

# Digital Skills Audit.

### Report 2025







#### Introduction

In the autumn of 2023, Sheffield Digital ran its first Digital Skills Audit as part of our "Talent23" skills campaign. The purpose of this audit was to compile information from South Yorkshire digital and tech businesses about their current and future skills requirements, and how well those are being met by education and training organisations and by the talent available in the region.

This information is important because there is no data focused specifically on the skills needs of our region's digital and tech businesses. Our aim was to take a step towards filling this gap and thus be able to provide evidence to influence improved skills provision and policies. The first audit set out to provide benchmark data which we could build on annually.

As planned, we ran a second audit in the autumn of 2024 – this report covers that audit and, where possible, compares its results to those of the first audit.

#### Methodology

The audit was conducted through a survey questionnaire with a mix of multiple choice and open questions. The questions mirrored those of the first audit with a few additions. Where appropriate, we also shortened or combined questions to reduce the length of the questionnaire.

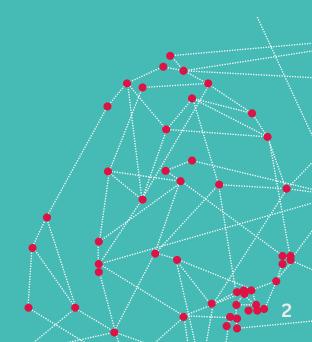
Businesses were asked to identify themselves to avoid duplication, but all the results have been anonymised. The survey was conducted under Sheffield Digital's privacy and data protection policy.

The survey was designed and targeted to collect responses from individuals with knowledge of the skills and recruitment requirements within their organisation.

## The types of businesses and organisations included were:

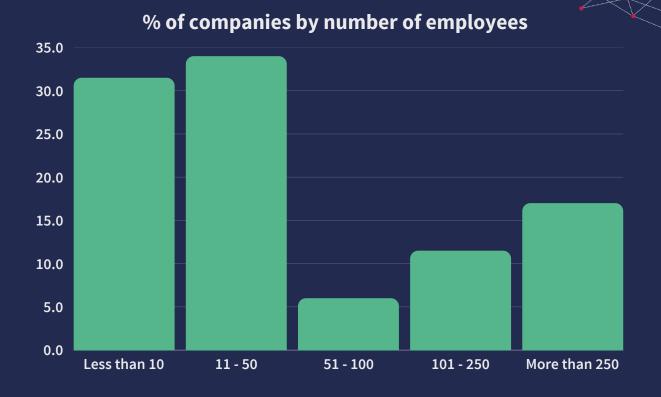
- Those that are technology-first i.e. the business offers products or services that are directly related to digital hardware and/or software.
- Those that are technology-driven i.e. the business relies on digital hardware and/or software to deliver its products or services.
- Those that have a significant requirement for technology skills i.e. organisations that have an IT department or team of software engineers.





#### Who responded?

We collected just under 40 usable responses, 26 of which were from Sheffield Digital member companies. This was a smaller number of responses than the first audit but, while this is a fairly small sample, we can see that it is broadly representative of the region's digital and tech sector.







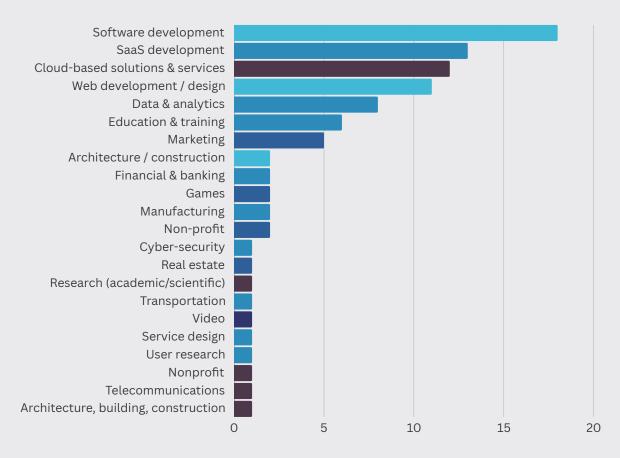


In a change from the first year, we received more responses from small employers, reducing the impact of a few large employers on the results.

It is interesting to note that, compared to 2023, there are more companies in the £250k-£1m turnover bracket. This indicates that, despite a challenging year, a number of our small company members were able to grow their turnover.

94% of the organisations that responded have been in business for at least two years.

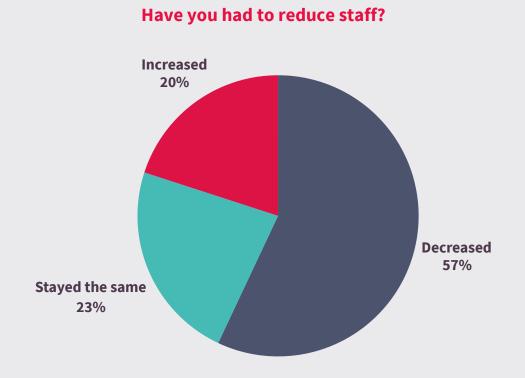
#### What do companies do?



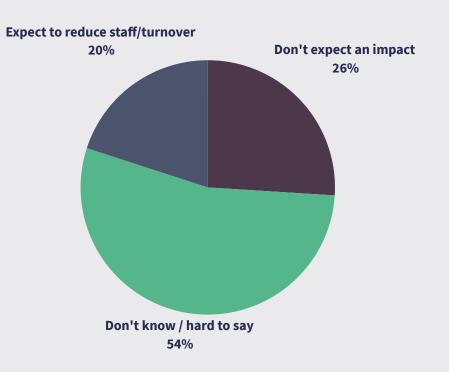
### Part two: the economic climate

# How did the economic climate in 2024 impact company operations?

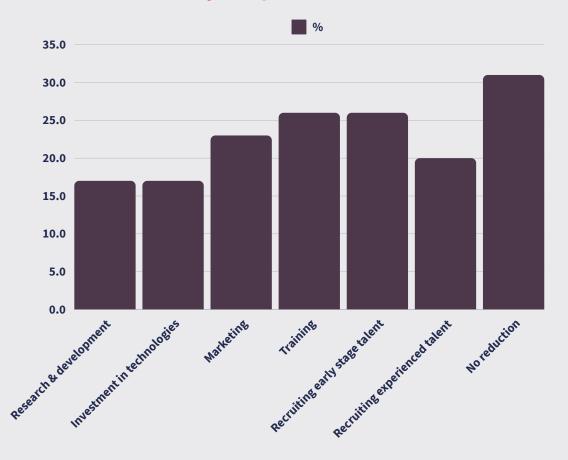
In 2024, we heard anecdotal evidence that many companies were having to reduce headcount, so we added a question to investigate this. Over half of the respondents said that they had reduced their number of employees. They did this by delaying recruitment, not replacing staff who left and, in some cases, through redundancies.



# What impact do companies expect in the next 12 months?



#### Where do you expect to reduce investment?



### What challenges are affecting productivity?

- 1. Not enough experienced talent
- 2. Cost of living
- 3. Hybrid/remote working demands & expectations
- 4. Transport (cost & infrastructure)
- 5. Other (economic climate, leader's inexperience, finding new projects/projects delayed, client budgets, changing markets)



In 2023, we asked about working patterns in order to test the impact of the pandemic. We asked the question again in 2024 and, as can be seen, the shift to hybrid and remote working is firmly embedded in our sector (despite newspaper headlines). In addition, the majority of respondents said they expected this to stay the same over the next 12 months. While companies have embraced these changes, it does make it hard for employers to support inexperienced staff members and is a factor in whether companies hire early stage talent.

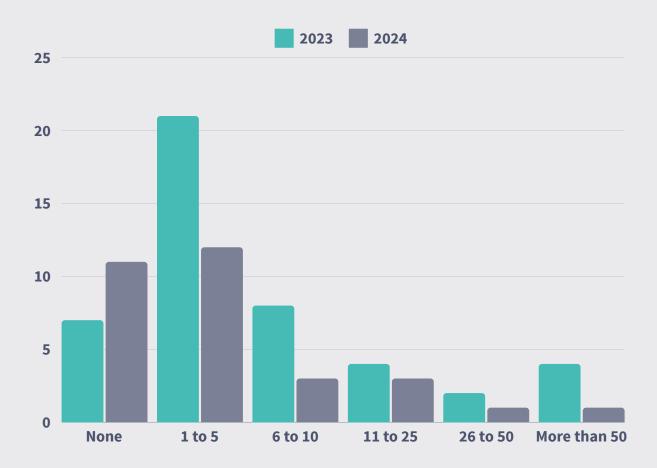
| Working p | atterns |
|-----------|---------|
|-----------|---------|

|                    | 2023 | 2024 |
|--------------------|------|------|
| Remote             | 5.5% | 11%  |
| Hybrid             | 91%  | 77%  |
| Fully office based | 3.5% | 8%   |

As a follow-on to this question, we asked how companies felt about their current office space. 70% said that it was suitable for their needs.

## Part Three: Skills recruitment

### **Understanding the demand**



How many vacancies did employers have over the previous 12 months?

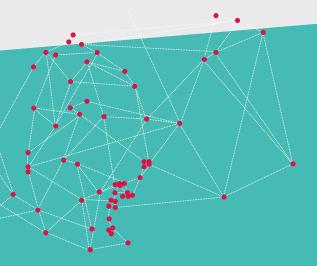
This graph shows clearly a drop in vacancies compared to 2023. This was mirrored in the jobs board on the Sheffield Digital website - our members and partners posted roughly half the number of jobs in 2024 compared to 2023.

## Which digital and tech related roles were they trying to recruit for?



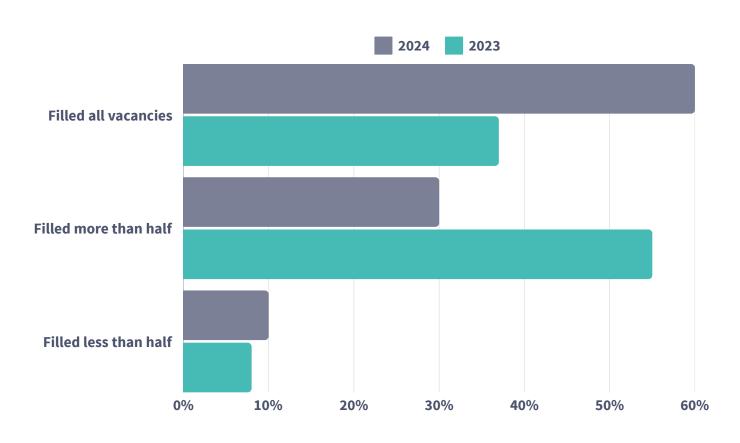
| Roles*  | Entry level  | Experienced           | Both                  |
|---|--------------|-----------------------|-----------------------|
| Developer (programming), including system engineering |              | <ul> <li>✓</li> </ul> | ✓                     |
| Project management                                    | ✓            | <ul> <li>✓</li> </ul> |                       |
| User Experience (UX) research and design              | $\checkmark$ | <ul> <li>✓</li> </ul> |                       |
| Business analysis                                     |              | ✓                     | $\checkmark$          |
| Product management                                    |              | <ul> <li>✓</li> </ul> |                       |
| Account management                                    | $\checkmark$ | $\checkmark$          | $\checkmark$          |
| Digital marketing                                     | $\checkmark$ |                       |                       |
| Sales & business development                          | $\checkmark$ | <ul> <li>✓</li> </ul> | <ul> <li>✓</li> </ul> |
| Testers / QA  |              | $\checkmark$          |                       |
| Data analysis   |              | $\checkmark$          |                       |
| Data science  |              | $\checkmark$          | $\checkmark$          |
| Design  |              | $\checkmark$          |                       |
| DevOps  |              | $\checkmark$          |                       |
| Client service / liaison                              |              | $\checkmark$          |                       |
| AI & machine learning                                 |              | $\checkmark$          |                       |
| Cloud technologies                                    |              | $\checkmark$          |                       |
| Network engineer                                      |              | $\checkmark$          |                       |

As in 2023, respondents were mostly looking for candidates with experience.





### And how successful were they?



### Which roles were the hardest to fill?

Developer (programming) including system engineering

Systems architect

Artificial intelligence (AI) and machine learning

Data science

**Product management** 

Sales and business development

**Business analysis** 

Cybersecurity

Dev ops

Sys admin

Testers/quality assurance (QA)

User experience (UX), research and design

Account management

Augmented reality (AR)

Cloud technologies

Creative

Data analysis

Design

IT and infrastructure

**Project management** 

Virtual reality (VR)



### Why were these vacancies hard to fill?

- 62% of respondents said there was a lack of candidates with the desired skills, knowledge and behaviours.
- **38%** said they were unable to meet salary demands\*\*
- **38%** said there was a lack of interest or applications.
- **12%** said the positions required specialist skills.

#### Attracting and retaining talent

\*\*Salaries: 83% of respondents said they have had to increase salaries to attract or retain talent over the past 12 months. This is a similar picture to 2023 and suggests that salary inflation is here to stay.

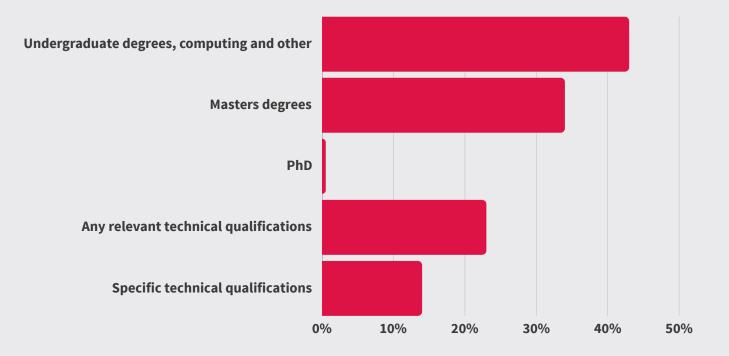
As in 2023, people felt that the level of pay they could offer had the biggest impact on attracting and retaining talent, followed closely by being able to offer flexible working and a clear career progression path.

It is also worth noting that 65% of respondents said they either use freelancers now or plan to in the future. This is also a similar figure to 2023.



#### **Importance of qualifications**

Formal qualifications continue to be important to employers.



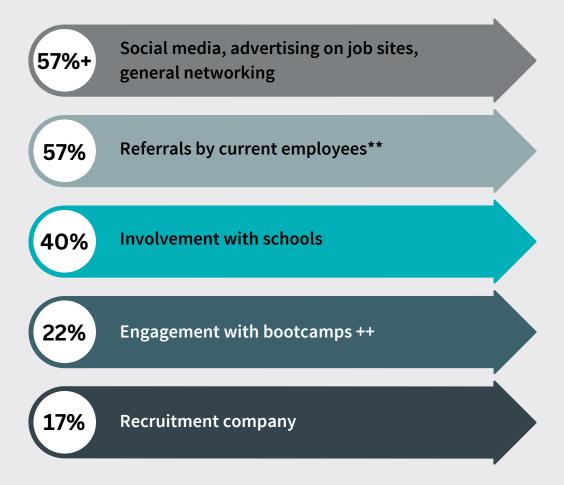
#### **Entry level talent**

While about half of our respondents said that they did not hire entry level talent, others reported recruiting at degree level, with candidates coming from both computing-related courses and other courses. These figures were similar to 2023, except that companies reported recruiting fewer apprentices in 2024.

Encouragingly, employers said that the entry level candidates they recruited either met or exceeded their expectations.



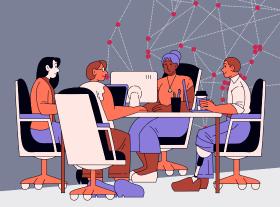
### What sources do companies use for recruitment?



\*\* Respondents said that referrals by current employees was the most effective source of new talent.

++ Of those respondents that had used bootcamps, 75% said they were likely to use them again.

### Part four: diversity & inclusion



In the final section of the survey, we asked some questions to focus in on diversity and inclusion in our sector. It is encouraging to report that, compared with the first audit, considerably more respondents completed this section, giving us more data to work with. However, we should note that there was probably some self-selection in the kinds of companies that took the time to respond to the survey.

| AGE      | %  |
|----------|----|
| Under 25 | 9  |
| 25 to 34 | 12 |
| 35 to 54 | 41 |
| 55 +     | 7  |

| GENDER     | Total<br>workforce % | In tech<br>roles % |
|------------|----------------------|--------------------|
| Male       | 64                   | 71                 |
| Female     | 34                   | 18                 |
| Non-binary | 1                    | 1                  |
| Other      | 1                    | 1                  |

The gender breakdown of Sheffield's tech sector is very similar to what was reported in 2023. Female/non-binary numbers have dropped very slightly, but we remain above the national average. (see footnote/comment on page 16)

| Ethnicity                                      | %  |
|--|----|
| White  | 82 |
| Asian / Asian British                          | 9  |
| Black / African / Caribbean / Black<br>British | 4  |
| Mixed / multiple                               | 4  |
| Other  | 1  |

In 2023, there was insufficient data to report on the ethnic makeup of respondent companies. It is encouraging that companies are now collecting this data and are willing to share it. (see footnote/comment on page 16)

| DIFFERENCES OF<br>ABILITY | %  |
|---------------------------|----|
| Yes                       | 2  |
| Νο                        | 30 |
| Form of neurodiversity    | 11 |
| Prefer not to say         | 5  |
| Not shared                | 52 |

According to the Tech Talent Charter's (TTC) latest Diversity in Tech report, just 6% of tech employees are disabled despite making up 23% of the UK workforce. While this is the first time we have had sufficient data to report on disability, it is difficult to draw conclusions about how we compare to the national picture. However, on neurodiversity, the TTC report uncovered some interesting information: According to ACAS, 15-20% of the UK population are thought to be neurodivergent. But in the TTC research, employers reported that just 3% of their tech workers are neurodivergent.

However, when tech workers were asked directly, 53% of respondents identifed as having a neurodivergent condition (whether officially diagnosed or not).

The most prevalent conditions are autism/autism spectrum disorder (15%), ADHD/ADD (15%), and dyslexia, dyscalculia and dyspraxia (9%).

Tech Talent Charter suggests that the gulf between the employer-reported neurodiversity rates and the tech worker-reported rates highlights the need for clearer discussion about what neurodiversity is, how neurodivergent people want to discuss and disclose this information, and how it should be supported in a work context.

#### Attracting diverse talent

In response to our questions about what companies were doing to attract more diverse talent, we received some interesting responses:



We plan to set up a relaxation and sensory room for staff.

> We developed our anti-racism strategy and aligned more with groups who were supporting people trying to get into the industry.

We have introduced anonymised CVs with personal details and education removed when using recruiters. In our own recruitment we have moved to an application form rather than CV, these are also anonymised when being reviewed. We have moved to a points based scoring system, rather than previous "gut feel".

We now try to use gender inclusive language in our adverts to ensure we attract all ethnicities, sex, race etc.

> We actively recruit neurodiverse people for their unique skill sets.

We volunteer in schools to teach pathways into the industry.

We intend to engage more with more diverse networks and communities to reach a wider audience, through network and social media. I think the increase in diversity has more been about where we're advertising than the way we're undertaking the process. But, generally, also just showing a commitment to EDI as an organisation may have made people more diverse feel comfortable with applying.

We have started introducing extended remote working for those with family overseas to enable non-British nationals to spend extended time with family that are abroad.

#### Footnote/comment:

The latest research by the UK's Tech Talent Charter (link: <u>https://www.techtalentcharter.co.uk/reports/diversity-in-tech-report-2024/</u>) reports that: 29% of tech workers are gender minorities and that this reduces to 21% in senior roles. 25% of UK tech employees are ethnic minorities – 5% are black.

## Part Six: Looking ahead

Finally, we asked our respondents which technical skills would be most important to the future growth of their companies. Their top picks were:

- Developer (programming), including system engineering (18)
- Artificial Intelligence (AI) and machine learning (17)
- Sales and business development (14)
- Design (13)
- DevOps (12)
- Product Management (11)
- Project Management (11)
- User Experience (UX) research and design (11)
- Digital marketing, including social media, SEO, CRO, PPC (11)
- Business analysis (10)
- Client service/liaison (10)
- Cloud technologies (9)
- Testers / QA (9)
- Strategy (9)

Looking at the immediate future, the top skills that companies expect to recruit for in 2025 are:

- Developer (programming), including system engineering (13)
- Digital marketing, including social media, SEO, CRO, PPC (9)
- Sales and business development (9)
- Project Management (9)
- Artificial Intelligence (AI) and machine learning (8)
- Design (8)
- Account management (7)
- Product Management (6)
- User Experience (UX) research and design (5)
- IT and infrastructure (5)
- Business analysis (5)

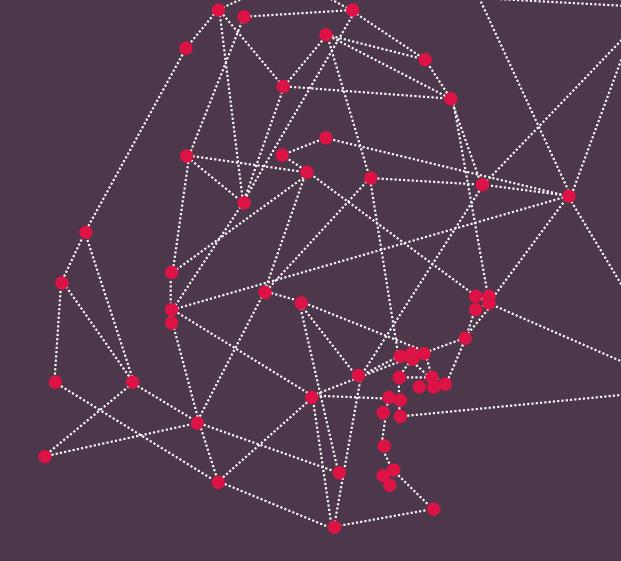


### Sheffield Digital continues to support the tech talent pipeline through a number of initiatives:

- Our <u>mentoring scheme</u> matches people in the early stages of their careers or looking to change careers with experienced digital industry professionals. Since 2021, this scheme has brokered 78 successful mentorship pairings.
- We work closely with the digital ecosystem, our two universities and The Sheffield College to help foster relationships between industry and education.
- We produce <u>short videos</u> and <u>podcasts</u> where people talk about their roles and career paths.
- We publish blogs showcasing how digital companies in the region are engaging with education and training providers to raise the profile of the industry and find new talent.

We will be continuing this work in 2025, working closely with digital employers, education and training providers and policy makers as we do so. If you have ideas or resources that you would like to contribute, please get in touch with us via info@sheffield.digital.

Our thanks to everyone who participated in this audit or who helped to share it through the region, and to Sheffield Hallam University for the use of their survey platform.



# sheffield digital

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