Hackney DIGITAL TECH Commission D+I

DIVERSITY IN TECH: BREAKING THE BARRIERS

Hackney

Contents

Mayor's foreword

For almost two decades, Hackney has seen the growth of digital tech, innovation and creative industries in Shoreditch, Dalston and Hackney Wick.

Philip Glanville
Mayor of Hackney

Looking to the future, a key challenge is ensuring inclusive economic growth, increasing accessibility and opening up digital tech skills and employment opportunities to our long-term residents.

A critical priority for the Council and my administration is to ensure residents, particularly those facing the biggest barriers, fully benefit from the borough's economic growth. The challenge of closing skills and employment gaps in digital tech and beyond is central to building a fairer and more equal Hackney.

This report is a milestone for our Diversity in Tech Commission. It's an essential piece of work the Council is doing with and for our residents to ensure that there are opportunities for our diverse communities to acquire in-demand skills, get qualifications and access routes into good quality jobs, no matter their background.

We also want to be clear that nurturing and recruiting from a diverse, highly capable talent pool will benefit these industries. While the report focuses on barriers, we must also stress the potential of Hackney's diverse residents if they are given the tools to succeed.

It has been exciting to be a part of the work of the Commission so far, including the input of Hackney digital apprentices who have been on this journey, and I hope this report will ignite further debate and lead to real change. I believe that with the right ecosystem, work and support, there should be no glass ceilings or barriers in these industries.

We look forward to working with community groups, local businesses and educators in Hackney and beyond to take the Commission's findings forward.

Introduction by the Chair

Hackney has a unique opportunity to play a leading role in the conversation on reimagining diversity in the local tech sector.

Cllr Carole Williams
Cabinet Member for
Employment,
Human Resources and
Equalities

Hackney's Diversity in Tech Commission was established to close the science, technology, engineering and maths (STEM) skills gap and understand our diverse community's intersecting barriers to accessing good jobs in the digital tech economy.

We first conducted listening exercises to understand what residents see as the biggest barriers to opportunities in digital tech, their views on how identity or background affects opportunities, and what needs to be done to address the obstacles.

By embarking on this listening exercise, we hope to develop a long-term collaborative partnership with leading businesses and employers and achieve sustainable structural changes that deliver the outcomes so Hackney residents can benefit from continued economic growth across the sector.

We are inspired by the willingness to participate and hope that the findings contribute to an ongoing conversation about economic opportunity and inclusion among leaders to create real change at the local level.

I want to thank fellow commission members and all participants, including educators, training providers, community groups, public sector partners and business partners from corporations, workspaces, micro-businesses and SMEs.

This report establishes a foundation for action, but more work is needed to create the conditions required to deliver on these recommendations. I look forward to working closely with employers, educators and community groups to build an ecosystem of digital skills delivery and progression pathways into digital tech careers.

Commission Team

Commission Advisory Group

Cllr Carole Williams
Cabinet Member for Employment, Human Resources and Equalities, Hackney Council

Dr Sandra Husbands
Director of Public Health for Hackney and the City of London

Stephen Haynes
Strategic Director, Economy, Policy and New Homes, Hackney Council

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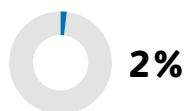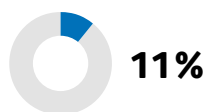## Project Manager

Nicola Joyce
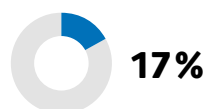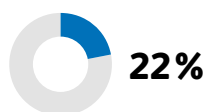STEM Project Manager, Hackney Council

Commission research findings

Only

2%

of UK tech workers are from a black, African, Caribbean or Black British background

11%

have disabilities

17%

are women

22%

are aged 50 or above

In June 2021, Hackney Council established a Commission to listen to our diverse communities to understand the barriers they face in accessing jobs in the digital tech economy and how we can work with local employers, educators and community groups to overcome the challenges.

This report covers the Commission's findings from primary research to answer three questions:

1. What intersecting barriers do residents face in accessing digital tech skills and jobs?
2. What are the barriers for employers wishing to recruit diverse talent locally?
3. What changes are needed to overcome the barriers?

Survey respondents are representative of Hackney's long-term residents

210 people completed the online survey. Of our respondents, 71 % live in social housing, 48 % are women, 47 % are from Black Caribbean, African or Black British communities, and 23 % are disabled people. Thirty-three people participated in focus group discussions.

What did we learn?

Few respondents are optimistic about access to job opportunities in digital tech

Given the low levels of diversity in the sector, it's unsurprising that many respondents are sceptical of the current state of economic opportunity in digital tech. Only 23 % agreed that "in Hackney, most people have opportunities to find good jobs in digital tech", 48 % said that they disagreed with the statement, while 29 % neither agreed nor disagreed.

Nearly half of respondents believe that their identity or background is a barrier to job opportunities in digital tech

49 % of respondents - including people from Black Caribbean, African or Black British communities, women, people living in social housing, and people with disabilities believe that their identity or background negatively affects their access to opportunities in the sector. Only 19 % disagreed that background or identity was a barrier and one-third neither agreed nor disagreed.

Top 3 barriers to skills and qualifications

1. Not knowing what jobs are available and what qualifications are needed
2. The high cost of studying
3. Not having anyone to advise them about courses and training options

Top 3 barriers to careers

1. Not having the right skills or qualifications
2. Needing work experience to apply
3. Not being confident enough to look for opportunities in this sector

Residents may not view digital tech as an inclusive culture where they can belong and thrive. During focus group discussions, they told us that they see the sector as predominantly male, white and young. They have concerns about racism and discrimination in hiring practices and on-the-job. They believe that opportunities for internships and employment depend on networks and recommendations, which reinforce racial, gender, social and disability disadvantages.

What barriers prevent inclusion in digital tech?

Access to skills and qualifications is an underlying barrier to job opportunities for many

We asked respondents what they believe are their main barriers to finding a good job in digital tech. 44 % of respondents said that not having the right skills and qualifications is a top barrier to job opportunities, while 38 % said that needing work experience to apply is a top challenge. 25 % told us that a stumbling block was that they felt they needed more confidence to look for opportunities in this sector.

A lack of advice about what jobs are available and what qualifications are needed prevents many from choosing a digital tech pathway

63 % of respondents told us that not having anyone to advise them about different courses and training options or not knowing how to find the right course was a top challenge. Knowing what jobs are available and what qualifications are needed was the second most commonly cited obstacle to getting the skills and qualifications for a good job in digital tech, picked by one-third of respondents. These challenges were raised in all five focus groups, which suggests that they are top-of-mind concerns for many local people.

The cost of studying is a major barrier. People with caring responsibilities and those who want to switch careers face specific challenges

The cost of studying was the second highest barrier to acquiring skills and qualifications, cited by 32 % of respondents. During the focus group discussions, young women told us that they needed affordable

and flexible training to fit around work or caring responsibilities and that the high cost of childcare was a further deterrent. People who want to switch careers or sectors told us they didn't have the resources to retrain.

Traditional pathways are a deterrent to digital tech careers. Many learners and workers require alternative access routes to skills and jobs

For many respondents, the undergraduate pathway is too expensive and time-consuming. Residents told us they needed faster and cheaper ways into employment. They asked for affordable training linked to digital tech qualifications, work experience and jobs. Young people, people looking to switch careers, disabled people and older residents told us they wanted access to apprenticeships.

Traditional hiring practices impede local employers looking to hire diverse talent

Employers told us that their top obstacles to recruiting diverse talent include a gap in local candidates with appropriate skills, qualifications and relevant work experience and their organisation's inability to reach and attract diverse talent. They also told us that their organisation did not have the capacity to manage an apprentice, trainee or entry-level employee.

What changes are needed?

Better career information and advice

Residents said they want to know what jobs are available and what qualifications are required. They need someone to advise them about courses and training options

> "*Someone to speak to about training and the skills required for certain digital tech jobs.*"

> "*1:1 advice to find the right route that is worth doing.*"

> "*Having a clear and affordable pathway to progress into a job.*"

> "*It's hard to find the right course.*"

> "*Clear specifications on what skills are needed and how to get them.*"

Affordable and flexible access to skills and qualifications

They want affordable courses leading to a recognised qualification, flexibility in course format and delivery, and community courses with the opportunity to progress.

> "*A recognised qualification that is easily accessible and affordable.*"

> "*Having online courses or weekend classes enables all to have an equal chance of getting new skills.*"

> "*Opportunities to retrain alongside current work commitments.*"

> "*More digital tech courses in the community.*"

> "*Financial support towards training and certification costs.*"

Links to employers

Residents aren't confident enough to look for opportunities in digital tech. They asked for more direct links with employers to understand the job requirements, gain work experience, and have training options with the possibility of securing a job or apprenticeship.

*"Employers should organise **open days** to understand their requirements."*

*"Please provide training with **work placements.**"*

*"Training courses with **guaranteed interviews**"*

*"Free or affordable **training and work experience and help into work**"*

*"**Work experience**"*

*"**Apprenticeships**"*

A more inclusive culture and hiring practices

Peer-to-peer conversations in focus groups revealed feelings and attitudes that people didn't share in the survey. Race and ethnicity were a theme raised in all groups, along with concerns that hiring based on networks and referrals reinforces disadvantages.

- Digital tech is perceived as **white**, **male**, and **young**
- Concerns about **racism** and d**iscrimination** in hiring practices and on-the-job
- Concerns that hiring practices are based on **networks** and **recommendations**

What changes did different groups ask for?

Young people

- Access to work experience opportunities
- Information and guidance on digital tech roles, pathway options, what qualifications are needed, and how to get them
- Access to apprenticeships
- Active promotion of diversity

Young disabled people

- Alternative access routes. Traditional hiring models are a barrier. Young disabled people told us they prefer to demonstrate their skills rather than talk about them
- Job fairs, work experience, and apprenticeships

People wanting to switch careers or sectors

- More transparency and information - they need help understanding job titles, what jobs are on offer, where they can apply, and the application process
- Affordable, flexible training
- Gain UK job experience based on qualifications from the country of origin
- Access to apprenticeships at any age

Woman and carers

- Opportunities for women
- Affordable, flexible training to balance caring duties
- Help with childcare costs
- Job flexibility to help balance job and family obligations

Older residents

- No age barriers for training, job opportunities, and apprenticeships
- More affordable training
- Flexible working opportunities

What changes did employers ask for?

Improved local technical and soft skills training

Top 3 barriers to local recruitment

1. No capacity to manage an apprentice, trainee, or entry-level employee
2. Not knowing how to reach and attract diverse local talent
3. Local candidates lack skills, qualifications and relevant work experience

Top 3 skills needed for an entry-level role

1. Communication skills
2. Critical thinking and problem-solving
3. Flexibility and adaptability

*"Changes to **local skills training**."*

*"**Increase in local tech skills** for the community."*

*"It's not just technical skills; we've found '**softer skills**' to be lacking; how you present yourself in a work setting, communication, hard work, interview skills."*

*"**Better soft skills training** for local talent."*

Better access to diverse local talent

*"**Easier channels** for employers to reach out to prospective candidates."*

*"Working with **local youth organisations** with direct access to local talent."*

*"Better **partnerships with schools and colleges**."*

Improved information and access to employment schemes

*"**Easy-to-access** government employment programmes."*

*"A **local authority welcome pack** for new businesses."*

*"I never thought of **local hiring schemes**, so **knowledge** about these schemes."*

Recommendations

The Commission identified five high-level changes required to address the barriers identified in the research. The high-level changes map to three themes.

Increase awareness and interest in digital tech careers

1. Improve career information and advice for all ages

Make sure residents are well-informed about the demand for digital tech skills and know what jobs are available, the qualifications needed, and the different pathways, courses and training options to achieve their career goals, no matter their starting education level or budget.

2. Increase business-led career information for adults

Increase exposure to jobs and workplaces in the local digital tech economy. Create opportunities for residents to speak to industry insiders to understand jobs, what skills and attributes employers are looking for, and how to secure work experience and find entry-level jobs.

3. Address concerns about culture and discrimination

Show residents that digital tech is an inclusive sector where they can belong and thrive. Explore ways to increase engagement and inspire confidence that digital tech is a viable career choice, irrespective of background and identity.

Build skills

4. Improve the local technical and soft skills training offer

Ensure residents have access to affordable and flexible courses and training opportunities linked to digital tech qualifications and jobs and that people doing community courses have a joined-up pathway to progress to courses for work. Explore ways to address employers' need for improved local skills provision.

Innovate recruitment

5. Support alternative access routes to digital tech

Create pathways that address the barriers for diverse talent to pursue careers in digital tech. Employers can expand the talent pool and realise business benefits by attracting and nurturing local people and historically underrepresented communities.

Areas for further exploration

The Commission recommends exploring the following issues and ideas to determine gaps in current practices and programmes and what actions to prioritize.

Explore the following ideas to increase awareness and interest in digital tech careers:
- Improve career information and advice provision
- Increase exposure to jobs, workplaces and role models in the local digital tech economy

    - Workplace visits and open days
    - Job fairs inside tech workplaces
    - Career insight sessions

- Increase engagement and hands-on experience through work experiences, internships, and volunteering
- Increase feelings of belonging through peer networks, relationships and mentorship programmes
- Involve family and friends and other career choice influencers

Explore the following ideas to build skills
- Collaborate with employers to pinpoint the technical skills to invest in
- Increase investment in targeted local digital tech skills provision
- Collaborate with employers to link training provisions to work experience, interviews and jobs
- Improve community-based skills provision so residents can progress from foundation-level digital skills toward mid-level skills for work
- Increase the provision of accredited courses at level 3 and above
- Review soft skills provision to ensure training meets employer requirements
- Identify financial support to enable people to get training and transition into digital tech without worsening their financial situation (including career changers and unemployed or underemployed people)
- Improve access to technology and software through community tech hubs

Explore the following ideas to innovate recruitment

- Remove degree requirements from job descriptions
- Increase support for apprenticeships, boot camps, and training programs to accelerate pathways into digital tech
- Raise employer awareness of government employment and support schemes
- Anti-bias training for hiring managers
- Review job description language, images, and channels to ensure a broad range of applicants learn about a job opening and feel they are welcome to apply
- Anonymise CVs
- Request diverse shortlists from recruiters
- Update company employee value proposition (EVP) to reflect the needs of diverse candidates, e.g., work-life balance
- Promote diverse talent in all company materials
- Feature targeted messages for local people and diverse communities on website and company materials
- Familiarise and prepare candidates for interviews
- Expand recruiting sources to connect with diverse talent
- Build an inclusive culture to retain diverse talent

About the Commission

Aims and approach

Focusing on the 2018 manifesto commitment to "close the STEM skills gap", Hackney Council established a Commission to listen to our diverse community to understand the intersecting barriers they face in accessing good jobs in the digital tech economy.

Taking a bottom-up approach, the Commission captured real stories from residents and created opportunities for people to explore their ideas and contribute to innovative solutions to address inequalities.

The Commission brought different stakeholders together - employers, educators, academics, and charities - to listen and learn from residents and highlight successful initiatives and new opportunities to improve diversity in digital tech.

Commission operating model

The Commission's work was carried out by the Project Manager, working in partnership with community groups and other stakeholders and guided by the Advisory Group.

The Advisory Group contributed expertise to:

- Shape and guide the mission of the Commission
- Tailor the priorities and outcomes of the Commission
- Review outputs from each work stream
- Monitor quality, risks, and timelines
- Oversee progress and ensure delivery of the project outputs and achievement of project outcomes

Advisory Group Members

Chair:

Cllr Carole Williams, Cabinet Member for Employment, Human Resources and Equalities , Hackney Council

Membership:

Dr. Sandra Husbands, Director of Public Health for Hackney and the City of London

Stephen Haynes, Strategic Director, Economy, Policy and New Homes, Hackney Council

Cate McLaurin, Head of ICT Delivery, Hackney Council

Alison Arnaud, Principal, Tower Hamlets College and Hackney College, New City College Group

Methodology

Literature review

Synthesis of the existing data and information on participation and representation in digital and tech skills and employment.

Community consultation and focus groups

In November 2021, the Commission launched **a community survey** followed by peer focus groups to sense-check survey findings, deep-dive into the issues raised, and explore participants' ideas for solutions.

Employer survey

In February 2022, the Commission launched an **employer survey to understand barriers to local recruitment** for digital tech and the technical and soft skills employers require for entry-level roles.

Roundtable discussions

In June 2022, the Commission hosted a roundtable on the theme: "How to address the barriers to digital tech employment and skills." Representatives from local businesses, educators, and community groups came together to reflect on the findings from the Commission's community consultation and to collaborate on a joint approach to target the barriers faced by Hackney's underrepresented and low-income communities. A delegation from Hackney Council's IT and digital apprenticeship scheme participated in the event to present the research findings and share their experiences in forging their careers in the sector.

Existing evidence on barriers to participation in digital tech

The Hackney context

Hackney has seen more rapid social and economic change over the last 15 years than almost any other UK area, yet inequalities characterise the local economy. Much of the difference is related to the boom in digital companies and technology start-ups which attract more highly qualified people to the borough. However, Hackney is ranked the seventh most deprived local authority in England. With one in three older people experiencing income deprivation, 19.6 % of the population live in income-deprived households, of which 40.7 % are older people[1].

As far as Hackney is concerned, not all residents have the education or skills to access the opportunities on offer. Nearly 20 % of working-age residents have a low skill level of NVQ level 1 or below.

Hackney's digital tech economy

Hackney's digital tech economy is mainly made up of small companies involved in app and web development, gaming, IT, software, computer services and activities associated with advertising and marketing, architecture, video, and digital content development.

- Shoreditch is the largest concentration of creative industries in Europe[2] and is home to Amazon, a global tech company
- Hackney Wick and the Queen Elizabeth Olympic Park are the base for small start-ups and scaling companies:
  - Here East, accelerator space for global businesses and scaling companies to work with universities and research institutes. It is a video game and esports cluster
  - Plexal, a coworking space for collaboration on cybersecurity, mobility and inclusion/assistive technology
  - UCL, UAL, Loughborough, East London, and Staffordshire universities have campuses on-site
  - BT Sport, Sports Interactive, Bidstack, and the innovation departments of Ford and Ladbrokes Coral and other media production companies operate from the site

1   The English Indices of Deprivation, 2019, p.11
2   Hackney, Future Shoreditch, 2017

Known barriers for residents

Hackney Young Futures Commission

Between 2019-2020 the Young Futures Commission[3] engaged with 2500 diverse young people to generate insights into their lived Hackney experience and their asks to achieve a brighter future. Young people asked for increased access to local employment opportunities, work experience, apprenticeships, learning opportunities, and improved career advice services. Recommendations included:

- Establishing a Local Employment Forum
- Developing meaningful work experience for school students
- Creating a range of employment projects to improve access to jobs (including for SEND)
- Reviewing internships, apprenticeships and voluntary work (including for SEND)
- Establishing accredited learning opportunities for young people to support meaningful/non-academic qualifications
- Improving and expanding the Careers Advice Service
- Reviewing support for entrepreneurial opportunities
- Developing guidance and training for local businesses on the importance of diversifying their workforce with a specific focus on SEND young people

Research into barriers to Tech City jobs, 2013

Council research from 2013[4] into residents' barriers to accessing Tech City jobs remains relevant. Research found that barriers included:

- Qualifications gap: the number of residents with higher-level qualifications has increased as highly qualified people move into the area. 66% of Shoreditch residents have level 4 qualifications or above, higher than the c.42% in Hackney, and c.38% in London. However, nearly a fifth of Hackney's working-age population has NVQ level 1 (GCSE grades D-G) or no qualifications at all. This accounts for 38,600 residents with a need for the Council and local education partners to provide support to improve their skill level from a relatively low base and bridge the gap before they can embark on higher-level skill-building
- Social capital. Recruitment agencies estimate that 80% of jobs are not advertised. Small businesses commonly recruit from closed communities

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3   Valuing the future through young voices: Report of Hackney Young Futures Commission, 2020
4   Making the most of tech city: Report of the Community Safety Social Scrutiny Commission, April 2013

- The job market is confusing and difficult to access for university graduates, even more so for job seekers who need more digital skills training or lack prior experience or community connections

The challenge for educators, parents, and carers is that jobs are not clearly defined in the fast-moving digital tech economy. There is a general lack of understanding and guidance about where the opportunities are and the potential career paths at different levels.

Existing evidence on diversity and inclusion in digital tech: UK level

Sector definition:

The Department for Digital, Culture, Media and Sport sector definition[5] includes the following sub-sectors: manufacturing of electronics and computers; wholesale of computers and electronics; publishing, software publishing; film, TV, video, radio, and music; telecoms; computer programming, consultancy, and related activities; information service activities; and repair of computers and communication equipment.

Hackney sector definition:

The Commission applies a loose definition of digital tech to include skills and jobs for our local digital tech economy, as well as the digital tech skills in demand across all sectors and skill levels. Relevant skills and jobs include app and web development, gaming, IT, software engineering, cyber security, digital content development, data analytics, cloud computing, and many more.

The importance of the digital tech sector

- The UK digital tech sector employs 2.93m people[6], with 40 % growth in two years. Digital tech now accounts for 9 % of the UK workforce
- London accounts for close to half of the UK digital tech sector's total annual turnover; almost 30 % of UK tech businesses are based in London[7]

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5 DCMS Sectors Economic Estimates 2018
6 Tech Nation, Jobs and skills, 2020
7 Ibid

Skills demand

Technical roles are in extremely high demand in digital tech. The roles require specialist knowledge and focus on the creation and implementation of technologies.

Tech Nation[8] reported:

- Advertised digital tech roles grew 36 % from June to August 2020, second only to healthcare for the number of jobs advertised
- The most in-demand role was for software developers, accounting for 6 % of all advertised digital tech roles
- Cyber-security skills were mentioned in 49,992 job ads, up 79.69 % and
- Cloud skills were mentioned in 56,640 job ads, up 26.16 %

Beyond the digital tech sectors, demand for advanced digital skills is likely to rise as more tasks across all sectors become digitised.

- An analysis of job adverts in 2019 found that digital skills were an essential entry requirement for two-thirds of UK occupations and that digital skills are required in 87 % of online advertised openings in London, spread across all sectors[9]
- A survey conducted by the CBI in 2019 found that three in five (58 %) of employers expected they would need significantly more advanced digital skills in the next five years[10]

Skills participation and representation

GCSE

A 2020 study by the Learning and Work Institute[11] found that:

- The uptake of IT subjects at GCSE has fallen by 40 % since 2015 and the numbers taking A Levels, further education courses, and apprenticeships were also declining
- Women account for just 22 % of GCSE entrants in IT subjects, 17 % of A-Level entrants, 23 % of apprenticeship starts in ICT, and 16 % of undergraduate starts in computer science

8   Tech Nation, Jobs and skills, 2020
9   DCMS and Burning Glass Technologies. (2019).
     No Longer Optional: Employer Demand for Digital Skills.
10 Educating for the modern world, CBI and Tata, 2019
11 Learning and Work Institute, Disconnected: Closing the digital
     skills gap, 2020

A levels

- 2018 saw a 3 % increase in STEM A-Level entries than in 2011/12; however: only 9.4 % of A-Level examination entries in computing, 21.2 % in physics, and 39 % in mathematics were women[12]

Undergraduate qualifications

- Women make up only 13 % of students studying computer science, gaming and related courses[13]
- Teaching and academic representation in the UK
- Only 2.2 % of school teachers, 0.65 per cent of university professors, and 15 of the 445 people who graduated with postgraduate research degrees in computer science in 2018/19 are black[14]

Sector employment and representation

The Chartered Institute for IT[15] found in 2019 that:

- The 249,000 women working in UK technology accounted for 17 % of tech workers in the region, a figure which has only grown by 1 % over the past five years
- There were 268,000 black, Asian, and minority ethnic tech specialists in the UK, accounting for 18 % of tech workers, which has increased by 2 % over the past five years from 16 % in 2015. Around 8 % of tech workers are of Indian ethnicity, 2 % from a black, African, Caribbean, or Black British background, and 2 % from Pakistani or Bangladeshi backgrounds
- In 2019, 11 % of all UK tech workers had disabilities, rising from 8 % in 2015. 22 % of tech workers were aged 50 or above

The APPG on Diversity and Inclusion[16] analysed representation in the technology workforce. They reported:

- In London, people from ethnic minorities represent 31 % of the technology workforce versus 34 % of the broader workforce. Women represent 29 % versus 46 % of the wider workforce

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12 National Audit Office. (2018). Delivering STEM skills for the economy, Page 26.

13 Stem Women, Solving the Gender Gap in Computer Science and Gaming, 2019

14 Obum Ekeke, Tackling tech's big diversity problem starts with education, Wired UK, 2021

15 Sourced from Computer Weekly, Tech's diversity gap: Slow growth for minority groups, 2020

16 APPG on Diversity and Inclusion in STEM, The State of the Sector: Diversity and representation in STEM industries in the UK, 2020

Existing evidence on skills gaps and inequalities: UK level

Some groups face disproportionate barriers to accessing learning and skills, making it more likely that they have fewer qualifications which, in turn, makes it harder to find good work.

A 2018 report on Barriers to learning for disadvantaged groups[17] identified the challenges adults face in engaging in learning. Barriers included cost, family and childcare obligations, the way learning was organised or delivered, self-belief and confidence, disability and health issues that affect their ability to physically access learning and social pressures and expectations.

Qualification gaps for different groups in London

Many communities have been left behind across London, resulting in inequalities and age, gender, and socioeconomic disparities. The evidence base for the GLA's Skills Strategy[18] reports:

- 43 % of "Black Londoners" (the source report does not break the data down to a granular level e.g., Black British, Black Caribbean and/or Black African) and 41 % of mixed ethnicity Londoners had the highest proportion of NVQ Level 2 or below, compared to 37 % for all Londoners
- 9 % of single parents had NVQ Level 1 or below, compared to 28 % of all Londoners
- Only 18 % of Londoners with a disability had the highest qualification of NVQ Level 4+ in 2011, compared to 42 % of those without a disability

Women are still more likely than men to be working in low-paid jobs and young people, particularly those with less than tertiary education, are facing worsening job prospects. The risk of unemployment and underemployment has increased over the past decade, especially for men, and youth unemployment is particularly high among young black men in London and people of mixed or other ethnicities.

17 Dept. of Education, Barriers to learning for disadvantaged groups, 2018
18 GLA, Skills strategy for Londoners: Evidence base, 2018

Foundation skills

UK-wide, there are gaps in English, maths, and digital skills that must be addressed so that people can find good jobs or progress in their careers. 49 % of adults have numeracy skills at the level expected of an 11-year-old, and 15 % have literacy skills at that level. 52 % of the workforce do not have essential digital skills for work, with digital exclusion more common among older people and lower socioeconomic grades.[19]

A recent survey of Londoners found that cost (49 % report this as one of their two top barriers) and lack of time (40 %) are also the main barriers for individuals taking on learning opportunities.[20]

Access to training

There is an inequality dimension to training in London: more qualified individuals are disproportionately likely to benefit. Simultaneously, cost and lack of time are barriers for individuals taking on learning opportunities. According to the report, almost three in ten working-age Londoners qualified at NVQ 4+ received training in the relevant 13 weeks in 2018, compared to less than a fifth of those qualified at NVQ3 or below. This inequality contributes to a widening existing skills gap, despite the evidence that those in mid-skilled roles receive a higher wage boost from training. [21]

Conclusion

The barriers uncovered through a review of existing research include: skills and qualifications gaps, gender, ethnicity and class barriers, little or no access to digital skills training opportunities, jobs are not clearly defined in these fast-moving sectors, lack of understanding and guidance about potential career paths, and lack of social capital and networks to find opportunities. Further, the local digital tech businesses are often small and operating on a contract or project basis - making it less likely that they offer apprenticeships, in-house training, or in-work progression.

19 DfE, Skills for Jobs: Lifelong Learning for Opportunity and Growth, 2021
20 GLA, The Evidence Base for London's Local Industrial Strategy – Final report, 2020, p.76
21 GLA, Local Skills Report, London, 2020

# Findings from the community survey and focus groups

To build a more profound, local understanding of the challenges, the Commission took evidence from our diverse communities with experience of skills and employment barriers.

We launched the "Barriers to digital tech employment and skills survey" on 11 Nov 2021. This section is based on responses from 210 residents and 5 focus groups in which 33 people participated.

In Hackney, most people have opportunities to find good jobs in digital tech

- Agree
- Neither agree nor disagree
- Disagree

23 %
28.6 %
48.4 %
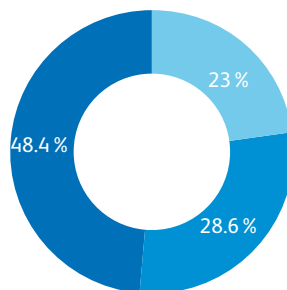
My unique identity or background is a barrier to job opportunities in digital tech

18.8 %
48.8 %
32.5 %
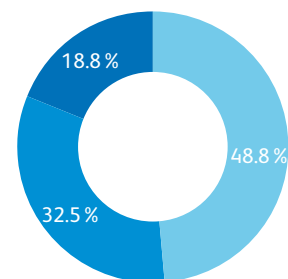
We are interested in hearing what people think are the biggest barriers to finding a good job in digital tech. What would you say are your top three barriers? (Choose 3 ONLY)
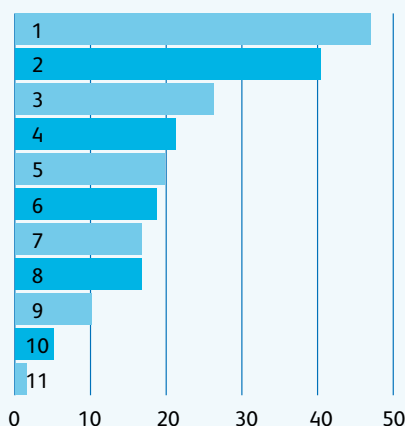
1. I don't have the right skills or qualifications
2. I need to have work experience in order to apply
3. I don't feel confident enough to look for opportunities in this sector
4. I believe recruitment will be biased and I won't be successful in applying for jobs
5. I can't find entry-level digital tech jobs to apply for
6. I don't know how to find jobs in this sector
7. I don't know anyone who works in this sector
8. I don't know about jobs in this sector
9. I think I will experience prejudice, stereotyping, or racism in digital tech, so I don't apply
10. People like me don't work in this sector
11. My family and friends don't think this type of career is appropriate for me

What do you think are your top three barriers to getting the skills and qualifications for a good job in digital tech? (Choose 3 ONLY)
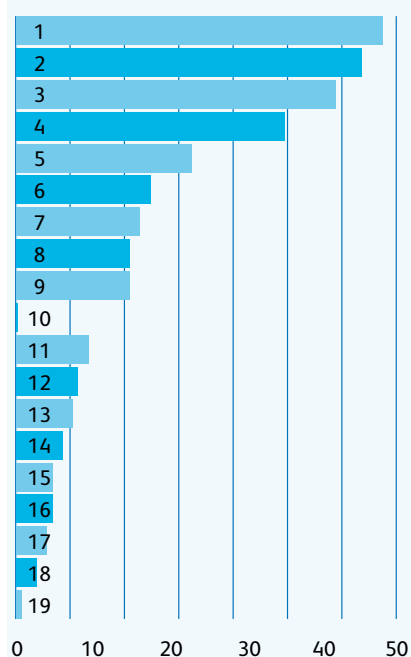
1. I don't know what jobs are available and what qualifications are needed
2. The cost of studying is too high
3. I don't have anyone to advise me about different courses and training options
4. I don't know how to find the right digital tech course for me
5. I don't have the right maths skills to apply for digital tech courses
6. I can't access digital tech skills training opportunities because of my age
7. I don't feel confident enough to study digital tech subjects
8. I can't access digital tech skills training opportunities because of work obligations
9. It takes too much time to get a qualification
10. I'm unemployed and need to prioritize finding work
11. I can't access digital tech skills training opportunities because of caring obligations
12. I can't access digital tech skills training opportunities because of my disability
13. I don't know anyone studying digital tech subjects
14. Other
15. I can't access digital tech skills training opportunities because of lack of childcare
16. People like me don't study digital tech subjects
17. My past experiences of studying were not enjoyable
18. I can't access digital tech skills training opportunities because of my language skill
19. My family and friends don't think digital tech courses are appropriate for me

What changes would make it easier for you to get new skills, retrain and progress into a good job in digital tech?

Theme 1: Better career information and advice

"Someone to speak to about training and the skills required for certain digital tech jobs"

"1:1 advice to find the right route that is worth doing"

"Having a clear and affordable pathway to progress into a job"

"It's hard to find the right course - you search online and it shows unreliable things"

"Clear specifications on what skills are needed and how to get them"

Theme 2: Affordable, flexible access to skills and qualifications

"A recognised qualification that is easily accessible and affordable"

"Financial support towards training and certification costs"

"Having online courses or weekends to enable all to have an equal chance of getting new skills"

"Opportunities to retrain alongside current work commitments"

"More digital tech courses in the community"

Theme 3: Links to employers for career insights, open days, and training connected to work opportunities

"Employers should organise open days to help me understand their requirements"

"Please provide training with work placements"

"Training courses with guaranteed interviews at the end"

"Free or affordable training and work experience and help into work"

Theme 4: More inclusive culture and hiring practices

We conducted focus groups to unpick some of the findings from the survey. Our findings include the following:

- Digital tech is perceived as white, male, and young
- Concerns about racism and discrimination in hiring practices and on the job
- Concerns that hiring practices are based on networks and recommendations

About our survey respondents

Male
Female

48.3 %   51.7 %
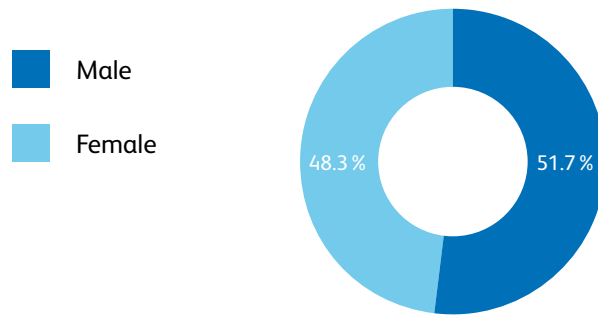
Age: what is your age group?

Age group	Percentage
Under 16	~1 %
16-17	~8 %
18-24	~19 %
24-34	~14 %
35-44	~18 %
45-54	~20 %
55-64	~17 %
65-74	~2 %
75-84	~0.5 %
85+	~0 %
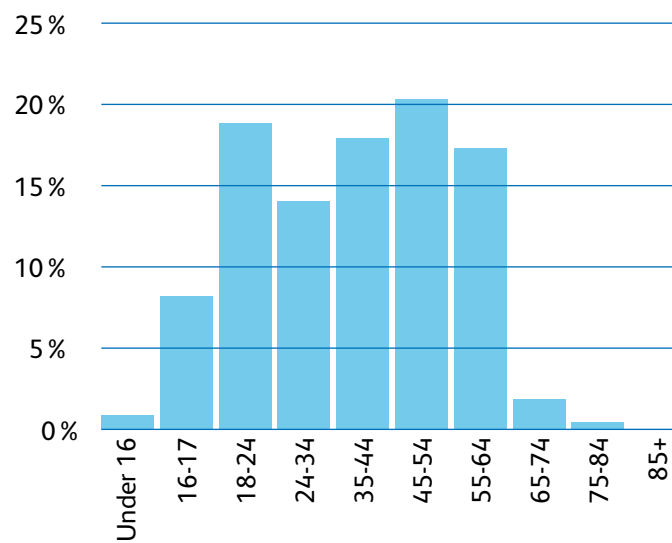
Ethnicity: What is your ethnicity?

Ethnicity	Percentage
Black or Black British	~46 %
White or White British	~23 %
Other ethnic group	~12 %
Asian or Asian British	~13 %
Mixed background	~8 %

Disability: Do you have a disability?

Yes
No

24.8 %

75.2 %
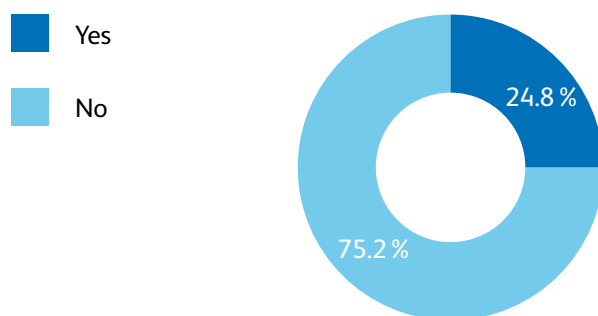
Housing Tenure: Which of the following best describes the ownership of your home?

Category	Percentage
Rented (Local Authority/Council)	~58%
Don't know	~18%
Rented (Housing Associoation/Trust)	~10%
Being bought on a mortgage	~5%
Owned outright	~4%
Rented (private)	~4%
Shared ownership (part rent/part buy)	~3%

Caring responsibilities

Yes
No

18.2 %

81.8 %
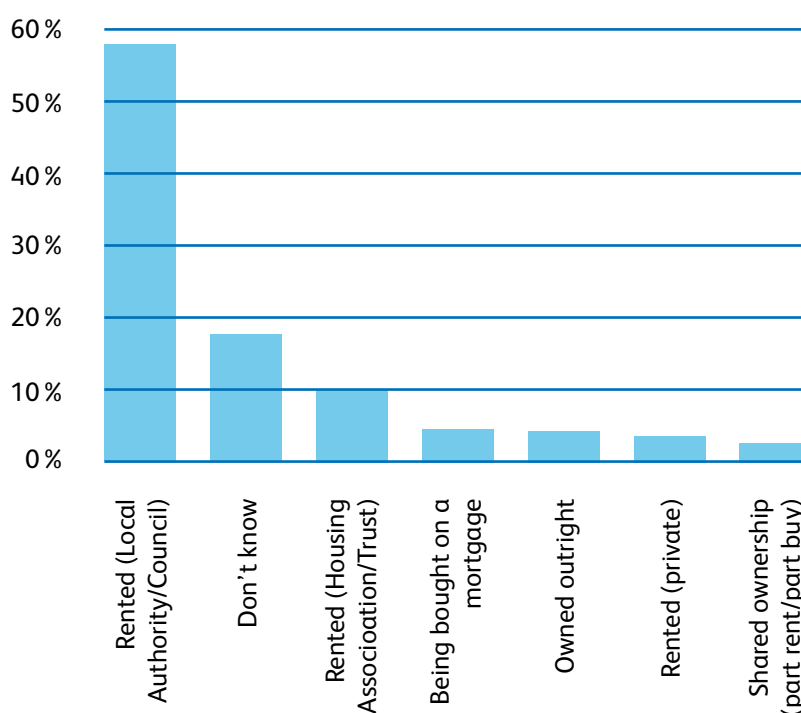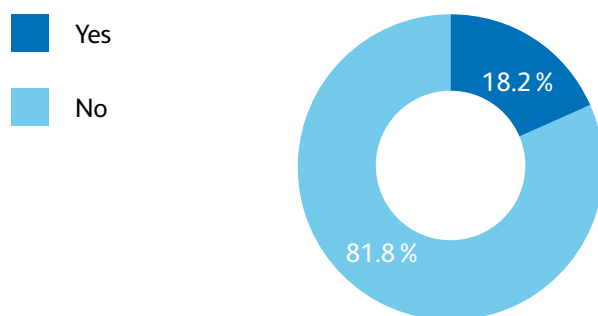
Findings from community focus groups

We conducted focus groups to deep-dive into some of the findings from the survey. A broad script was developed and refined for each focus group. Questions included:

- What examples come to mind when you think about digital technology?
- What types of jobs come to mind when you think of digital technology and all the activities we just discussed?
- Do you think there are plenty of job opportunities in digital tech?
- Do you personally think there are digital tech jobs for you?
- What do you think are the biggest barriers to find a good job in digital tech?
- What do you think are the biggest barriers for you to get the skills and qualifications for a good job in digital tech?
- After everything you've just heard, what are your top three things that should change to make it easier for you to get the skills and qualifications to get a good job in digital tech?

For each session, one member of the Consultation & Engagement team facilitated the session with note-taking provided by another team member.

Three common themes emerged across five focus group discussions:

1. A lack of awareness of digital tech jobs
2. Participants wanted help and guidance to know which qualifications are needed for these jobs and where and how to get them
3. Race and ethnicity. Participants perceive digital tech as white, young and predominantly male. They are concerned about racism and discrimination in hiring practices and on-the-job and they believe that hiring practices are based on networks and recommendations
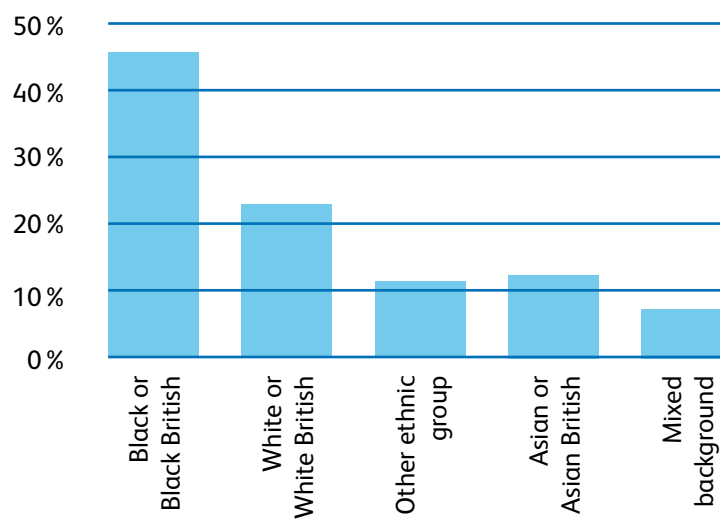
Socio-cultural barriers

Socio-cultural barriers related to family and cultural attitudes arose in a couple of focus groups. In one group, respondents from Ghana, Nigeria and Columbia talked about language barriers and the challenge of different cultural expectations of women, such as attitudes about the types of jobs women should do. In another group, participants talked about family pressure to apply for specific jobs vs less encouragement to apply for digital tech jobs.

What changes did different groups ask for?

Young people

Young people's barriers showed the biggest variance compared to the full data set.

Their top barriers include:

- Not knowing how to find jobs in this sector
- Not knowing about jobs in this sector
- Not knowing how to find the right digital tech course
- Lack of diversity in hiring

What are the asks from young people?

- Access to work experience opportunities
- Information and guidance on digital tech roles, pathway options, what qualifications are needed, and how to get them
- Access to apprenticeships
- Active promotion of diversity

Young disabled people

We conducted 2 focus groups with 17 Special Education Needs and disabled students (SEND) and their teachers. These discussions revealed that SEND students are interested in digital tech roles but don't know how to get them.

Their top barriers include:

- Not knowing about job opportunities in this sector
- Not having the right skills
- Lack of support from the industry

What are the asks from young disabled people?

- Alternative access routes. Traditional hiring models are a barrier as SEND students told us they prefer to demonstrate their skills rather than having to talk about them
- Job fairs, work experience, and apprenticeships

Career changers and upskillers

People who want to switch sectors or careers told us they faced a lack of opportunities which many believe is due to their age.

Their top barriers include:

- Not knowing how to find entry-level digital tech jobs to apply for
- Not having networks to tap into
- Socio-cultural barriers e.g., family and cultural expectations
- Some told us they prefer to demonstrate their skills rather than having to talk about them in an interview

What are the asks from career changers and upskillers?

- More transparency and information - they don't understand job titles or what jobs are on offer, where they can apply, and the process of applying
- Affordable, flexible training
- Gain UK job experience based on qualifications from the country of origin
- Access to apprenticeships at any age

Women and carers

Young women participating in focus groups told us that they are concerned about the predominance of young white males in digital tech culture and whether the jobs are for women.

Their top barriers include:

- Perceived sexism and the need for gender diversity
- Need to balance training or work with caring responsibilities
- Expensive childcare costs

What are the asks from women?

- Opportunities for women
- Free/affordable, flexible training to balance with caring duties
- Help with childcare costs
- Job flexibility to help balance job and family obligations

Older residents

Older residents are more concerned with age limits.

Their top barriers include:

- Believing that recruitment will be biased and that they won't be successful in applying for jobs
- Not knowing what digital tech companies operate in the area
- Lack of training

What are the asks from older residents?

- No age barriers for training, job opportunities, and apprenticeships
- More affordable training
- Flexible working opportunities
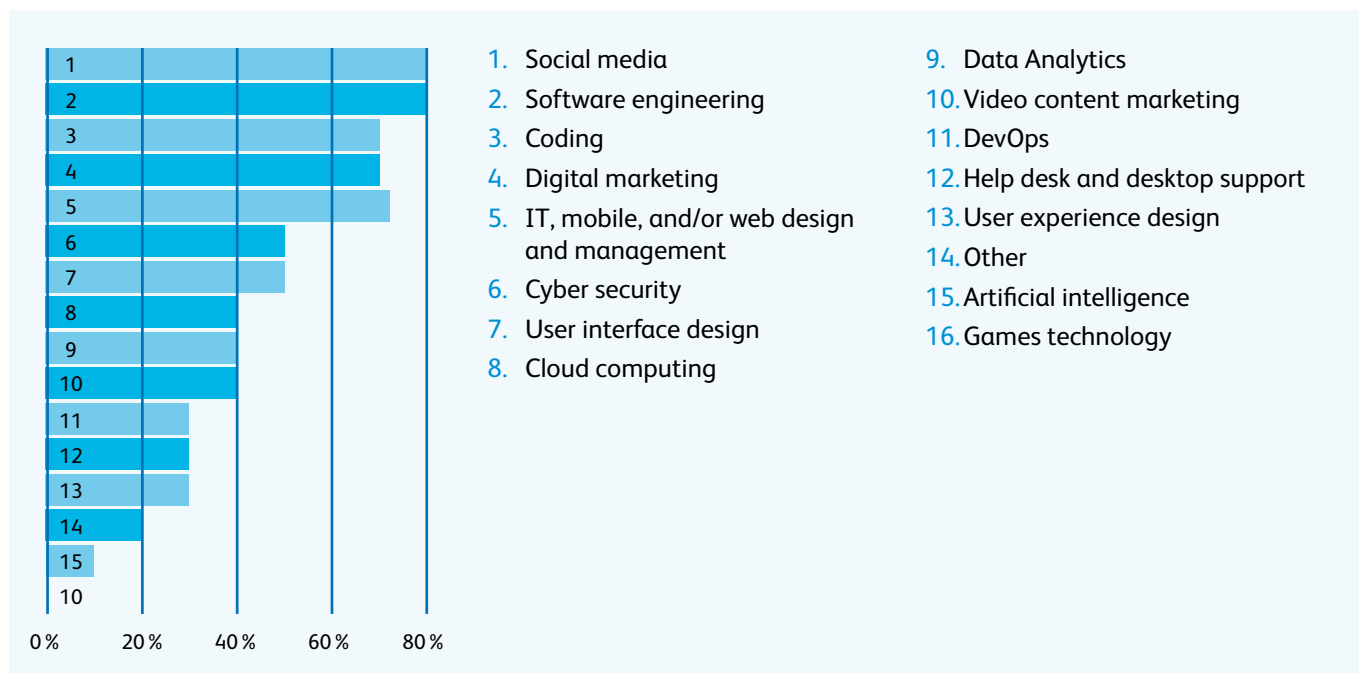
Findings from the employer survey

This section explores what Hackney's digital tech employers see as the biggest barriers to recruiting local diverse talent and the skills they require for entry-level roles.

We launched a survey "Barriers to local recruitment for digital tech" on 24 Feb 2022.[22] This section is based on responses from 20 employers in digital tech sectors or employers hiring for digital tech skills.

## What are the top three barriers to recruiting digital tech skills locally? (Choose 3 only)

1. My organisation lacks the capacity to manage an apprentice, trainee or entry-level employee
2. My organisation doesn't know how to reach and attract diverse local talent
3. Lack of local candidates with appropriate skills or qualifications
4. Lack of local candidates with appropriate work experience
5. My organisation doesn't know about employment and support schemes
6. My organisation isn't hiring
7. My organisation doesn't hire for entry-level roles
8. Local candidates don't apply
9. Government employment schemes are too rigid and bureaucratic
10. Other
11. My organisation can't access high-quality training to support entry-level employees, apprentices, trainees
12. My organisation would like to participate in employment schemes, but information is too complex and confusing to get started

What skills are in demand for entry-level digital tech roles in your organisation and/or your sector? (Choose 3 ONLY)

1. Social media
2. Software engineering
3. Coding
4. Digital marketing
5. IT, mobile, and/or web design and management
6. Cyber security
7. User interface design
8. Cloud computing
9. Data Analytics
10. Video content marketing
11. DevOps
12. Help desk and desktop support
13. User experience design
14. Other
15. Artificial intelligence
16. Games technology

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22 Employer survey - Barriers to local recruitment for digital tech, Hackney consultation and engagement hub, Feb, 2022

What are the top three soft skills needed for an entry-level digital tech role? (Choose 3 only)
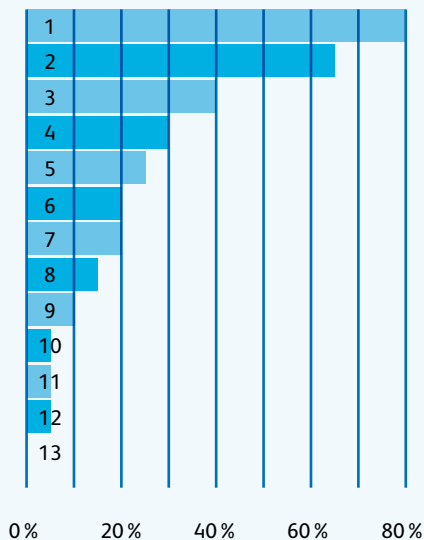
1. Communication
2. Critical thinking and problem-solving
3. Flexibility and adaptability
4. Continuous learning and self-development
5. Collaboration
6. Planning and organisation
7. Teamwork
8. Independence
9. Self-awareness and self-management
10. Leadership
11. Customer-centricity
12. Other
13. Entrepreneurship

What changes would make it easier for your business to recruit local diverse talent with the right digital tech skills?

Theme 1: Improved local technical and soft skills training

"Changes to local skills training."

"Increase in local tech skills for the community."

"It's not just the technical skills; it's the 'softer skills' which we've found to be lacking; how you present yourself in a work setting, communication, hard work, interview skills."

"Better soft skills training for local talent."

Theme 2: Better access to diverse talent

"Better partnerships with schools and colleges."

"Easier channels for employers to reach out to prospective candidates."

"Working with local youth organisations with direct access to local talent."

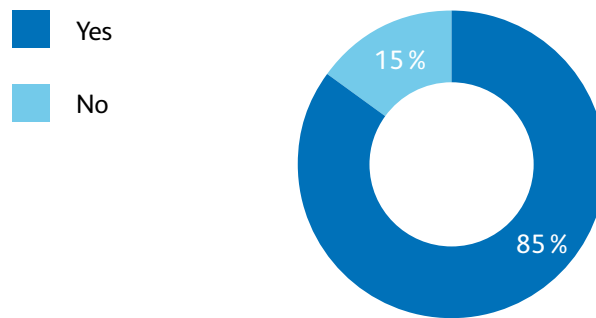**Theme 3: Information about government employment programmes**

"I never thought of local hiring schemes, so knowledge about these schemes."

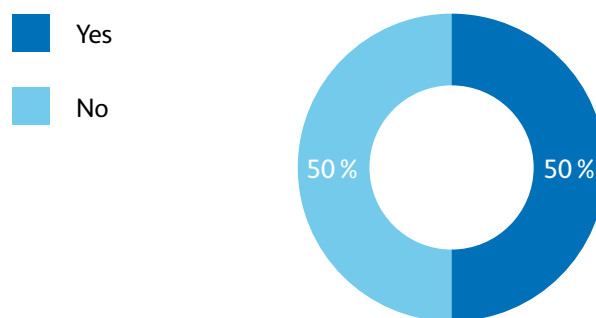"Easy-to-access government employment programmes."

"A local authority welcome pack for new businesses."
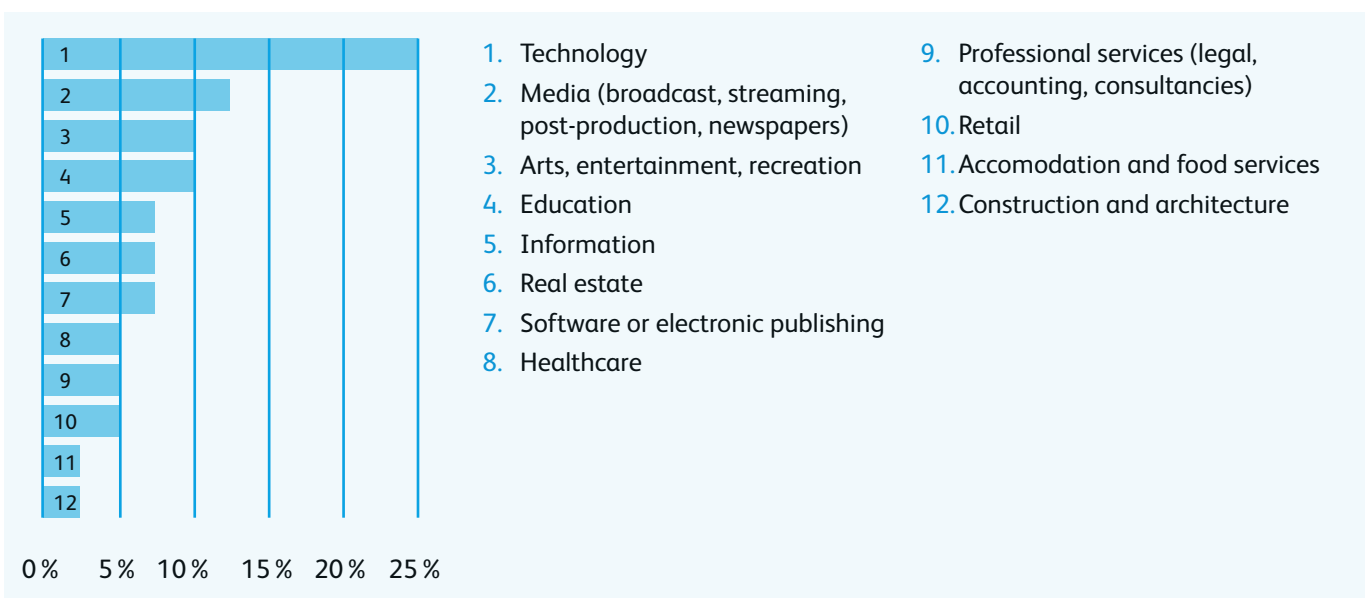
About our employer survey respondents

Is your company based in Hackney?

- ■ Yes
- ■ No

85 %
15 %

Does your organisation have a local recruitment strategy?

- ■ Yes
- ■ No

50 %
50 %

In which industry is your business?

1. Technology
2. Media (broadcast, streaming, post-production, newspapers)
3. Arts, entertainment, recreation
4. Education
5. Information
6. Real estate
7. Software or electronic publishing
8. Healthcare
9. Professional services (legal, accounting, consultancies)
10. Retail
11. Accomodation and food services
12. Construction and architecture

0 %   5 %   10 %   15 %   20 %   25 %

How long has your company been in business?

Years	Percentage
10+ years	~45%
5-9 years	~30%
3-4 years	~15%
0-2 years	~10%
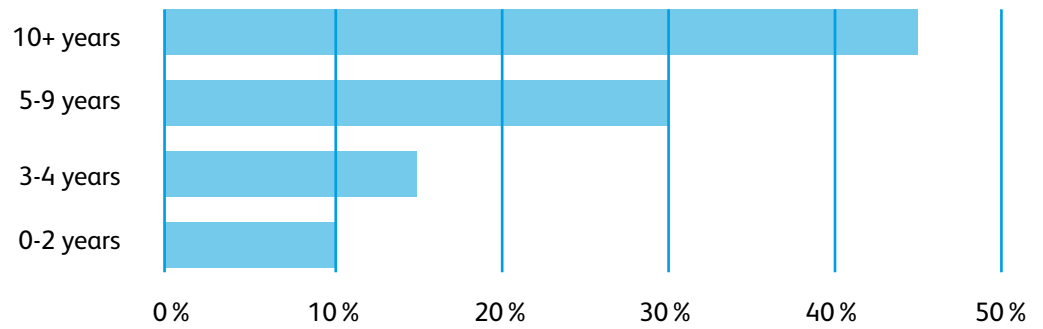
How many people are employed at your company?

Category	Percentage
3-9 people	25%
1-2 people	20%
50-249 people	20%
1000+ people	20%
10-49 people	10%
250-999 people	5%
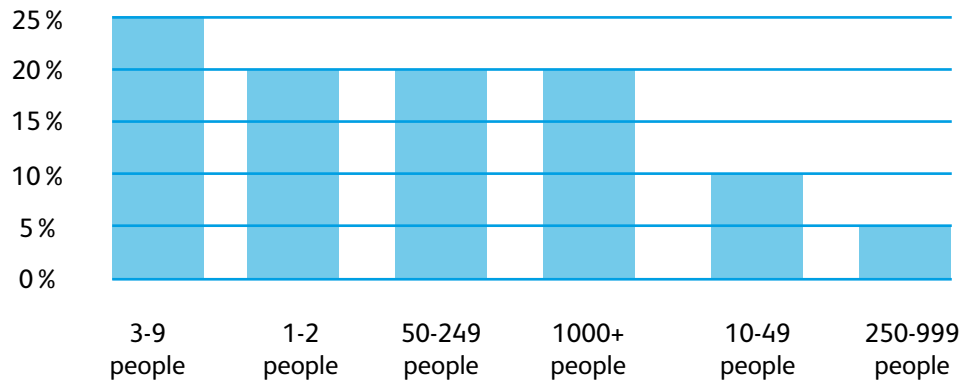
What is your title or role at your company?

Title or role	Count
Director	3
Founder	3
Managing Director, ustwo (European studios)	1
Generation UK	1
Appreticeship Program Manager	1
People and Culture Manager	1
Senior People Ops Manager	1
Designer	1
CEO	1
Principal	1
Head of Production	1
Talent Aquisition Manager, University EMEA	1

Findings from the roundtable discussion

On 16th June 2022, Hackney Council held a roundtable event hosted by the Mayor and Cllr Williams. The objective was to develop a common understanding of the barriers to digital tech skills and careers and to generate ideas to address these barriers.

Participants included representatives from:

- Corporations: Amazon, Adobe, and Ford
- Micro business/SME: Ldn Utd, Sportable Tech, Us Two
- Educators: New City College, Staffordshire University, University College London
- Training providers: Generation, Strive Group
- Community Groups: 16+ Network, A New Direction, Badu
- Public sector: LBH's Employment & skills team, Regeneration team, Hackney Apprentices

The agenda kicked off with a presentation by Hackney apprentices who shared their lived experience of barriers, followed by two questions to initiate the idea-generating session:

Question 1:

What was your initial response to the research?

Question 2:

Imagine there is a meeting three years from now. In a perfect world, what would you have done by then to improve inclusion and diversity in Hackney?

Support Question:

What are the priorities to focus on?

Apprentice voices

Some revealing quotes about the barriers to entry into the digital tech arena from the apprentices included:

> "I came across Hackney apprenticeships – no one actually told us about them"

> "The greatest barrier to apprenticeships is that they are competitive - more opportunities would make them less competitive and more accessible"

> "Older people believe they'll experience an age bias"

> "Digital tech is seen as a white industry"

> "I worry about being a woman in the tech space"

> "I didn't have tech experience so I almost didn't apply"

> "Companies don't understand what people have to get through to get to this point"

Ideas to address the barriers

The roundtable participants developed a long list of ideas to address the barriers. We've grouped them into four broad themes:

1. Raise awareness of digital tech skills and employment opportunities
2. Boost local hiring, apprenticeships and work experience
3. Champion inclusive human resource practices
4. Link to the digital inclusion agenda

1. Raise awareness of digital tech opportuities

- Improve career information, advice, and support

  - Clarify pathway options
  - Identify free/affordable courses (Level 3 and above)
  - Identify which digital tech companies have apprenticeship programmes
  - Identify where to find entry-level jobs

- Build peer networks

  - Peers or 'apprentice ambassadors' to explain the jobs, what skills are required, coach through the application process, help with CVs and interviews, mentor apprentices, and provide referrals for roles
  - Speak to people in apprenticeship programmes to find out how they found out about the role, and what barriers they faced so we can improve our info and outreach

- Open workplace doors

  - Visits to digital tech workplaces
  - Job fairs inside digital tech workplaces

- Outreach to communities/colleges/schools

  - Develop a robust plan to educate and raise awareness - what are the different roles, what skills are needed etc. Need a solid outreach strategy and mailing list to ask community groups to share with their communities

2. Boost local hiring, apprenticeships and work experience

- Build a talent pool

  - The talent pool should consist of partnerships between businesses, community groups, schools and colleges, and the council so that:

    - Businesses can rapidly connect with work-ready diverse talent, educated about vacancies
    - Diverse talent can link to employment and apprenticeship opportunities, get support with soft/employability skills training, and network for ongoing support

- Help local employers set up apprenticeships

  - Leverage council and business know-how to help businesses set up apprenticeships

- Improve technical and soft skills to meet employer requirements

  - Soft skills: Develop a competency handbook, run bootcamps, and harness community groups to develop soft skills
  - Technical skills: Subject matter experts to connect with educators and career advisors to improve sector knowledge. Provide technical skills courses to make residents 'job ready'
  - Improve business awareness about government employment/local hiring schemes

3. Champion inclusive human resource practices

- Educate hiring managers

  - Diversity training for hiring managers to raise awareness of barriers
  - Address hiring manager's preconceptions that entry-level employees and apprentices need a lot of handholding

- Develop peer referral schemes

  - Hiring incentives, such as referrals from peers, apprentices, and diverse and lower-level employees
  - Connecting with community organisations, linked to the referral system

- Diversify hiring panels

  - Hiring panels to be more diverse and representative

- Design employee benefits to attract diverse talent

  - Employee benefits are an indicator of culture and values: childcare vouchers, flexible hours, holiday swaps
  - Include salaries in advertisements - women often don't negotiate or undersell themselves

- Support for new hires to reduce the dropout rate

  - Tailor onboarding- if you hire an apprentice you might need to take more time to onboard, teach them to use the systems
  - Links to networks, mentors, and support to reduce apprentice/minority hire dropout rate
  - Ensure remote workers get the same opportunities

- Governance/data capture

  - Detailed data capture to monitor diversity beyond gender/ethnicity
  - Civic board to advise on the social mobility agenda

4. Link to the digital inclusion agenda

- Improve access to technology and software

  - Create community tech hubs where people can access tech and software and have volunteers/mentors on hand to help people learn how to use them

- Link to digital inclusion initiatives

  - Link the Commission to LOTI's digital inclusion agenda - digital skills for work is an extension of the digital inclusion agenda. Residents need opportunities and support to progress from foundation-level digital skills towards mid-level skills for work

Quotes from participants in the roundtable show that they are only too aware of the issues they face to attract potential talent into the digital tech sector and how they intend to address them.

"if you don't know that we list apprenticeships, then it can get missed"

"We're trying to get a programme up and running and are passionate about it"

"(apprenticeships) are a good pathway but it's only one pathway"

" … having a pool of people ready cuts down the recruitment process"

"Hackney has done a lot of good work with partnerships in the borough …but feel like it has not been fully harnessed"

"If you pay agencies to find people, why not work with community organisations?"