CompTIA

State of the Tech Workforce UK

2023

Nations | Regions | Metro Area

Tech Hiring Trends | Wages | Workforce Characteristics

CompTIA.org

STATE OF THE TECH WORKFORCE UK
IS PRODUCED BY
The Computing Technology Industry Association (CompTIA)

ABOUT

ABOUT COMPTIA

The Computing Technology Industry Association (CompTIA) is the world's leading information technology (IT) certification and training body. CompTIA is a mission-driven organization committed to unlocking the potential of every student, career changer or professional seeking to begin or advance in a technology career. Each year CompTIA, directly and through its global network of partners, provides millions of learners the tools and confidence to succeed.

CompTIA's base of certified information technology professionals spans 232 countries worldwide.

CompTIA sets the standard for preparing entry-level candidates through expert-level professionals to succeed at all stages of their career in technology. Through CompTIA's philanthropic arm, CompTIA Spark develops innovative on-ramps and career pathways to expand opportunities to populations that traditionally have been under-represented in the information technology workforce.

          CompTIA Technology Career Pathway Roadmap
          CompTIA Certifications Job Match
          CompTIA Training and Learning
          CompTIA Tech Career Academy
          CompTIA IT Salary Calculator
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          CompTIA Academy and Delivery Partner Program

ABOUT COMPTIA'S UK & IRELAND COMMUNITY

The CompTIA UK & Ireland Community brings together technology business professionals from across the UK and Ireland to discuss both regional opportunities and global trends. The community offers industry leaders the opportunity to gain valuable insight, share best practices, and collaborate to grow their businesses and showcase how technology and technology companies solve business challenges.

          CompTIA UK & Ireland Community

ABOUT THE STATE OF THE TECH WORKFORCE UK

CompTIA's State of the Tech Workforce UK provides an in-depth look at employment, economic impact, technology trends, salaries, hiring activity, and more across the regions and metropolitan areas of the United Kingdom. The report draws upon many data sources, including EMSI Burning Glass, UK Office for National Statistics (ONS), Eurostat, OECD, CompTIA and more.

National reporting	Metropolitan Area reporting		
England	Birmingham	Newcastle	Belfast
Northern Ireland	Bristol	Nottingham	Edinburgh
Scotland	Leeds	Manchester	Glasgow
Wales	London	Sheffield	Cardiff
	Liverpool		

As with any sector-level report, there are varying interpretations of what constitutes the tech sector and the tech workforce. Some of this variance may be attributed to the objectives of the author. Is the goal to depict the broadest possible representation of STEM and digital economy fields, or a more narrowly defined technology subset? Is the goal to capture all possible knowledge workers, or a more narrowly defined technology subset? CompTIA weighs a number of factors in making these decisions. See the methodology section for details of the specific NAICS codes and SOC codes CompTIA uses in its definitions.
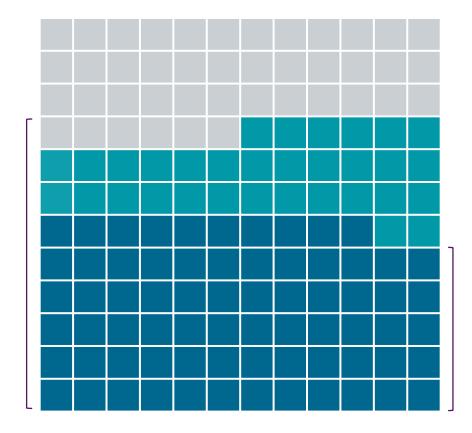
DEFINING NET TECH EMPLOYMENT

The tech workforce consists of two primary components, represented as a single figure by the 'net tech-employment' designation. The foundation is the set of technology professionals working in technical positions, such as IT support, network engineering, software development, data science, and related roles. Many of these professionals work for technology companies (51%), but many others are employed by organisations across every industry sector in the U.K. economy (49%).

The second component consists of the business professionals employed by technology companies. These professionals – encompassing sales, marketing, finance, HR, operations and management, play an important role in supporting the development and delivery of the technology products and services used throughout the economy. Thirty-one percent of the net tech-employment total consists of tech-industry business professionals.

One final segment involves workers classified as self-employed. For the purposes of this report, only dedicated, full-time self-employed technology workers are counted towards net-tech employment. Workers that are characterised as "gig" workers, which may entail working on the side for supplementary income, are excluded from this analysis due to several uncertainties with the data and to minimize the possibility of double counting.

N = Technology professionals employed across the economy, including in the tech sector
(e.g. software developers, network architects, database admins, etc.)

N = Tech sector employment, less technology professionals
(e.g. sales, marketing, finance, HR, etc.)

2.0 million
workers in total
2022 estimate

69%
% of NET tech employment is in technology occupations
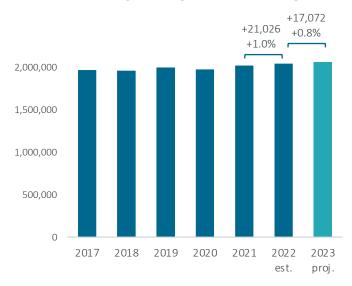

= 20,000 workers

Source: Lightcast | CompTIA
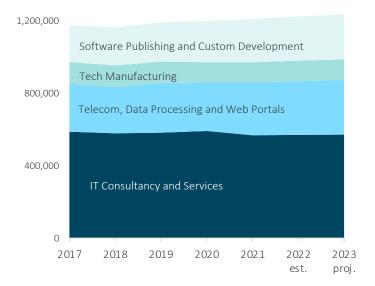Some numeric changes affected by rounding

KEY FINDINGS

KEY POINTS

→ Net tech employment in the United Kingdom – as described on the previous page, reached an estimated 2,043,622 workers in 2022, a 1% increase over the previous year. Net tech employment is projected to increase by almost 1% in 2023.

→ Since 2017, net tech employment increased by an estimated 75,280 net-new jobs. Net tech employment saw a slight decline between 2019 and 2020 but has shown growth since then.

→ Net tech employment accounted for approximately 6.3% of the overall U.K. workforce in 2022. Because of the blurring of lines across industries, there is likely a degree of undercounting in tech sector employment as a percentage of U.K. employment.

→ Among the components of net tech employment, the tech sector side of the equation grew at 1.1% year over year, while the occupation side across all industry sectors experienced a gain of 1.0% year over year. Looking ahead, tech sector and tech occupation gains are projected to be 0.9% and 0.8% respectively.

→ The software and custom development sector has seen continuous gains over the 5 year period 2017-2022. Largest tech industry contributor to job gains, 2017-2022:

　　→ Software and Custom Development: +39,355

→ Largest tech occupation contributors to job gains, 2017-2022:

　　→ Programmers and Software Development: +15,444
　　→ IT Specialist Managers: +8,491
　　→ IT Operations Technicians: +5,526
　　→ IT Technology and Telecommunications Professionals: +4,588
　　→ IT Technology and Telecommunications Directors: +4,370

→ On a percent change basis, the occupation category covering programmers and software development professionals grew by +5.3%, the largest increase among tech occupations during 2017-2022. IT Support or Operations Technicians increased by 4.1%, IT Project Managers increased by 3.4%, and IT Analysts and Cybersecurity and systems increased by 2.8%.

NET TECH EMPLOYMENT TRENDING

TECH INDUSTRY EMPLOYMENT TRENDING

ECONOMIC IMPACT OF TECH INDUSTRY

5.5%

Estimated direct contribution of the UK tech industry to the UK economy: £82.6 billion
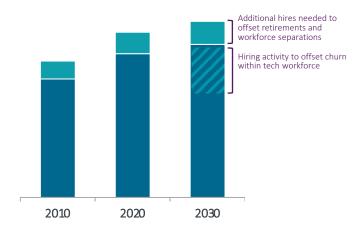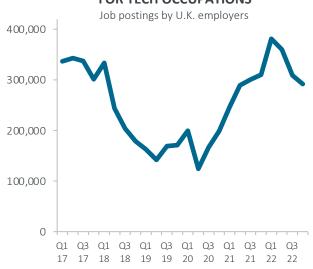
KEY FINDINGS

KEY POINTS

→ By 2030, projections from EMSI Burning Glass put the base of tech occupation employment at approximately 1.41 million (note: this covers occupations only and represents a subset of the net tech employment figure presented previously).

→ Calculating future workforce needs over the next decade is a function of several variables. First, there is a growth component, which may entail organisations adding headcount due to expansion or possibly to support new emerging technologies.

→ Secondly, there is a retirement factor, with a portion of the workforce transitioning away from the workforce permanently. And lastly, there is a segment leaving the workforce for some other reason, also referred to as separations. These may stem from a career change, a return to school, family pursuits, or other. Changes to any of these variables can boost or shrink future workforce projections.

→ Job posting data provides another layer of insight into the tech job market outlook. Because government labour taxonomies – Standard Occupation Codes (SOCs), lag the speed with which the market changes, job posting data provides a more up-to-date look at the skills and experiences employers seek.

→ Overall quarterly tech job postings among U.K. employers dipped during 2020 due to the pandemic slowdown. Postings rebounded in Q1 2021. Job postings have seen in a decline in the last two quarters of 2022. Note: job postings should not be interpreted as unfilled jobs and there is not a 1:1 relationship between postings and actual hires made.

→ Nationally, women represent approximately 49% of the U.K. workforce and 17% of tech occupations. This gap signals underrepresentation in the tech workforce. In the United States, women represent 26% of tech occupations.

TECH OCCUPATION EMPLOYMENT OUTLOOK

Workforce need = annual replacement rate + growth rate

Additional hires needed to offset retirements and workforce separations

Hiring activity to offset churn within tech workforce

AGGREGATE QUARTERLY JOB POSTINGS FOR TECH OCCUPATIONS

Job postings by U.K. employers

TECH WORKFORCE CHARACTERISTICS

	Representation	Numeric Count
% and count of women working in tech occupations	17%	241,552
% and count of women working in all occupations	49%	15.9 Million

KEY FINDINGS

METRO AREA NET TECH EMPLOYMENT

→ The top four metropolitan areas employ a little more than 662,350 tech industry and tech occupation workers, or about 1 in 3 tech workers in the nation.

→ London is the largest metropolitan area in the country by a wide margin. It follows that it also has the largest base of tech employment.

→ The London and Birmingham areas saw the highest increases in net tech employment year over year.

METRO AREA EMPLOYMENT CONCENTRATION

→ Employment concentration provides a measure of tech employment relative to employment across all the other industry sectors in a local economy. Along with economic impact as a percentage of a local economy, these metrics help to put tech into context.

→ At more than 8%, London, Leeds, and Edinburgh have the highest concentration of net tech employment as a percentage of their overall employment bases.

→ Compared to the national tech employment concentration benchmark of 6.3%, seven metro areas had the same or higher rate, confirming the importance of technology to a far-reaching set of cities across the U.K.

METRO AREA TECH BUSINESS ESTABLISHMENTS

→ A large, dynamic base of business establishments, also referred to as company locations, is another measure of a healthy tech sector. Tech business establishments tend to be concentrated in population centers and in locations that are close to the customers they serve.

> → London 44,883
> → Manchester 6,391
> → Bristol 3,860
> → Birmingham 3,134

METRO AREA MEDIAN TECH INDUSTRY WAGES

→ Tech jobs continue to command a premium with a median wage 55% higher than the prevailing median wage across the UK labor market.

→ Not surprisingly median tech wages are highest in the London metropolitan area. Rank order of top five metro areas by median tech wage:

1. London
2. Edinburgh
3. Bristol
4. Glasgow
5. Leeds

TOP METROS BY NET TECH EMPLOYMENT

#	Metro	Value
1.	London	451,380
2.	Manchester	81,476
3.	Birmingham	46,235
4.	Bristol	42,241
5.	Leeds	41,023
6.	Glasgow	37,671
7.	Edinburgh	35,916
8.	Nottingham	33,143
9.	Sheffield	31,660
10.	Newcastle	30,678

TOP METROS BY NET TECH EMPLOYMENT JOB GAINS

#	Metro	Value
1.	London	+4,383
2.	Birmingham	+1,424
3.	Manchester	+816
4.	Leeds	+784
5.	Nottingham	+625
6.	Belfast	+504
7.	Bristol	+419
8.	Glasgow	+419
9.	Edinburgh	+378
10.	Sheffield	+338

TOP METROS BY NET TECH EMPLOYMENT AS A PERCENT OF LOCAL EMPLOYMENT

#	Metro	Value
1.	London	9.0%
2.	Leeds	8.5%
3.	Edinburgh	8.2%
4.	Birmingham	6.7%
5.	Bristol	6.4%
6.	Glasgow	6.3%
7.	Nottingham	6.3%
8.	Belfast	6.2%
9.	Newcastle	5.7%
10.	Manchester	5.7%

Source: Lightcast | UK ONS | CompTIA

UNITED KINGDOM SNAPSHOT

United Kingdom

STATE OF TECHNOLOGY SUMMARY

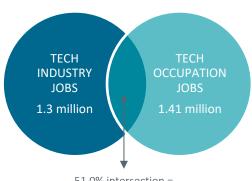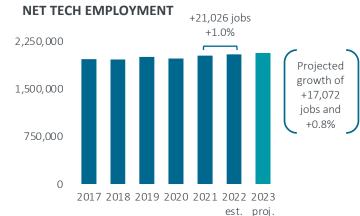|	
2,043,622	NET TECH EMPLOYMENT[1]
6.3%	NET EMPLOYMENT AS A % OF OVERALL WORKFORCE
188,874	TECH BUSINESS ESTABLISHMENTS [firms with payroll]
£82.6b	ECONOMIC IMPACT
1,342,707	EMPLOYER JOB POSTINGS [2022 total for tech occupations]
14%	EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

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TECH INDUSTRY JOBS 1.3 million

TECH OCCUPATION JOBS 1.41 million

51.0% intersection =
2.04 million NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+21,026 jobs
+1.0%

Projected growth of +17,072 jobs and +0.8%

2017 2018 2019 2020 2021 2022 est. 2023 proj.

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

Quarterly tech job posting trending[2]

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

	2022	2023 % Change[4]
Software Development and Web Design	364,563	+0.9%
IT Analysts, Cybersecurity[3] and Systems	309,140	+0.8%
IT Support and Operations Technicians	227,435	+0.7%
Network and Telecommunications Engineers	104,507	+0.7%
IT Project Managers	87,312	+0.7%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	570,563	+0.3%
Telecom, Data Processing, Web Portals	296,608	+1.4%
Software and Custom Development	244,342	+1.9%
Tech Manufacturing	113,773	+1.0%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

Estimated median tech wage £42,201, 55% higher than median national wage[5]

10th 25th 50th 75th 90th

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

NATIONAL SNAPSHOTS

England

STATE OF TECHNOLOGY SUMMARY

1,810,010	NET TECH EMPLOYMENT[1]
6.6%	NET EMPLOYMENT AS A % OF OVERALL WORKFORCE
173,643	TECH BUSINESS ESTABLISHMENTS [firms with payroll]
833,355	EMPLOYER JOB POSTINGS [2022 total for tech occupations]
114,819	EMERGING TECH JOB POSTINGS [job roles + skills]
14%	EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

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TECH INDUSTRY JOBS **1.15 million**

TECH OCCUPATION JOBS **1.25 million**

51.3% intersection =
1.81 million NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+18,429 jobs
+1.0%

Projected growth of +15,001 jobs and +0.8%

(Bar chart: 2017, 2018, 2019, 2020, 2021, 2022 est., 2023 proj.)

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

Quarterly tech job posting trending[2]

(Line chart x-axis: Q1 17, Q2 17, Q3 17, Q4 17, Q1 18, Q2 18, Q3 18, Q4 18, Q1 19, Q2 19, Q3 19, Q4 19, Q1 20, Q2 20, Q3 20, Q4 20, Q1 21, Q2 21, Q3 21, Q4 21, Q1 22, Q2 22, Q3 22, Q4 22)

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

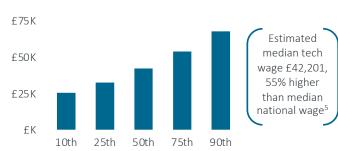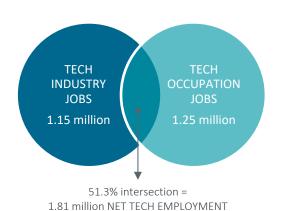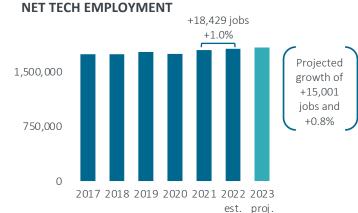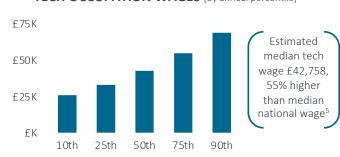|	2022	2023 % Change[4]
Software Development and Web Design	323,094	+0.9%
IT Analysts, Cybersecurity[3] and Systems	274,050	+0.8%
IT Support and Operations Technicians	196,849	+0.7%
Network and Telecommunications Engineers	91,818	+0.7%
IT Project Managers	76,772	+0.7%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	519,426	+0.4%
Telecom, Data Processing, Web Portals	258,095	+1.4%
Software and Custom Development	220,916	+1.9%
Tech Manufacturing	90,622	+0.8%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

(Bar chart: 10th, 25th, 50th, 75th, 90th)

Estimated median tech wage £42,758, 55% higher than median national wage[5]

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

Wales

STATE OF TECHNOLOGY SUMMARY

54,102	NET TECH EMPLOYMENT[1]
4.0%	NET EMPLOYMENT AS A % OF OVERALL WORKFORCE
3,993	TECH BUSINESS ESTABLISHMENTS [firms with payroll]
18,991	EMPLOYER JOB POSTINGS [2022 total for tech occupations]
2,551	EMERGING TECH JOB POSTINGS [job roles + skills]
13%	EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

[Venn diagram]

TECH INDUSTRY JOBS
30,912

TECH OCCUPATION JOBS
36,313

42.5% intersection =
54,102 NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+310 jobs
+0.6%

Projected growth of +253 jobs and +0.5%

[Bar chart showing Net Tech Employment from 2017 to 2023 proj., with values ranging near 50,000-75,000; y-axis marked 0, 25,000, 50,000, 75,000; x-axis labels: 2017, 2018, 2019, 2020, 2021, 2022 est., 2023 proj.]

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

[Line chart, y-axis: 0, 2,000, 4,000, 6,000; x-axis: Q1 17, Q2 17, Q3 17, Q4 17, Q1 18, Q2 18, Q3 18, Q4 18, Q1 19, Q2 19, Q3 19, Q4 19, Q1 20, Q2 20, Q3 20, Q4 20, Q1 21, Q2 21, Q3 21, Q4 21, Q1 22, Q2 22, Q3 22, Q4 22]

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

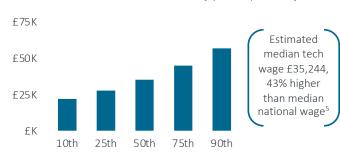|	2022	2023 % Change[4]
Software Development and Web Design	9,165	+0.6%
IT Analysts, Cybersecurity[3] and Systems	7,946	+0.3%
IT Support or Operations Technicians	6,993	+0.5%
Network or Telecommunications Engineers	3,133	-0.5%
IT Project Managers	2,328	+0.3%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	9,618	-3.8%
Telecom, Data Processing, Web Portals	8,978	+1.4%
Software and Custom Development	3,562	-2.5%
Tech Manufacturing	8,034	+2.3%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

[Bar chart, y-axis: £K, £25K, £50K, £75K; x-axis: 10th, 25th, 50th, 75th, 90th]

Estimated median tech wage £35,244, 43% higher than median national wage[5]

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

Scotland

STATE OF TECHNOLOGY SUMMARY

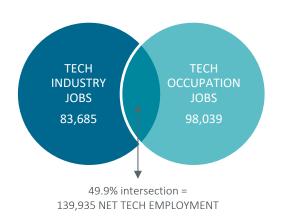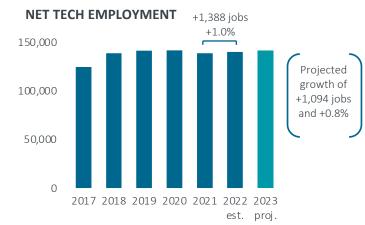|	
139,935	NET TECH EMPLOYMENT[1]
5.4%	NET EMPLOYMENT AS A % OF OVERALL WORKFORCE
9,131	TECH BUSINESS ESTABLISHMENTS [firms with payroll]
62,555	EMPLOYER JOB POSTINGS [2022 total for tech occupations]
6,825	EMERGING TECH JOB POSTINGS [job roles + skills]
11%	EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

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TECH INDUSTRY JOBS 83,685

TECH OCCUPATION JOBS 98,039

49.9% intersection =
139,935 NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+1,388 jobs
+1.0%

Projected growth of +1,094 jobs and +0.8%

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

	2022	2023 % Change[4]
Software Development and Web Design	24,243	+0.9%
IT Analysts, Cybersecurity[3] and Systems	21,450	+0.6%
IT Support and Operations Technicians	19,707	+0.5%
Network and Telecommunications Engineers	7,842	+0.7%
IT Project Managers	5,652	+0.5%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	32,601	+0.2%
Telecom, Data Processing, Web Portals	24,648	+0.9%
Software and Custom Development	11,823	+2.7%
Tech Manufacturing	11,013	+0.6%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

Estimated median tech wage £39,937, 49% higher than median national wage[5]

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

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Northern Ireland

STATE OF TECHNOLOGY SUMMARY

39,617   NET TECH EMPLOYMENT[1]

4.0%   NET EMPLOYMENT AS A % OF OVERALL WORKFORCE

2,107   TECH BUSINESS ESTABLISHMENTS [firms with payroll]

19,552   EMPLOYER JOB POSTINGS [2022 total for tech occupations]

2,495   EMERGING TECH JOB POSTINGS [job roles + skills]

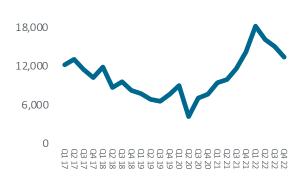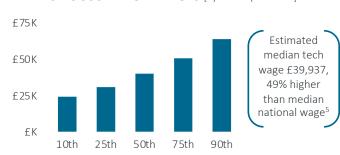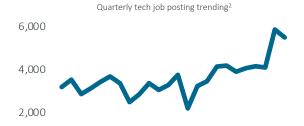13%   EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

Created with mapchart.net

TECH INDUSTRY JOBS
26,719

TECH OCCUPATION JOBS
26,859

52.3% intersection = 39,617 NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+901 jobs +2.3%

Projected growth of +733 jobs and +1.9%

2017   2018   2019   2020   2021   2022 est.   2023 proj.

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

Quarterly tech job posting trending[2]

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

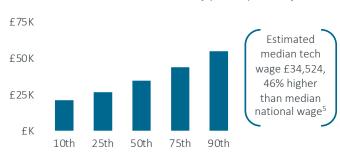|	2022	2023 % Change[4]
Software Development and Web Design	8,062	+1.3%
IT Analysts, Cybersecurity[3] and Systems	5,693	+1.5%
IT Support and Operations Technicians	3,886	+1.5%
IT Project Managers	2,561	+1.6%
Network and Telecommunications Engineers	1,713	+1.5%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	8,918	+3.5%
Telecom, Data Processing, Web Portals	4,886	+2.5%
Software and Custom Development	8,041	+0.6%
Tech Manufacturing	4,102	+2.9%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

Estimated median tech wage £34,524, 46% higher than median national wage[5]

10th   25th   50th   75th   90th

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

METRO AREA SNAPSHOTS

Belfast

STATE OF TECHNOLOGY SUMMARY

26,069 NET TECH EMPLOYMENT[1]

6.2% NET EMPLOYMENT AS A % OF OVERALL WORKFORCE

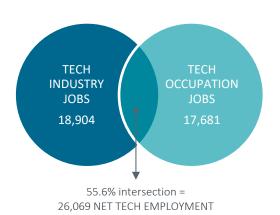1,305 TECH BUSINESS ESTABLISHMENTS [firms with payroll]

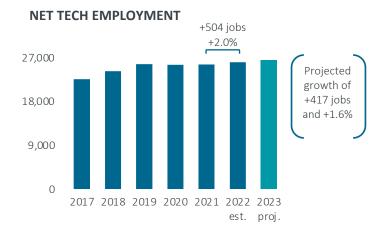17,619 EMPLOYER JOB POSTINGS [2022 total for tech occupations]

2,251 EMERGING TECH JOB POSTINGS [job roles + skills]

13% EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

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Venn Diagram

TECH INDUSTRY JOBS
18,904

TECH OCCUPATION JOBS
17,681

55.6% intersection =
26,069 NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+504 jobs +2.0%

Projected growth of +417 jobs and +1.6%

2017 2018 2019 2020 2021 2022 est. 2023 proj.

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

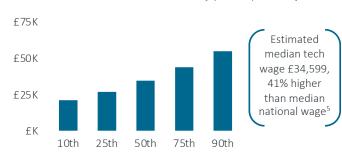|	2022	2023 % Change[4]
Software Development and Web Design	5,714	+1.1%
IT Analysts, Cybersecurity[3] and Systems	3,784	+1.4%
IT Support and Operations Technicians	2,345	+1.4%
IT Project Managers	1,770	+1.6%
Network and Telecommunications Engineers	983	+1.7%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	6,944	+3.7%
Telecom, Data Processing, Web Portals	3,253	+2.7%
Software and Custom Development	6,249	-0.1%
Tech Manufacturing	1,964	+1.3%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

Estimated median tech wage £34,599, 41% higher than median national wage[5]

10th 25th 50th 75th 90th

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

Birmingham

STATE OF TECHNOLOGY SUMMARY

46,235   NET TECH EMPLOYMENT[1]

6.7%   NET EMPLOYMENT AS A % OF OVERALL WORKFORCE

3,134   TECH BUSINESS ESTABLISHMENTS [firms with payroll]
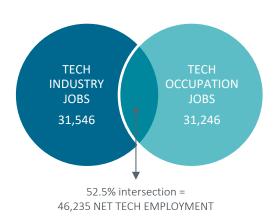
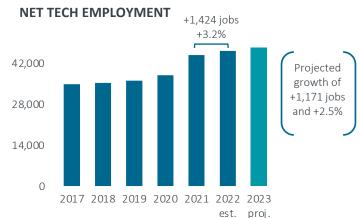33,687   EMPLOYER JOB POSTINGS [2022 total for tech occupations]

3,230   EMERGING TECH JOB POSTINGS [job roles + skills]
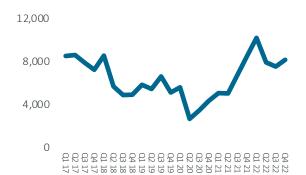
10%   EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

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TECH INDUSTRY JOBS
31,546

TECH OCCUPATION JOBS
31,246

52.5% intersection =
46,235 NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+1,424 jobs
+3.2%

Projected growth of +1,171 jobs and +2.5%

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

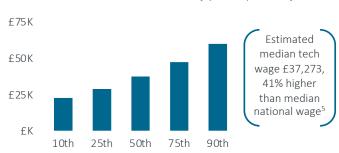|	2022	2023 % Change[4]
Software Development and Web Design	7,452	+1.9%
IT Analysts, Cybersecurity[3] and Systems	6,957	+1.3%
IT Support and Operations Technicians	5,707	+1.9%
Network and Telecommunications Engineers	2,825	+2.3%
IT Project Managers	1,478	+1.4%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	13,234	+2.9%
Telecom, Data Processing, Web Portals	7,101	+4.4%
Software and Custom Development	6,939	+4.0%
Tech Manufacturing	1,195	+6.2%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

Estimated median tech wage £37,273, 41% higher than median national wage[5]

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

CompTIA.

Bristol

STATE OF TECHNOLOGY SUMMARY

42,241 NET TECH EMPLOYMENT[1]

6.4% NET EMPLOYMENT AS A % OF OVERALL WORKFORCE

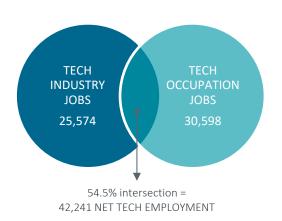3,860 TECH BUSINESS ESTABLISHMENTS [firms with payroll]

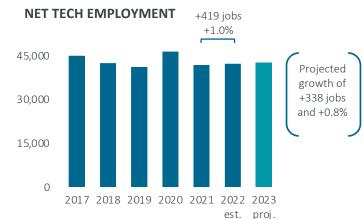41,514 EMPLOYER JOB POSTINGS [2022 total for tech occupations]

4,555 EMERGING TECH JOB POSTINGS [job roles + skills]
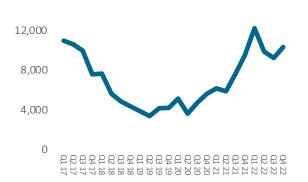
11% EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

NET TECH EMPLOYMENT

TECH INDUSTRY JOBS 25,574

TECH OCCUPATION JOBS 30,598

54.5% intersection = 42,241 NET TECH EMPLOYMENT

+419 jobs
+1.0%

Projected growth of +338 jobs and +0.8%

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

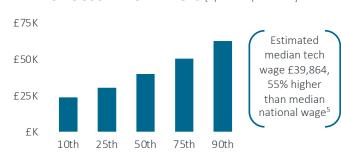|	2022	2023 % Change[4]
Software Development and Web Design	8,273	+1.0%
IT Analysts, Cybersecurity[3] and Systems	5,921	+0.9%
IT Support and Operations Technicians	4,764	+0.5%
Network and Telecommunications Engineers	2,665	+0.6%
IT Project Managers	1,864	+0.6%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	10,529	-0.1%
Telecom, Data Processing, Web Portals	7,506	+2.0%
Software and Custom Development	5,283	+1.5%
Tech Manufacturing	1,778	+0.7%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

Estimated median tech wage £39,864, 55% higher than median national wage[5]

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

Cardiff

STATE OF TECHNOLOGY SUMMARY

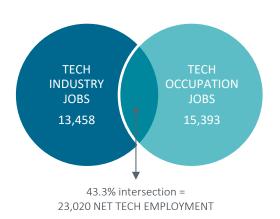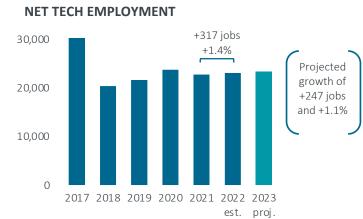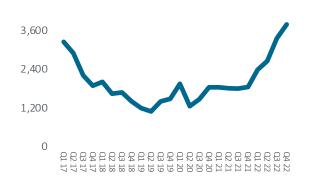|	
23,020	NET TECH EMPLOYMENT[1]
4.8%	NET EMPLOYMENT AS A % OF OVERALL WORKFORCE
1,553	TECH BUSINESS ESTABLISHMENTS [firms with payroll]
12,141	EMPLOYER JOB POSTINGS [2022 total for tech occupations]
1,444	EMERGING TECH JOB POSTINGS [job roles + skills]
12%	EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

TECH INDUSTRY JOBS
13,458

TECH OCCUPATION JOBS
15,393

43.3% intersection =
23,020 NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+317 jobs
+1.4%

Projected growth of +247 jobs and +1.1%

2017 2018 2019 2020 2021 2022 est. 2023 proj.

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

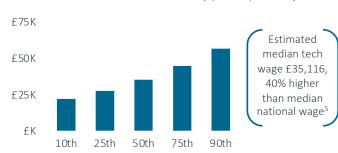|	2022	2023 % Change[4]
Software Development and Web Design	3,988	+1.2%
IT Analysts, Cybersecurity[3] and Systems	3,417	+1.1%
IT Support and Operations Technicians	2,970	+0.8%
Network and Telecommunications Engineers	1,323	0.0%
IT Project Managers	1,064	+1.1%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	3,967	-2.8%
Telecom, Data Processing, Web Portals	4,562	+3.0%
Software and Custom Development	1,838	-1.2%
Tech Manufacturing	2,969	+2.2%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

Estimated median tech wage £35,116, 40% higher than median national wage[5]

10th 25th 50th 75th 90th

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

CompTIA.

Edinburgh

STATE OF TECHNOLOGY SUMMARY

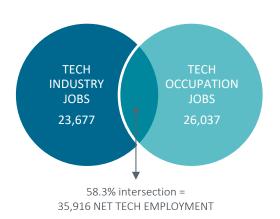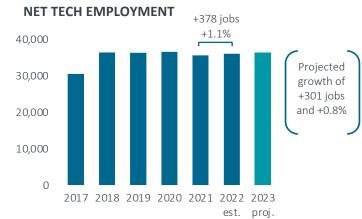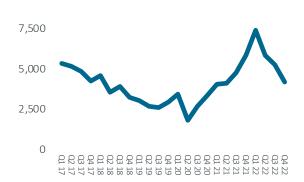|	
35,916	NET TECH EMPLOYMENT[1]
8.2%	NET EMPLOYMENT AS A % OF OVERALL WORKFORCE
2,407	TECH BUSINESS ESTABLISHMENTS [firms with payroll]
22,618	EMPLOYER JOB POSTINGS [2022 total for tech occupations]
3,003	EMERGING TECH JOB POSTINGS [job roles + skills]
13%	EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

NET TECH EMPLOYMENT

TECH INDUSTRY JOBS 23,677

TECH OCCUPATION JOBS 26,037

58.3% intersection = 35,916 NET TECH EMPLOYMENT

+378 jobs +1.1%

Projected growth of +301 jobs and +0.8%

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

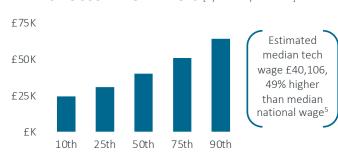|	2022	2023 % Change[4]
Software Development and Web Design	7,677	+1.1%
IT Analysts, Cybersecurity[3] and Systems	5,861	+0.6%
IT Support and Operations Technicians	5,005	+0.8%
IT Project Managers	1,733	+0.6%
Network and Telecommunications Engineers	1,303	+0.5%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	10,960	+0.1%
Telecom, Data Processing, Web Portals	3,622	+0.0%
Software and Custom Development	5,379	+2.9%
Tech Manufacturing	3,238	+1.2%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

Estimated median tech wage £40,106, 49% higher than median national wage[5]

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

Glasgow

STATE OF TECHNOLOGY SUMMARY

37,671	NET TECH EMPLOYMENT[1]
6.3%	NET EMPLOYMENT AS A % OF OVERALL WORKFORCE
2,151	TECH BUSINESS ESTABLISHMENTS [firms with payroll]
25,377	EMPLOYER JOB POSTINGS [2022 total for tech occupations]
2,263	EMERGING TECH JOB POSTINGS [job roles + skills]
9%	EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

TECH INDUSTRY JOBS
23,140

TECH OCCUPATION JOBS
26,615

52.2% intersection =
37,671 NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+419 jobs
+1.1%

Projected growth of +323 jobs and +0.9%

2017 2018 2019 2020 2021 2022 est. 2023 proj.

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

	2023	2023 % Change[4]
Software Development and Web Design	6,684	1.3%
IT Analysts, Cybersecurity[3] and Systems	5,851	0.9%
IT Support and Operations Technicians	5,539	0.4%
Network and Telecommunications Engineers	2,070	0.1%
IT Project Managers	1,392	1.0%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	10,659	+0.2%
Telecom, Data Processing, Web Portals	6,896	+1.2%
Software and Custom Development	2,800	+3.5%
Tech Manufacturing	2,042	-0.1%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

Estimated median tech wage £39,650, 47% higher than median national wage[5]

10th 25th 50th 75th 90th

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

Leeds

STATE OF TECHNOLOGY SUMMARY

41,023   NET TECH EMPLOYMENT[1]

8.5%   NET EMPLOYMENT AS A % OF OVERALL WORKFORCE

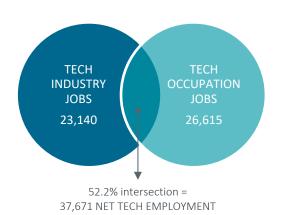2,351   TECH BUSINESS ESTABLISHMENTS [firms with payroll]

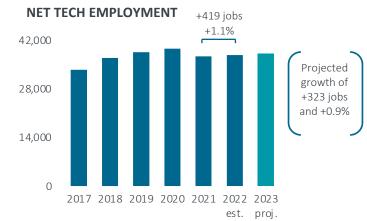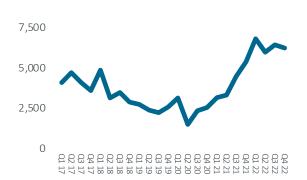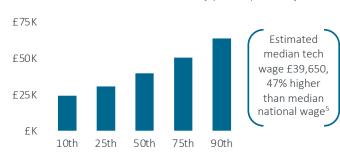31,057   EMPLOYER JOB POSTINGS [2022 total for tech occupations]

2,443   EMERGING TECH JOB POSTINGS [job roles + skills]

8%   EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details
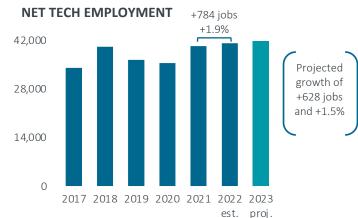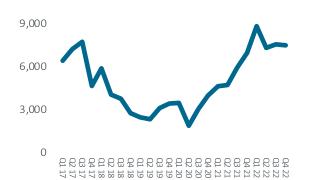

TECH INDUSTRY JOBS
28,712

TECH OCCUPATION JOBS
28,384

56.0% intersection =
41,023 NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+784 jobs
+1.9%

Projected growth of +628 jobs and +1.5%

(bar chart: 2017, 2018, 2019, 2020, 2021, 2022 est., 2023 proj.; y-axis 0 to 42,000)

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

(line chart: y-axis 0 to 9,000; x-axis Q1 17 through Q4 22)

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

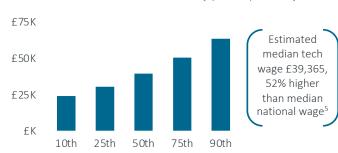|	2022	2023 % Change[4]
Software Development and Web Design	7,715	+1.2%
IT Analysts, Cybersecurity[3] and Systems	6,602	+1.5%
IT Support and Operations Technicians	4,251	+1.1%
Network and Telecommunications Engineers	1,993	+0.9%
IT Project Managers	1,603	+1.4%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	13,937	+2.5%
Telecom, Data Processing, Web Portals	6,921	+1.9%
Software and Custom Development	5,755	+2.8%
Tech Manufacturing	366	-2.7%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

(bar chart: percentiles 10th, 25th, 50th, 75th, 90th; y-axis £K to £75K)

Estimated median tech wage £39,365, 52% higher than median national wage[5]

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

Liverpool

STATE OF TECHNOLOGY SUMMARY

19,528   NET TECH EMPLOYMENT[1]

4.1%   NET EMPLOYMENT AS A % OF OVERALL WORKFORCE

1,614   TECH BUSINESS ESTABLISHMENTS [firms with payroll]
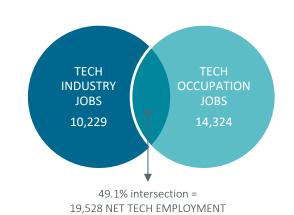
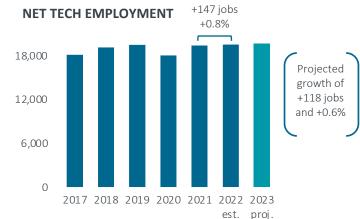14,963   EMPLOYER JOB POSTINGS [2022 total for tech occupations]

1,351   EMERGING TECH JOB POSTINGS [job roles + skills]

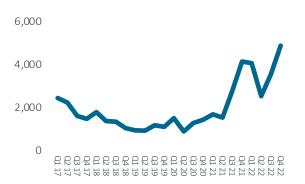9%   EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

TECH INDUSTRY JOBS
10,229

TECH OCCUPATION JOBS
14,324

49.1% intersection =
19,528 NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+147 jobs
+0.8%

Projected growth of +118 jobs and +0.6%

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

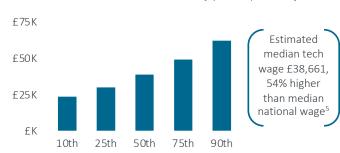|	2022	2023 % Change[4]
Software Development and Web Design	3,667	+1.0%
IT Analysts, Cybersecurity[3] and Systems	2,915	+0.7%
IT Support and Operations Technicians	2,497	+0.8%
Network and Telecommunications Engineers	1,101	+0.6%
IT Project Managers	1,058	+1.9%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	4,137	+1.2%
Telecom, Data Processing, Web Portals	3,258	-1.8%
Software and Custom Development	4,624	-0.1%
Tech Manufacturing	484	0.0%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

Estimated median tech wage £38,661, 54% higher than median national wage[5]

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

London

STATE OF TECHNOLOGY SUMMARY

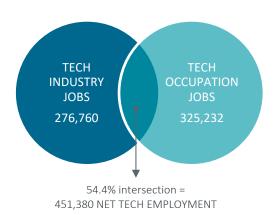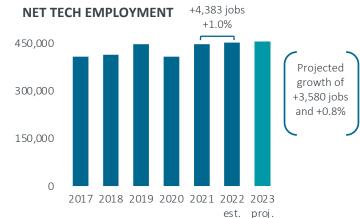|	
451,380	NET TECH EMPLOYMENT[1]
9.0%	NET EMPLOYMENT AS A % OF OVERALL WORKFORCE
44,883	TECH BUSINESS ESTABLISHMENTS [firms with payroll]
28,012	EMPLOYER JOB POSTINGS [2022 total for tech occupations]
3,145	EMERGING TECH JOB POSTINGS [job roles + skills]
11%	EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

Tech Jobs Venn Diagram

TECH INDUSTRY JOBS
276,760

TECH OCCUPATION JOBS
325,232

54.4% intersection =
451,380 NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+4,383 jobs
+1.0%

Projected growth of +3,580 jobs and +0.8%

Bar chart years: 2017, 2018, 2019, 2020, 2021, 2022 est., 2023 proj.

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

Line chart quarters: Q1 17 through Q4 22

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

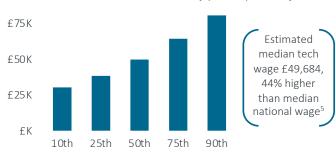|	2022	2023 % Change[4]
Software Development and Web Design	89,470	+0.9%
IT Analysts, Cybersecurity[3] and Systems	78,329	+0.8%
IT Support and Operations Technicians	43,693	+0.9%
IT Project Managers	21,641	+0.8%
Network and Telecommunications Engineers	16,570	+0.8%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	136,173	-0.5%
Telecom, Data Processing, Web Portals	67,802	+1.7%
Software and Custom Development	63,647	+1.6%
Tech Manufacturing	3,986	+0.4%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

Bar chart percentiles: 10th, 25th, 50th, 75th, 90th

Estimated median tech wage £49,684, 44% higher than median national wage[5]

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

Newcastle

STATE OF TECHNOLOGY SUMMARY

30,678   NET TECH EMPLOYMENT[1]

5.7%   NET EMPLOYMENT AS A % OF OVERALL WORKFORCE

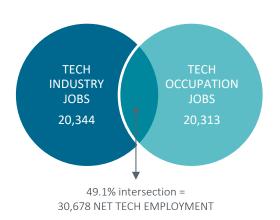1,772   TECH BUSINESS ESTABLISHMENTS [firms with payroll]

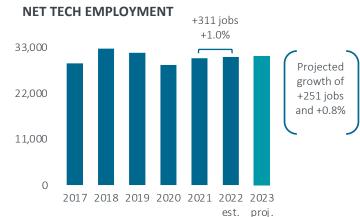11,821   EMPLOYER JOB POSTINGS [2022 total for tech occupations]

1,394   EMERGING TECH JOB POSTINGS [job roles + skills]

12%   EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

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TECH INDUSTRY JOBS / TECH OCCUPATION JOBS

TECH INDUSTRY JOBS **20,344**

TECH OCCUPATION JOBS **20,313**

49.1% intersection =
30,678 NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+311 jobs
+1.0%

Projected growth of +251 jobs and +0.8%

2017   2018   2019   2020   2021   2022 est.   2023 proj.

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

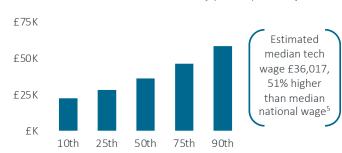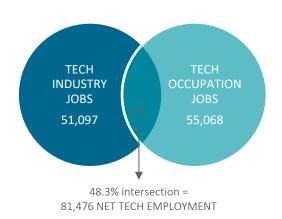|	2022	2023 % Change[4]
Software Development and Web Design	5,091	+0.9%
IT Analysts, Cybersecurity[3] and Systems	4,329	+1.3%
IT Support and Operations Technicians	4,212	+1.3%
Network and Telecommunications Engineers	1,304	+1.0%
IT Project Managers	1,179	+0.8%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	9,313	+1.7%
Telecom, Data Processing, Web Portals	6,689	-0.8%
Software and Custom Development	2,507	-0.6%
Tech Manufacturing	1,614	+2.2%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

£75K
£50K
£25K
£K

10th   25th   50th   75th   90th

Estimated median tech wage £36,017, 51% higher than median national wage[5]

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

Manchester

STATE OF TECHNOLOGY SUMMARY

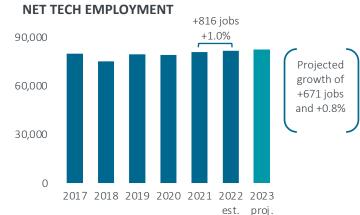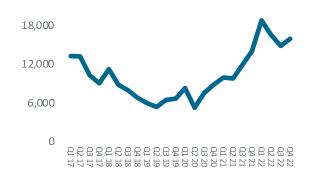|	
81,476	NET TECH EMPLOYMENT[1]
5.7%	NET EMPLOYMENT AS A % OF OVERALL WORKFORCE
6,391	TECH BUSINESS ESTABLISHMENTS [firms with payroll]
65,855	EMPLOYER JOB POSTINGS [2022 total for tech occupations]
6,891	EMERGING TECH JOB POSTINGS [job roles + skills]
10%	EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

NET TECH EMPLOYMENT

+816 jobs
+1.0%

Projected growth of +671 jobs and +0.8%

48.3% intersection = 81,476 NET TECH EMPLOYMENT

TECH INDUSTRY JOBS 51,097

TECH OCCUPATION JOBS 55,068

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

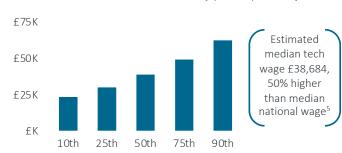|	2022	2023 % Change[4]
Software Development and Web Design	13,622	+1.0%
IT Analysts, Cybersecurity[3] and Systems	11,547	+0.9%
IT Support and Operations Technicians	9,371	+0.9%
Network and Telecommunications Engineers	4,695	+1.1%
IT Project Managers	3,481	+1.0%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	21,631	+1.5%
Telecom, Data Processing, Web Portals	14,154	+1.0%
Software and Custom Development	8,152	+1.6%
Tech Manufacturing	4,135	-1.4%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

Estimated median tech wage £38,684, 50% higher than median national wage[5]

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

Nottingham

STATE OF TECHNOLOGY SUMMARY

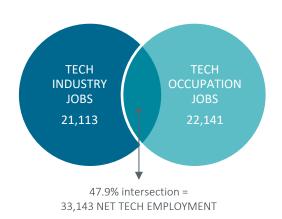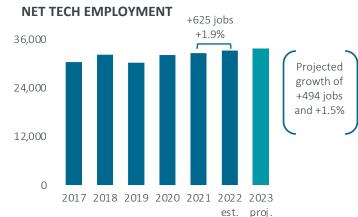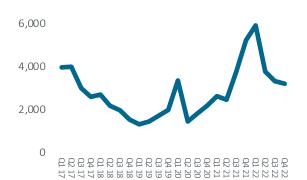|	
33,143	NET TECH EMPLOYMENT[1]
6.3%	NET EMPLOYMENT AS A % OF OVERALL WORKFORCE
2,136	TECH BUSINESS ESTABLISHMENTS [firms with payroll]
16,143	EMPLOYER JOB POSTINGS [2022 total for tech occupations]
1,435	EMERGING TECH JOB POSTINGS [job roles + skills]
9%	EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details

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[Venn diagram]

TECH INDUSTRY JOBS
21,113

TECH OCCUPATION JOBS
22,141

47.9% intersection =
33,143 NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+625 jobs
+1.9%

2017 2018 2019 2020 2021 2022 est. 2023 proj.

Projected growth of +494 jobs and +1.5%

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

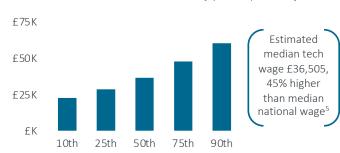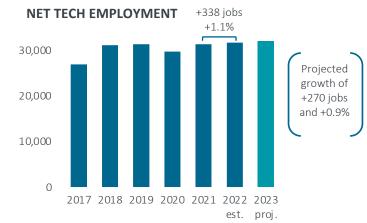|	2022	2023 % Change[4]
Software Development and Web Design	5,332	+1.8%
IT Support and Operations Technicians	4,371	+0.9%
IT Analysts, Cybersecurity[3] and Systems	4,175	+1.6%
Network and Telecommunications Engineers	1,895	+1.9%
IT Project Managers	1,548	+1.9%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.

LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	6,177	+0.1%
Telecom, Data Processing, Web Portals	8,987	+2.6%
Software and Custom Development	3,955	+2.9%
Tech Manufacturing	759	+1.7%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

10th 25th 50th 75th 90th

Estimated median tech wage £36,505, 45% higher than median national wage[5]

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

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Sheffield

STATE OF TECHNOLOGY SUMMARY

31,660	NET TECH EMPLOYMENT[1]
5.3%	NET EMPLOYMENT AS A % OF OVERALL WORKFORCE
1,960	TECH BUSINESS ESTABLISHMENTS [firms with payroll]
17,416	EMPLOYER JOB POSTINGS [2022 total for tech occupations]
1,639	EMERGING TECH JOB POSTINGS [job roles + skills]
9%	EMERGING TECH JOB POSTINGS AS A % OF TOTAL

[1]Net of tech industry + tech occupation + self-employed | Sources: CompTIA analysis of Lightcast and UK Office for National Statistics data| Estimates cover 2021-2022 time period or most recently available | See report Methodology for details
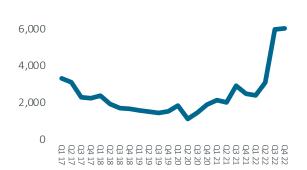

Tech Industry Jobs / Tech Occupation Jobs

TECH INDUSTRY JOBS
18,789

TECH OCCUPATION JOBS
22,714

52.4% intersection =
31,660 NET TECH EMPLOYMENT

NET TECH EMPLOYMENT

+338 jobs
+1.1%

2017 2018 2019 2020 2021 2022 est. 2023 proj.

Projected growth of +270 jobs and +0.9%

EMPLOYER HIRING ACTIVITY VIA JOB POSTINGS

[2]CompTIA analysis of Lightcast employer job posting data | core tech jobs

LEADING TECH OCCUPATIONS

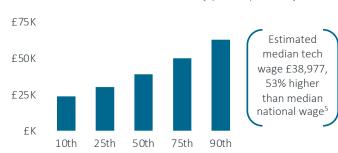|	2022	2023 % Change[4]
Software Development and Web Design	5,290	+1.1%
IT Analysts, Cybersecurity[3] and Systems	5,000	+0.9%
IT Support and Operations Technicians	3,977	+0.6%
Network and Telecommunications Engineers	1,799	+0.6%
IT Project Managers	1,148	+0.7%

[3]Cybersecurity job role does not yet have a dedicated ONS occupation category, but rather spans several categories. For reporting purposes, it is grouped with IT and Systems Analysts.
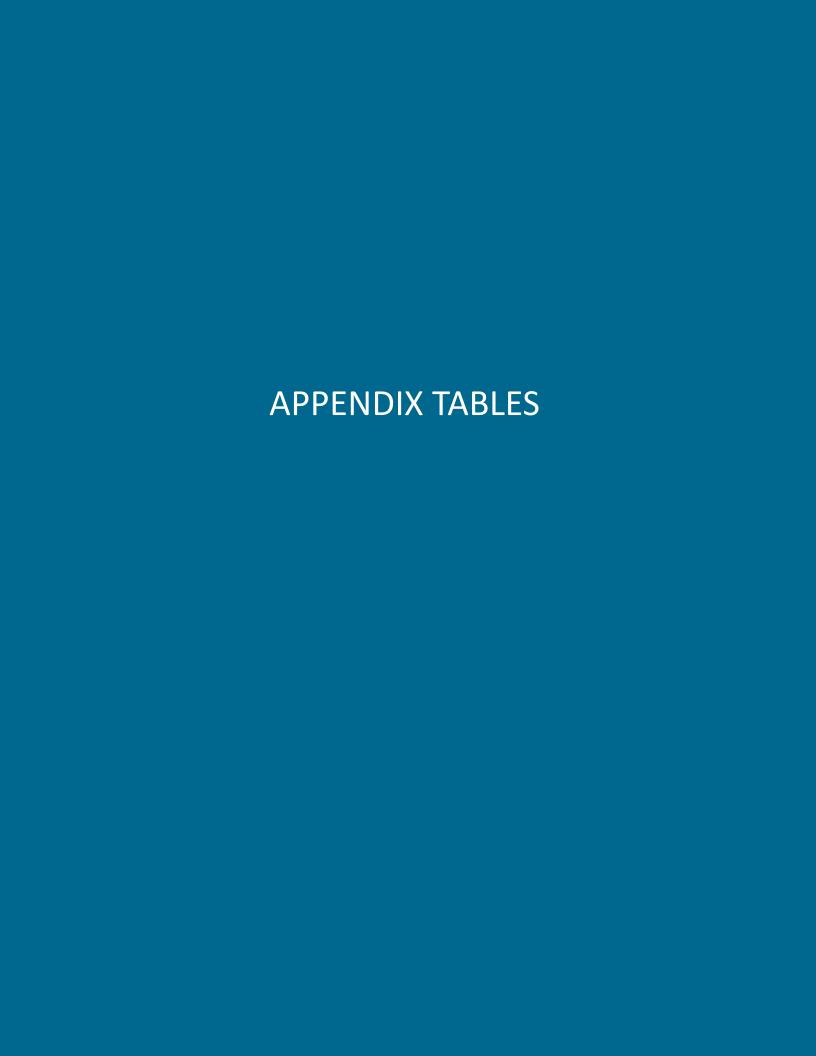
LEADING TECH INDUSTRY SECTORS [by employment]

	2022	2023 % Change[4]
IT Consultancy and Services	7,474	+1.5%
Telecom, Data Processing, Web Portals	6,305	+0.2%
Software and Custom Development	3,374	+3.3%
Tech Manufacturing	795	-2.0%

[4]2023 projection | [5]Wage data subject to revisions and may not be directly comparable to prior years

TECH OCCUPATION WAGES [by annual percentile]

10th 25th 50th 75th 90th

Estimated median tech wage £38,977, 53% higher than median national wage[5]

[5]2021 data due to UK ONS reporting delays | 2022 wage figures unavailable at time of publication

APPENDIX TABLES

	2022 Jobs	2023 Jobs Proj.	Numeric Change 2022-2023	% Change 2022-2023
Information Technology and Telecommunications Directors	95,002	95,857	856	1%
IT Specialist Managers	221,062	222,685	1,624	1%
IT Project and Programme Managers	87,312	87,959	647	1%
IT Business Analysts, Architects and Systems Designers	124,915	125,839	925	1%
Programmers and Software Development Professionals	311,236	314,032	2,795	1%
Web Design and Development Professionals	53,327	53,872	545	1%
Information Technology and Telecommunications Professionals n.e.c.	184,225	185,625	1,400	1%
IT Operations Technicians	113,227	114,029	803	1%
IT User Support Technicians	114,208	115,006	798	1%
Telecommunications Engineers	56,311	56,753	442	1%
IT Engineers	48,196	48,507	311	1%
Total	1,409,020	1,420,165	11,145	1%

Sources: EMSI Burning Glass| CompTIA

CLASSIFICATION SYSTEM

CompTIA's State of the Tech Workforce UK utilises the UK Standard Industrial Classification System (SIC) to define the tech industry. The UK SIC is a five-digit classification assigned to most specific industries. Economic units with similar production processes are classified in the same industry. Because State of the Tech Workforce UK analyses the tech industry by using industry classifications, the report in general focuses on companies and sectors, not individual occupations.

For occupation analysis, CompTIA's State of the Tech Workforce UK utilises Standard Occupational Classification (SOC) System, which is a standard used by government agencies to classify workers into occupational categories.

NET TECH EMPLOYMENT

The tech workforce consists of two primary components. The foundation is the set of technology occupation professionals working in technical positions, such as IT support, network engineering, software development and every related role. Many of these professionals work for technology companies (51%), but many others are employed by organisations across every industry sector in the UK economy (49%).

The second component of the discussion consists of the business professionals employed by technology companies. These professionals play an important role in supporting the development and delivery of the technology products and services used throughout the economy. 31.05% of the net tech employment total consists of tech industry business professionals.

See page 4 of this report for more details on the concept of Net Tech Employment.

TECH INDUSTRY DEFINITION

There are a number of considerations when developing a definition of the technology industry. In some cases, SIC codes do not perfectly reflect industry dynamics. This can be especially challenging in times of rapid innovation, when new tech sectors emerge in a short period of time. More recently, the degree to which technology has become core to so many industry sectors poses new questions. For example, a technology platform designed to facilitate the online sale of goods may have traditionally been viewed as a retailer, although given the intense use of technology, an argument could be made to classify it as a technology firm.

Conceptually, CompTIA's State of the Tech Workforce UK focuses on the sectors involved in making, creating, enabling, integrating, or supporting technology, whether as a product or service. At this time, the report does not include industry sectors categorised primarily as users of technology.

CompTIA's State of the Tech Workforce UK includes 25 SIC codes in its definition of the tech industry. Broadly these can be thought of in two broad categories: tech manufacturing and tech services. These industries sufficiently represent the technology industry within the framework provided under the UK Office for National Statistics industry taxonomies. For more specific details regarding the UK managed services sector, see CompTIA's UK MSP sizing research brief.

TECH OCCUPATION DEFINITION

The occupations covered in this report are broadly categorised into core information technology (IT) positions and then engineering, repair, and technician positions. In total, 11 distinct SOCs are used to define the tech occupations found across every industry sector of the UK economy.

LOCATION CONSIDERATIONS

The UK Office for National Statistics uses several different location classifications, which may include a hierarchy of administrative geographies, electoral regions, census regions, Eurostat NUTS-3 and LAU-2 mapping, postal geographies and more. See UK ONS site for more details. The data sources used in this report may also have unique interpretations of locations to facilitate data aggregation or to allow for more consistency across regions or metro areas.

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