

DIGITAL SKILLS PACK

MARCH 2021

Introduction

This purpose of this document is to:

- (1) Provide Labour Market Intelligence highlighting skills demanded within the digital sector and other industries with a large digital component, and analyse the skills demanded within different digital career 'pathways' within these sectors.
- (2) Contribute evidence to the ongoing process of identifying where gaps in skills provision exist (currently being undertaken as a separate exercise) that, if filled, could see significant benefits for the region.

Geography

The document refers to the West of England region. This is taken to mean the West of England Local Enterprise Partnership area, which is made up of four unitary authorities:

- Bath and North East Somerset
- Bristol
- North Somerset
- South Gloucestershire

Data

The data in this report is derived from EMSI Economic Modelling, a tool that collates economic data from a variety of national datasets, as well as performs web-scraping functions. Where possible, the underlying data-source has been referenced.

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Summary

The report looks at the Digital Sector (businesses in the information and communications industry) and Digital Jobs (jobs primarily requiring digital skills and responsibilities) separately, as defined in their respective sections. It also looks at Digital Pathways, highlighting key skills in different occupational pathways in digital jobs. Some high-level key points from each section are included below.

The Digital Sector

- In 2019, the West of England region had 22,200 jobs in the Digital Sector. This is 7% above the national average.
- The Digital Sector grew at a slower rate in the region than nationally, with 13.8% growth in the region between 2010 and 2019 (in terms of number of jobs) compared to 35.9% at a national level.
- In 2019, the average wage in the digital industry in the West of England was £38.7k, 17.8% lower than the industry national average salary of £46.9k. This is 46% higher than the region's average salary of £26.4k.
- Males made up 75.5% of the workforce in the Digital Sector.

Digital Jobs

- Digital jobs were predominantly held by males, at 83.3% of jobs in 2016.
- The sector with the most individuals working in jobs classed by this methodology as 'Digital jobs' was the Information and communication sector (13,838). Digital jobs make up 49.2% of jobs in this sector. Significant numbers of jobs were seen in other sectors. 10 other sectors had over 1000 digital jobs in the West of England in 2019.

Digital Pathways

Five digital pathways are analysed in this report, all of which require different skillsets, although there is significant cross over between the pathways (see Digital Pathways section).

Eight specific skills are cited as required in more than 10% of digital job postings. These include:

- Agile Methodology
- JavaScript
- Python (Programming Language)
- SQL (Programming Language)
- Software Engineering
- Amazon Web Services
- Software Development (Generic)
- C# (Programming Language)

THE DIGITAL SECTOR MAKE-UP

The formal Digital Sector

This section examines the formally defined ‘Digital Sector’ within the economy. Definition of this sector differs between sources, with some organisations conducting activities that are ambiguous in their definition. This report has been aligned with the EMSI Digital Pathways report, using the same 14 individual industries within the Government’s 4-digit Standard Industry Classifications (SIC) to define the digital sector, all of which found within the broader 1-digit SIC Information and Communication sector (see table).

High-level analysis

- In 2019, the West of England region had **22,200** jobs in the digital industry. This is 7% above the national average.
- The Digital Sector grew at a slower rate in the region than nationally, with **13.8%** growth in the region (in terms of number of jobs) compared to **35.9%** at a national level.
- In 2019, the average wage in the digital industry in the West of England was **£38.7k**, 17.8% lower than the industry national average salary of **£46.9k**. This is 46% higher than the region’s average salary of **£26.4k**

Digital sector sub-category	West of England jobs, 2019
Computer consultancy activities	7,455
Other telecommunications activities	3,015
Computer programming activities	4,947
Data processing, hosting and related activities	2,634
Other information technology and computer service activities	2,769
Computer facilities management activities	141
Web portals	395
Wireless telecommunications activities	223
Wired telecommunications activities	105
Motion picture, video and television programme post-production activities	238
Other software publishing	181
Publishing of computer games	16
Satellite telecommunications activities	10
Reproduction of recorded media	24

*Such as the EMSI Digital Pathways [report](#)

Sector job change by geography

Since 2010, the Digital Sector* grew at a slower rate in the West of England region than nationally in terms of number of jobs, with 13.8% and 35.9% growth respectively.

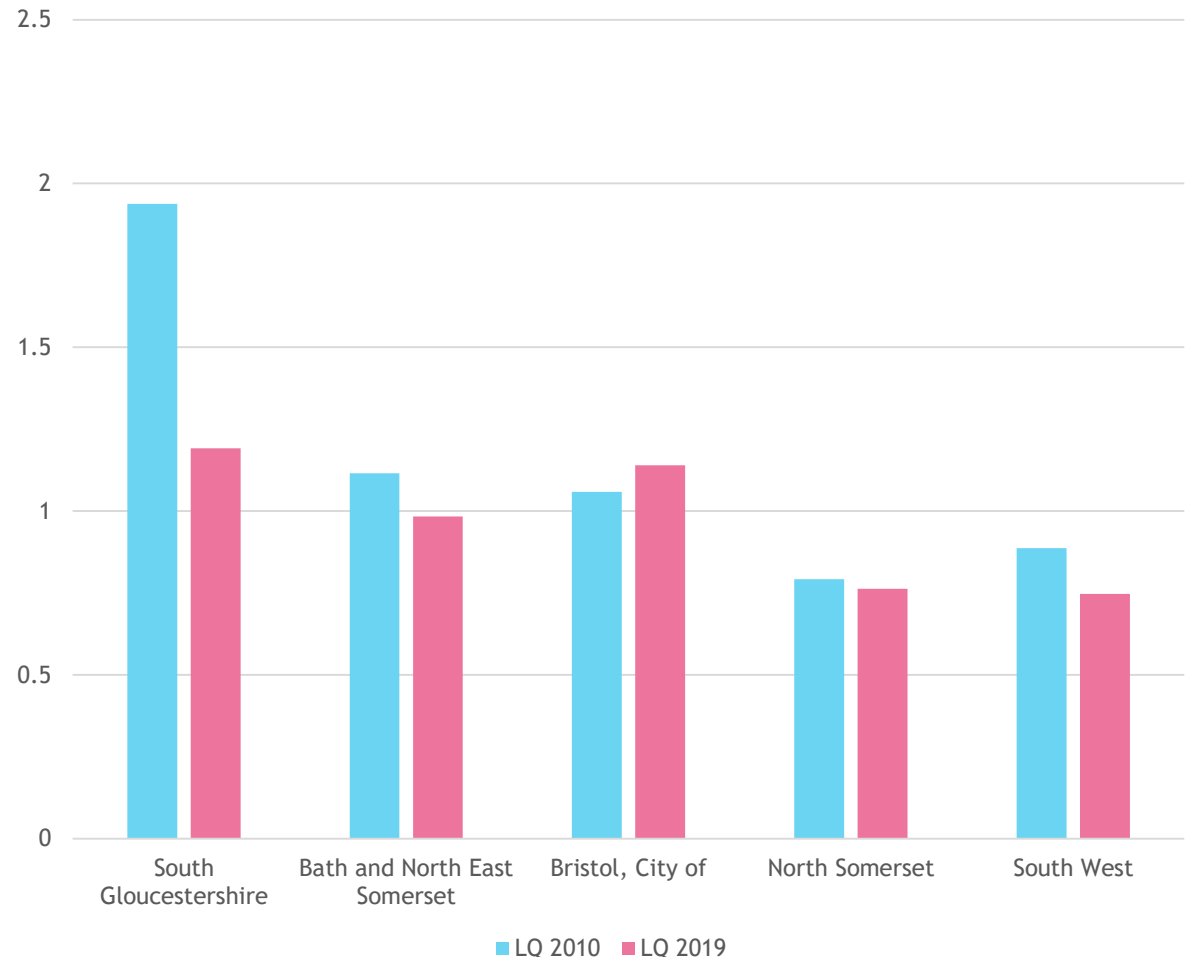
Between 2010 and 2019, both Bristol and North Somerset experienced above UK average job growth in the Digital Sector (45% and 38% respectively). B&NES saw growth lower than average 14% growth.

The main driver behind the West of England experiencing below average job growth in the industry was the reduction in jobs in South Gloucestershire, which fell by 20% in the period.

South Gloucestershire went from having the highest number of digital jobs in 2010 to second contributor below Bristol in 2019 (40.4% of digital industry jobs in the region in 2010 to 28.3% in 2019.)

Industry location quotient (LQ) is a way of quantifying how “concentrated” an industry is in a region compared to the national picture, with a result of 1 indicating the region has the same concentration as the national. Of the four LAs, only Bristol increased its location quotient for digital industry jobs between 2010 and 2019, therefore showing increased specialism jobs in the Digital Sector. South Gloucestershire and Bristol have a higher concentration of Digital Sector jobs than the nation as a whole.

Location Quotient 2010 and 2019



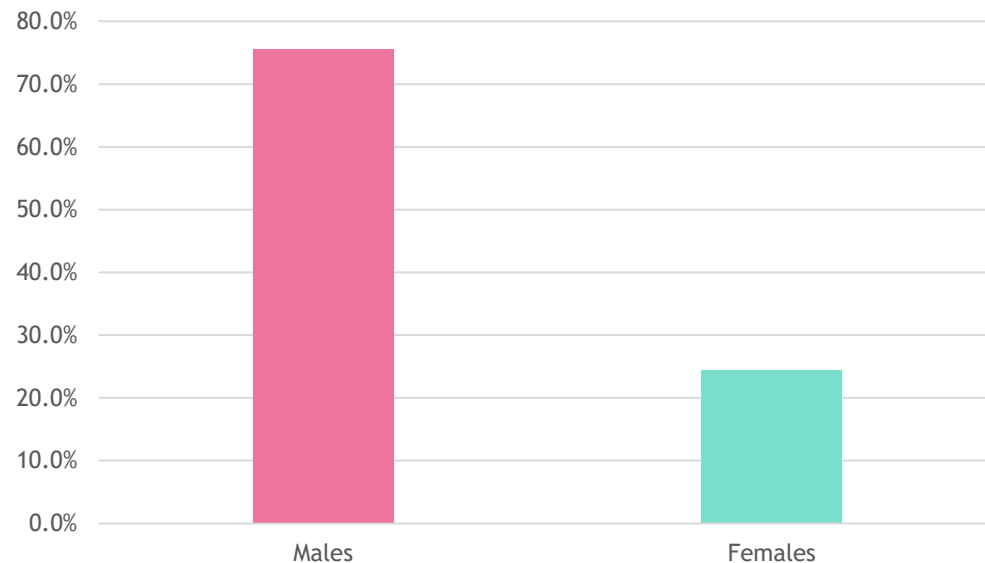
*As defined in [‘The formal Digital sector’](#) slide

Labour market characteristics in the Digital Sector

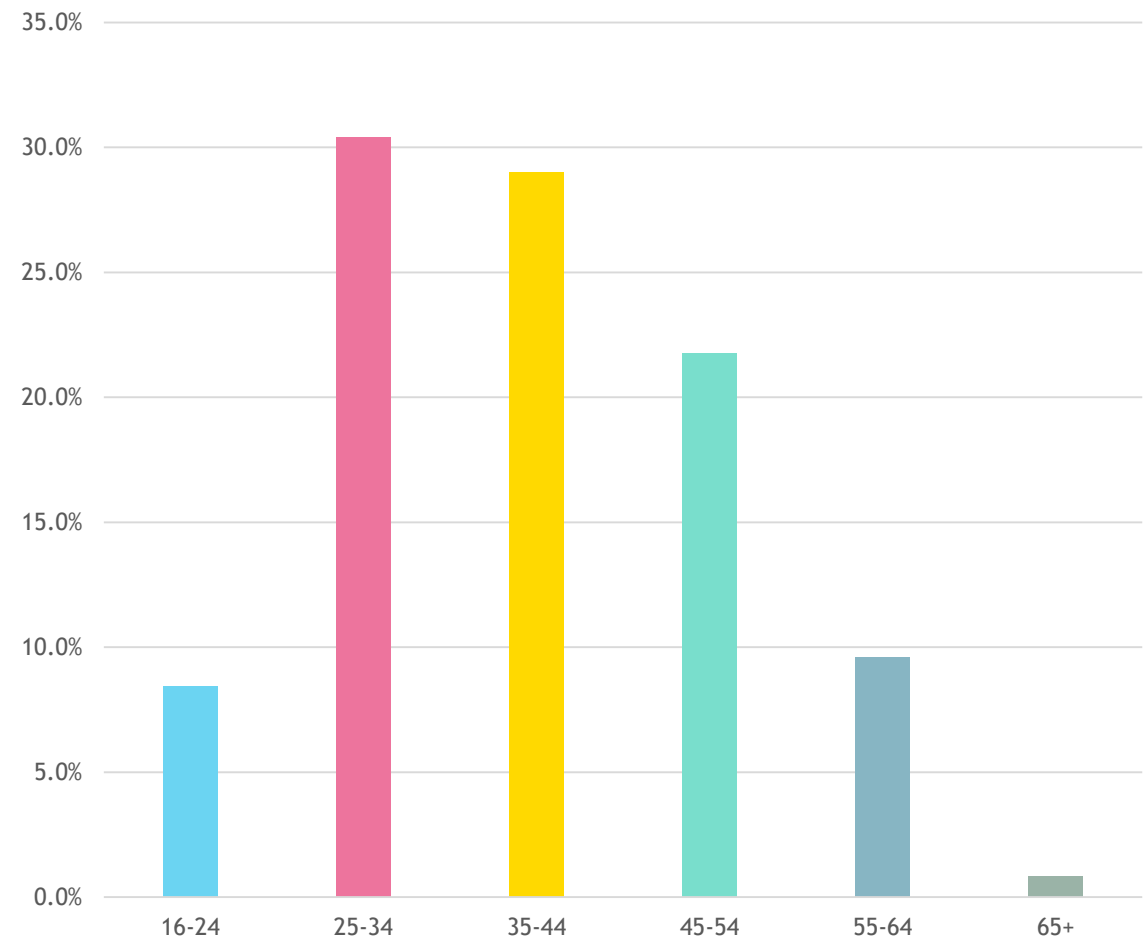
In terms of labour market characteristics, the 25-44 age range made up 59.4% of the Digital Sector workforce in 2016*. The 45-54 age range made up 21.8%, and the 16-24 range 8.4%.

The majority of employees were males, with 75.5% of those employed across the industry being male.

2016 West of England Digital Industry employees by gender



2016 West of England Digital Industry employees by age



*The latest data available

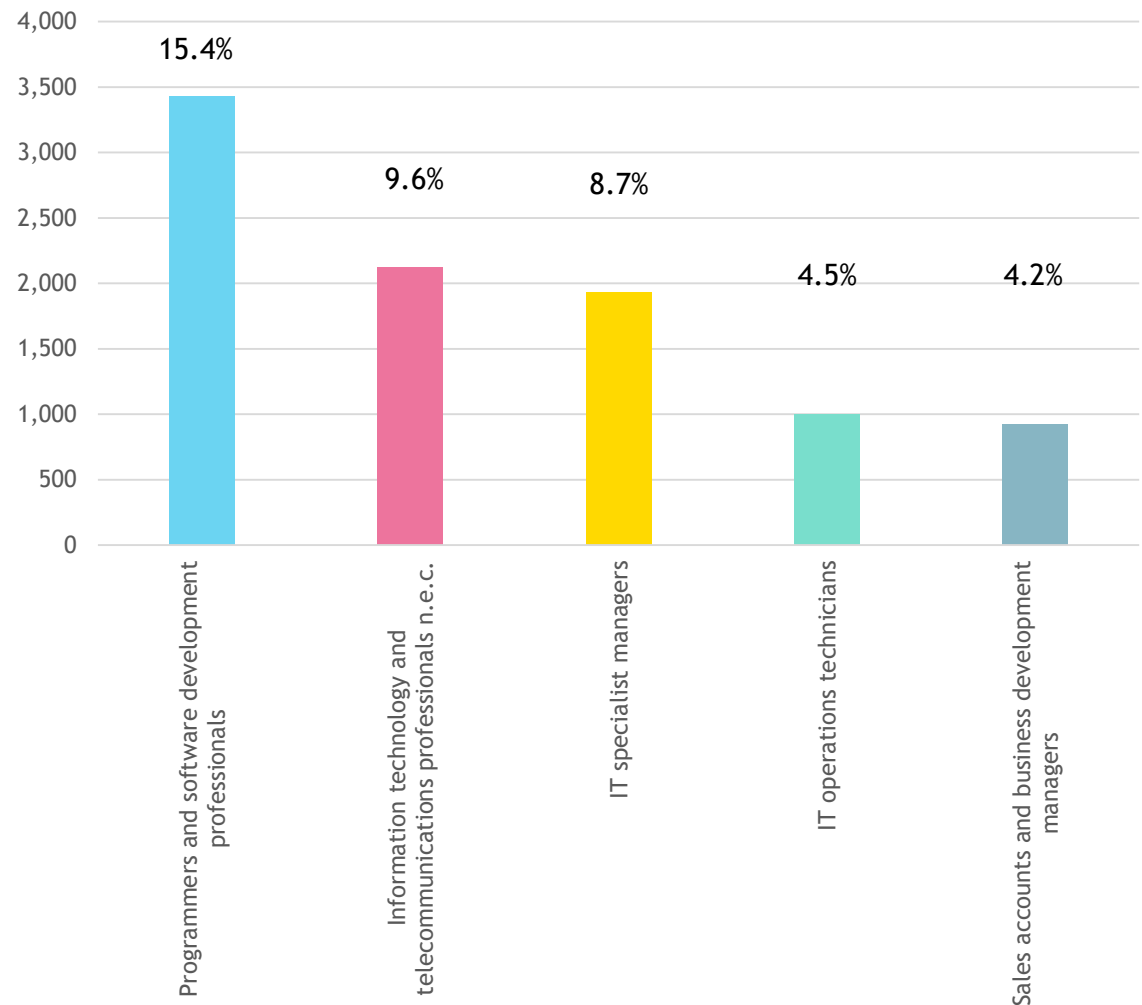
Job titles within digital sector

5 occupations made up 42.4% of the total jobs in the industry. There were:

- Programmers and software development professionals (15.4% of jobs in industry)
- IT specialist managers (9.6%)
- Information technology and telecommunications professionals n.e.c. (8.7%)
- Sales accounts and business development managers (4.5%)
- IT project and programme managers (4.2%)

Managerial, sales and project management skills feature highly in this list, highlighting that the industry relies on both technical and non-technical skills, and the importance of transferable and soft skills.

Composition of Digital Industry jobs by job title, 2019

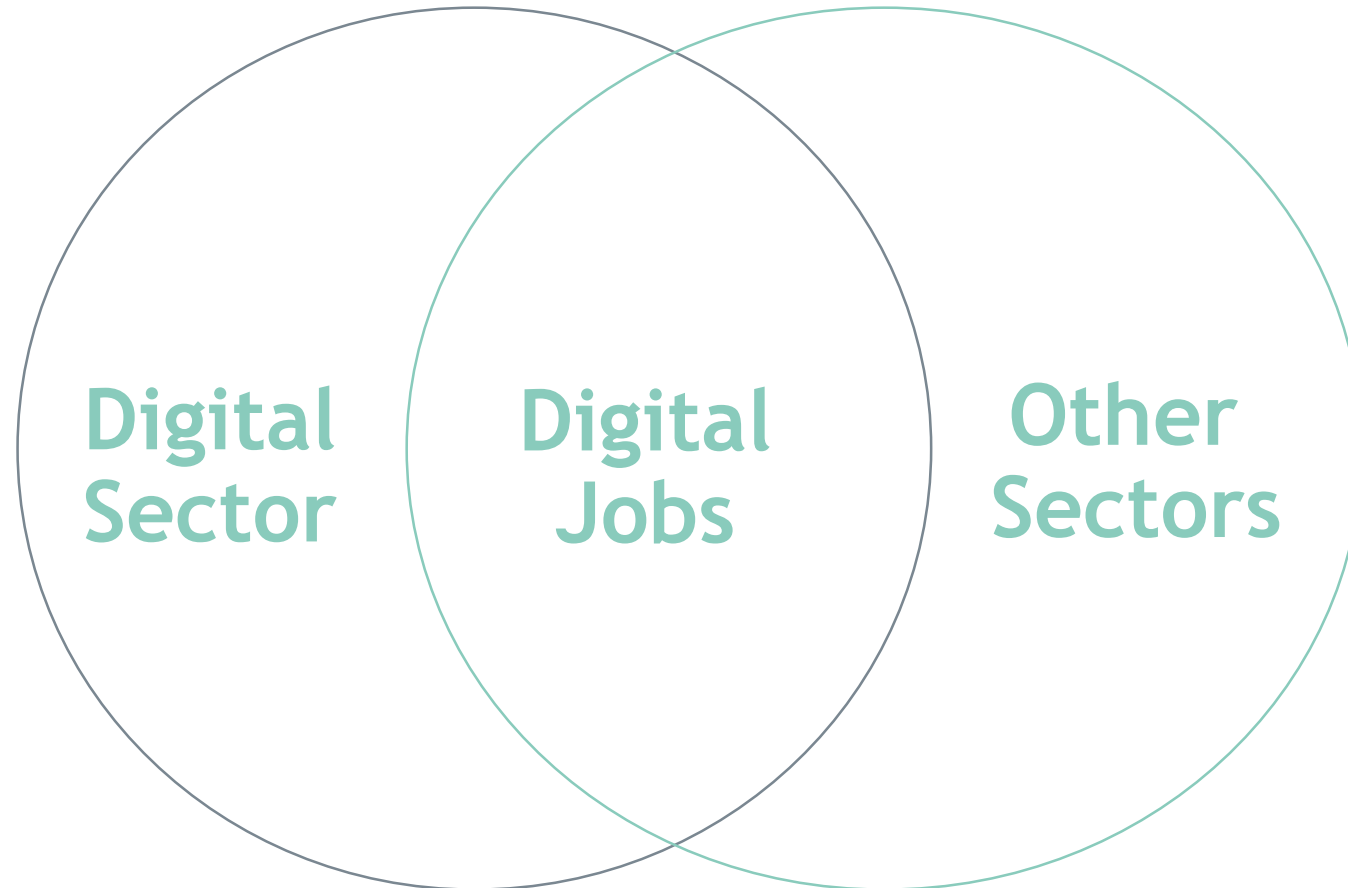


*Such as the EMSI Digital Pathways [report](#)

DIGITAL JOBS

Digital Sector and Digital Jobs

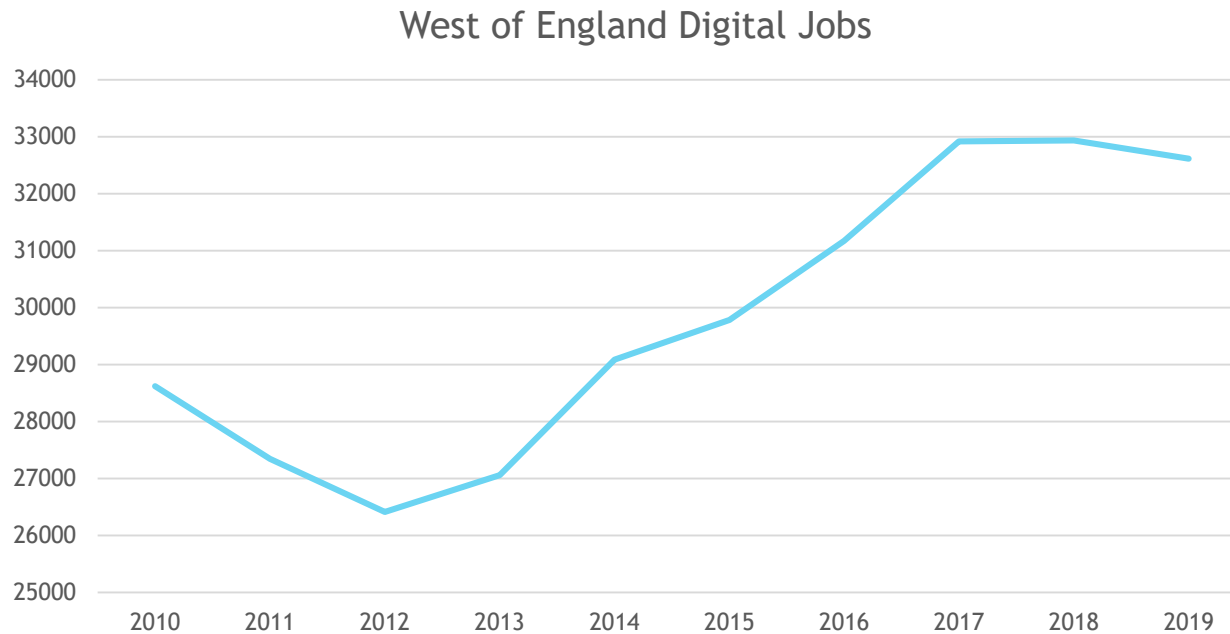
Not all jobs in the digital sector are digital jobs, and not all digital jobs are in the digital sector. The sector with the most individuals working in jobs classed as 'digital jobs' was the Information and communication sector (13,838), in which the digital sector sits, with 50.8% of digital jobs sitting outside of the digital sector.



Digital jobs

Many digital jobs fall outside of the formally defined Digital Sector within the economy. **Digital skills are increasingly demanded across economic sectors, with some studies* finding over 50% of digital jobs to be outside of the formal digital sector.** This report defines digital jobs as the 17 '3-digit SOC classifications found in the table (right), in line with the [EMSI Digital Pathways Report](#).

The number of digital jobs in the region has increased since 2010.



3 Digit Standard Occupational Classification

Information technology and telecommunications directors

Electrical engineers

IT specialist managers

IT project and programme managers

IT business analysts, architects and systems designers

Programmers and software development professionals

Web design and development professionals

Information technology and telecommunications professionals n.e.c.

Electrical and electronics technicians

IT operations technicians

IT user support technicians

Graphic designers

Telecommunications engineers

TV, video and audio engineers

IT engineers

Electrical and electronic trades n.e.c.

Pre-press technicians

Digital jobs demographics

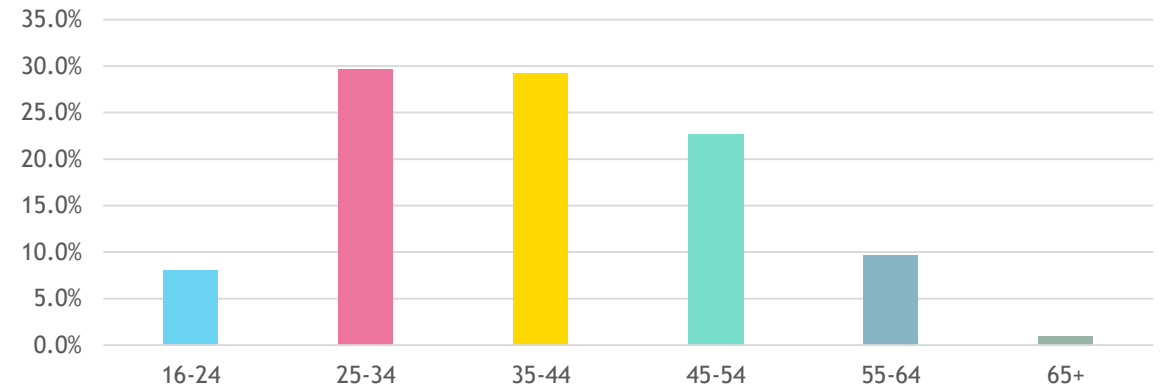
In 2016*, the age profile of those in Digital jobs in the West of England region was similar to those in the Digital Sector**, with the 25-34 and 35-44 age groups together making up the majority of individuals. The next highest levels were in the 55-64 age group, at 22.7% of the workforce.

In the West of England, the 25-34 and 35-44 age groups represented a greater proportion of Digital jobs than jobs in the labour market as a whole, where they held 24.1% of Digital jobs compared to 21.8% of all jobs in 2016.

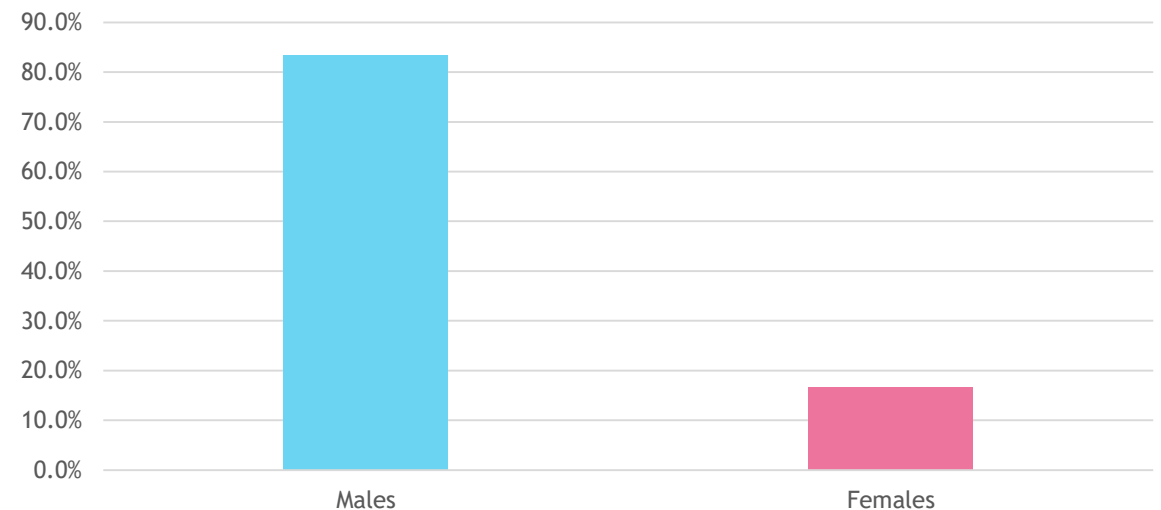
Digital jobs were predominantly held by males, at 83.3% of jobs in 2016. This is higher than in the Digital sector specifically, where males still hold the majority of jobs but to less of an extent (75.5%).

Some studies have found that females in the digital sector are more likely to undertake roles in sales, HR and project management***. This could explain the higher levels of males in digital roles across sectors, when compared to the digital sector specifically, although this is not known to be the case in the West of England specifically.

2016 Digital jobs by age, West of England



2016 Digital jobs by age, West of England



*The latest data available

**As defined in the [Digital Sector Make-up](#) section

***Women in Digital: A study into gender representation, [link](#)

Digital jobs by local authority

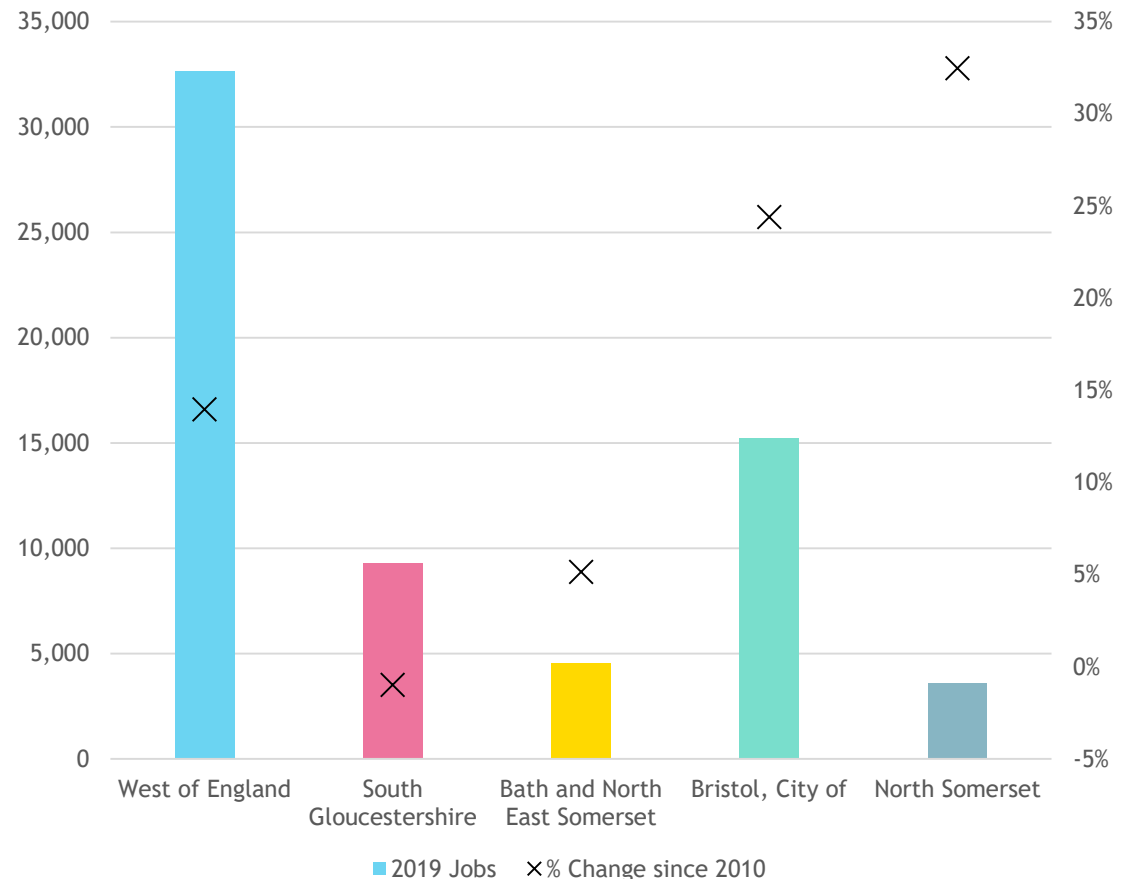
Bristol saw the highest level of digital jobs in 2019, at 15,249. This was followed by South Gloucestershire (9,269), Bath and North East Somerset (4,515) and North Somerset (3,584).

Although it had the lowest levels, North Somerset saw the largest percentage increase in digital jobs since 2010, at 32.47%. Bristol saw the second largest increase at 24.39%, followed by Bath and North East Somerset (5.15%). South Gloucestershire saw a small decrease in digital jobs (-0.98%).

The overall growth rate for digital jobs was higher than for jobs as a whole in the region, at 14.0% and 11.3% respectively.

The growth rate in digital jobs between 2010-2019 was 20.4 percentage points lower for the West of England region than England as a whole, which saw 34.4% growth in these jobs.

Number of digital jobs and % change since 2010, by LA



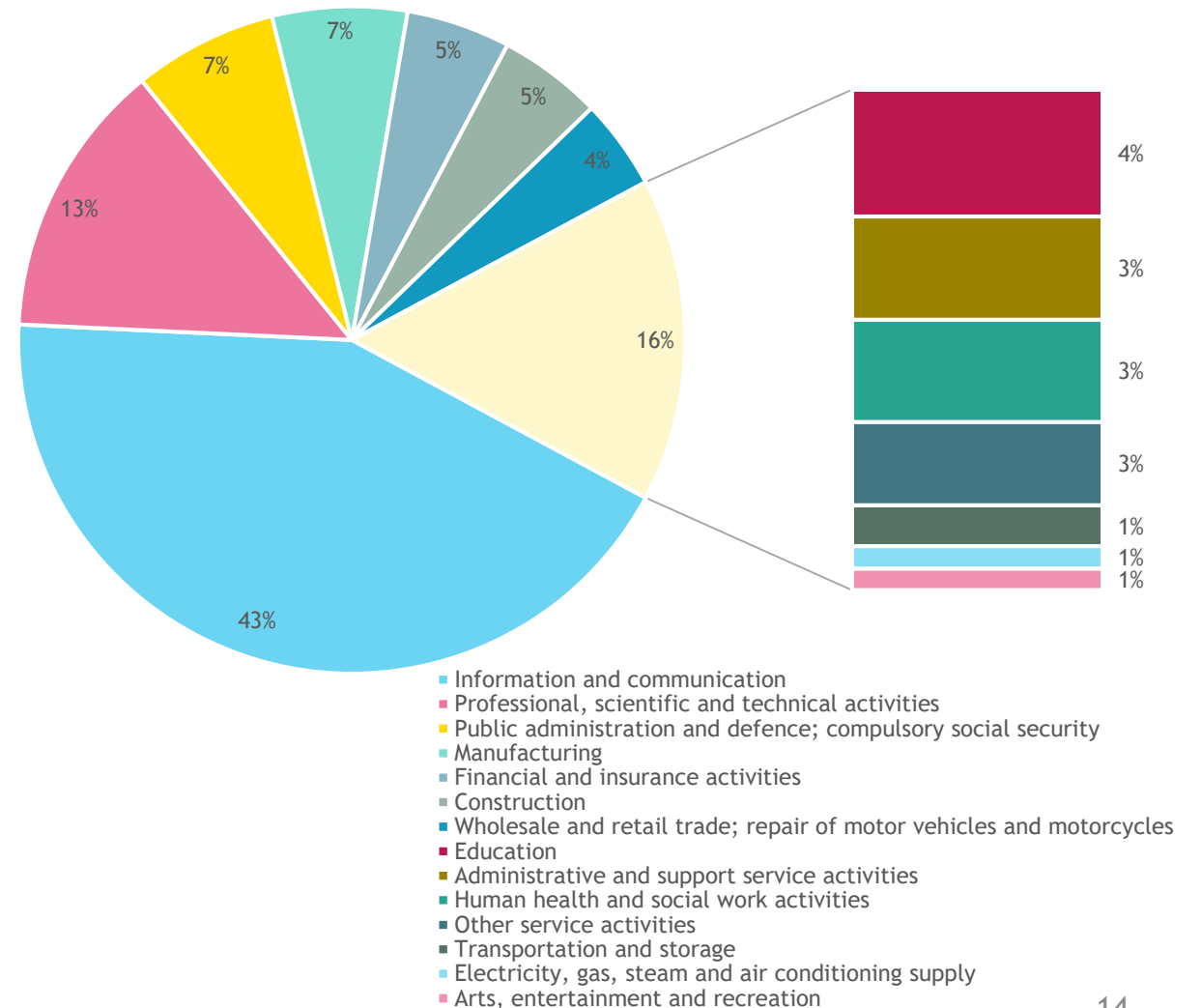
Digital jobs by sector

The sector with the most individuals working in jobs classed by this methodology as 'Digital jobs' was the Information and communication sector (13,838). Digital jobs make up 49.2% of jobs in this sector.

Significant numbers of jobs were seen in other sectors. 10 other sectors had over 1000 digital jobs in the West of England in 2019. These were:

- Professional, scientific and technical activities (4,330)
- Public administration and defence, compulsory social security (2,252)
- Manufacturing (2,111)
- Financial and insurance activities (1,627)
- Construction (1,626)
- Wholesale and retail trade' repair of motor vehicles and motorcycles (1,415)
- Education (1,282)
- Administrative and support service activities (1,043)
- Human health and social work activities (1,036)

Occupation Group Jobs in Industry (2019)



(Sectors with under 200 digital jobs were omitted)

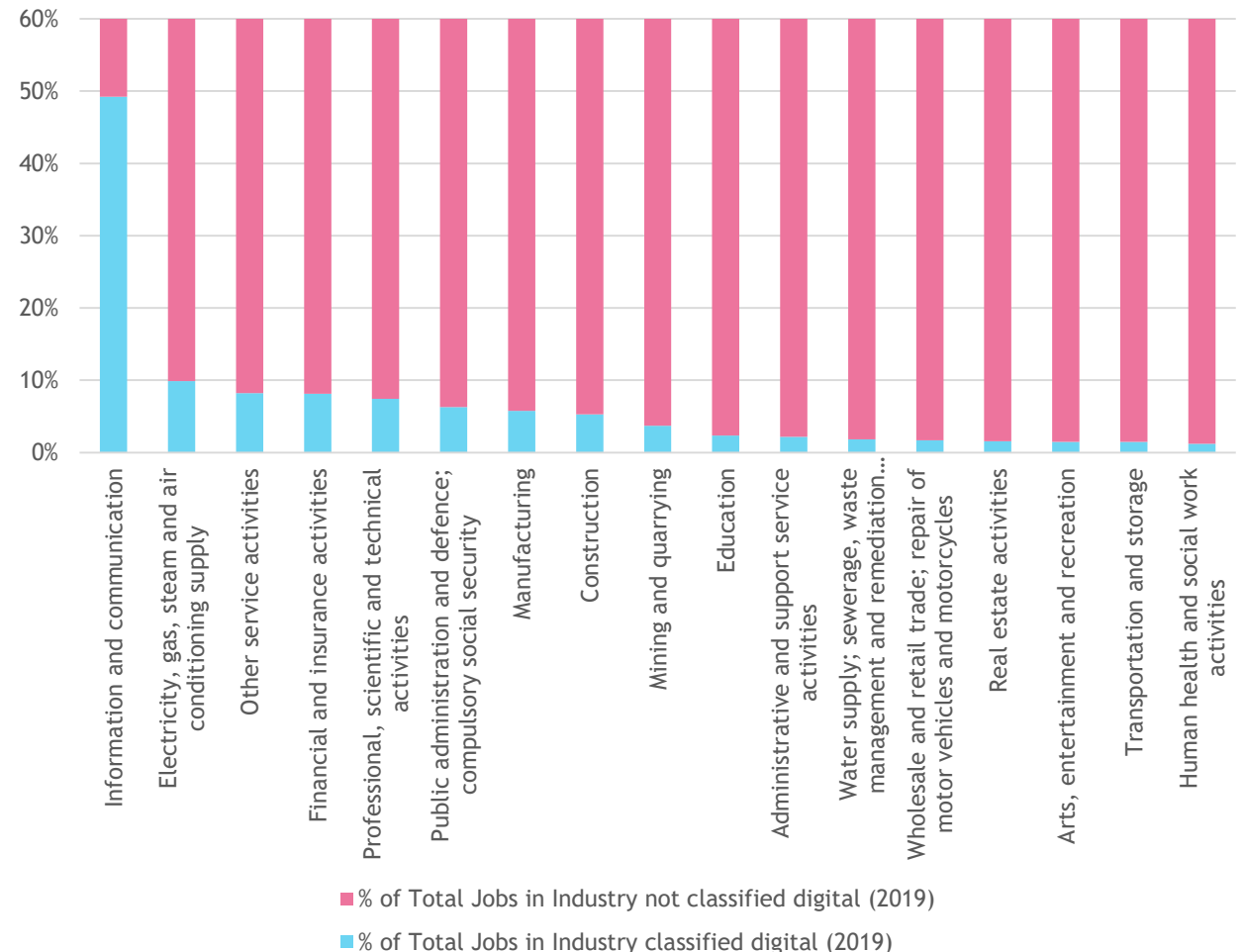
Sectors proportions of digital jobs

Some sectors rely on digital jobs as a key component of their workforce. Looking at the number of digital jobs as a proportion of the total workforce of a sector indicates the prevalence of digital jobs in that industry.

Digital jobs make up 49.2% of all jobs in the Information and communication sector, almost half of all jobs. A number of other sectors also see relatively high proportions of jobs being digital - 8.1% Financial and insurance activities jobs are digital, for example.

Sector	Occupation Group Jobs in Sector (2019)	% of Total Jobs in Sector (2019)
Information and communication	13,838	49.2%
Professional, scientific and technical activities	4,330	7.4%
Public administration and defence; compulsory social security	2,252	6.3%
Manufacturing	2,111	5.8%
Financial and insurance activities	1,627	8.1%
Construction	1,626	5.3%
Wholesale and retail trade; repair of motor vehicles and motorcycles	1,415	1.7%
Education	1,282	2.4%
Administrative and support service activities	1,043	2.2%
Human health and social work activities	1,036	1.2%
Other service activities	841	8.2%
Transportation and storage	413	1.5%

Sectors by proportion of digital jobs



SKILLS DEMANDED IN DIGITAL JOBS

Skills demanded

In order to establish the skills demanded from digital jobs, this section of the report looks at job postings to identify themes in skills required by employers. Digital jobs are defined as the 17 ‘3-digit SOC’ classifications found in the graph (right), in line with the [EMSI Digital Pathways Report](#), as shown in the digital jobs [slide](#)

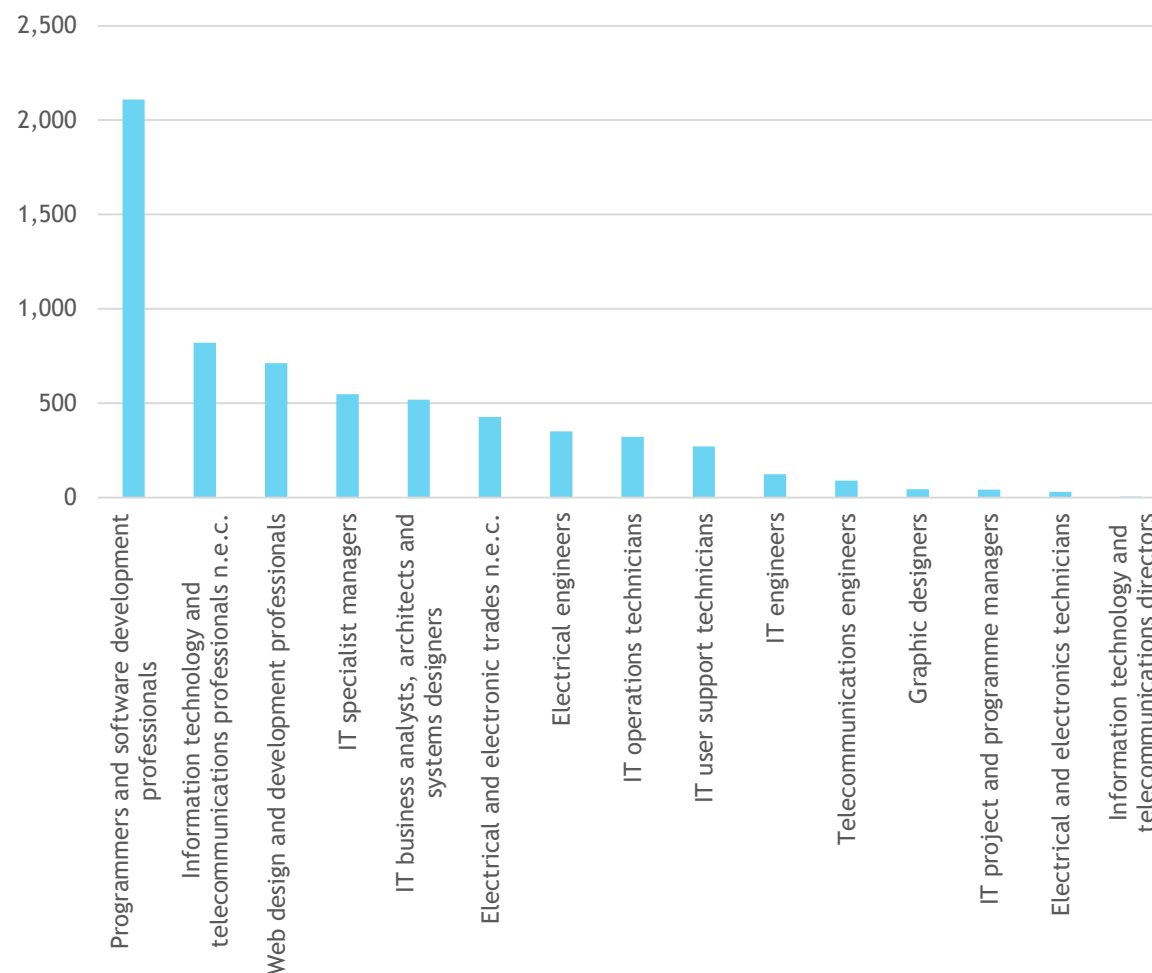
Looking at job postings data gives an indication of the skills demanded in such roles. This is an imperfect measurement - jobs with high churn could distort the data, over emphasising the importance of skills required in such roles, and the opposite could be true for jobs with low churn, under representing them in the data. Key skills must also be defined in the role description in order for the Web-scraping* tool to identify the skill.

December 2020 is selected as the most recent time period to assess - sensitivity analysis has been conducted on time selection, and results do not differ greatly depending on time criteria, so the most recent data is chosen for the most up to date outlook.

High-level analysis

- Programmers and software development professionals saw the highest number of postings of digital jobs, with 2,110 postings in the West of England in December 2020.
- Other IT professions also saw high levels of job postings, including Information technology and telecommunications professionals, Web design and development professionals, IT specialist managers and IT business analysts, architects and system designers.

Unique Postings (Dec 2020)



*Emsi (Economic Modelling)

Hard-skills demanded

We can look at skills demanded within job postings, to get an indication of the skills demand from industry. Looking at skills demanded across digital jobs (see table) demonstrates how some skills are more frequently demanded than others across the digital sector.

This report focuses on hard-skills rather than soft-skills, given hard-skill's more specialised nature in the labour market. That said, soft skills, such as communication, also feature highly in skills demanded within digital jobs and should not be overlooked. Analysis on soft-skills can be found in the [appendix](#).

Key findings

8 skills are required within more than 10% of digital job postings. These include:

- Agile Methodology
- JavaScript
- Python (Programming Language)
- SQL (Programming Language)
- Software Engineering
- Amazon Web Services
- Software Development (Generic)
- C# (Programming Language)

Skill	Frequency in Postings
Agile Methodology	18%
JavaScript (Programming Language)	17%
Python (Programming Language)	12%
SQL (Programming Language)	12%
Software Engineering	12%
Amazon Web Services	11%
Software Development	11%
C# (Programming Language)	10%
Java (Programming Language)	9%
Microsoft Azure	9%
Cascading Style Sheets (CSS)	9%
Linux	9%
React.js	9%
DevOps	9%
Automation	8%
PHP (Scripting Language)	8%
HyperText Markup Language (HTML)	7%
Git (Version Control System)	7%
Application Programming Interface (API)	7%
C++ (Programming Language)	6%
Front End (Software Engineering)	6%
Docker (Software)	6%
.NET Framework	6%
Scrum (Software Development)	6%
Angular (Web Framework)	6%
Systems Engineering	6%
Full Stack Software Engineering	6%
Cyber Security	5%

Digital pathways

In this section of the report, key word searches are used on job adverts in order to establish the key skills demanded by specific job types. This methodology is not precise - using key words to identify job types could sometimes include incorrectly categorised postings, or omit relevant postings, but checks were undertaken in order to ensure searches broadly capture the correct types of postings.

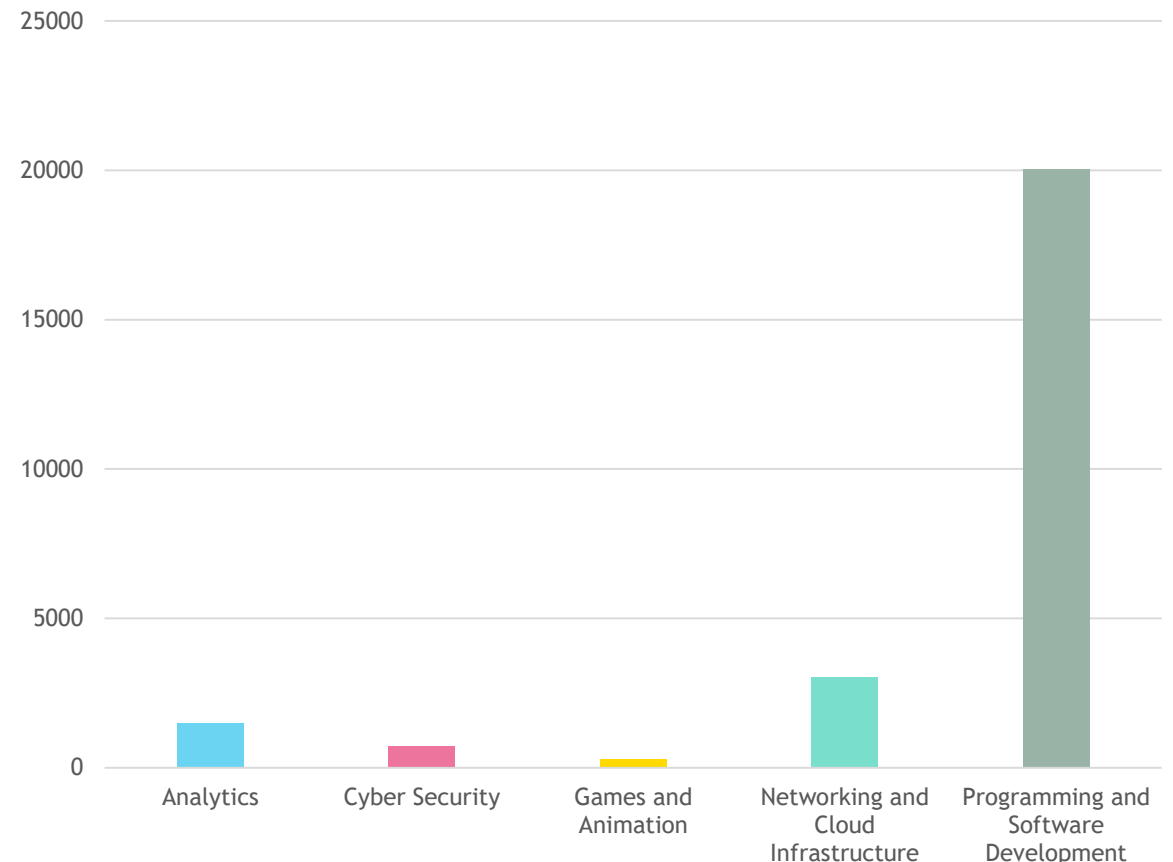
When searching, key words were split out using AND syntax, rather than being searched as a phrase. For example, Games AND Animation covers job postings that cite either games or animation, or both.

The 'pathways' analysed were inspired by the [EMSI Digital Pathways Report](#), and sense checked to ensure they are representative of the digital space.

The Five Pathways identifies and analysed are:

- Analytics
- Cyber Security
- Games and Animation
- Networking and Cloud Infrastructure
- Programming and Software Development

West of England job postings found by key-word search
(Dec 2020)



Analytics

1,492 unique postings.

Top Skills:

- Data Analysis (Generic)
- SQL (Programming Language)
- Agile Methodology
- Python (Programming Language)
- Auditing
- Key Performance Indicators (KPIs)
- Power BI
- Project Management
- Data Science
- Automation
- Business Intelligence

Skill	Postings with Skill	% postings with skill
Data Analysis	367	24.6%
SQL (Programming Language)	286	19.2%
Agile Methodology	230	15.4%
Python (Programming Language)	217	14.5%
Auditing	129	8.6%
Key Performance Indicators (KPIs)	119	8.0%
Power BI	114	7.6%
Project Management	111	7.4%
Data Science	104	7.0%
Automation	103	6.9%
Business Intelligence	101	6.8%
Software Development	98	6.6%
Microsoft Azure	95	6.4%
Business Development	95	6.4%
Analytics	94	6.3%
Customer Relationship Management	93	6.2%
Forecasting	91	6.1%
Java (Programming Language)	86	5.8%
Amazon Web Services	83	5.6%
Data Management	83	5.6%
Google Analytics	81	5.4%
Accounting	80	5.4%
Machine Learning	80	5.4%
Stakeholder Management	75	5.0%
Dashboard	74	5.0%
Big Data	72	4.8%
R (Programming Language)	72	4.8%
Supply Chain	71	4.8%
Digital Marketing	71	4.8%
JavaScript (Programming Language)	69	4.6%

Cyber security

728 unique postings.

Top Skills:

- Cyber Security (Generic)
- Agile Methodology
- Systems Engineering (Generic)
- Linux
- Python (Programming Language)
- Cyber Threat Intelligence
- Amazon Web Services
- Auditing (Generic)
- Java (Programming Language)
- Firewall
- Project Management

Skill	Postings with Skill	% of postings with skill
Cyber Security	388	53.30%
Agile Methodology	123	16.90%
Systems Engineering	91	12.50%
Linux	81	11.13%
Python (Programming Language)	75	10.30%
Cyber Threat Intelligence	71	9.75%
Amazon Web Services	63	8.65%
Auditing	63	8.65%
Java (Programming Language)	60	8.24%
Firewall	55	7.55%
Project Management	55	7.55%
Microsoft Azure	54	7.42%
Risk Management	54	7.42%
Software Development	52	7.14%
Automation	51	7.01%
Big Data	50	6.87%
DevOps	50	6.87%
Business Development	49	6.73%
Cyber Engineering	45	6.18%
Information Assurance	44	6.04%
Software Engineering	44	6.04%
Vulnerability	44	6.04%
Risk Analysis	42	5.77%
Scrum (Software Development)	40	5.49%
ISO/IEC 27001	39	5.36%
Operating Systems	38	5.22%
JavaScript (Programming Language)	36	4.95%
Data Analysis	36	4.95%
Computer Science	36	4.95%

Games and animation

300 unique postings.

Top Skills:

- Animations (Generic)
- JavaScript (Programming Language)
- Cascading Style Sheets (CSS)
- Agile Methodology
- Hypertext Mark-up Language (HTML)
- C# (Programming Language)
- Adobe Photoshop
- Application Programming Interface (API)
- Front End (Software Engineering) (Generic)
- User Experience
- PHP (Script Language)

Skill	Postings with Skill	% of postings with skill
Animations	84	28.00%
JavaScript (Programming Language)	50	16.67%
Cascading Style Sheets (CSS)	41	13.67%
Agile Methodology	40	13.33%
HyperText Markup Language (HTML)	32	10.67%
C# (Programming Language)	27	9.00%
Adobe Photoshop	26	8.67%
Application Programming Interface (API)	25	8.33%
Front End (Software Engineering)	23	7.67%
User Experience	21	7.00%
PHP (Scripting Language)	19	6.33%
Adobe Illustrator	19	6.33%
Microsoft Azure	19	6.33%
SQL (Programming Language)	18	6.00%
.NET Framework	17	5.67%
Scrum (Software Development)	17	5.67%
Git (Version Control System)	16	5.33%
Adobe After Effects	16	5.33%
Python (Programming Language)	16	5.33%
Scripting	16	5.33%
React.js	16	5.33%
HTML5	14	4.67%
C++ (Programming Language)	14	4.67%
Node.Js	14	4.67%
WordPress	14	4.67%
Test-Driven Development (TDD)	14	4.67%
Computer Animation	13	4.33%
User Interface	13	4.33%
Copywriting	12	4.00%

Networking and cloud infrastructure

3,036 unique postings.

Top Skills:

- Agile Methodology
- Amazon Web Services
- DevOps
- Civil Engineering (Generic)
- Microsoft Azure
- Python (Programming Language)
- Project Management
- Automation
- Linux
- Business Development
- Engineering Design Process

Skill	Postings with Skill	% of postings with skill
Agile Methodology	317	10.44%
Amazon Web Services	270	8.89%
DevOps	262	8.63%
Civil Engineering	261	8.60%
Microsoft Azure	255	8.40%
Python (Programming Language)	247	8.14%
Project Management	232	7.64%
Automation	230	7.58%
Linux	218	7.18%
Business Development	205	6.75%
Engineering Design Process	164	5.40%
SQL (Programming Language)	154	5.07%
Procurement	153	5.04%
Docker (Software)	150	4.94%
Software Development	149	4.91%
Software Engineering	142	4.68%
JavaScript (Programming Language)	137	4.51%
Risk Analysis	137	4.51%
Auditing	136	4.48%
Scripting	129	4.25%
AutoCAD	123	4.05%
Operating Systems	121	3.99%
Risk Management	119	3.92%
Java (Programming Language)	109	3.59%
Systems Engineering	109	3.59%
Kubernetes	104	3.43%
Terraform	99	3.26%
Active Directory	96	3.16%
Cyber Security	96	3.16%

Programming and software development

20,025 unique postings.

Top Skills:

- Business Development
- Agile Methodology
- Auditing (Generic)
- JavaScript (Programming Language)
- Nursing
- Software Development (Generic)
- Project Management
- Python (Programming Language)
- SQL (Programming Language)
- Key Performance Indicators

Skill	Postings with Skill	% of postings with skill
Business Development	1,784	8.91%
Agile Methodology	1,369	6.84%
Auditing	1,055	5.27%
JavaScript (Programming Language)	897	4.48%
Nursing	802	4.00%
Software Development	779	3.89%
Project Management	747	3.73%
Python (Programming Language)	706	3.53%
SQL (Programming Language)	701	3.50%
Key Performance Indicators (KPIs)	685	3.42%
Mental Health	655	3.27%
Software Engineering	644	3.22%
Risk Analysis	636	3.18%
Accounting	601	3.00%
Procurement	601	3.00%
New Product Development	583	2.91%
C# (Programming Language)	564	2.82%
Career Development	540	2.70%
Automation	523	2.61%
Amazon Web Services	520	2.60%
Java (Programming Language)	515	2.57%
Data Analysis	508	2.54%
Risk Management	508	2.54%
Customer Relationship Management	506	2.53%
Cascading Style Sheets (CSS)	504	2.52%
Systems Engineering	488	2.44%
Selling Techniques	474	2.37%
Scrum (Software Development)	463	2.31%
Advising	452	2.26%

FORECASTS

Forecasts for Digital

Future estimates and for both the digital sector and digital jobs must be assessed broadly, due to both their uncertain nature and the variation in the classification of what comprises of 'digital' between studies.

The broad message across studies is that the digital sector and jobs are going to continue to grow; with digital technologies permeating into more sectors.

Studies:

- [BSD, Tech City UK, 2017](#) - Digital sector growth outpaces national growth by over 50% in 2010-15 and is expected to continue to outpace it. Tech investment in the UK is highest in Europe, pointing to further growth.
- Government backed 'UK Tech for a Changing World' Technation [Report](#) highlights Bristol as one of the top 20 European cities for tech investment. According to this report, the tech sector outpaced UK GVA growth in 2010-17 by a factor of 6, and is expected to continue to grow.
- The 'UK Tech for a Changing World' Technation [Report](#) identifies key new areas of technology with high growth potential to be Agritech, Healthtech and Cleantech.
- The World Economic Forum 'The Future of Jobs [Report](#)' notes increased technology adaption and digitisation of the workforce, particularly since the start of the pandemic. It also highlights the automation-proof nature of digital skills.
- Government backed 'Bright Tech Future' Technation [report](#) highlights, in line with findings in this report, the fact that the majority of digital job are not in the digital sector. It also points to a large increase in vacancies, indicating that the skills are not necessarily present in the workforce. It also points out their prominence in job adverts and that they are likely to increase in prominence further yet.
- [Working Futures](#) report highlights technology and the IT sector's role as part of the main engine for employment and job growth.

APPENDIX

Change in jobs in Digital Sector by region (2010 - 2019)

Industry	South Gloucestershire	Bath and North East Somerset	Bristol, City of	North Somerset	South West	United Kingdom
Data processing, hosting and related activities	567	147	364	79	2,137	7,575
Computer facilities management activities	-	-	15	-	237	1,800
Other information technology and computer service activities	122	(65)	(89)	75	324	19,720
Web portals	38	-	-	-	1,204	11,837
Wireless telecommunications activities	-	-	76	-	(250)	17,907
Computer programming activities	27	416	2,074	36	6,020	101,166
Wired telecommunications activities	-	3	-	9	87	3,690
Motion picture, video and television programme post-production activities	12	-	151	-	147	1,049
Publishing of computer games	-	0	(33)	0	(1)	1,583
Reproduction of recorded media	0	-	(26)	-	(189)	(1,584)
Satellite telecommunications activities	-	-	10	0	(151)	4,031
Other software publishing	(17)	-	53	28	190	3,941
Computer consultancy activities	(710)	(256)	866	392	2,248	141,515
Other telecommunications activities	(1,807)	(44)	(465)	53	(6,363)	(32,763)
Total	(1,603)	356	3,301	640	5,639	281,467

Change in Digital Jobs by sector

Industry	Occupation Group Jobs in Industry (2019)	% of Occupation Group in Industry (2019)	% of Total Jobs in Industry (2019)
Information and communication	13,838	42.4%	49.2%
Professional, scientific and technical activities	4,330	13.3%	7.4%
Public administration and defence; compulsory social security	2,252	6.9%	6.3%
Manufacturing	2,111	6.5%	5.8%
Financial and insurance activities	1,627	5.0%	8.1%
Construction	1,626	5.0%	5.3%
Wholesale and retail trade; repair of motor vehicles and motorcycles	1,415	4.3%	1.7%
Education	1,282	3.9%	2.4%
Administrative and support service activities	1,043	3.2%	2.2%
Human health and social work activities	1,036	3.2%	1.2%
Other service activities	841	2.6%	8.2%
Transportation and storage	413	1.3%	1.5%
Electricity, gas, steam and air conditioning supply	227	0.7%	9.9%
Arts, entertainment and recreation	218	0.7%	1.5%
Real estate activities	151	0.5%	1.6%
Water supply; sewerage, waste management and remediation activities	129	0.4%	1.8%
Accommodation and food service activities	67	0.2%	0.1%
Mining and quarrying	0	0.0%	3.7%
Agriculture, forestry and fishing	0	0.0%	0.0%

Soft-skills demanded

We can look at skills demanded within job postings, to get an indication of the skills demand from industry. Looking at soft-skills demanded across digital jobs (see table) demonstrates how some skills are more frequently demanded than others across the digital sector.

Key findings

The top soft skills demanded within job adverts in December 2020 were:

- Communications
- Management
- Innovation
- Infrastructure
- Problem Solving
- Leadership
- Integration
- Customer Service
- Planning
- Operations
- Enthusiasm

Skill	Frequency in Postings
Communications	25%
Management	16%
Innovation	13%
Infrastructure	12%
Problem Solving	10%
Leadership	8%
Integration	7%
Customer Service	7%
Planning	7%
Operations	6%
Enthusiasm	5%
Mentorship	5%
Research	5%
Troubleshooting (Problem Solving)	5%
Microsoft Windows	5%
Self-Motivation	5%