

# THE EXPERIENCES OF BLACK WOMEN IN THE INFORMATION TECHNOLOGY INDUSTRY



Making IT good for society

< CODING  
BLACK  
FEMALES />



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# INTRODUCTIONS

## CHARLENE HUNTER MBE, CEO AND FOUNDER, CODING BLACK FEMALES

Coding Black Females and BCS have collaborated on this report because we wanted to capture the real experiences of Black women in the tech industry. For CBF it is, of course, our key demographic, but we want to ensure that we can provide findings and recommendations to a range of organisations.

Both CBF and BCS want to effect changes within the industry. To that end, the members of the working group behind this report span a range of industries and roles - all within technology - and they've come together to create the survey, conduct interviews, analyse results from the ONS and provide recommendations.

The result is that we have the numbers to show trends in this most exciting of industries, but also that all-important narrative - stories and comment from Black women in work right now. They tell us what they have faced, what works well for them, what doesn't work, where we can improve organisational approaches, what role diversity policies actually have and more.

Finally we have formulated practical recommendations, with views on interview and recruitment practices, the role of algorithms, the issues with hiring to an organisational template. We also look at the role senior technology leaders should play in increasing the number of Black female IT professionals.

Today, Black women are frequently represented by tech companies in their marketing and recruitment campaigns - but this is no reflection on how many are actually employed. This gap needs closing. We need to translate aspirations into real opportunities for Black women to get employment and progress in the industry.



## RASHIK PARMAR CEO, BCS, THE CHARTERED INSTITUTE FOR IT

We will only be able to build the systems that serve everyone if the diversity of humanity is represented in the project teams that design and build these systems. This is why the BCS has focused on practical actions that are informed by data, to highlight the issues to be addressed.

Welcome to the Coding Black Females takeover of the BCS Diversity report 2022. BCS has been producing reports on the representation of women in IT for many years, doing our own surveys, analysing third party data and hearing and reporting on first-hand experiences from people at the coalface. Our early work in this area was driven through the BCSWomen Specialist Group we have seen a recent improvement in that - women now account for 23% of the IT workforce, against a steady 17% in previous years. So we have seen progress and see the need for still more.

Of course, you cannot change what you cannot see, so three years ago we expanded this work to include analysing data on the experience of ethnic minorities, people with disabilities and older people in our most vibrant of industries.

BCS recognises the vital role of getting diversity right - especially in the era of AI and at a time when we all know the value of products taking into account multiple user-perspectives. We are very pleased to have worked with Coding Black Females on this extensive report and hope it provokes further conversation and research into these most important of issues.



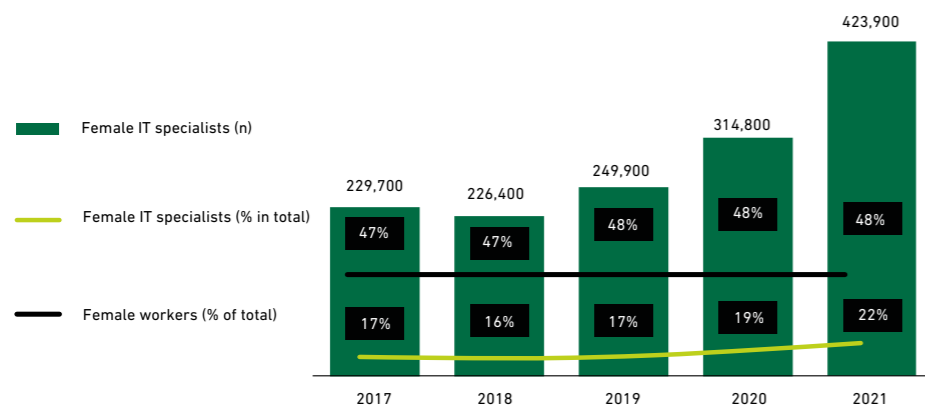
# ETHNIC MINORITY REPRESENTATION IN IT

## – SOME HISTORIC NOTES AND BACKGROUND

Below we have set out some scene-setting historical metrics, to demonstrate some of the issues that CBF and BCS think need to be addressed or, at the very least, more closely analysed. This report takes a quantitative approach from the ONS results and a more qualitative and narrative approach later - starting with the broad strokes from this brief historical perspective, moving to the overall UK picture and subsequently focusing on the actual constituency we are discussing - with added personal stories for a fuller flavour.

BCS and the BCSWomen Specialist Group have been surveying the under-representation of women in IT for nearly a decade – and reporting on the issue for considerably longer. As the following graph shows, change has been a long time coming – but small progress is now being seen.

Figure 1:  
WOMEN IN UK IT

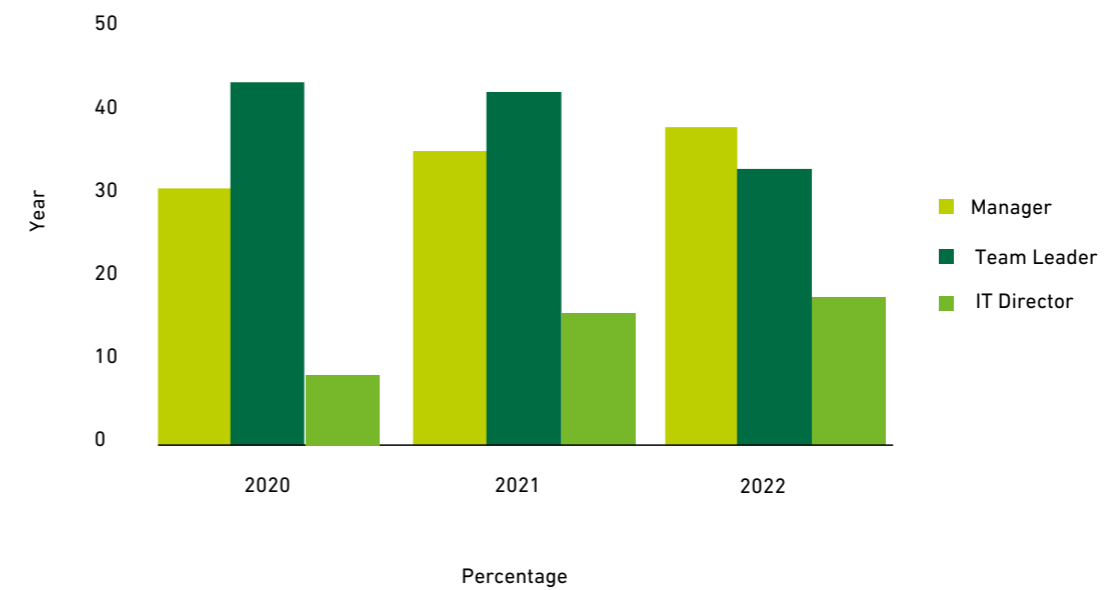


The picture is different, however, for black women. Currently, there are around 12,000 black women in the IT workforce. The number of black women in the IT workforce is two and a half times lower than the number of black women in UK workforce as a whole. At a time when the concerns over data bias and the value of creating widely usable products through diverse teams are well-known, this is a situation that requires attention. If we translate to real-world numbers, for black women to be truly represented there is a shortfall of at least 20,000 black women. Indeed, if overall gender representation in IT were equal to the workforce 'norm' there would have been an additional 486,000 IT specialists in the UK.

A look back at previous BCS reports shows the scale of the problem faced generally by workers from ethnic minority groups – and also some progress points. We will take three examples to illustrate this.

The graph below shows those from ethnic minorities – male and female - in leadership roles.

Figure 2:  
LIKELIHOOD TO BE IN A POSITION OF AUTHORITY



## LEADERSHIP

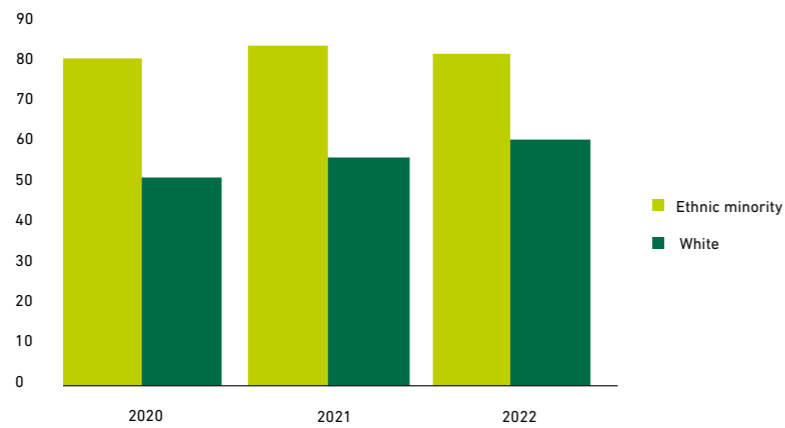
Likelihood to be in a position of responsibility, measured by use of terms 'manager', 'team leader', 'director', source BCS analysis of ONS figures.

Representation at board level has clearly improved over the past three years. Behind the scenes, however, the non-director numbers are generally static, which could mean that the gains for ethnic minorities at director level may not be maintained or that, at present, the pipeline getting ethnic minorities into management roles is running ahead of expected numbers. Either way it is important to note that for ethnic minority people the chances of a responsible position are higher in IT than the workplace overall. So that is progress.

## HIGHER EDUCATION AND DEGREE ATTAINMENT

A consistent theme that comes out in the CBF/BCS part of this report is that black females need to out-perform their counterparts to get noticed, make progress, or even land a job in the first place. It is therefore interesting to note that ethnic minorities, in general terms are more likely to have a degree. That overall number has been very clear for the three years BCS has been analysing ONS figures, as the chart below shows. men. An interesting comparator is the number for those of Indian background, whose representation in the IT workforce runs at between 8% and 9% against a

Figure 3:  
DEGREE ATTAINMENT



Degree attainment by ethnicity (all genders): source BCS analysis of ONS figures.

general workforce representation of only 3%.

There are two important caveats to these high-level numbers.

Firstly, the degree level is not taken into account here. So although the raw numbers are higher, when the focus is narrowed to good degrees (defined as a first or 2:1) the figures are much worse for ethnic minority students. The Office for Students go into this in detail (search: Degree attainment: Black, Asian and minority ethnic students).

Secondly, and interestingly from an IT perspective, this changes again if we focus on those with IT-related degrees, where people from ethnic minorities are again ahead of the curve. See the Skills section for more details.

Splitting ethnicities shows that the general situation can be improved. In 2020 and 2021, according to the ONS, Black/African/Caribbean/Black British people had a 2% representation in the IT industry against 3% in the workforce as a whole. This improved to parity in 2022, but, whilst this is another positive, it is weighted toward black men. An interesting comparator is the number for those of Indian background, whose representation in the IT workforce runs at between 8% and 9% against a general workforce representation of only 3%.



## UNEMPLOYMENT

Relative unemployment numbers are another cause for concern. The approximately 10,000 unemployed IT specialists from ethnic minority groups in the UK accounted for 40% of all unemployed IT specialists at that time. At 2.8% the associated unemployment rate for IT specialists from ethnic minority groups was notably higher than that of their white counterparts (1.6%) though well below the overall unemployment rate for the ethnic minority workforce of the UK (8.2%).

## A NOTE ON TERMINOLOGY

As per the ONS guidelines we use 'ethnic minorities' to refer to all ethnic groups except the White British group. Where this is split further the approach is noted – for example the section 'Ethnicity in IT explored'.

## ONS, BLACK/AFRICAN/CARIBBEAN/BLACK BRITISH PEOPLE HAD A ...

**2%** REPRESENTATION IN THE IT INDUSTRY

# THE OVERALL UK FIGURES

## AT A GLANCE: THE HEADLINES 2021 FOR ALL ETHNIC MINORITIES

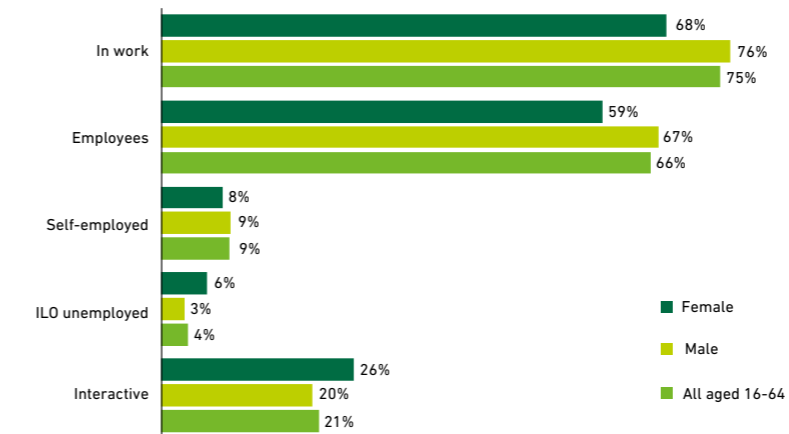
- The six million individuals from ethnic minorities of working age in the UK accounted for 15% of the working age population - 13% of those in work
- Ethnic minority representation was higher amongst IT specialists than within the workforce as a whole - 19% versus 13%
- There were 360,000 ethnic minority IT specialists in the UK
- Ethnic minority IT specialists were twice as likely to be working in non-permanent positions as their white counterparts (6% versus 3%)
- Approximately 10,000 unemployed IT specialists were from ethnic minority groups – which accounted for 40% of all
- In 2021, ethnic minority IT specialists (full-time employees) were earning the same as IT specialists as a whole, with median hourly rates in each case of £22phr
- Ethnic minority IT specialists were as likely to be in 'positions of responsibility' as those of white ethnicity with 38% and 39% respectively stating that they were a manager or team leader in 2021
- Amongst ethnic minority IT specialists 86% have an HE level qualification, compared to 68% of those from white ethnic groups.

## AT A GLANCE: REPRESENTATION BY SEX

- There were 424,000 female IT specialists in the UK workforce during 2021 - 22% of the total at that time
- The level of female representation in IT has increased marginally over the past five years though by an increasing rate since 2019
- Female representation remains well below the level observed within the workforce as a whole (48%)
- Scotland displayed the best 'gender balance', with women accounting for 32% of IT specialists
- At £19 per hour, the median hourly earnings for female IT specialists in 2021 was 13% less than that recorded for males working in IT positions (as employees)
- Women remain very poorly represented amongst IT directors (just 17% of which in 2021 were female) and programmers/software developers (16%)

## ETHNICITY IN CONTEXT

Figure 4:



Source: Analysis of ONS Quarterly Labour Force Survey by BCS \* includes a small number of individuals in work but not as employees/self-employed (i.e. <1% of the total). Note: ILO unemployed is International Labor Organization definition.

Given that they accounted for 15% of the working age population, the proportion of individuals in work accounted for by ethnic minority groups was slightly lower than would be expected (13%) as was the case for employees (13%) and the self-employed workers (13%).

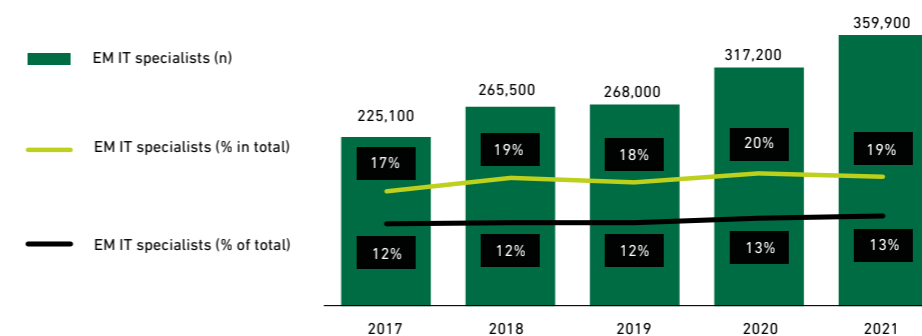
The level of representation for ethnic minority groups was much higher when considering individuals that were either unemployed (i.e. 25% of the total) or economically inactive (18%).

## IT EMPLOYMENT

There were 360,000 IT specialists in the UK from ethnic minority (EM) groups in 2021, representing 19% of all IT specialists in the UK at that time – a notably higher level of representation than for the workforce as a whole (13%). Moreover, the level of ethnic minority representation amongst IT specialists has remained consistently above the norm throughout the past five years as illustrated in the chart below:

Figure 5:

### TRENDS IN WORKFORCE REPRESENTATION (2017-21)



Source: Analysis of ONS Quarterly Labour Force Survey by BCS



### ETHNICITY IN IT EXPLORED

Amongst IT specialists from ethnic minority groups, representation is highest for those whose ethnicity is Indian (8%) – this group almost three times as prominent amongst IT specialists as within the workforce as a whole (3%) in 2021.

Figure 6:  
ETHNICITY IN THE WORKFORCE (2021)

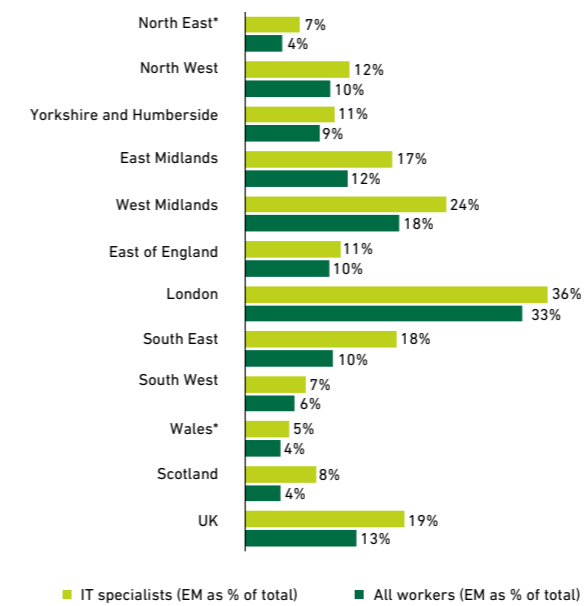
	IT Specialists	Other occupations	All occupations
<b>White</b>	<b>81%</b>	<b>87%</b>	<b>87%</b>
<b>Ethnic minorities</b>	<b>19%</b>	<b>13%</b>	<b>13%</b>
Indian	8%	3%	3%
Black/African/Caribbean/Black	3%	3%	3%
<b>British</b>			
Mixed	2%	1%	1%
Other	6%	5%	5%

Source: Analysis of ONS Quarterly Labour Force Survey by BCS

### REPRESENTATION ACROSS THE UK

Representation of individuals from ethnic minority groups amongst the IT professions varies significantly across the UK - from just 5% in Wales to 36% in London. Within all nations/regions however, the proportion of IT specialists from ethnic minority groups is higher than that recorded within the workforce as a whole for that area of the UK (i.e. during 2021).

Figure 7:  
WORKFORCE REPRESENTATION BY NATION/REGION (2021)



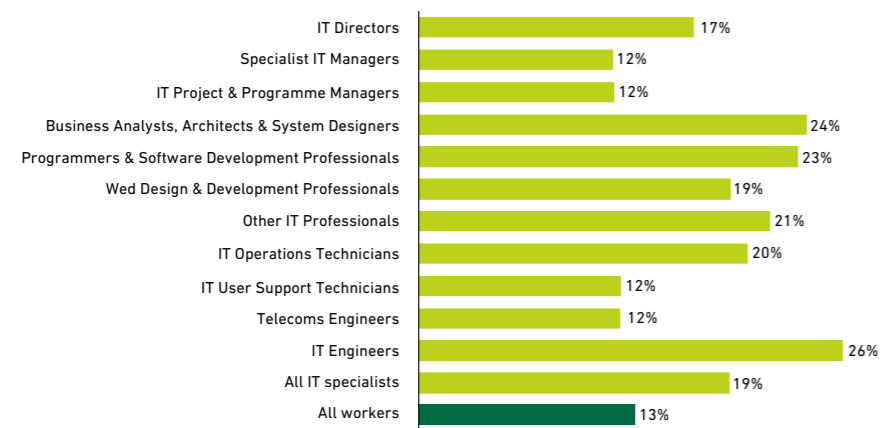
Source: Analysis of ONS Quarterly Labour Force Survey by BCS

\* Five-year average

## EMPLOYMENT ROLES

Ethnic minority representation amongst IT specialists in 2021 ranged from just 12% of specialist IT managers, IT project/programme managers, IT user support technicians and telecoms engineers – to 26% of IT engineers and 24% of IT business analysts.

Figure 8:  
ETHNIC MINORITY REPRESENTATION BY IT OCCUPATION (2021)



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

## PERMANENCY OF EMPLOYMENT

Overall, 4% of IT specialists in the UK were working on a non-permanent basis in 2021, whilst for IT specialists from ethnic minority groups the figure was twice the level of those from a white background at 6%. By comparison, the proportion of ethnic minority workers as a whole in non-permanent employment during the year was still higher at 9%.

Though a detailed analysis of the reasons why IT specialists (white/ ethnic minority) were in non-permanent employment during 2021 is not possible due to limitations of the data source, it can be said that ethnic minority IT specialists are marginally less likely to be in temporary positions as they cannot find a full-time job - with just under one quarter (23%) of ethnic minority IT specialists in such roles stating this to be the case during the 2017-21 period compared to a full quarter (25%) of those IT specialists classed as 'white'. Other factors that could also have a bearing here are the effects of the COVID-19 on the labour market in general and, for self-employed IT specialists, the changes to the IR35 legislation.

## UNEMPLOYMENT

There were approximately 10,000 unemployed IT specialists from ethnic minority groups in the UK during 2021 – 40% of all unemployed IT specialists in the UK at that time.

At 2.8% the associated unemployment rate<sup>1</sup> for IT specialists from ethnic minority groups was notably higher than that of their white counterparts (1.6%) though well below the overall unemployment rate for the ethnic minority workforce of the UK (8.2%).

<sup>1</sup> See data notes



**4%** OF IT SPECIALISTS IN THE UK WERE WORKING ON A NON-PERMANENT BASIS IN 2021



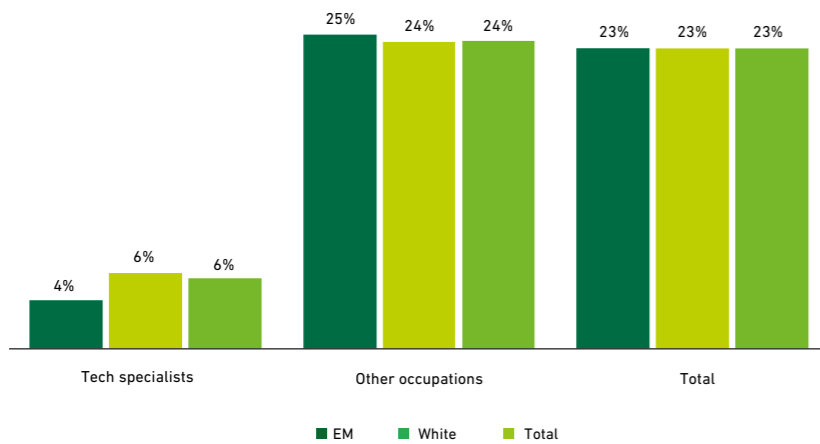
## PAY AND RESPONSIBILITY

### FULL-TIME AND PART-TIME WORKING

IT specialists in the UK are much less likely to work part-time than other workers, and in 2021, just 6% were working part-time hours compared with 23% of workers as a whole. Moreover, ethnic minority IT specialists appear even less likely to be working in part-time positions (just 4% in 2021).

When asked why they were working part-time, the majority of part-timers stated that it was because they did not want a full-time job (68% of all workers and 79% of IT specialists) though the likelihood of this being the case amongst ethnic minority workers was much lower (55% in each case).

Figure 9:  
INCIDENCE OF PART-TIME WORKING (2021)



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

### REMUNERATION

In 2021, the median hourly earnings recorded for ethnic minority IT specialists working in the UK stood at £22 per hour – a level equal to that for IT specialists as a whole and 48% higher than that for all ethnic minority workers in the UK at that time (£15 per hour)<sup>2</sup>.

**6%** OF IT SPECIALISTS WORK PART-TIME HOURS COMPARED WITH 23% OF WORKERS AS A WHOLE.

<sup>2</sup> All figures given are for full-time permanent employees.

Figure 10:  
MEDIAN HOURLY EARNINGS OF FULL-TIME EMPLOYEES (2021)



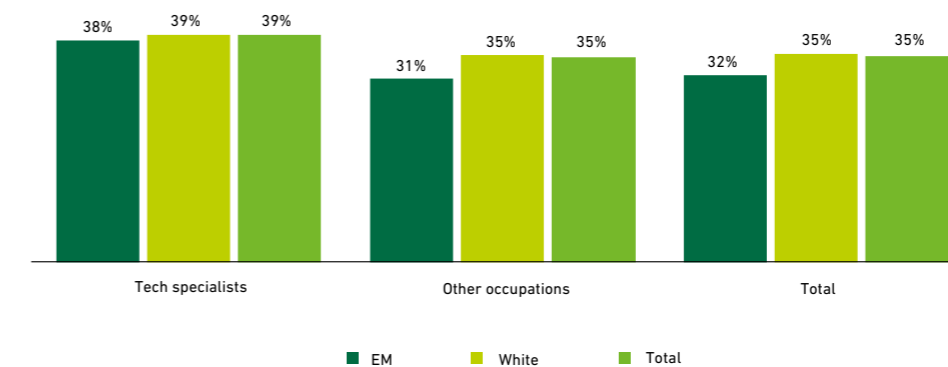
Source: Analysis of ONS Quarterly Labour Force Survey by BCS

### RESPONSIBILITY

Using managerial/supervisory status as a proxy for the likelihood that individuals are given responsibility within their work, it would appear that during 2021, ethnic minority IT specialists (that were employees) were marginally less likely to be in 'positions of responsibility' than their white counterparts with 38% and 39% respectively stating that they were a manager/foreman or team leader.

In both cases the likelihood of individuals holding positions of responsibility was higher than others in the workforce amongst which comparison figures of 32% and 35% respectively were recorded.

Figure 11:  
EMPLOYEES IN 'RESPONSIBLE POSITIONS' (2021)



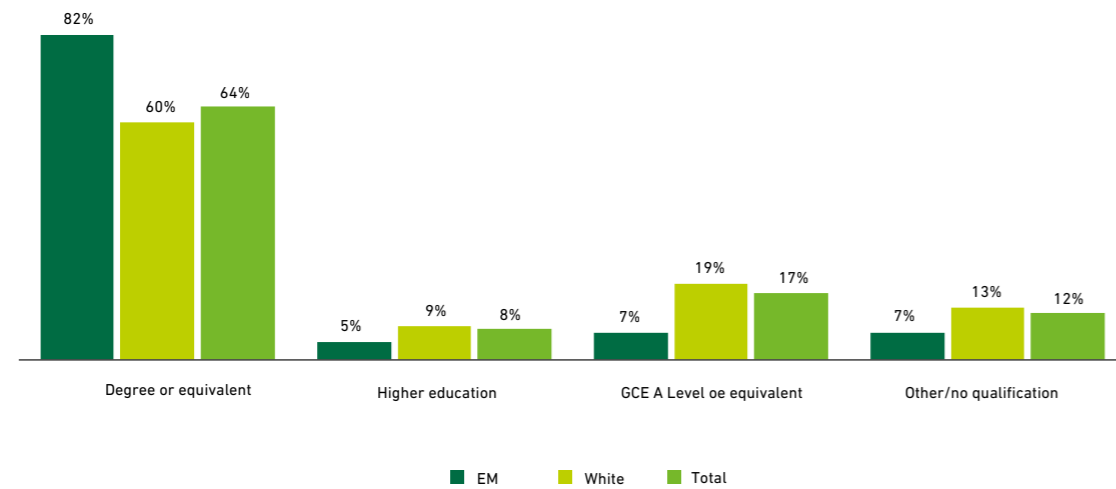
Source: Analysis of ONS Quarterly Labour Force Survey by BCS

## SKILLS

### QUALIFICATIONS HELD

IT specialists are more highly qualified than other UK workers, and in 2021, more than two thirds (72%) were thought to hold some form of higher-level qualification, compared with just under five in ten workers as a whole (50%). This said, ethnic minority IT specialists were found to be even more highly qualified than others in IT positions with almost nine in ten (86%) holding some form of HE level qualification.

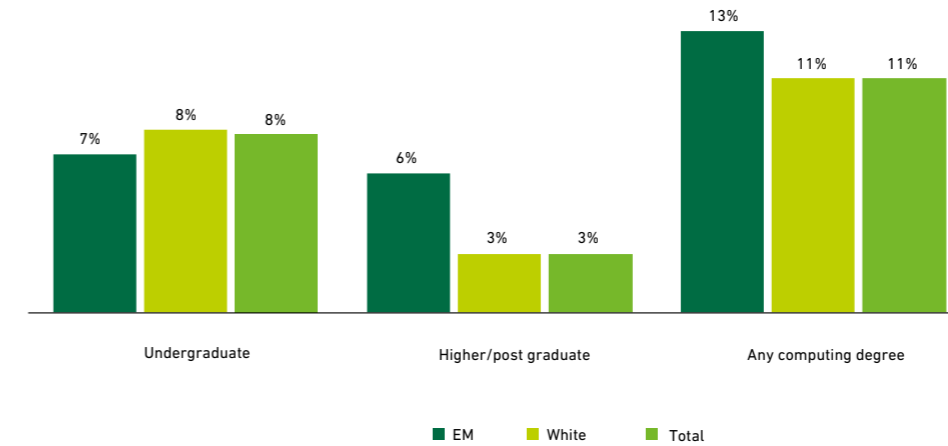
Figure 12:  
LEVEL OF EDUCATIONAL ATTAINMENT AMONGST IT SPECIALISTS (2021)



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

Ethnic minority IT specialists are also marginally more likely to hold a degree in an IT-related discipline than others working in such occupations, and in 2020, approximately 13% were thought to have either a higher or undergraduate computing degree compared with 11% of IT specialists from white ethnic groups.

Figure 13:  
IT SPECIALISTS HOLDING COMPUTING DEGREES (2021)



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

### SKILLS DEVELOPMENT

Despite the arguably high skill/knowledge requirements associated with their work, IT specialists as a whole in the UK do not appear any more likely than other workers to receive job-related education/training and, throughout 2021, on average 26% of IT specialists stated that they had received some form of job-related education/training in the previous 13 weeks, as was the case for workers as a whole.

The incidence of job-related education/training was marginally higher amongst ethnic minority IT specialists in 2021 - 28% of which stated that they had received education/training during the previous 13 weeks when surveyed compared with 26% of those with 'white' ethnicity.

# A QUALITATIVE VIEW: THE CBF/BCS SURVEY

## INTRODUCTION

The idea behind this survey was to find out whether the intersection of being a woman and black presented additional barriers to entering the IT industry. Whilst the number of responders is not large, both CBF and BCS think these answers indicate trends that can be addressed. The fact that it took so long to get sufficient views to draw any conclusions at all demonstrates the paucity of representation in IT for black women.

Alongside the raw data though we also asked for verbatims – and here we get a real sense of some the struggles faced by black women in IT. Some of these are referenced throughout the report – as well as some personal interviews to fill out the experiential angle.

The number identifying as a woman or gender minority from an ethnic minority background was 360.

The following sections do not cover the full report, which is available on demand, but highlights key areas.

## ATTRACTION TO IT INDUSTRY

The answers to the question 'what attracted you to the IT industry' drew answers that we would also expect from most people who enter the area.

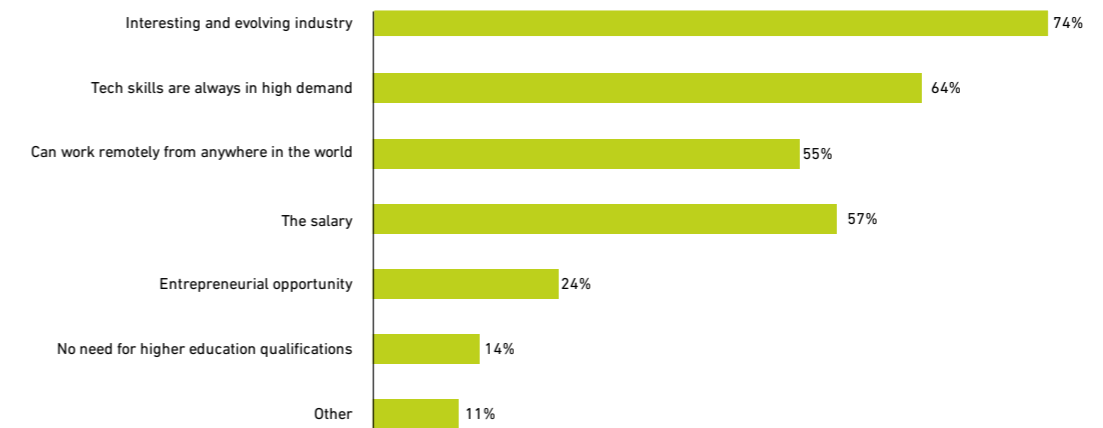
The verbatims here ranged from comments on drawing from 'creativity and mathematical thinking' in the work to the 'large range of possible future careers'.

Of particular interest to BCS were the ideas of making and supporting social change and impact. And naturally some motivations were more prosaic. One commenter wrote: 'An opportunity presented itself in the company I worked for so I took it because I fancied a change.'



Figure 14:

### WHAT ATTRACTED YOU TO THE TECH INDUSTRY?

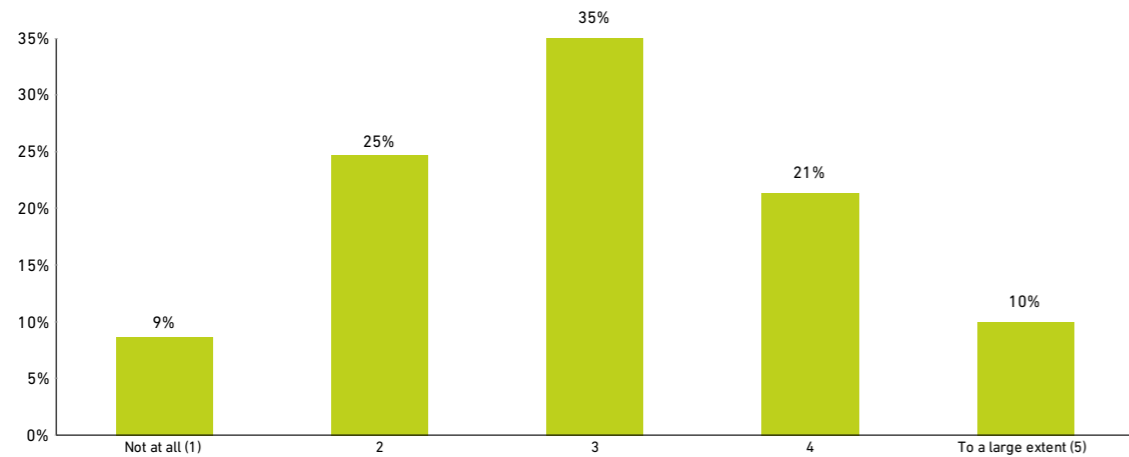


## PERCEPTION OF PROMOTION OPPORTUNITIES AND BARRIERS

'To what extent do you believe promotions in your organisation are based on individual performance?' is a key question when discussing issues of diversity. And there were a raft of answers with a very common theme – the requirement on minorities to over-perform to prove themselves.

Below are the raw numbers:

Figure 15:



Mean average = 3.16

Here is a short selection of the verbatims: '

I HAVE HAD TO WORK TWICE AS HARD TO GET AS FAR AS SOME OF MY WHITE COUNTERPARTS. OFTEN THEY HAVE LESS EXPERIENCE THAN ME.

FROM EXPERIENCE WE ALWAYS NEED MORE SKILLS AND EXPERIENCE THAN OUR WHITE COUNTERPARTS.

WE HAVE TO PROVE OURSELVES CONSTANTLY.

These themes are also present in previous research on the experience of women in the industry. So the next question 'do you believe black women face more or less barriers to entry into the tech industry than women from other ethnicities?' digs into an important area. And raised several interesting further thoughts in the comments.

Another responder gave an interesting view on the effect of diversity targets: 'With diversity hires, it's quite easy to get a role or interview, as a companies want to be seen as being progressive and diverse. However, they don't act on it once you have secured the role which jeopardises the development as in your career, making it difficult to move on in your career.'

One responder was even more direct with this – talking about the 'pet to threat' attitude when a diversity hire is effective.

Another issue highlighted is the 'seeing people like me' conundrum. As one commenter wrote: 'a lack of exposure to role models working in tech is a massive barrier.'

Interestingly two comments are very clearly from the cohort who were not identifying as a women or person from an ethic minority, but nevertheless give food for thought:

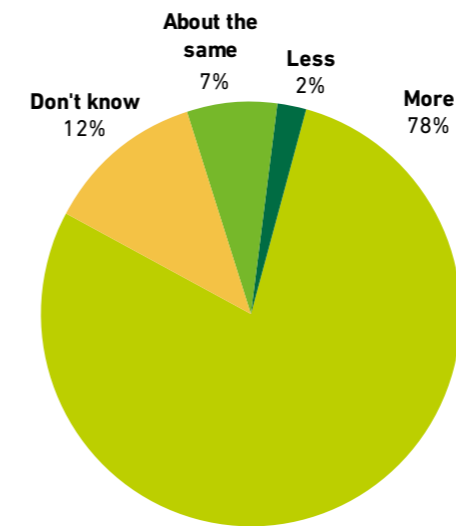
IN OVER 40 YEARS IN IT I HAVE MET SO FEW BLACK WOMEN IN TECH ROLES THAT I THINK THERE MUST BE SOME BARRIERS.

'I've only worked with one black lady in my years in IT.'

BCS recorded a podcast with author Suzanne Doyle-Morris (Search: The Gem of all Mechanisms), in which she spoke of the demeaning terms that are used when a women shows forcefulness that would be unacknowledged as such if coming from a man. This idea came up in this context too, as exemplified by this comment:

'The most damaging term to a woman's career is "angry". As a black woman I have been called this by both genders for asking focused questions.'

Figure 16:



Perceptions play a role in several ways, as exemplified by these two verbatims:

BLACK WOMEN DO NOT FIT THE TECH ARCHETYPE.

'Women from other ethnicities, especially white women will be hired on **potential** and black women are hired on **skills**.'

Whilst as rule BCS would view hiring on skills as a positive approach – this comments raises an interesting corollary to that rule – for example, how much accountability is taken into consideration in interviews for transferable skilling.

Another issue that we allude to in the interviews section of this report is micro-aggressions. 'There are specific micro- aggressions that many black women face due to the intersection of blackness and womanhood,' said one responder.

## INHIBITORS IN APPLYING FOR IT ROLES

When asked the question of what may inhibit a responder from applying for roles in IT, we naturally get answers that apply to a broad swathe of people. But again, there are specifics in the audience context worthy of further consideration. And some previous threads from previous questions are drawn in too, for example by our first two quotes:

“THE ORGANISATION NOT PORTRAYING ANY INTEREST IN WELLBEING AND INCLUSION.”

“WHEN THERE ARE NO WOMEN OR BAME PEOPLE IN THEIR EXECUTIVE TEAM. THAT IS USUALLY A BIG WARNING SIGN.”

As is to be expected recruitment practices come up:

“COMPANIES THAT HAVE MORE THAN THREE ROUNDS OF INTERVIEWS.”

“INTERVIEWING BIASES AND LACK OF STANDARD PRACTICE FOR INTERVIEWS.”

‘Unconscious bias. Diversity and inclusion statements are usually “standard” items and really tell you nothing. How strategies are implemented is what is important and whether they take an equal opportunity or equality view (these are very different things) and if they sign up for positive action. Do all staff have tailored/ in-person unconscious bias training (not an online activity)? How are processes in the organisation reviewed for audit of bias/ equality?’

‘What can be off-putting is the way roles and adverts are written with requirements or potential requirements raising barriers or issues if you have caring responsibilities. I can’t provide significant weekend or out of hours cover; some tech roles also require a significant

office presence which again makes the caring balance/ management challenging, so I’m better off looking at roles where it isn’t a requirement. Conversely many organisations can put the requirements in (ours does) but it happens so infrequently for staff at all levels I feel we’re putting people off as the reality is we are far more flexible and accommodating of everyone’s caring requirements or personal needs.’

“OLDER OVERWEIGHT WOMAN. AGE IS BIG TURN OFF.”

‘Expectation of formal qualifications over experience and interest in the role.’

“THE REQUIREMENT OF A DEGREE.”

‘No part-time or flexible options.’

As BCS is pushing forward on its ‘making IT good for society’ agenda, some of the inhibitors actually make for encouraging reading:

‘The type of organisation the role is for. I tend to apply for roles in companies with a purpose (i.e. pharma, non-profit, healthcare).’

‘I avoid organisations that may have socially damaging outcomes, such as contributing to military and financial institutions.’

Broader thoughts on culture arise too:

‘The wording is often too A-type, aggressive. Very few companies are transparent about their salaries. I am also a carer for older family member so this is an important factor - many tech roles expect you to be on all the time.’

‘The “tech bro” culture. It is exhausting being around (even virtually) Type A/extroverted white boys (yeah, I said it) who failed up.’

Other commenters noted that the pandemic has had disproportionate impact to ethnic minority groups. ‘The situation of representation of black females in the tech industry was always an issue but it has been really compounded with the pandemic because black females are the main carers in families,’ writes one responder. ‘I have had four members of my family who had Covid or a suffering from other serious life threatening illnesses. Employers need to give more opportunities consider part time and working from home roles.’

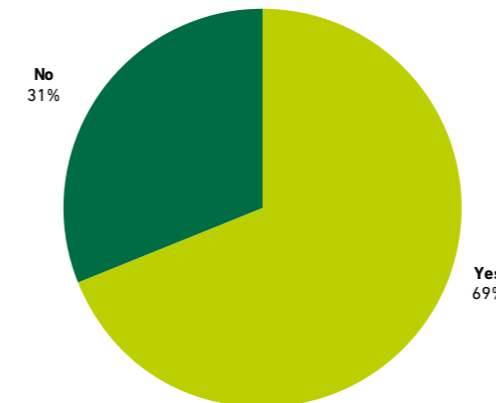
Imposter syndrome also raises its head... ‘I don’t apply for roles if I don’t meet at least 60% of the job requirements.’

A final thought is on the possibility of being patronised, one commenter laments an organisation’s ‘over-promotion of diversity and inclusion, it puts me off a job as I feel that I am then discredited for hard work and undervalued.’

## ROLE OF DIVERSITY AND INCLUSION STATEMENTS

Figure 17:

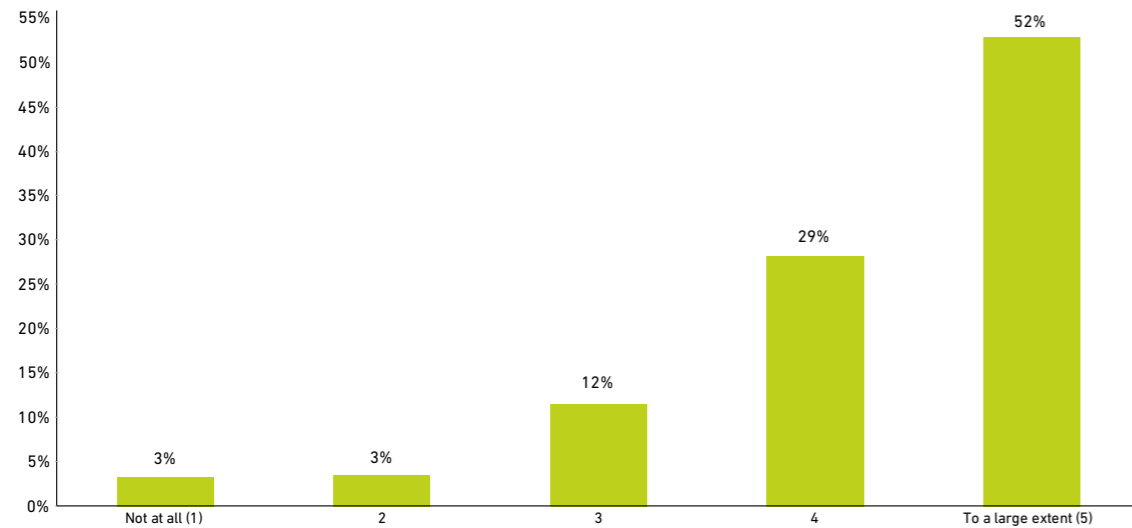
DO YOU CONSIDER AN ORGANISATION’S DIVERSITY AND INCLUSION STATEMENT OR POLICY WHEN APPLYING FOR A JOB?



A clear conclusion can be drawn from this simple chart, with its underpinning split. Diversity and inclusion are important and valued. In keeping with the rest of this survey, they need to reflect actual changes in organisations – in attitude and optics.

And the next chart shows that these policies matter:

Figure 18:  
TO WHAT EXTENT DOES DIVERSITY AND INCLUSION MATTER TO YOU IN YOUR JOB ROLE?

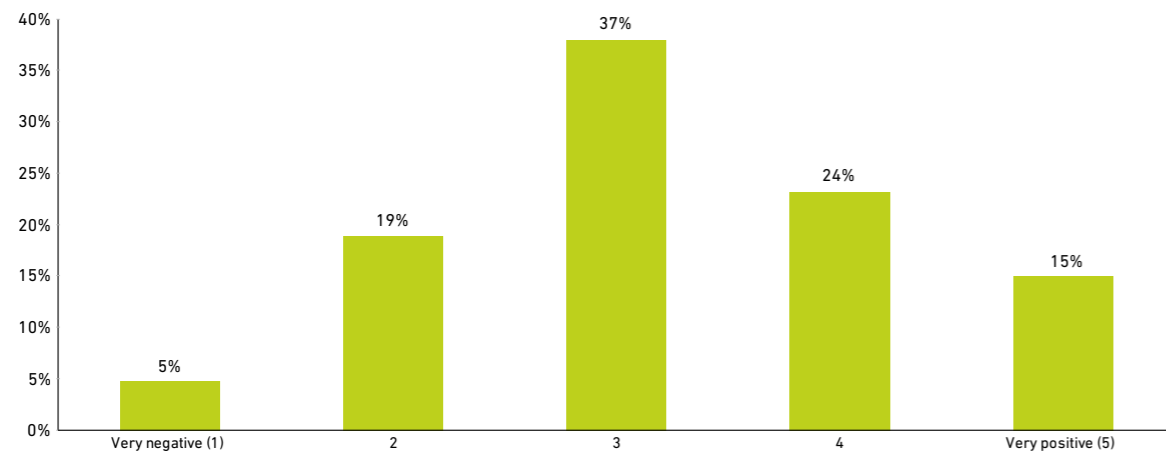


Mean average = 3.97

## HOW TO IMPROVE COMMITMENT TO D AND I POLICIES

The final policy chart shows a matter that demands further investigation: whilst it is encouraging that 39% are seeing a positive impact from diversity and inclusion policies, 37% are ambivalent and 24% consider them to be negative.

Figure 19:



Mean average = 3.26

As reports only really work if there is a practical dimension, we then asked in the survey what one change responders would like to see in their organisation's commitment to diversity and inclusion. Below we draw together key comments under general themes.

One particular comment is useful to introduce this, as it draws together a number of strands at issue, and nicely demonstrates some of the complexity: 'Although they have an organisation for people of colour and have recently started showing people of colour on their advertisements, it doesn't escape the fact that there aren't any people of colour, particularly black people, who get promoted into management nor given the opportunity for any sort of progression. Also, they still have not scrapped the policy of minimum 3% of ethnic minorities to be employed in the company. This needs to happen because once hiring managers have reached that target of 3%, they don't employ any more minorities.'

It is also interesting to note that the idea of closing the gap between being performative and actually making a difference is a common underlying principle here.

### LOOK BEYOND THE OBVIOUS

Diversity issues have crept up the agenda over recent years, but more thought is required. Said one commenter: 'Understand that having a higher amount of women in the company doesn't "tick all the boxes"'. And another drew attention to the fact that organisations need to 'commit to all protected characteristics not just the popular ones.'

The importance of nuanced approaches – and 'doing the work' – are also hinted at in a number of comments, for example, one person writes: 'The language used when talking about the groups that they are intending to support often doesn't feel empathetic or like they've understood the issues that certain groups are facing.'

### RECRUITMENT PRACTICES

Diversity issues have crept up the agenda over recent Gender and name blind recruitment was a theme in the recruitment area. One commenter mentioned anonymised blind CVs should be followed by online interviews without video. They also mentioned an idea that previous BCS surveys have received - to look at how orchestras conduct screened auditions. (see [www.theguardian.com/women-in-leadership/2013/oct/14/blind-auditions-orchestras-gender-bias](http://www.theguardian.com/women-in-leadership/2013/oct/14/blind-auditions-orchestras-gender-bias)).

In a straightforward comment, one person made this request: 'I wish I could see more people of colour in higher positions.'

The issue of transparency was also mentioned – with the observation from one responder that 'it's frustrating when they pick the "token" person from any minority and feature them heavily on advertising platforms.'

Another responder proposed that diversity and inclusion sessions need to be mandatory and discussed broadly, and that fits with this practical tip in another comment: 'One change would be to improve the onboarding process by exposing people to spaces where they can access support from day one, e.g. women's network information should be included in the onboarding

information, alongside LGBT, neurodiversity, mental health forums.'

### CULTURE AND WORKING CONDITIONS

So much of this is about organisational culture. What is needed? Here are some verbatim suggestions:

- More flexible working practices, e.g. job share, school hours working, even school holiday extended leave. Interactions with minority representatives through seminars.
- Make managers accountable for diversity and inclusion and tie it to reward.
- Diversity and inclusion needs actual resource and correct financing, so it not just word or a pretty picture or a video.
- Pace: there are plenty of good ideas but the pace of change is too slow. This is caused by changes being made by enthusiasts and as side-projects, rather than through major change initiatives. We're getting there but very, very slowly.
- We need to be more transparent and instructive about the KPIs on success in diversity and inclusion.
- Formulate what good looks like and what builds that picture.
- I would involve the whole workforce – and include openness to hear from black workers. Ask them directly what they think can be improved and how.
- A high ranking individual should

have responsibility for increasing diversity and inclusion through implementation of a equality and positive action. This person would then a) have to be audited and b) take action.

and how they differ from other marginalised groups.

opportunities and pathways for black women who are junior engineers which helps them accelerate from junior positions to more senior positions.

### THE SOCIETAL DIMENSION

Understandably the broader issues facing society crop up in many comments. Here is a selection:

- We need to stop dancing around issues that are deemed 'too political'. Historically we've had a stance of not presenting a political opinion as an organisation, but in areas like sustainability, our stances are inevitably political and the leadership seem happy with that. But when it comes to diversity and inclusion, we hold off on public statements of our stance for fear that they'll be seen politically.
- Lose the 'woke' connection. Diversity of viewpoint is important for problem solving. Inclusivity is important to get diverse viewpoints.
- Stop treating diversity it like it's a charity project.
- We need more action in the local community to tackle disparity in applicants from diverse backgrounds e.g. events in local schools, work experience and so on.
- There should be more formal training delivered by black women for senior leaders and managers on the unique experiences of black women

### HR PRACTICE:

Some of these issues sit with the HR function, and several commenters made suggestions along these lines:

- We need progress on gender pay gap.
- Make sure people with less experience are getting mentored and levelled up.
- Outreach and education support is needed to raise awareness of opportunities among black women and girls.
- We need more mentorship programmes.
- Embed pay equity so that we are not disadvantaged - I would also like to feel more empowered to keep on learning and developing my career e.g. 121s that are not just updates.
- There is a lack of trust. Ketanji's experience rings - (a reference to Ketanji Brown Jackson first black Supreme Court justice in the US).
- Just hiring diverse people is not enough. The company must also provide a safe environment to those diverse employees and listen to those diverse employees when they bring up micro-aggressions - then the company should act on it and not just brush it off as a minor incident.
- Our apprenticeship program was for people who have no prior experience. It feels like the program was performative.
- We need more sponsorship

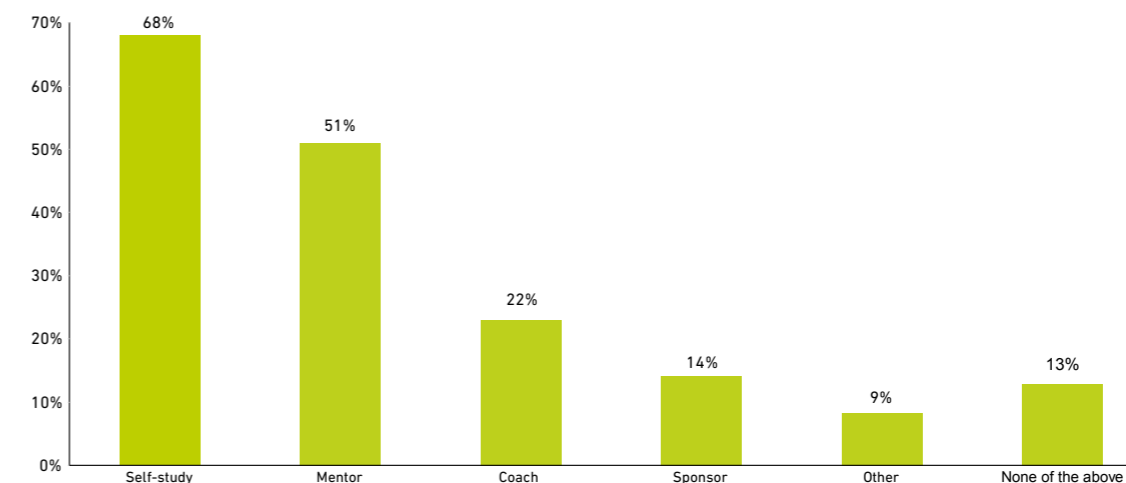
- Greater consideration of intersectional identities is required. Organisational initiatives are often highly siloed around a single protected characteristic, and don't consider when a slightly broader amendment/application of policy could benefit more minority groups.

**WE NEED TO STOP DANCING AROUND ISSUES THAT ARE DEEMED 'TOO POLITICAL'**

## FURTHER CAREER SUPPORT

The career support answer allowed for more than one option to be selected. The question posed was 'have you had support in your career from any of the following?'

Figure 20:



Self-motivation is clearly the top requirement, but in an area we have shown to be problematic, improvement in coaching and sponsoring is called for. And whilst 13% seems, at first glance, low for 'none' that is still a substantial minority.

In the comments we had a number calling attention to the work of Coding Black Females and similar groups. One commenter said: 'Due to organisations such as black girls in tech, coding black females and code first girls I was able to have a relatively clear path onto the tech industry. If these companies did not exist I think I would've found it harder to find learning resources, networking, training and job opportunities.'

# GETTING PERSONAL: REAL-LIFE EXPERIENCES

To add narrative flesh to the skeleton of survey numbers, CBF and BCS undertook interviews with black women – there is nothing like a lived experience to add depth. The full interviews are on the BCS website, here we present some interesting snippets to whet the appetite.



**AMBER SHAND IS A FRONTEND ENGINEER AT AMERICAN EXPRESS. SHE SPOKE TO CBF'S IRAAH WEHNER ON GETTING SUPPORT IN HER CAREER JOURNEY.**

The support definitely made a difference because we're all in this together, we're learning how to code so that we can land the Sky graduate scheme. That's the whole point. It made a big difference to be able to talk about our struggles.

Remember when you come from a non-technical background you almost feel like you have to prove yourself more because you have more people doubting your abilities compared to when you have a computer science degree. I feel like people wouldn't have doubted me as much, because that was feedback that I kept receiving.

So we talked to each other whenever feeling really overwhelmed with all the rejections we were facing. There was also support from Coding Black Females, to see women who look like me helped.



**BEVERLY CLARKE IS AN AUTHOR AND EDUCATION CONSULTANT. HERE SHE SPEAKS TO ON BCS'S JOHANNA HAMILTON ON HOW BEING A WOMAN OF COLOUR HAS IMPACTED HER CAREER.**

A long time ago at work, I was pulled aside and told, 'don't apply for this role because you've got young children you won't be able to do it.' Now what shocked me at the time and to be honest, it still does - I'd never been off sick, I'd never asked for time off to look after my children, I turned up every day... So, that's a form of discrimination. What do you do when your face just doesn't fit or your gender?

So, that's the ceiling which has been imposed. I've also had a situation where I was told, 'so you're gaining a qualification? That's really great. And once you've got that, what are you going to do with it? Because there's no room for you here.'

When you start putting them together you start to realise discrimination is at work. What encouraged me to start thinking about it was the events of two years ago with the George Floyd incident, and I didn't realise how much these issues have affected me.



**DOROTHY MONEKOSSO IS THE FIRST BLACK WOMEN PROFESSOR OF COMPUTER SCIENCE. SHE TOLD CBF'S KRYSTAL DOUGLAS ABOUT HER EXPERIENCE IN ACADEMIA.**

In academia, you tend to be left to just get on with it and it's up to the individual to learn to progress. I think that's where the biggest difference is between academia and industry, but this is also an opportunity for huge improvement to help younger people and those who are still early in their career. University tends to let you sink or swim, especially for young black women.

If you haven't 'made it' when you get to a certain level, you can be stuck as a junior lecturer and cannot make progress. There's barely any chance of getting back on track. This is where we are seriously lacking because if young researchers and emerging talent are given more support it could make a big difference in terms of getting them into an academic career.



**NICOLA MARTIN IS HEAD OF QUALITY ENGINEERING AT ADARGA, A UK-BASED AI SOFTWARE COMPANY. SHE SPOKE TO CBF'S ZARINA CAMAL ON CHANGE.**

There were seismic changes in approaches to Diversity and Inclusion in 2020. The intersection of the death of George Floyd, Black Lives Matter protests and the pandemic was huge. People made life-changing decisions about how they wanted to live and work. Many companies have started D&I initiatives and have had to pay attention to the diverse needs of their employees. Now stats are being published related to diversity in tech, we can see there is still a lot of work to do. The tech industry needs to encourage more diversity to ensure that people want to stay in the industry.



**MABEL OCCHIBIRI IS A CUSTOMER EXPERIENCE GRADUATE AT SAGE UK. SHE SPOKE TO CBF'S ZARINA CAMAL ON OBSTACLES FACED IN HER AND WHY THERE'S NOT ENOUGH ETHNIC MINORITY BAME WOMEN IN TECH:**

I've noticed that usually with tech companies more women are usually in leadership roles rather than technical core teams. I was one of two women on the core team where the other woman was my manager. Having a woman as my manager was very, very encouraging. She really made me feel like part of the family even with the smallest things.

However, I did notice she was under a lot of stress. She had to work double; she had to work twice as much as her male counterparts in order to prove herself that she was good enough to be there. And also, I think eight months into my role she got pregnant and again there was a lot of pressure on her, but the thing is with their actions it felt like her being pregnant was going to put her at a disadvantage compared to the rest of the group.

Being diverse is one thing but being inclusive is a totally different thing. They were diverse in having a technical manager as a woman but not that inclusive given that she didn't feel comfortable throughout her maternity stage. I believe that might be why women do not feel comfortable in these places. It's deeper than just being the only woman in the room, it's also about the systems in place to support you, do you feel like you have to constantly prove yourself just because of the role you have in the company? Thankfully my current company is completely different and they do really support and are inclusive of everyone regardless of gender, race or sexual identity.





THEY KNEW I WAS KNOWLEDGEABLE AND THEY RESPECTED ME BUT THEY DIDN'T UNDERSTAND THE UNDERLYING CHALLENGES THAT I WAS GOING THROUGH AS A MUM.



**PAULETTE WATSON OF ACADEMY ACHIEVERS SPOKE TO CBF'S JESSIE AUGUSTE ON BARRIERS TO GETTING INTO TECH.**

The barriers that I faced were quite complex. In the international banking field, it was such a challenge being a single-parent mother. When you look through the lens of intersectionality it was me as a black woman, as a woman, my disability being dyslexic, and also having my child at a young age. I realised in banking there were only white men. They didn't understand that I had to leave at a particular time to get my daughter.

I was good at my job. If there was a problem, especially with a deal with foreign exchange (FX) or paying collateral money we'd have meetings and they'd always want my advice. They knew I was knowledgeable and they respected me but they didn't understand the underlying challenges that I was going through as a mum. Sometimes I would start work late because I was trying to drop off my daughter, if she wasn't sick. I just couldn't do certain things, like go to the pub with the lads. Then because I'm a problem solver I decided to do my PGCE, my postgraduate, in computer science. I had a 15-year plan and I wanted to support my daughter.

The education system was a different ball game though. That's where I experienced microaggression, discrimination, bullying. I couldn't understand it as I was the only one qualified to teach computer science and I knew how important it was as I was the head teacher's advisor at the time.



**SIBA MUNSANJE IS A SOFTWARE ENGINEER AT DELOITTE, SHE SPOKE TO JESSIE AUGUSTE ON OTHERING:**

You have to get used to knowing that you are the only one in the room on the team, in the project, at the conference. There's that sense of novelty even for the people who are on the same project as you or attending the same event. You walk into the room and you can see the fascination, the curiosity, the relief in some people's eyes that it's good we have a woman on the team, a black girl on the team.

# WHAT NEXT? RECOMMENDATIONS

## INTERVIEW AND RECRUITMENT PRACTICES MUST BE MORE INCLUSIVE

- Evidence from the report suggests that long, prescriptive interview processes, the language of job adverts and poor promotion of flexible options impact the diversity of applicants for IT roles.
- To attract a greater number of black women, we should ensure that:
  - All routes (academic and vocational) into the tech industry are considered when hiring for candidates at both entry and senior levels.
  - Job adverts should make obvious that options like schools hours working and schools hours extended leave are available, if they are. This is particularly important because black women often report being the lead carer in their families.
  - Recruitment teams should review the inclusivity of the first human 'sift' and consider limiting algorithms to prevent hiring to an organisational template.
  - Outreach events in the local community (schools/ colleges) and through social networks can help make it clear that a diverse range of candidates are welcomed.

## LEADERSHIP SHOULD SET AN EXAMPLE

- Anyone joining an IT department should enter an inclusive culture and quickly have an achievable career progression pathway set out in their objectives and development plan.
- Senior technology leaders should expect and want to play a part in increasing the number of black female

IT professionals – as part of efforts to grow the proportion of all women in the sector.

- Senior managers should be proud to have this in their objectives and hold themselves accountable, capturing data such as the ethnicity pay gap.
- Technologists from ethnic minority groups should be actively identified by the 'C-Suite', supported and encouraged to apply for leadership positions, removing the management ceiling.

## A DIVERSE, OPEN CULTURE GOES BEYOND DIVERSITY POLICY

- While IT teams are in many ways ahead of others on inclusivity, the gender gap in particular needs to close before they are representative of the national workforce.
- Black women are frequently represented by tech companies in their marketing and recruitment campaigns, but this needs to translate to real opportunities to progress, once inside the system.
- Respondents to our study have reported that the 'Type-A' or 'Tech-bro culture' is both a barrier to progression and initial recruitment.
- Culture change cannot be left to a static policy. All areas of an organisation need to be involved, supportive and able to incorporate DE&I policies into their departments.
- Truly inclusive environments can be staff networks, education, focus groups and continuous shared review of DE&I policies to understand what is working and ensure implementation isn't lip service.

- Investment in this is crucial to increase a sense of belonging, as without investment this can contribute to low levels of engagement, low retention and limited ambition.
- Removing awkwardness around 'woke' or political conversations around ethnicity and allyship across the organisation can help understanding and cultural change.
- Greater consideration of intersectional identities is required. Organisational initiatives are often highly siloed around a single protected characteristic, and don't consider when a slightly broader amendment/application of policy could benefit more minority groups.

## PARTNER WITH GROUPS WHO CAN HELP YOU

- IT teams and wider organisations should look at what's already being done in the industry and seek experienced partners, and be guided by data, so they can move forward with confidence.
- It is vital to the success of any DE&I policy that organisations first understand their current position by gathering and scrutinising their data more comprehensively than they currently do.
- This will mean better knowledge and contextual understanding of black women's experiences as a linked but distinct element of the underrepresentation of all women in technology.
- There should be more formal training delivered by black women for senior leaders and managers on the unique experiences of black women and how they differ from other marginalised groups.
- Organisations can partner with a range of IT-focused communities such as Coding Black Females and Black Valley to access free mentoring programmes and training opportunities within the Black community. Mentoring opportunities exist and should be sought in addition to online communities and networking.

# ABOUT CBF AND BCS

## CODING BLACK FEMALES

Coding Black Females was created in 2017. It is a non-profit organisation, with the primary aim of providing opportunities for Black female developers to develop themselves, meet familiar faces, network, receive support and build relationships through having regular meetups. Whether you've been in the industry for 5 minutes or 10 years, if you work as a freelancer or for a huge corporation, the CBF philosophy is that we can learn from and inspire each other, and empower the next generation to achieve success.

## BCS, THE CHARTERED INSTITUTE FOR IT

BCS is the professional body for information technology. Our purpose, as defined by royal charter, is to promote and advance the education and practice of computing for the benefit of the public. With over 60,000 members, BCS brings together academics, practitioners, industry and government to share knowledge, promote new thinking, inform the design of new curricula, and shape policy.

# SURVEY APPROACH NOTES

## ONS RESEARCH DATA NOTES

1. This report contains statistical data from ONS which is Crown Copyright. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data, and research datasets employed may not exactly reproduce National Statistics aggregates.
2. Annual figures presented are derived from the ONS Labour Force Survey (LFS) and have been produced by averaging results for the four quarters of any given year/years. Further details of the LFS can be obtained direct from the ONS website:
3. For this report a generic age filter has been applied (16-64 inclusive) for all analysis presented unless specifically stated otherwise.
4. In cases where estimates span multiple years, this amalgamation has been undertaken to overcome issues of small sample sizes which otherwise render estimates unreliable and/or potentially disclosive.
5. Numerical estimates are rounded to the nearest 1,000, percentages (normally) to the nearest whole number, and rates of pay to the nearest £1 (hourly), as such totals given may not equal the sum of related subsidiary figures.
6. Annual estimates below 6,000 have been suppressed, as have five-year averages below 2,000.
7. IT specialists are normally defined by Standard Occupational Classification (SOC2010) codes 1136, 2133-9, 3131/2 and 5242/5. In 2021 the SOC coding system was updated (to SOC20) though for this report it was elected to continue with the older codes to retain continuity using ONS provided crosswalks.

8. The 'IT industries' are defined by a series of Standard Industrial Classification (SIC) codes which are available on request.

9. Unemployment rates (for IT specialists) are derived by dividing the number of individuals classed as unemployed according to the International Labour Organisation (ILO) definition (and, in the case of IT specialists, who were previously working in a position of this nature) by the total number of people in work (as an IT Specialist) plus the number ILO unemployed (previously as an IT Specialist) combined.

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