regions of the UK, though the majority are headquartered in London.

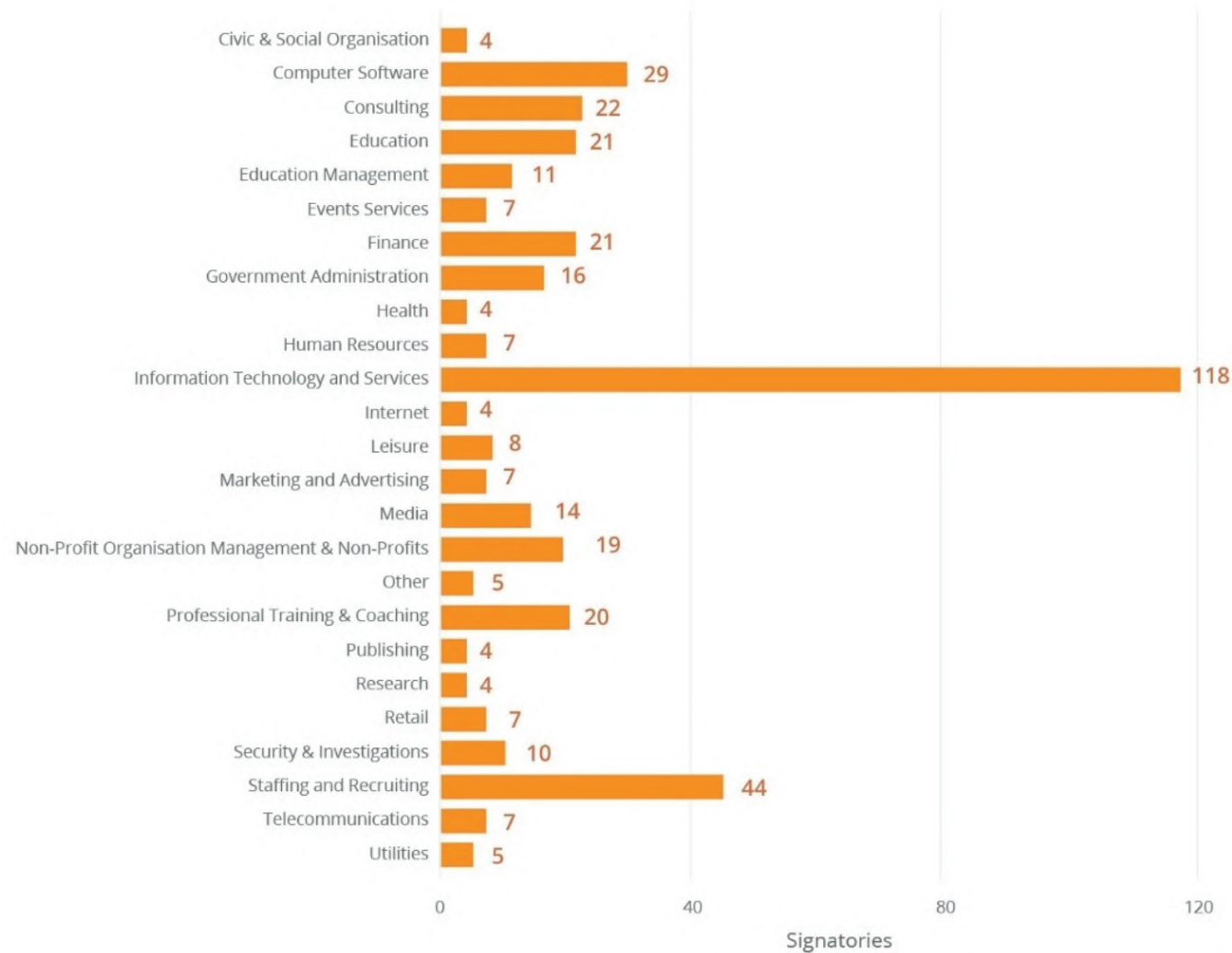


TTC Signatories span a wide range of sectors (they are grouped into 25 industry categories for this report) and are not just technologically- or digitally-focused organisations. We have seen cross-sectoral engagement grow; in 2018 we only represented 13 industries. Though 97% of the roles counted are from large organizations, our Signatories include businesses of all sizes, from micro companies (25% of our signatory base) to large enterprises (34%).

### Signatories per company size



## Signatories per industry



Over a quarter of our Signatories operate in the IT, tech and software industry. We also have strong representation from staffing and recruiting companies, consultancy, education, professional training, finance, and third sector organisations. All have submitted mandatory gender data for this report and many have also submitted optional diversity data on topics including ethnicity, tech skills learning and development, and culture.



“We're plugged into local/regional D&I work, and a number of national D&I projects being rolled out across the sector. The one thing that has been really challenging is the lack of data. It's been thin on the ground and many studies haven't gone beyond gender. TTC's insights will help the sector understand the scale of work to do, as well as equipping local tech ecosystems with some visibility of how they're performing on this important issue.”

Liz Scott,  
Head of Entrepreneur Engagement  
at Tech Nation

# How are signatories tracking D&I data?

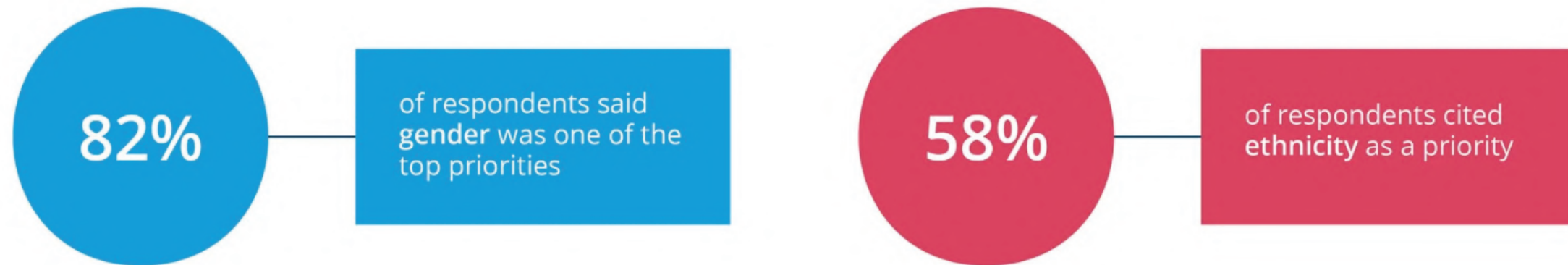
Over one in five organisations (22%) are not using self-identification surveys to gather data about the diversity of their employees. Self-identification is when an employee discloses information about their identity to their employer, which is more accurate than conducting a visual survey or using employment records, and can bring about cultural and social awareness. It is encouraging to see that a majority of companies are keen to capture employee diversity information. This can facilitate communication and help break down any barriers that may exist in the workplace. TTC encourages all employers to proactively request their employees share this data.

Ultimately, the key is not just to gather data but to use it to drive action and to measure its impact. That's why, from now on, TTC will ask Signatories whether they would like us to store a copy of their survey responses each year so they can compare their progress year on year. Our hope is that over time, we may be able to build up a longitudinal dataset to help us measure progress.



# What are Signatories' D&I priorities?

Of the Signatories that track diversity characteristics using a self-identification survey, half are tracking two or more protected characteristics in their workforce. The highest tracked characteristic is gender, whilst the least tracked characteristics are socio-economic background (only 8% track income disparities in childhood) and neurodiversity at 7%. More than one in five organisations say they are tracking other characteristics including religion, mental health, and care commitments. We also asked Signatories which currently underrepresented groups receive the most focus from their organisation.



82% responded that gender was one of their top priorities; followed by ethnicity, which was cited as a priority among 58% of respondents. In the past, TTC and many other organisations primarily focused energies on gender diversity. We know there is more work to be done to support other groups and intersections between them. That is why a key focus for us this year is social mobility. Accenture, a TTC Signatory and an employer recognised on the Social Mobility Employer Index, shared their experience on improving social mobility:

# Let there be change: Accenture's innovative Assessment and selection process

"Accenture have made a public declaration to become the most inclusive and diverse company in the world and we aspire to build a workforce that reflects our clients and the communities we serve.

We are passionate about levelling the playing field for candidates from all socio-economic backgrounds and have taken several actions to help. From an Entry Level perspective, we have removed UCAS and degree grade criteria from all our programmes so that academic criteria requirements are not a blocker to any particular group. We have also looked to remove any potential human bias by utilising software that ensures that each candidate's economic, demographic and social background is taken into account at the point of application, ensuring a meritocratic assessment of candidate potential and job fit.

Once candidates enter our recruitment process, we manage our selection process robustly. We run assessments that do not require any pre-existing technical knowledge or work experience, removing any potential barriers or blockers for candidates who have been impacted by bias previously. Candidate's enter an immersive virtual reality based assessment that mimics a client case study narrative; both simultaneously educating candidates on how we work whilst also providing an assessment where no previous experience or knowledge of consulting is necessary to be successful with decision making centred on structured strength-based interviews that bring out the genuine interest, motivation and aptitude of interviewees; which is effective in identifying potential instead of pedigree.

This increased focus on fairness, combined with our strategy and robust assessment processes, has yielded very positive results in relation to the diversity of our hires. Within our Apprenticeship programme alone we have increased BAME hiring to 50% across the UK, with London being a particular success where we have seen a 16 percentage point increase in apprentices from BAME backgrounds to 72% in 2020."

Adrian Love, UKI Recruitment Director at Accenture

# Gender diversity in technical roles

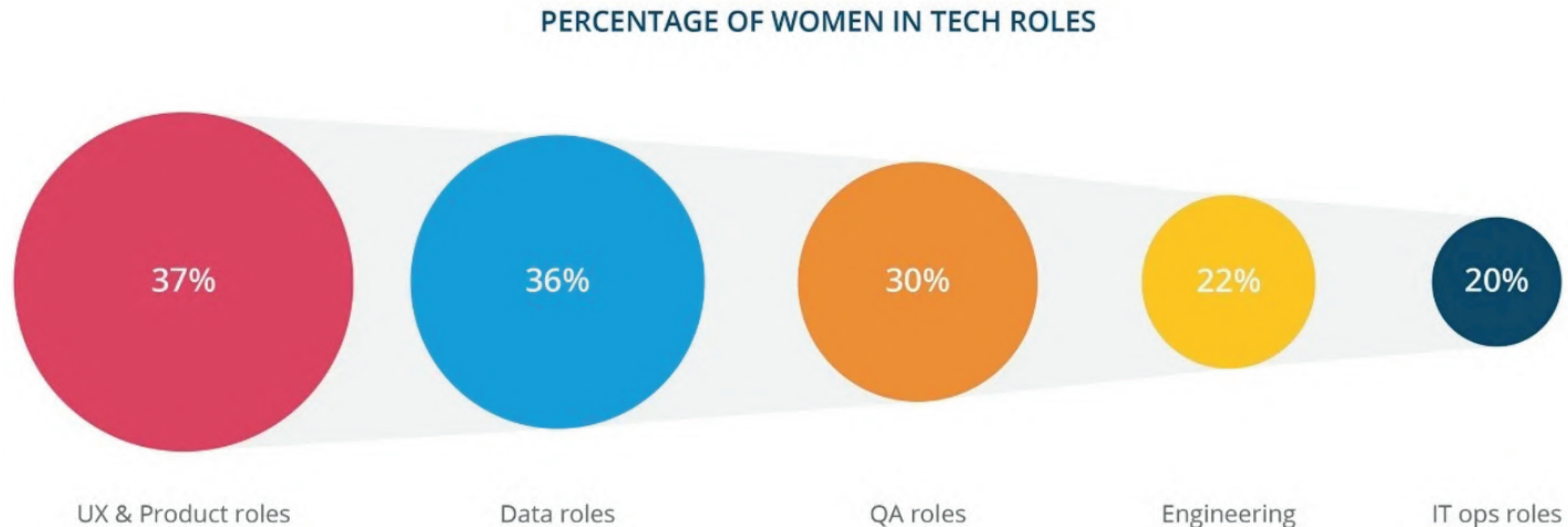
The [APPG on Diversity and Inclusion in STEM](#) found that in the tech sector, diversity of gender, disability and age were all lower than in the rest of the workforce. The good news is that these areas of diversity are ones that our Signatories are measuring the most, and this is information we can use to shape action.

Although still not reflective of the wider population demographics, representation of women and gender minorities in technical roles across our Signatories continues to outperform averages across the tech sector. According to recent analysis from BCS: the Chartered Institute of IT, in the last quarter of 2020 women made up 19% of the UK IT industry. Amongst TTC Signatories women represent 25% of the technical roles. Last year, we had reported that women made up 24% of all technical roles and whilst the rise is small, it comes alongside a net rise in the number of roles counted. At this scale this number is not without merit. With such a widespread issue, we would next expect to see a sudden shift. Our Signatory base changes each year. We are therefore unable to determine the degree of this shift is down to improvements by existing Signatories or the inclusion of new data by new Signatories. What we can say is that the TTC Signatory base is approaching a more accurate reflection of the performance of the UK's most engaged businesses when it comes to D&I efforts. When we consider these organisations collectively, we learn that progress is emerging in the diversity landscape and importantly, it's emerging at scale.

**25%**  Amongst TTC signatories women represent 25% of the technical roles.

# Gender diversity by tech discipline

In our 2019 report, we found that certain disciplines within the digital sector are more gender diverse than others. Last year, our Signatory base reported that QA was almost at parity for gender. This was followed by UX Design and Data roles which reported over a third of their workers were women. All the disciplines with better diversity last year continue to perform well again amongst our Signatories this year. This year we found UX Design and Product roles had the highest proportion of women at 37% each. This was closely followed by Data roles with 36% women and QA roles at 30% women. The greatest area of opportunity is within engineering and IT ops roles where 22% and 20% of tech roles respectively are held by women. Despite the progress still to be made, it is pleasing to note that engineering roles, which were at 17% women last year, are at 22% amongst our Signatories this year.



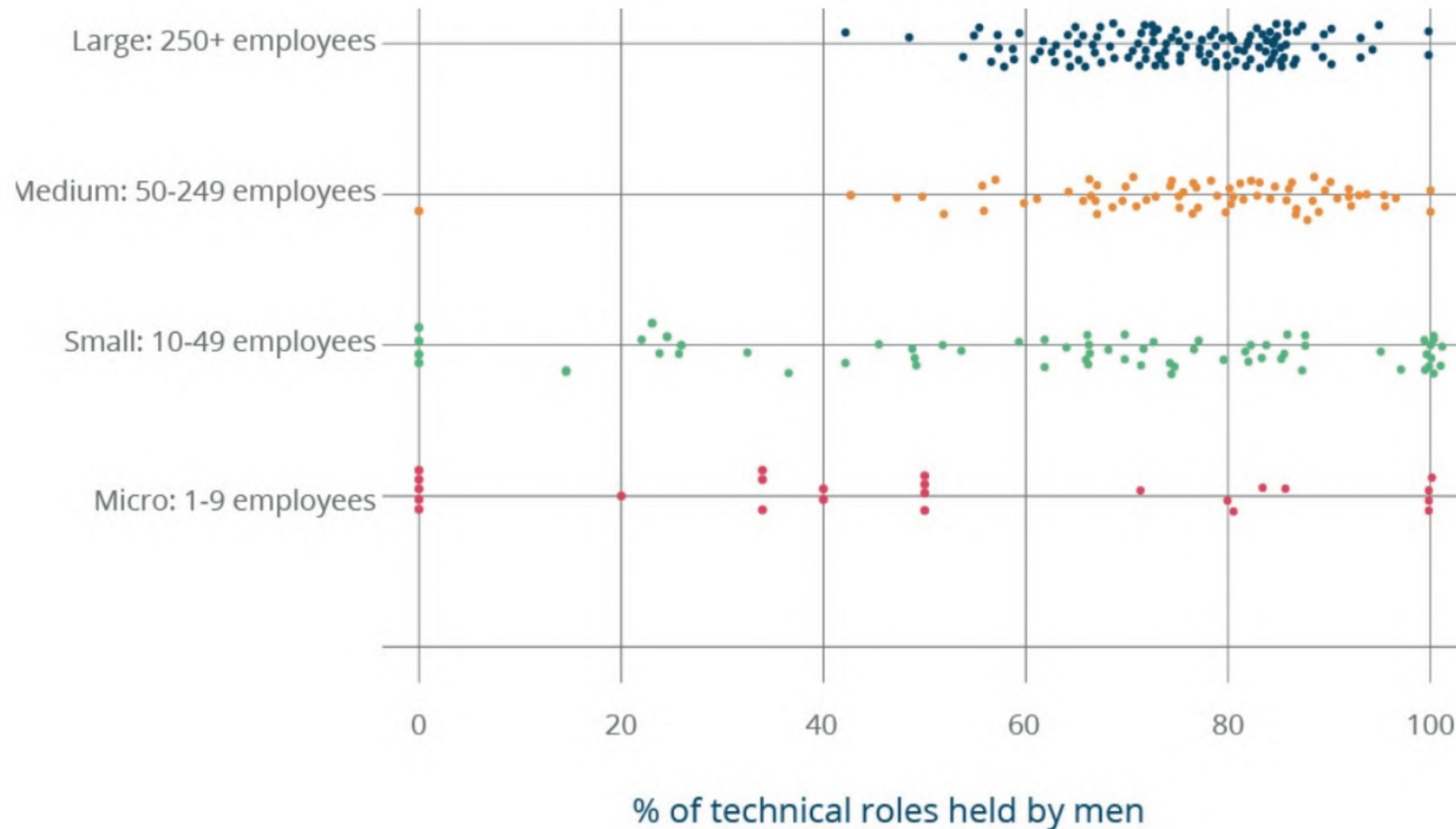
# Gender diversity in tech roles by organisation size

The data we have collected shows clear differences between the size of an organisation and its gender representation in technology roles. In both 2018 and 2019, we found that micro-companies topped the board in having the most balanced mean gender ratio and this year is no different. The gender diversity at micro-companies (1-9 employees), saw an increase in the proportion of women in tech roles from 42% to 45%.

However, whilst micro-companies might be the best performers in terms of mean, they also have the most volatile diversity stats due to small sample size. We can see this borne out in small companies with 10-49 employees as well; they average 28% of tech roles held by women compared to 30% last year. Medium-sized companies with 50-249 employees have the most room for improvement, with women in technical roles averaging at 23% - the exact same figure as last year.

At large companies with 250+ people, 25% of technical jobs were held by women compared to 24% last year. This exactly mirrors the overall results of the TTC Signatory base, most likely due to the fact that large organisations account for 97% of our total sample. This year our count showed more tech roles at large organisations, with 6,613 more women and 15,315 more men— creating a net increase of 21,928 tech roles. Whether this is from new hires at existing Signatories or new companies joining TTC, large companies as a group saw gender minorities account for 30% of the increase in roles. Whilst large organisations undoubtedly face gender diversity challenges, it's no small feat that the number of tech roles held by gender minorities in large companies increased by 31,775, and that proportionally we are seeing positive changes. This is testament to the work being done by large organisations and the level of impact they can have across the entire tech landscape through their scale.

Whilst many small companies are holding onto a more balanced gender split in tech roles, large organizations are the key to shifting the national picture. Large organisations have the ability to shape workplace norms and invest in innovative people practices at scale, something that smaller organisations do not often have the resources to mirror. On the other hand, small organisations are typically more agile and can pilot new ideas faster. By continuing to join the dots between diversity efforts across different organisations, we can collectively learn and innovate faster and improve D&I across the wider ecosystem.

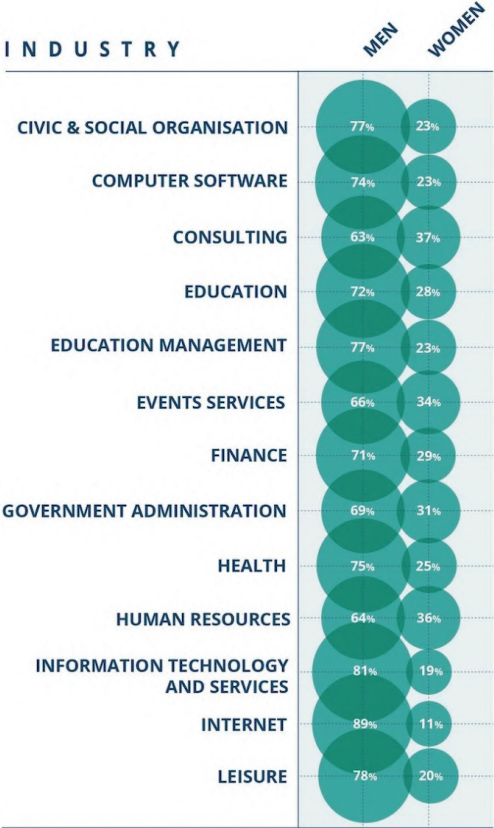


# Gender diversity in tech roles by industry

As we have seen in previous years, the gender balance in tech roles varies between industries. It's tempting to rationalise that some industries fare worse on gender balance than others because they have more technical roles than other industries. Therefore they experience the "weight of numbers" problem, where maintaining or improving gender balance is hindered by a simple lack of diverse applicants in the numbers required to fill demand. However, our data suggests a different story.

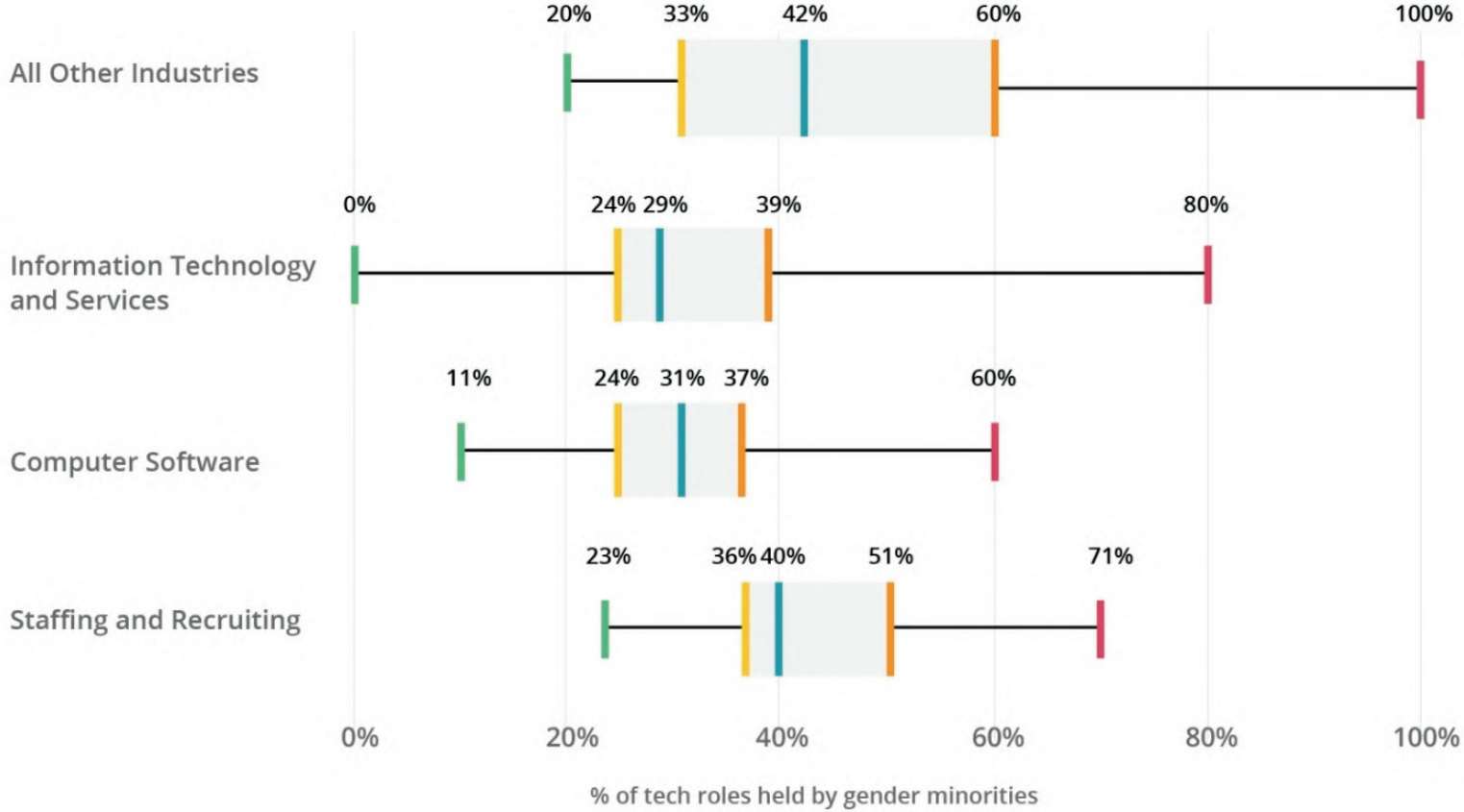
When we control for the number of technical roles in an industry, big differences still emerge. For example, internet organisations, which came last in the industry rankings for gender diversity, have a comparable number of tech roles to not-for-profits. Yet non-profit organisations rank best for gender diversity with 41% of tech roles held by women. This also plays out at the largest end of the scale. Finance and Consulting, which account for almost a third of our entire sample of technical roles, have significantly better gender balance than the IT and Services industry, which employs a similar number. This indicates that a weight of numbers argument does not necessarily hold up as a reason why certain industries are making more progress than others. But, it continues to indicate that there are influencing factors that can improve gender balance, irrespective of the scale of resourcing needs.

## JOBS (TECHNICAL ROLES)



# Benchmark yourself: how do you compare to other companies on gender diversity in tech roles?

Minimum - lowest value    Lower quartile - 25% of data lower than this value    Median - middle of the data set  
Upper quartile - 25% of data higher than this value    Maximum - highest value



We split out separate benchmarking graphs for the industries that had the most Signatories to enable more accurate benchmarking.



# Ethnic diversity

This year for the first time, TTC requested ethnicity data from our Signatories. Although provision of this data was optional, encouragingly, 45% of organisations with tech employees elected to share it with us. This is a testament to the fact that many companies are already taking an action-oriented approach to ethnic diversity — being both willing and ready to report ethnicity numbers, not just as a company, but by different factors such as job role.

People from ethnic minorities make up a larger share of the technology workforce than they do the wider UK workforce (16% versus 12%) — a positive outcome for diversity in tech. This is driven by an over-representation of workers of Indian ethnicity in the sector (7% versus a 2% baseline in the rest of the workforce). The stronger representation of one ethnic minority group disguises underrepresentation of other groups. Similarly, regional differences in ethnic diversity disguise the problem further. According to census data, London has the highest representation of ethnic minority tech workers, but the figure is proportionally lower than the demographics for the region. Everything links back to the way we measure and categorise ethnic diversity. As highlighted in [techUK's Delivering Diversity report](#), often the reality of the tech sector's diversity problem is masked, as people characterised as 'BAME' or White or "mixed/multi racial" are grouped together. Broad categorisations mean statistics are likely to disguise nuance.



“To ensure a digitally diverse workforce, it is essential that we understand the experience of people from different ethnic backgrounds as they enter and progress through their digital careers. techUK is committed to making sure the tech sector reflects the society it seeks to serve.”

Antony Walker,  
Deputy CEO of techUK

While the UK tech sector may employ more Black, Asian and minority ethnicity (BAME) people than other STEM industries, IT professionals of colour are less likely to hold management positions than their white counterparts despite being on average, better qualified. A BCS, The Chartered Institute for IT study has revealed that:



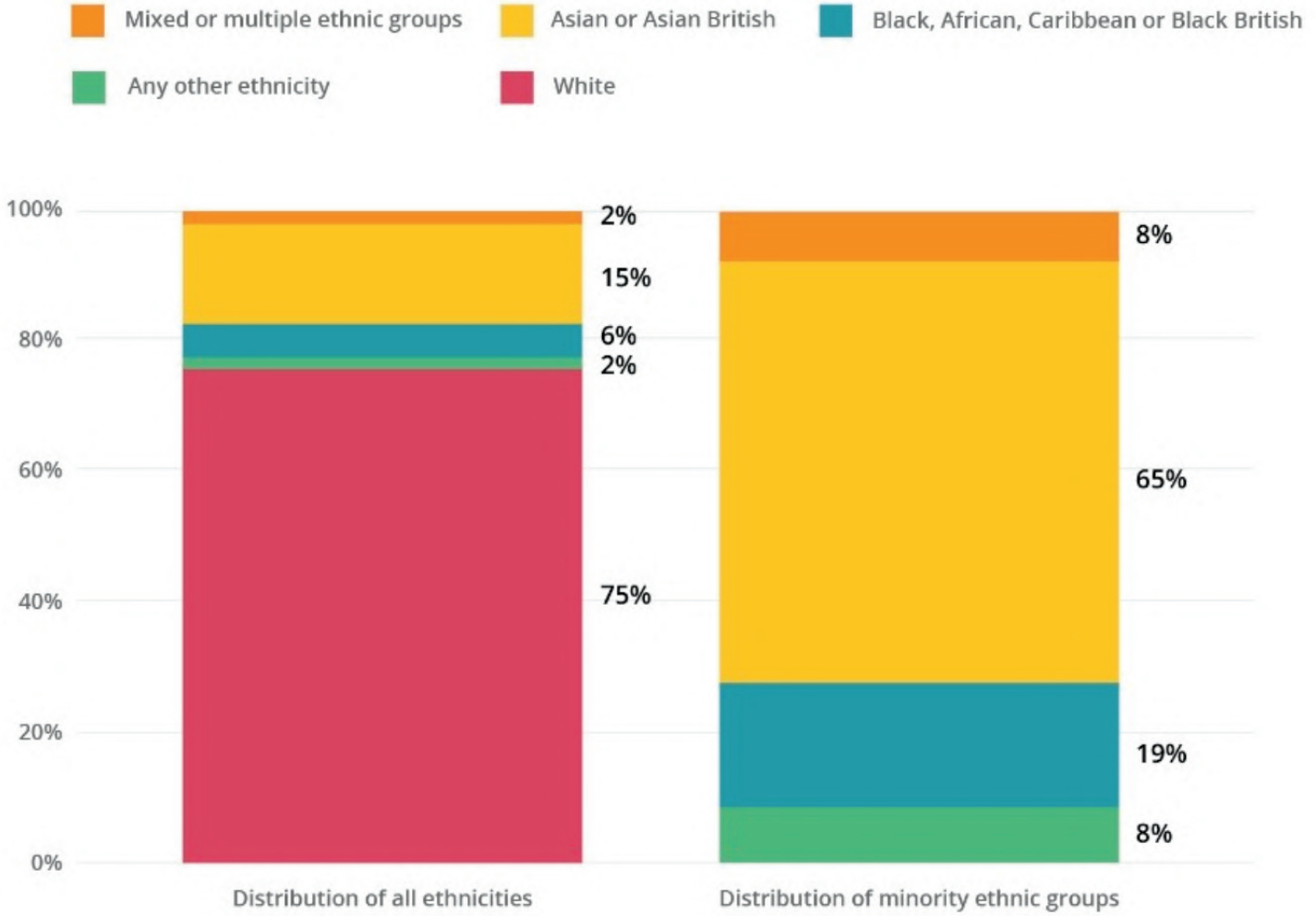
BAME workers also have, on average, better qualifications, with almost nine in ten IT specialists holding a Degree or HE level qualification (85%), compared with less than seven in ten (66%) of those from white ethnic groups.



The data in the image below, pulled from a 2020 BCS: the Chartered Institute of IT study, suggests that there are factors influencing the career development of different ethnicity groups in different ways. Further research is needed in order to understand these influences, if we are to better support not just entry, but progression, within tech.

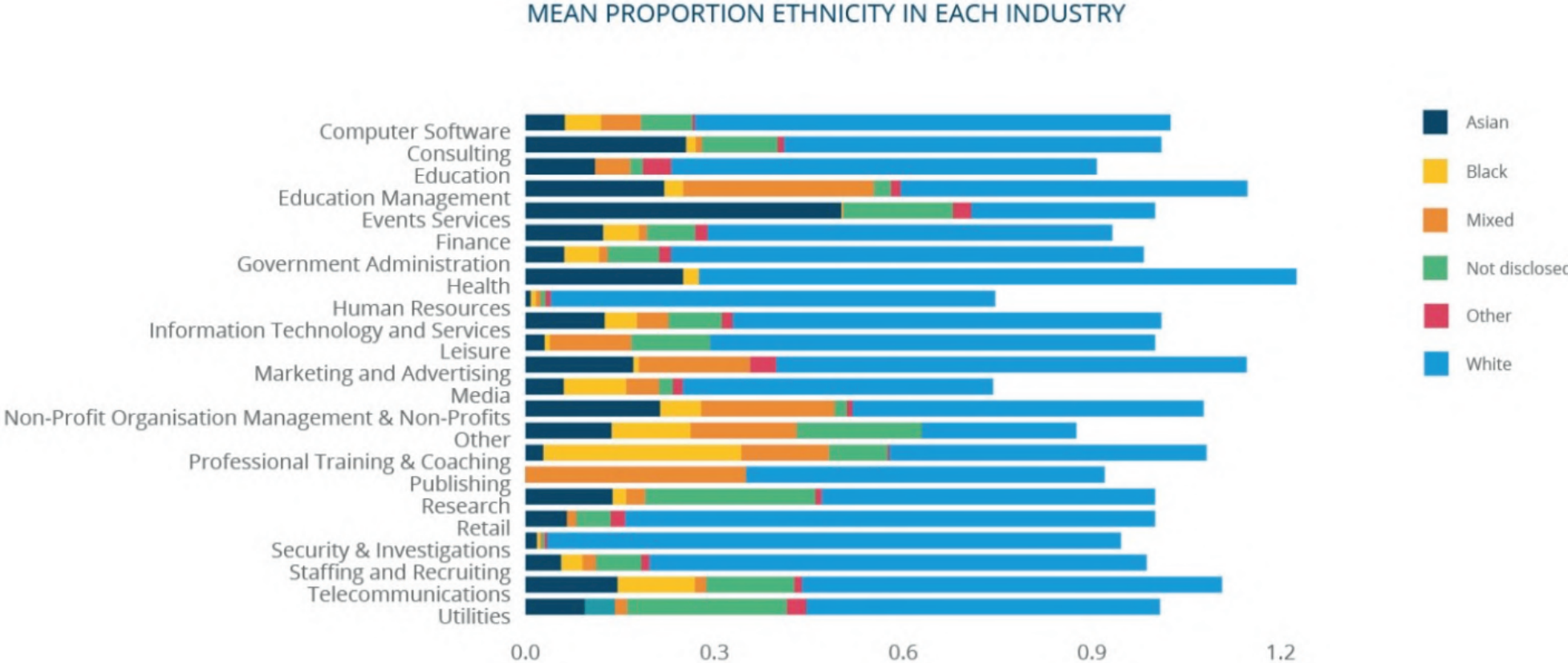
# How do Signatories fare on ethnic diversity?

We found that of the Signatories who reported ethnicity data, 25% of tech roles were held by people who were Black, Asian, of mixed/multi-ethnic backgrounds or other ethnic minorities. This exceeds the wider tech industry average. 15% of this group were Asian, 6% were Black and people of multi-ethnic and from other ethnicities made up 2% each of the rest.



# How do TTC Signatories fare on ethnic diversity?

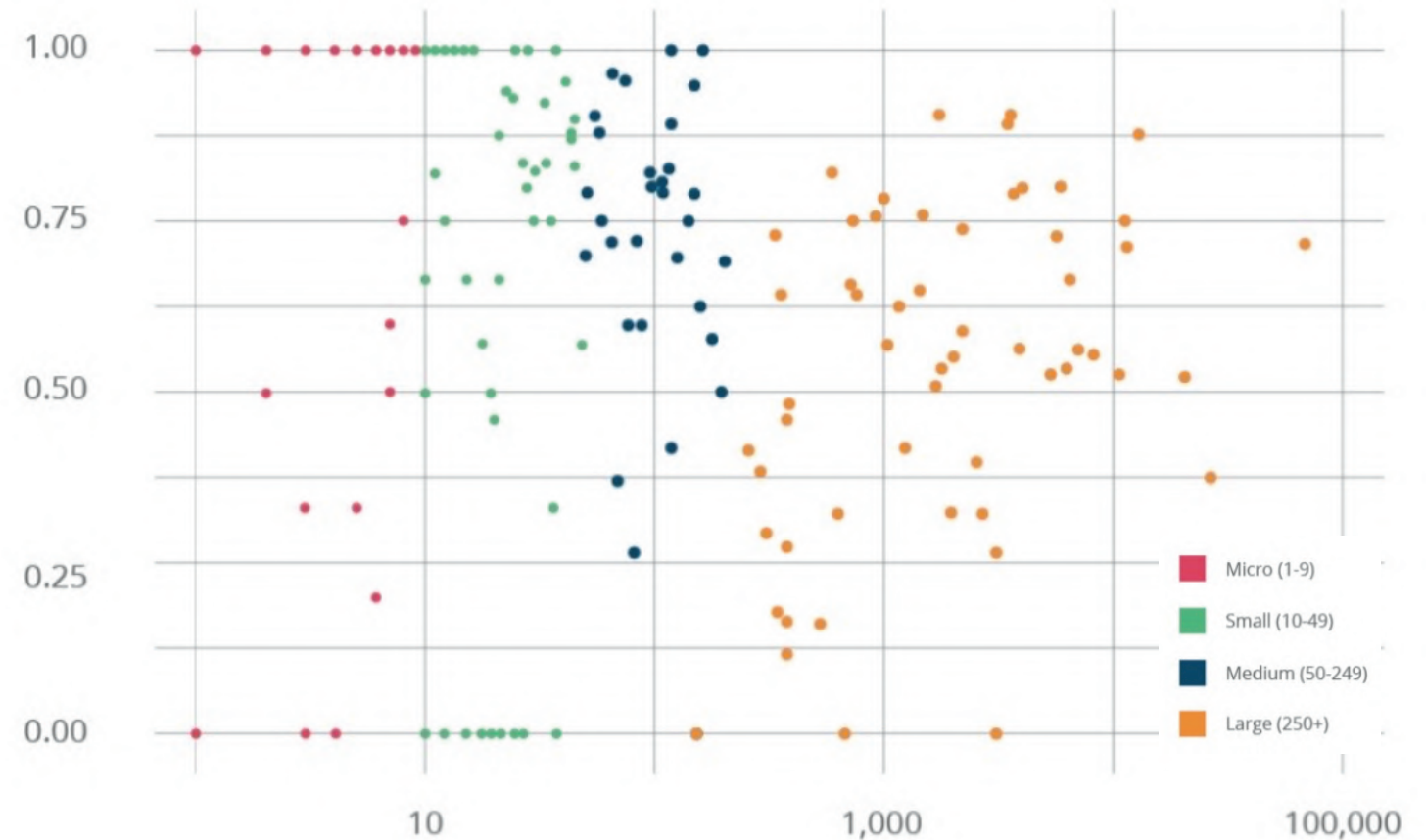
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# Ethnic diversity in tech roles by organisation size

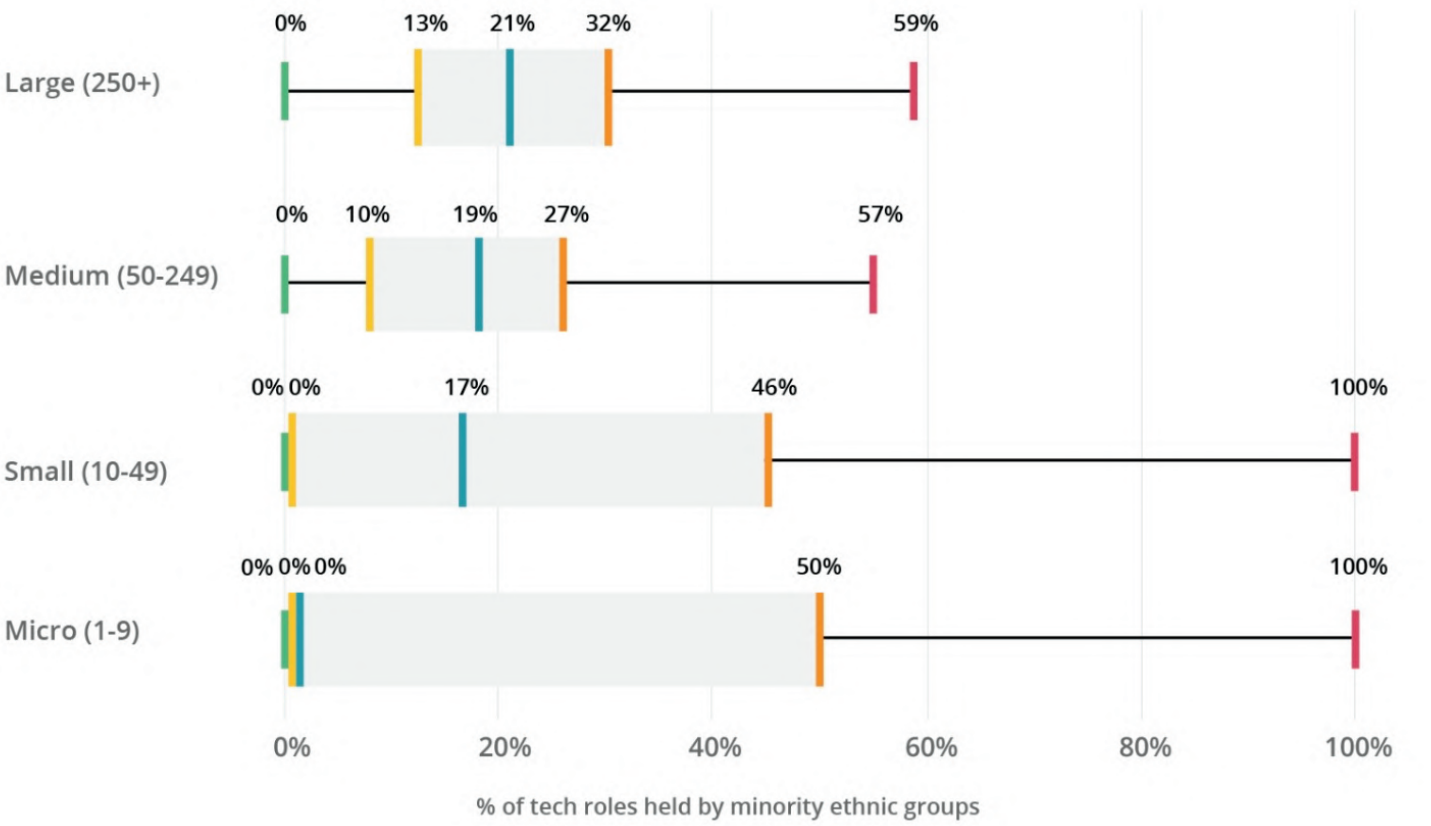
As with gender, larger companies appear to have higher representation of ethnic minority individuals in technical roles and we see greater volatility in micro and small organisations. Micro companies have almost one and a half times the UK average of technical roles fulfilled by people from ethnic minorities (23%).

PERCENTAGE OF TECHNICAL EMPLOYEES WHO ARE WHITE BY COMPANY SIZE



# Benchmark yourself: how do you compare to other companies on ethnic diversity in tech roles?

Minimum - lowest value    Lower quartile - 25% of data lower than this value    Median - middle of the data set  
Upper quartile - 25% of data higher than this value    Maximum - highest value



# Diversity by region

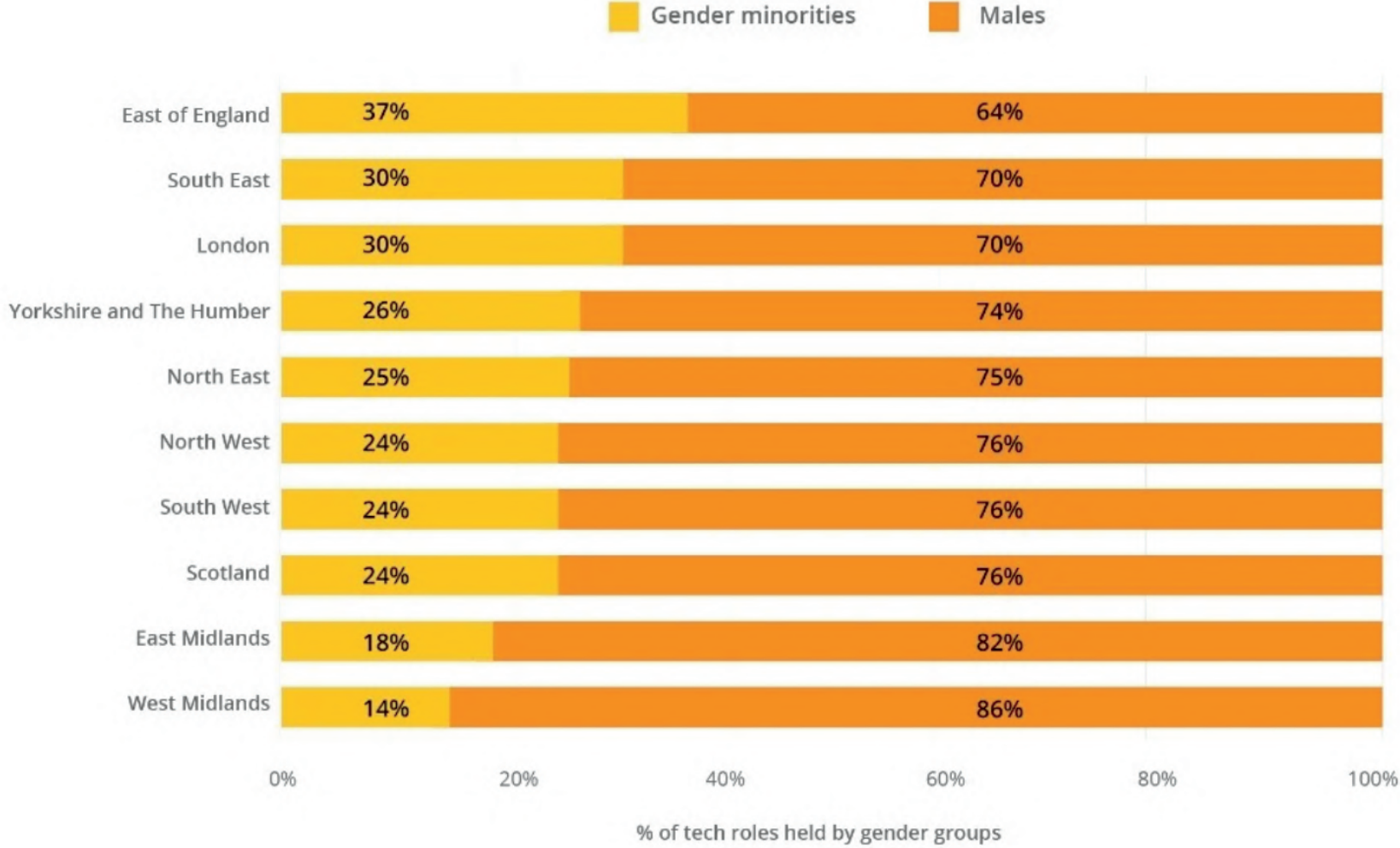
A conversation about diversity and inclusion that does not account for regional variability may be limiting. Accordingly, for the first time, we cross-referenced our data with HQ locations sourced from Companies House, to map regionalised diversity insights for the report. Although this does not account for situations such as organisations with multiple office locations, we still get a sense of broad regional trends.

We have reported data for regions only where we have sufficient numbers of Signatories to maintain anonymity. As ethnicity data reporting was optional this year, we did not have sufficient data to report by individual regions but have provided some limited regional benchmarking on ethnicity below.

The data supplied by our Signatories comes from organisations across the UK, the majority of which are in London and the South East (64%). The latter has the greatest gender and ethnicity diversity, with 18% of its tech teams made up of ethnically diverse individuals; followed by the East of England (15%). Scotland and the North West are at the low end of this scale (2% and 1% respectively). Contributing factors may include the higher percentage of ethnically diverse communities in local populations, and roles with higher average wages, more likely to attract international candidates.

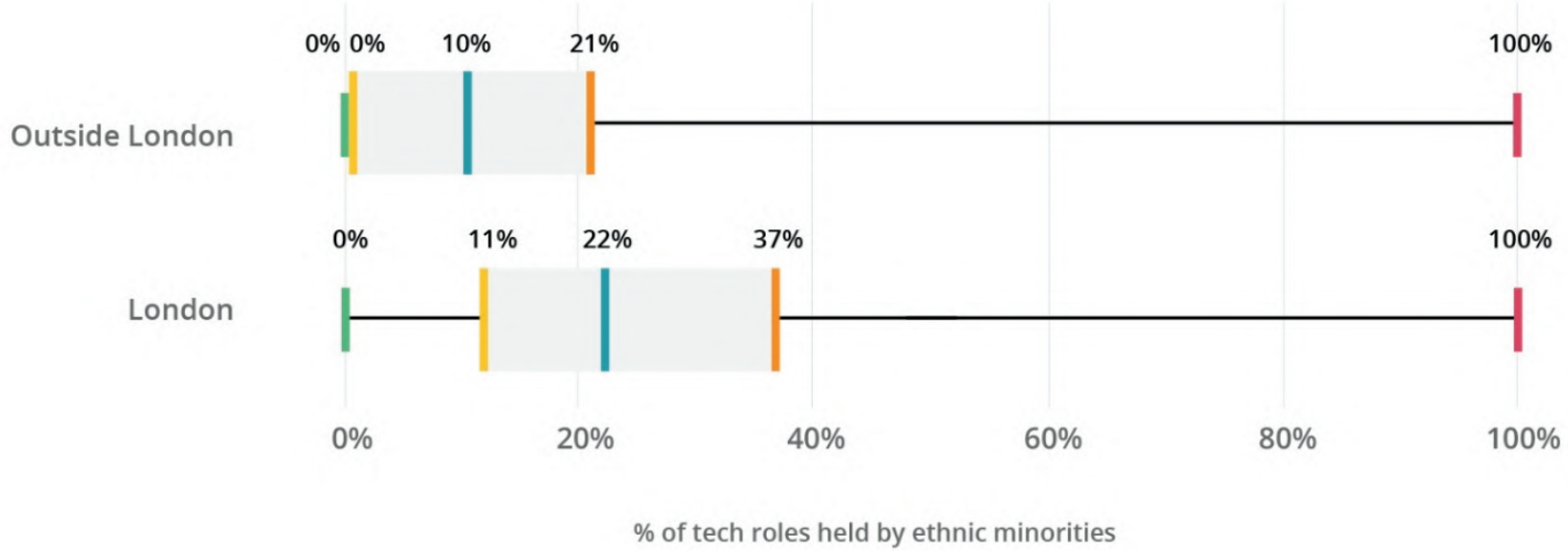


**Benchmark  
yourself: how do  
you compare to  
other companies in  
your region on  
gender diversity in  
tech roles?**



# Benchmark yourself: how do you compare to other companies in your region on ethnic diversity in tech roles?

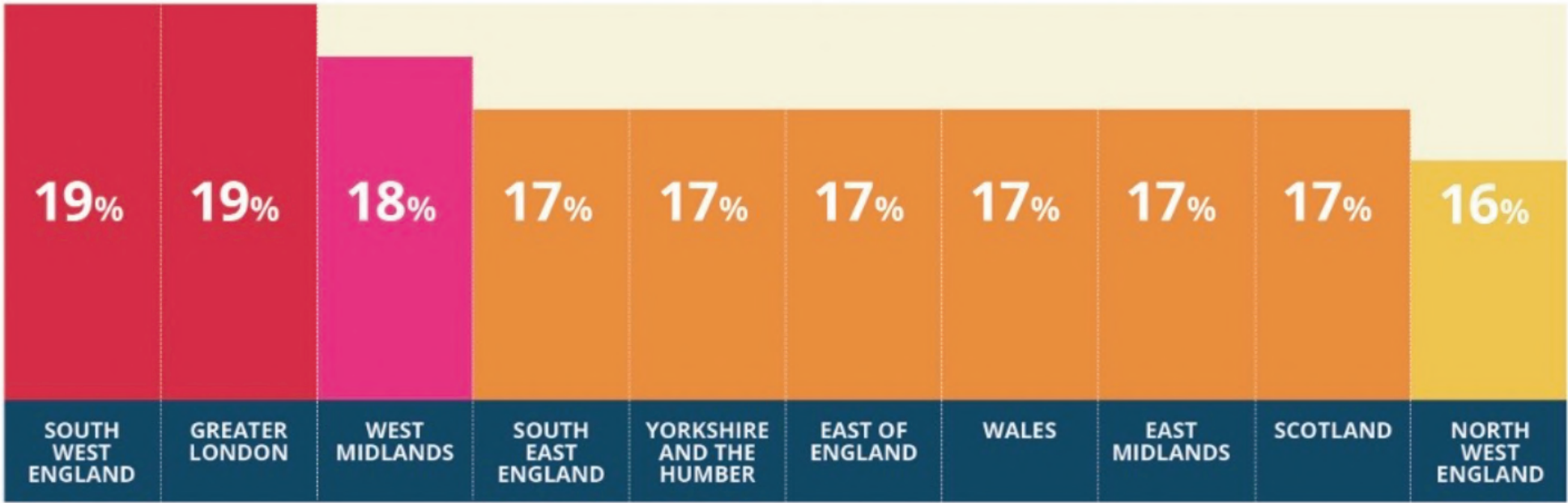
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# Demand for tech skills by region

Tech Nation’s Jobs and Skills report highlights a significant increase in nationwide employer demand for digital tech roles — which account for 9% of the UK workforce. In some areas, nearly 1 in 5 advertised roles are in digital or tech. Emerging technologies, such as AI and machine learning, are creating requirements for specialist skills that are hard to come by in the labour market. This is intensifying competition for diverse talent, while supporting jobs, growth, and productivity in communities.

**% of advertised digital tech roles**

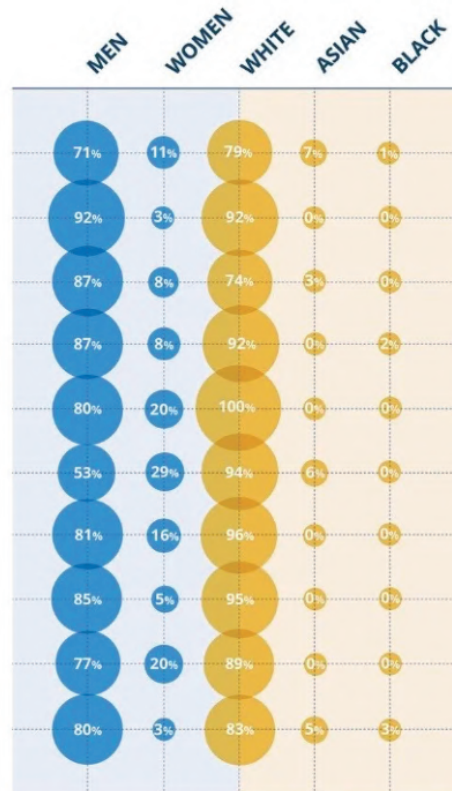
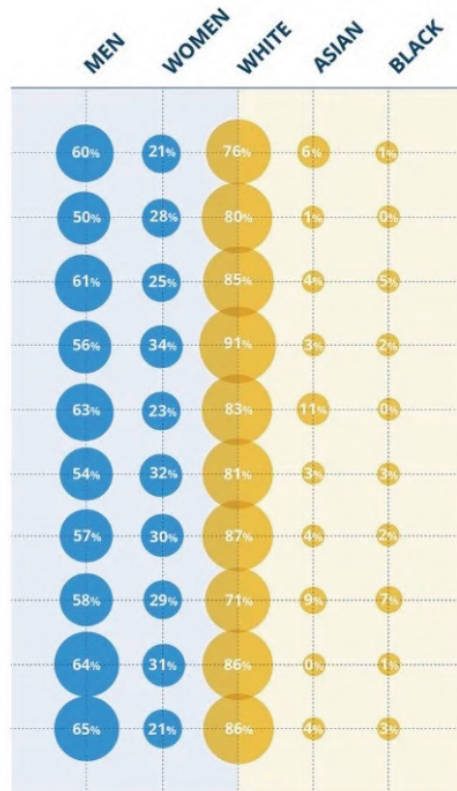
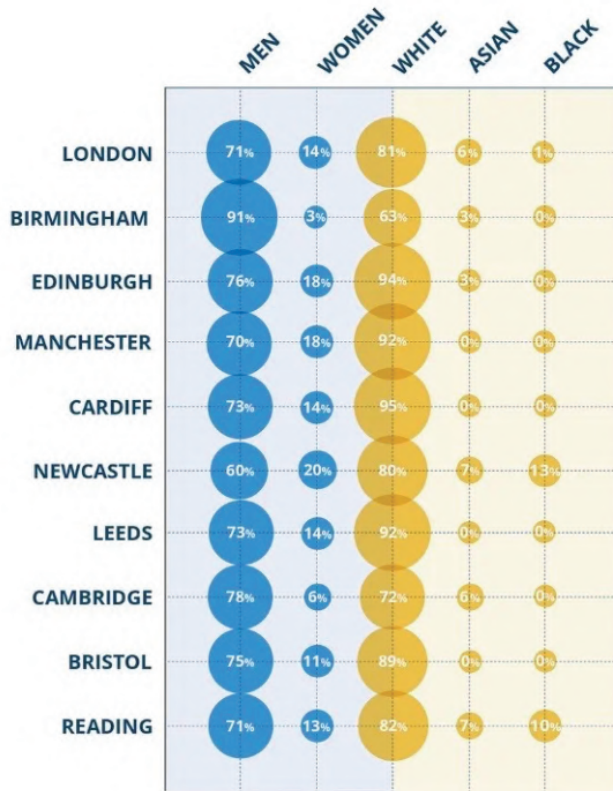


Data provided by [Tech Nation](#)

DATA SCIENCE

PROGRAMMING

ENGINEERING



We partnered with [Stratigens](#), which uses thousands of data sources like LinkedIn, Facebook and Twitter, to analyse self-reported skill supply in various regions. They provided us with insight on three highly significant skill areas, broken down by region, gender and ethnicity: data science, data engineering, and programming.

This data was provided by Stratigens and shows the skills individuals report having in each region broken down by ethnicity and gender. Stratigens pulls data from a variety of sources such as GitHub, LinkedIn, Meetup and twitter. Where demographics data for a datapoint was not available it was recorded as unknown. We omitted the percentages for unknown demographic data from this visualisation though it can be inferred where figures total less than 100%.



"Organisations being challenged on diversity planning and action, can and should be actively targeting diverse populations of talent to turn the dial and understand the diversity breakdown of the skills supply."

Alison Ettridge,  
CEO of Stratigens and Talent  
Intuition

# Regional data science & data engineering skills

The demand for data science roles increased by 46% from 2018-2019, and is projected to grow even more. The most frequently required skills for data science roles are those associated with scripting languages, big data, SQL databases and machine learning, according to [The Royal Society](#). Cities within the North of the UK, such as Newcastle, Edinburgh and Manchester have a higher percentage of women with data science skills. This is, however, lower in Birmingham which has the highest proportion of males with data science skills.

There is a higher percentage of women with data engineering skills in London and Bristol, compared to Manchester and Birmingham. Whilst data engineering skills in Cardiff appeared to be entirely composed of white people, Reading, London and Newcastle show higher percentages of other ethnic groups with data engineering skills. Examining the ethnicity split for data science skills within UK cities, there is a higher proportion of other ethnic groups in Birmingham and Cambridge, mirroring [regional ethnicity data from the ONS](#) which shows that after London, people from the Asian and Black ethnic groups were most likely to live in the West Midlands.

# Regional programming skills

There are a vast array of programming languages used today, from front end to back end development. In the top programming languages according to [IT Jobs watch](#), based on the past six months of live job ads, Javascript is most in demand based within permanent roles, however, for contract roles, SQL is most in demand. The cities located within the North of the UK, generally shows that a higher proportion of women have programming skills compared to the cities located within the south of the UK. London and Cambridge have the highest number of people from ethnic minorities with programming skills. London is the most ethnicity diverse region in the UK where 40% of residents identified as BAME but TTC found that London underperforms in terms of ethnic diversity within technical roles when compared to the census data.

# Making the most of regional talent

The Stratigens analysis illustrates where tech talent can be found in the UK. Across our Signatory base, Wales, the West Midlands, the North East, Yorkshire and Scotland all have a higher proportion of male technical workers than the average across the regions. The South West, London and East of England have at least 25% of female technical workers. Even in cities with a relatively rich ethnic mix, the digital skill landscape is far from uniform. Stratigens highlights the fact that diverse, digitally skilled talent exists across the UK, beyond the so-called tech hubs of London and the South East. Often, pathways into tech and digital sectors are seen as difficult to access, and London-centric. It's important to shift this narrative to ensure tech can play a major role in economic recovery and growth for all areas of the UK.

For decades the conventional wisdom has been that geographical inequalities in social mobility are drawn across simple boundaries: North versus South; London & South East versus everywhere else. The data shows that there may be more to it. Inclusive Boards estimates that in the UK tech sector, 19% of workers are from a working class background, compared to 33% of the nationwide population (2014 Labour Force Survey). With social mobility a key theme for Signatories this year, TTC is working towards improving representation from all backgrounds. It is important for companies to be aware of regional skills data to ensure that they are accessing the existing talent pool across the UK to fill the growing digital skills gap. A proactive approach will help future-proof organisations against skills shortages. And by bringing the learnings on flexible working in 2020 into BAU, businesses can access and maximise the skills of regional talent pools.



“Lancashire Digital Skills Partnership (LDSP) research on the tech landscape in Lancashire has identified a clear skills gap and identifiable areas of hard to fill vacancies requiring specialist digital skills that were limiting growth and development of our local businesses. We also identified that there were underrepresented groups in our digital workforce. Increasing the D&I practices of the Lancashire digital sector to widen the talent pool that employers have access to is now a key pillar of work for the LDSP.”

Kerry Harrison,  
Digital Skills Coordinator at  
Lancashire Enterprise Partnership

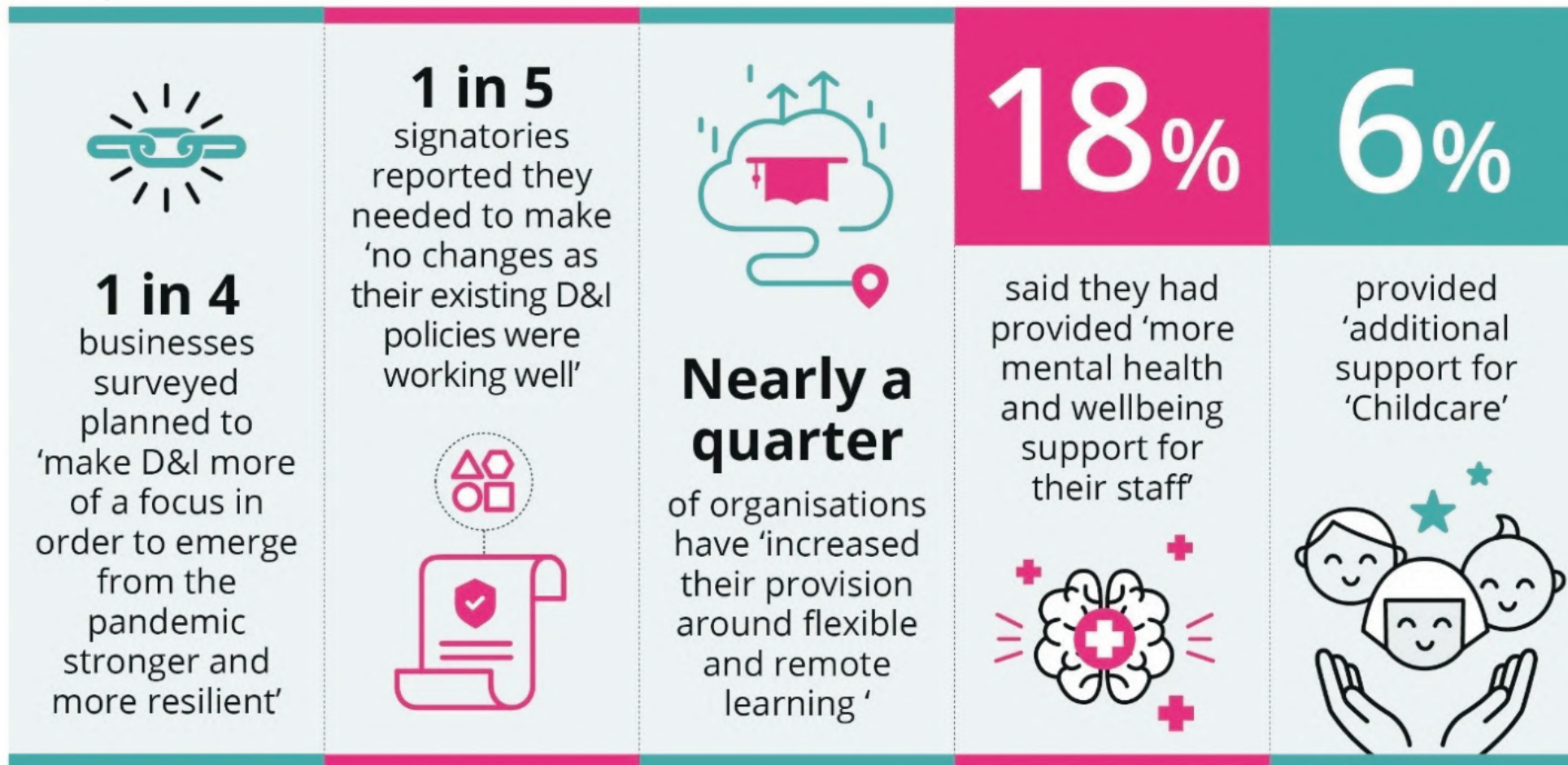


# The new normal: flexible working

Work and care patterns shifted dramatically in 2020, as a result of the COVID-19 pandemic. There were also many concerns that the health crisis would exacerbate inequality. Research commissioned by the Fawcett Society revealed that 1 in 3 working mothers lost work or hours due to childcare needs, that women were more likely than men to lose work or be burdened with childcare during the crisis, and that ethnic minority women were more likely to have concerns about losing their jobs.

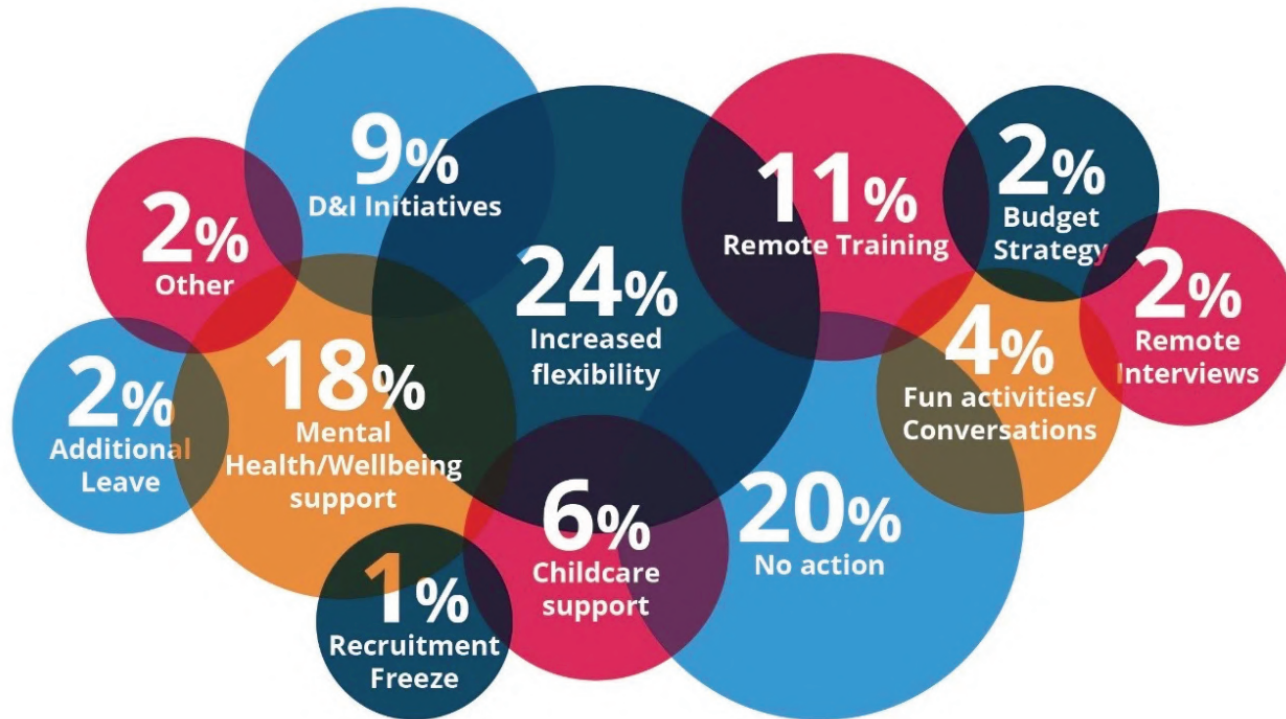
UK flexible working consultancy Timewise recently reported that 9 in 10 people wanted to work flexibly, but only 2 in 10 jobs are advertised with flexible work options. TTC has always advocated flexible working but too often, managers have reported that this wouldn't work at their office. COVID has exploded that myth, with a massive shift to remote working, part-time working and flexibility of hours. Flexible work is key to building an inclusive workplace. According to Timewise, flexible working is far more likely to be sought by women or other underrepresented groups such as people with disabilities. However, the relative shortage of roles means these groups may not be able to find flexible work that makes the best use of their skills, ultimately impacting overall career development.

The pandemic presented a unique opportunity for employers to take new approaches to work. Earlier in the year, TTC partnered with consumer research platform Attest to understand how business leaders' D&I plans were being affected by the pandemic. The Attest research revealed that 14% of business leaders said that diversity and inclusion has been superseded by other priorities. However, a quarter of businesses actually planned to make D&I more of a focus in order to emerge from the pandemic stronger and more resilient. The positivity around D&I was echoed by the actions of our Signatories when we surveyed them a few months later.



Far left: findings from research commissioned by the TTC and conducted by Attest in May 2020 amongst UK business leaders. The other stats come from TTC's annual survey of Signatories in August-September.

## COVID-19 RESPONSE SUMMARY



The most common actions Signatories reported taking in response to the pandemic.

As an employer, it's never been more important, nor so effective, to have and promote flexible work practices. Research by Peakon shows flexible working discussions increased by approximately 35% amongst workers under 40. This age group makes up the majority of the UK tech workforce and their interest in flexible working is two to three times higher than that of individuals in other age brackets. Further research by the Gender and Behavioural Insight Team found that job adverts offering flexible working attracted 30% more applicants and boosted applications from women by 16%.

The research into work flexibility, spurred by the pandemic, has therefore added to an increasingly pressing business and social responsibility case in favour of more flexible work options. Managing changes to organisational culture, for example the introduction of more flexible work patterns, may require careful management to deal with discomfort or resistance.



“Everyone wants the ability to work flexibly, and it's well known that the younger generations expect it. While the decision to extend flexible working was driven by responding to lockdown, the long term impact we expect to see is on the recruitment and retention of talent. When you don't have to be within commuting distance, and you can flex your hours, our talent pool has widened dramatically. That's necessary but not sufficient to meet the needs of a growing company in a competitive market. We've coupled it with a drive to grow our own future talent, we look forward to the fresh thinking and innovation that an ever more diverse team will deliver.”

Beverley Hamblet-Bowes,  
Director of HR at Nominet

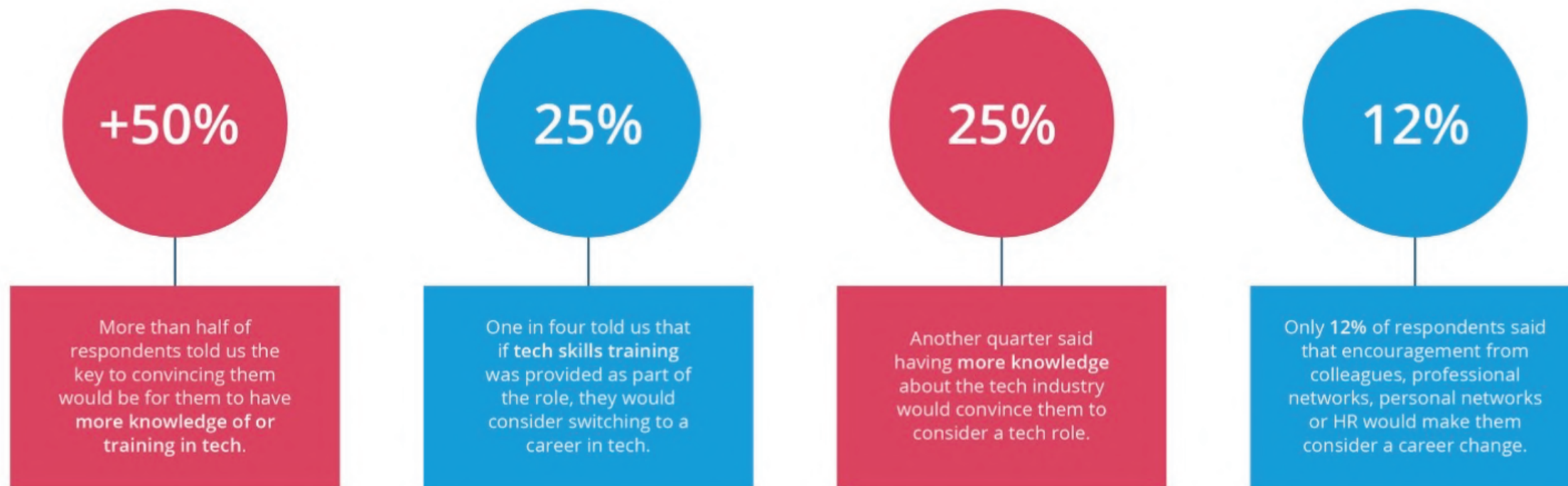
# Training: the key to getting more women into tech

The brunt of the pandemic has been borne by ethnic minorities and women — particularly those with caring responsibilities — older workers and those with health conditions. As we recover from the COVID crisis, many workers will be looking for different employment. This can be an opportunity for the tech sector to benefit from new talent, particularly in these underrepresented groups. Training will be the key to bringing new people into the workforce.

Flexible work culture is something that is particularly well established in the tech industry and the groups mentioned above could benefit from the ability to work flexibly. With such positive outcomes possible, TTC surveyed working women to see what would persuade them to consider a career in tech, and examined the current training initiatives within the tech sector.

Signatories collectively reported that **24,355** people were trained via these initiatives in the last year.

**48%** of them were from gender minorities and **26%** from ethnic minorities.

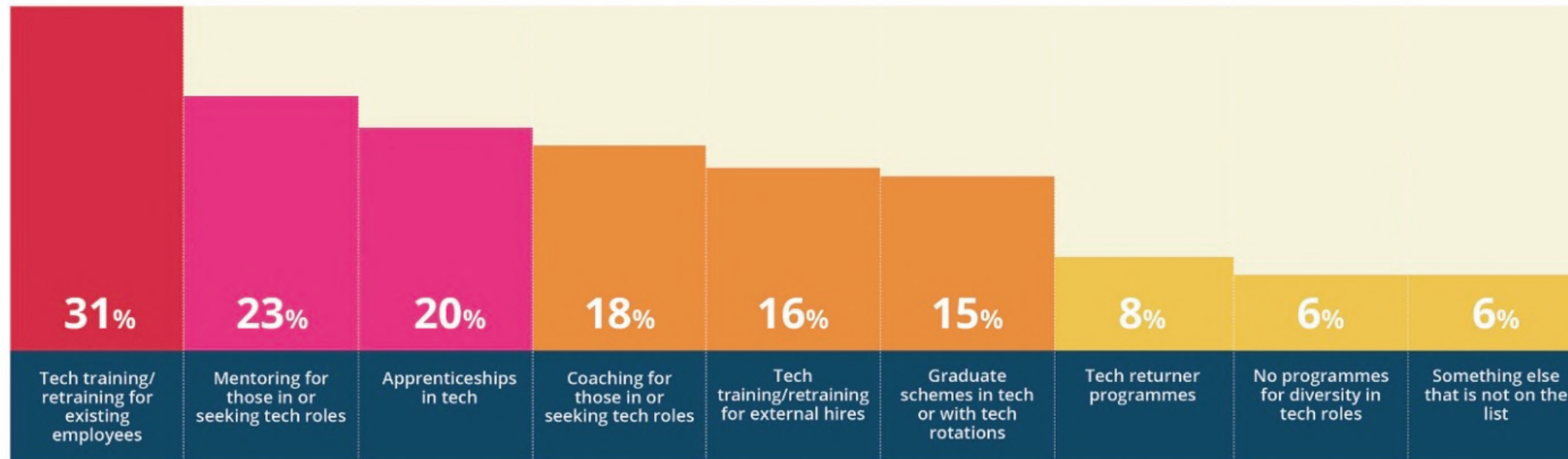


Working with consumer research platform, Attest, we surveyed working women and their thoughts on changing to a career in tech. Results showed that tech training and more knowledge about the industry are key motivators that would persuade women to consider a tech career.

The fact that more than half of respondents were open to a career in tech, subject to being able to obtain the relevant knowledge and skills, underscores how critical training and development programmes are in helping to improve diversity in tech. The potential for more diverse talent is there. To enable women to make this career switch, tech companies must have the right training initiatives in place. We surveyed our Signatories and were pleased to learn that their tech training initiatives had relatively strong uptake from ethnic and gender minorities.

# What training initiatives did companies run?

## Skills and training interventions to improve inclusion and diversity in technical roles



The most frequent initiatives among the companies analysed were tech training and retraining for existing employees, mentoring for those in or seeking tech roles, and apprenticeships. Last year, we asked Signatories whether they offered retraining or returner programmes; 13% reported that they did. This year, that proportion is over 2.5 times higher at 34% and refers to explicitly tech-focused training/retraining or returner programmes. When we expand this to include other types of tech skills initiatives such as graduate schemes, apprenticeships, and mentoring and coaching it rises to 44% of total Signatories. It is positive to see the increase in companies who are offering L&D opportunities designed to help people get into tech. There is also encouraging evidence, which shows mentoring to be a promising intervention, particularly for increasing the number of women from ethnically diverse backgrounds in management roles.








“The Lloyds Bank Academy, West Yorkshire Digital Skills Partnership and Clockwork City are training fifteen businesses led by under-represented groups across Yorkshire. The training is delivered via a set of four workshops, with follow-up 121 mentoring sessions, post training workshops and demonstrations. With a focus on practical advice and support on using digital tools to increase profitability and exposure. These workshops offer businesses an introduction into the value of Essential Digital Business Skills and provide detailed Digital Skills Implementation support to help put theory into practice. Through the sessions, we are teaching business owners how to combat the effects of COVID 19 and to prepare for re-launching their business as and when restrictions ease.”

Jemma Waters,  
Head of Responsible Transformation  
at Lloyds Banking Group.



# Key Insights

01	02	03	04	05
<p><b>Women are interested in working in tech.</b> One in two women would consider changing to a career in the tech sector if they had training or further knowledge of the sector.</p> 	 <p><b>The number of tech companies offering training initiatives has greatly increased.</b> Now, almost half of tech companies surveyed have some form of programme to increase skills in place.</p>	<p><b>When it comes to skills, quality is important.</b> We recommend that companies run a few programmes well which are publicised heavily so that those both inside and outside the organisation can make use of them.</p> 	 <p><b>Size matters.</b> To ensure these schemes affect numbers, they need to be significant enough to reach larger numbers of people. Partnering and collaboration with other organisations is a way to help us upskill people at scale, particularly for smaller organisations.</p>	<p><b>Keep mentoring.</b> Mentoring is the second most common skills initiative for tech companies surveyed to run, and these programmes are proven to help increase the number of women from ethnically diverse backgrounds in management roles.</p> 

While the tech sector faces pervasive challenges when it comes to getting more women into the workforce, the prevalence of training programmes may provide a way to overcome such obstacles and to support people entering the tech sector. It is heartening to learn that working women would consider a career in tech and that overall, companies across regions say they have skills and training interventions in place, designed to improve D&I.

It's now up to the tech sector to ensure that training, skills and support programmes are in place to attract and retain diverse talent.

# Recruitment

Organisations are adopting hiring practices and strategies that promote diversity and inclusion. 17% of Signatories reported using strategies in the last 12 months that improved diversity in technical roles and over half of these reported using recruitment initiatives successfully. Organisations described effective practices like blind CV screening, instituting diversity requirements for candidate shortlists, incorporating more inclusive language in job descriptions, and implementing D&I-friendly policy and communications initiatives. These practices, when executed in specific ways, have been tested in real-world settings and shown to improve diversity in hiring. Building on these developments, we investigated further and pulled together candidate diversity data from 13 agencies and 44 internal recruitment teams:

**Our research found that agencies shortlisted at least one woman or other gender minority person for an interview for 78% of the roles they were tasked with filling. Whereas, internal recruiters did so for just 57% of the roles, despite having proportionally more women in their candidate pool than their agency counterparts.**

This suggests that agency recruiters are leading the charge in pushing for women to be on interview shortlists, which has been shown to correlate with higher numbers of women being hired. However, when you count the number of unique individuals shortlisted for an interview by agencies, only 17% of that total pool were women or gender minorities. By comparison, internal recruiters had a much higher proportion: 29%.

These findings point to inherent challenges associated with the common transactional practices of traditional agency recruiters. Typically, a transactional agency recruitment process comes with a high sense of urgency, as different businesses compete to be the first past the post with a successful candidate. This has several ramifications for recruiters: less time and thus exposure to the nuances of their client's employer brand, less time to communicate such details and subtleties to their candidates, less incentive to invest in getting to know candidates, particularly when the career or hiring narrative isn't straightforward. This can often be the case for underrepresented groups such as women, who are statistically more likely to be juggling a range of complex domestic and work responsibilities.

When candidates and clients are brought together in a transactional process, it can be difficult to attain compatibility that accounts for nuanced needs. This can perpetuate a cycle of poorer experiences on both sides and potentially further ingrains negative stereotypes around what, on the face of it, seems like good diverse hiring practice. Despite the challenges of the traditional agency model, many organisations, which are tackling these problems by reinventing their recruitment practices, are joining TTC.



# Agency recruitment



"As talent partners to the start-up, scaleup and fast growth tech sector, we take our responsibility for driving positive change and removing barriers for talent in the tech industry seriously. Working collaboratively and developing new ways of working with our clients is crucial to making real change happen. Our Spinks onsite solution was designed to do just that - an embedded, onsite talent model that also incorporates emerging recruitment tech to help our clients attract, hire and then retain diverse talent."

Dania Lyons,  
Head of Partnerships and Customer  
Engagement at Spinks

# Internal recruitment



“At Iress we understand that to get the best talent we need to look beyond the most common, established sources, and that is one of the reasons we started working with Talent Beyond Boundaries (TBB). TBB is the first organisation in the world to focus on pioneering labour mobility as a complementary solution to traditional humanitarian resettlement. Over the past two years, TBB has given us the opportunity to access a new talent pool of fantastically talented people that we wouldn't have otherwise had the opportunity to speak to.

By working with TBB, we are proud to have started recruiting refugees with highly valued tech skills into software engineer roles in Australia and the UK. We plan on welcoming more, as it's not just our talent pool that reaps the benefit: the real driver behind our partnership with TBB is allowing us to offer people, and their families, a life changing opportunity. Something that provides everyone at Iress with a real sense of pride.”

Julia McNeill,  
Chief People Officer at Iress

To learn more about Iress' work with Talent Beyond Boundaries, please read their blog post: [Solving the global skill shortage the smart way.](#)

The increasing number of women and gender minority candidates coming through both agencies and internal recruiters is encouraging. Ultimately, businesses willing to take an open and innovative approach to recruitment will potentially uncover lessons, opportunities and gains at the nexus of internal and external agency recruitment, which benefit the business community and society.

# Top tips from CWJobs on how to create the best job descriptions for diversity

01	02	03	04	05	06	07	08
<b>Avoid gender-coded language</b> Smart tools, such as the Gender Bias Decoder, can help you check job ad text for hidden gender bias and create more balanced copy.	<b>Highlight inclusive benefits</b> If your company offers benefits such as parental leave, childcare subsidies and flexible working, make sure to call them out in a job description.	<b>Emphasise your company's commitment to diversity</b> Industry partnerships, internal policies and employee groups can bring forward your company's commitment to diversity and inclusion so make sure to include them in the ad copy.	<b>Go beyond words with video</b> Work with your existing diverse workforce to create videos talking about job responsibilities and company culture. This will make your job ad more authentic and relatable to diverse candidates.	<b>Limit your job requirements to must-haves</b> Women are more likely to apply to a role if they meet all requirements, so keeping the list to the must-haves will help increase applications from female candidates.	<b>Promote training, reskilling and returners programmes</b> By offering support, training and mentorship, candidates from a variety of backgrounds and experiences are more likely to apply to your roles.	<b>Have a culture add mindset</b> Make sure your ad copy not only reflects your current culture but also something different that candidates should bring and positively contribute to your company.	<b>Consider indicating a salary range</b> 78% of large organisations admitted to having a gender pay gap in tech, with men earning more than women, so including a salary range in your job ad will show you strive to be an equal pay employer.

# What inclusive practices are Signatories using?

Our data indicates that there is a correlation between gender diversity amongst tech and non-tech roles: companies that are more diverse in one respect are likely to be more diverse in the other. This suggests that improving diversity in tech roles is unlikely to be solved in isolation. We need to consider the entire culture of the organisation and sector.

To understand inclusion culture better, we asked Signatories about whether they used certain inclusive practices. Our data showed that 84% and 86% of the Signatories who reported they had made improvements in diversity and inclusion had a flexible working policy and safe process for employees to call out bias/unacceptable behaviour. We are seeing repeating trends around the themes of transparency and flexibility continuing to emerge as key drivers in improving diversity both in research and industry practice.

Among the organisation policy and culture traits surveyed, one frequently reported factor has been linked to improved diversity: flexible working. However, we also found that another promising intervention - use of internal D&I KPIs - was not as frequently reported as others for which there is less promising evidence.





“For more than 80 years, HP has stood up for diversity, equity and inclusion. We are on a global journey to keep the momentum of increasing the representation of women within HP and beyond. For the past few years we have extended our gender diversity commitment to our suppliers and partners. Across the technology industry we need to accelerate the work we do on ethnic diversity & inclusion. In the UK, HP employees have recently created a focused ‘Diversity & Inclusion Business Impact Network’ and are working with the management team to support the implementation of effective change.”

George Brasher,  
UK & Ireland Managing Director at  
HP Inc.



# Tough conversations: finding what works

We know that D&I best practice is an evolving business area. More research is needed into the best ways to move the dial. Whilst we continue to innovate, measure and report what works best, we strongly encourage all organisations to review the guidance provided by the Government Equalities Office and Behavioural Insights Team on which interventions have so far been shown to increase diversity.



“We ask too much of certain types of diversity training: short-term training programmes are not enough to remove biases acquired over a lifetime. Studies are yet to rigorously show that this training changes biased behaviours in the workplace in any lasting way, or improves outcomes we care about for minority groups in terms of representation in leadership positions or reducing pay gaps. But there are good alternatives to this training, which focus on de-biasing systems rather than people!”

Hannah Burd,  
Principal Advisor & Programme Director of the Gender & Behavioural Insights (GABI) programme at The Behavioural Insights Team

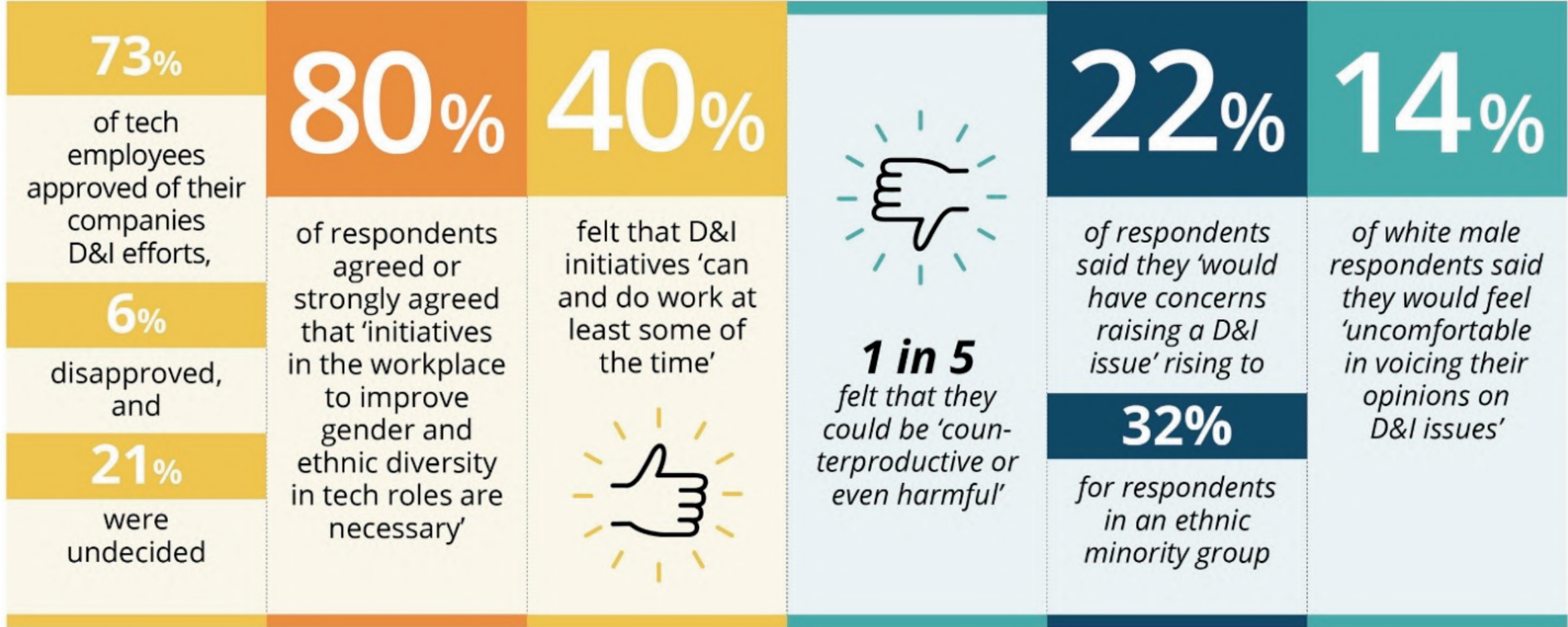
# Tough conversations: perceptions of D&I

The New Yorker called 2017 “the year of ‘Diversity Fatigue’”. In the article of the same name, the author describes the effort it takes to address D&I and remain committed to long-term measures – including time and resources. Not to mention the emotional toll it takes to run these programmes while simultaneously fighting for their relevance and not offending others. The media also zeroed in on dissenting voices, some from the tech sector, which surfaced as diversity programmes increased. Among them James Damore, who authored the controversial Google memo challenging the company's internal D&I approach. This highlights a divide which the existing D&I conversation had not yet addressed. As the Black Lives Matter movement grew exponentially and calls for a renewed focus on D&I increased on a global scale, we undertook a study to identify gaps between the demand for diversity initiatives and pushback against them.

The list below features seven evidence-based interventions that have been shown to positively affect gender equality. The findings were made by the GABI Programme, run by the UK government and the [Behavioural Insight Team](#). Their meta analysis reviewed the methodology and findings of hundreds of studies to produce the following:

1. Implement transparent pay, promotion and reward processes
2. Appoint diversity managers/diversity task forces
3. Specify jobs as offering flexitime and part-time working as part of your standard job description whenever possible and relevant.
4. Use blind CV screening (i.e. remove the name, images or any unnecessary information about the candidate).
5. Assess candidates by asking them to undertake a task relevant to the role that demonstrates their skills.
6. Share salary range details with the candidate.
7. Ensure shortlists contain more than 1 woman.

TTC partnered with consumer research platform, Attest, to investigate the perception of D&I within the tech industry, beyond our signatory base. Surveying people who reflect the demographic makeup of the tech industry, Attest found that the vast majority of tech employees (73%) approved of their organisation’s D&I efforts; just 6% disapproved; the rest were undecided. The research also found that the approval rate was even higher (80%) for respondents up to the age of 35 and 10% lower in respondents 36 and over. Despite age-related variance, there is a clear agreement amongst tech professionals that organisations endeavouring to improve D&I are doing the right thing in the eyes of their employees. Over **80% of respondents agreed or strongly agreed that “initiatives in the workplace to improve gender and ethnic diversity in tech roles are necessary”**.



# Tough conversations: perceptions of D&I

**40%**, felt that D&I initiatives can and do work at least some of the time. However, just over one in five also reported that they felt such initiatives could sometimes be counterproductive or even harmful. Attention is now needed to ensure that organisations get buy-in from their employees over their course of action and results. This is backed up by our research, which revealed meritocratic decision-making to be a key area of concern. Respondents both supportive and critical of D&I initiatives, had negative views of non-meritocratic actions around hiring and talent. As with our findings on inclusive recruitment and culture, a key recurring focus is the importance of transparency. However, ensuring that employees engage with the conversations around diversity can also be a challenge.

Another theme that arose from our research was the reluctance of individuals on both sides of the aisle to raise D&I issues. Both those who belonged to minority groups and majority groups in tech were hesitant to voice their opinions and concerns, with each group saying it could have a negative effect on how they were viewed in their organisation. **22% of respondents said they would have concerns raising a D&I issue; this rises to 32% for respondents who are part of ethnic minority groups. Equally striking was the fact that 14% of white men also felt uncomfortable voicing their opinions on D&I issues.** This highlights the importance of companies leaning into the tough conversations about D&I and giving their employees the appropriate spaces to engage with and discuss diversity and inclusion topics. Without the cultural backdrop for D&I issues to be discussed openly in a professional context, it's unlikely that organisations will be able to elicit and address concerns amongst the segment of their workforce that simply views this as too risky to engage with.

The business case for D&I is well documented. When it comes to a multitude of other difficult business issues, we do not allow discomfort to be a reason for avoidance; nor should this be the case with regards to discussing D&I. As with any other business concern, the key is to support staff to be better at handling these conversations.

# The key takeaways on perceptions of D&I

- **The vast majority of tech employees approve of their organisation's D&I efforts and think that they are necessary.** Businesses can take some confidence from that fact that the average tech employee does back action on diversity and inclusion. We expect this number to increase over time, as Millennials and Gen Z account for increasing proportions of the tech workforce.
- **Industry opinion is more divided over how to improve D&I.** Despite broad agreement on the necessity of diversity and inclusion interventions, a significant proportion of tech employees have misgivings about the efficacy of the interventions being used.
- **Processes around the discussion of D&I issues are important.** Companies that had in place clear processes to raise concerns about diversity and inclusion were significantly more likely to have employees feel strongly that inclusion initiatives always work. Employees at these organisations were also more likely to strongly approve of initiatives to improve diversity in tech hiring. This suggests that companies that endeavour to make their entire workforce feel heard around D&I create more positive feelings about these initiatives within their workforce.
- **Illustrate how all hires are right for the job.** A common perception held by people who tended to disapprove of a company running initiatives for diversity and inclusion was that it didn't lead to the best candidates for the job. 10% of survey respondents said they felt that D&I initiatives at their organisation were unfair. Organisations planning diversity and inclusion programmes need to be aware of this, as it has the potential to affect the candidates, employees and general employee morale. For D&I programmes to be more successful, this perception needs to be addressed. If we want to give diversity and inclusion initiatives the best chance of working for and being supported by everyone, they need to promote equality of opportunity, whilst also demonstrating fairness of outcome. With this in mind, it is critical to ensure that your D&I work is measurable, tracked, evidence-based and that proof of its credibility is part of your messaging.

# Tough Conversations: perceptions of D&I

This research gives us critical insights into the need for open and honest conversations around D&I. It's fantastic to see a high degree of support for diversity and inclusion efforts in general. Whilst D&I efforts in the tech sector are welcome, they are not yet fully trusted. We encourage organisations to take this information into account when devising their diversity and inclusion programmes, in order to combat 'diversity fatigue'. By prioritising transparency and evidence on D&I we may be able to bring more employees along on the journey to become a more diverse and inclusive workplace. Only with an accurate understanding of how employees perceive D&I processes, can we fully engage people in culture change.



# 3 tips from insight experts Attest on diversity consumer research

01

**Speak to those you can't normally access.**

Consumer research is a perfect opportunity to speak to those who aren't already represented in your internal data. Target the people who are missing from your workforce, and explore what they need from an employer.

02

**Check for biases.**

When drafting your survey, ask others to check for leading questions. It can be hard to avoid writing your own opinions into questions, especially when you think you know what the answers will be. Differing opinions ought to be heard, and will spark tough conversations that are worth having.

03

**Anonymity is key.**

22% of mid-level tech employees\* have concerns raising their opinions about diversity at work. Your internal surveys, unless completely anonymous, are likely to be self-censored. When you run consumer research, you allow your respondents to speak freely without fear of repercussions and the results might surprise you.

# Having tough conversations and finding meaningful solutions - together

2020 has been a year like no other. People and organisations have been under unprecedented pressure, and are facing uncertain times ahead. Yet, amongst many Signatories D&I efforts have been shown to be more, rather than less important. Many companies are already looking at the diversity and inclusion question through lenses beyond gender. Despite strained resources, efforts to create equal opportunity and better diverse outcomes are not dying down. TTC is committed to continuing to support our Signatories' D&I efforts more broadly as well as helping them to hone in on specific singular issues.

We know that pressing needs will emerge over the course of 2021 as our society is more divided than ever before. Diversity issues have outgrown the conversation around the basic business case and now require more nuanced thought and action. Often there is no single right course of action for all organisations. However, by leaning into these tough conversations on D&I, TTC is committed to helping us all find solutions - together.



# Methodology

As our third year draws to a close, TTC now has 544 Signatories... and counting. We have worked with 418 of them to collect data for this report, between 1st August and 30th September 2020. The Senior Signatory, Principal or Data contact for our organisations were asked to respond to a survey, which requested qualitative and quantitative information relevant to D&I on behalf of their organisation. Questions and guidance notes were provided a month in advance of the submission window. All organisations collected and reported their own data to TTC, where it is protected by NDA. The data was submitted directly by the respondent into a survey platform.

The survey submission was split into a mandatory section of mainly quantitative data and an optional section that asks for more qualitative data. To become and remain a TTC Signatory, organisations must provide answers to at least the mandatory section of the survey. We had an expected level of drop-off in responses for the optional section of the survey. Organisations that did not submit the mandatory data requirement were removed from TTC. As Signatories vary each year, TTC has been mindful to interpret our data as a snapshot. Historically we have removed between 15-20% of our signatories for failure to submit data. We've also had a net increase of 91 responses since 2019, due to the growth of our Signatory base. TTC will continue to improve and develop our data collection each year, to drive for greater accuracy and a higher completion rate for optional questions.

As part of this report centres around gender representation, it is worth noting that TTC respects that 'non-binary' and other gender identities are unique. However, the proportion of individuals covered by those who identified as such were so small a cohort that we have grouped non binary individuals, women, and people of other gender minorities for the purposes of succinct data. Looking forward, we will continue to encourage Signatories to consider how they are supporting gender diversity and inclusion beyond the binary definitions and will continue to survey Signatories about other genders and non-binary identities. TTC understands the term "BAME" can be a problematic classification term in the diversity and inclusion space. We use the phrase "BAME" as it remains a core terminology in many corporate communications. We will explore and embrace the evolving appropriate language that recognises the complexity of these issues.

## **Insight creation**

TTC ran a project with [DataKind UK](#) and data professionals from the Signatory community to analyse the anonymised dataset. Twenty-six data and research professionals took part in the project over a two week period and submitted their results including workbooks and code, to TTC. This analysis was then checked by TTC and a team of four data professionals from DataKind UK. Additional data and insight sources were also brought into the report after initial analysis of our data. These include bespoke survey-based research in December 2020 by consumer research platform, [Attest](#). They surveyed a sample of the working population in the tech industry on their views of D&I. They also surveyed working age women about their likelihood to consider tech careers. Additionally we brought in regional skills data from analytics platform [Stratigens](#), and analysis on this was produced by Tech Nation. This was used to form our regional analysis by job role. The resulting report has been co-written by Lexie Papaspyrou at Tech Talent Charter and Nimmi Patel at techUK. It also features contributions from Beth McGarrick at Attest, Diana Akhano at Tech Nation, Shana Ting Lipton from the Storytelling team at Lloyds Banking Group and Casey Calista at Hill+Knowlton Strategies.

# Sponsors & Thanks

## Thank you

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# Individual thanks and credits

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