

Digital Sector

Labour Market Information

This is the fifth largest sector in the West Midlands with nearly 14,000 tech and digital businesses.

The tech and digital sector is one of the most dynamic parts of the UK economy. In 2016 there were nearly 270,000 tech and digital firms in the UK – some 31% more than there were in 2011. According to the Tech Partnership there are around 170,000 digital enterprises in the UK employing 1.75m people (7% of the UK workforce).

The digital sub sector refers to the systems, services, software and communications upon which all businesses and organisations depend. It covers telecommunications, computer programming and information service activities.

- Digital businesses grew 30% in five years, compared with a 17% average for all businesses.
- 99.8% of digital businesses are small and medium-sized enterprises.
- Employment across digital businesses is mainly focussed in IT (74%), with telecoms employing 24% and games 2%.

Overview

It is forecast that employment in the West Midlands in this sector will rise by nearly 14,000 from just over 70,000 to 84,000. These jobs will be predominantly in higher skilled roles with 91% in professional, associate professional and technical roles and almost all of new jobs will be in roles requiring a foundation, undergraduate or higher degree (or equivalent). (Tech & Digital Deep Dive Report May 2018).

Though the sector is buoyant across the West Midlands, there are 'hotspots' where a larger concentration of certain types of digital businesses can be found.

Greater Birmingham: The term 'Silicon Canal' is often used to refer to a cluster of 7,500 tech companies in this area employing over 40,000 people; also the location of 25% of the UK's gaming workforce. (Business Birmingham).

Coventry and Warwickshire is home to some 2,500 digital businesses and there are clusters of gaming companies around Leamington Spa and Warwick.

The Malverns: There is a cluster of cyber security companies based there and often referred to as 'Cyber Valley' – also home to the National Cyber Skills Centre.

HS2 will be coming through the region and there will be opportunities for people with digital skills, including digital design, digital planning, data analytics and digital construction techniques.

The UK and the West Midlands Region's strengths are in emerging technologies such as the Internet of Things, wearable technologies, Business Intelligence (BI) Data and Data Analytics, Cyber Security, 5G and wireless technologies, robotics, autonomous vehicles, advanced manufacturing and building automation. This is leading to an emerging demand for specialist technical skills in areas such as 3D printing, CAD, graphic design, Building Information Modelling (BIM), digital marketing and digital publishing.

At the same time, however, there are shortages of key technical skills and expertise in:

- the existing tech and digital workforce and
- Data Analytics, Big Data and Cloud Computing.

This is a particularly critical issue for SMEs and micro businesses who lack the resources to recruit globally.

Top 10 Job Roles & Salaries

Job role	Average salary
IT technician	£24,000
Graphic designer	£25,950
TV, video and audio engineers	£32,650
Web designer	£30,300
Telecommunications engineer	£32,700
Programmer	£33,750
Computer games designer	£41,250
Software developer	£41,350
IT systems architect	£44,350
Ethical hacker	£56,650

SKILLS

Digital skills are vital for both STEM and non-STEM specific jobs, with demand growing. This is evidenced by Tech City UK research, which shows that highly skilled and highly paid digital jobs grew at twice the rate of non digital jobs between 2011 and 2015.

Tech Partnership research shows the UK needs 138,000 new entrants each year to fill digital specialist roles and 52% of companies in the tech industry are reporting hard-to-fill vacancies.

Despite a high number of computing graduates there are still skills shortages. This is because employers are looking for very specific skills. According to the Tech Partnership:

- Developers are the most commonly sought digital specialists accounting for around 27% of all jobs advertised.
- At sub-group level, project managers and business analysts are the most commonly advertised positions.
- Agile software development is the process/methodological skill requirement most often required of digital specialists (22% of adverts as a whole) whilst the top digital tools needed were SQL Windows, SQL Server, JavaScript and .NET.
- A degree was the most sought after qualification (featuring in 11% of digital job adverts) followed by a Cisco, then Microsoft certification.

Future trends

Growth in jobs will be in these three areas:

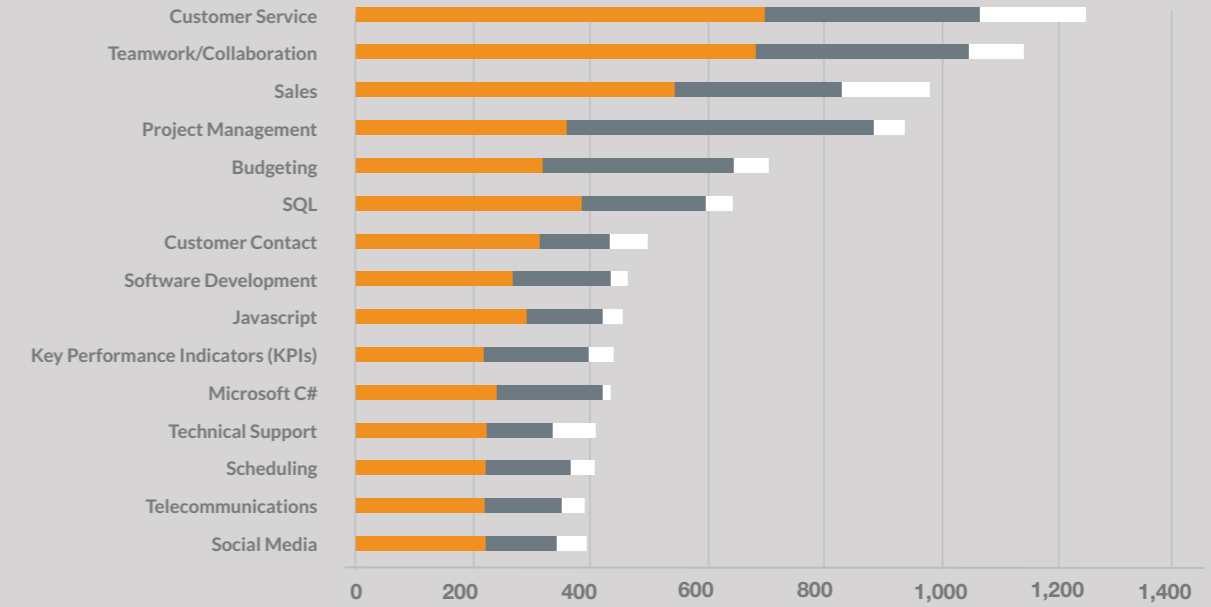
- Data analysis and behavioural insights and cyber security will become increasingly important in the context of rising adoption of artificial intelligence and machine learning
- IT, software development and computer service, big data, cloud services, software development and data support
- Multitalented and multiplatform content producers: Gaming, AR (augmented reality) & VR (virtual reality), 3D animation, digital marketing, UX (user experience), internet of things

As commercial districts grow, people with Digital and ICT skills will be able to take advantage of new jobs on offer in sectors such as business, finance, IT, leisure and retail.

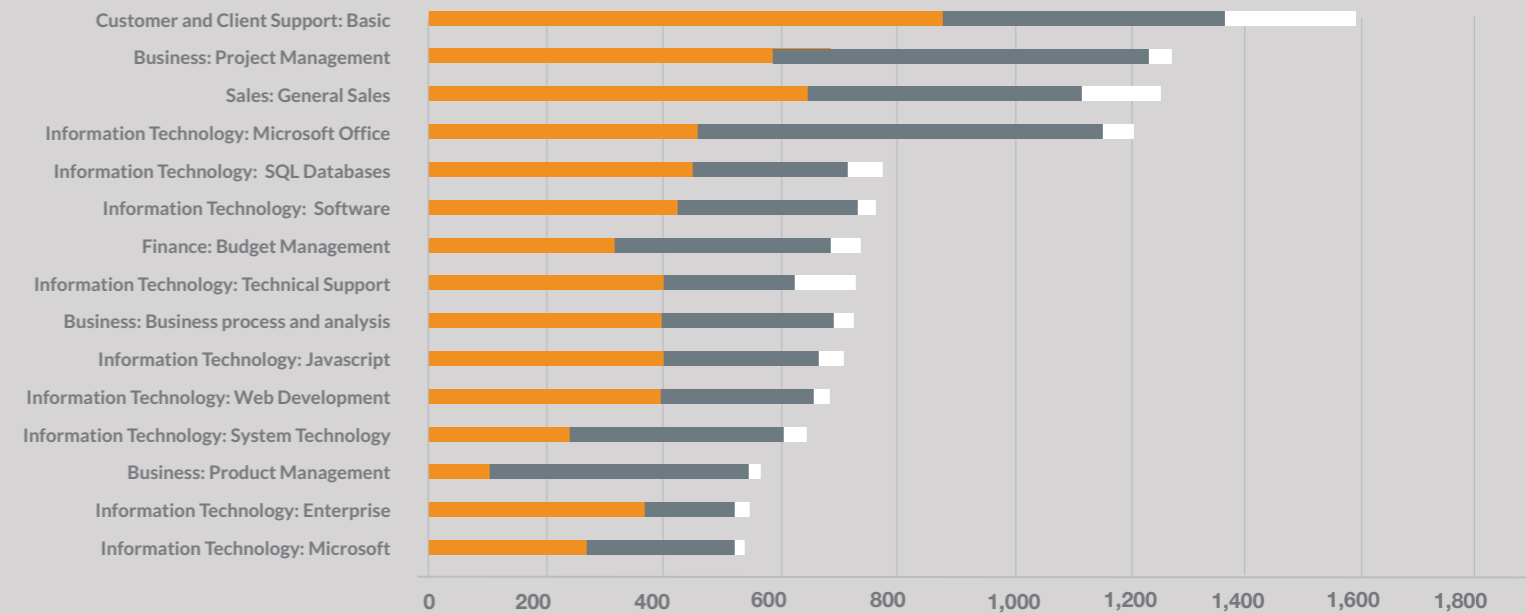


Top Skills in Demand

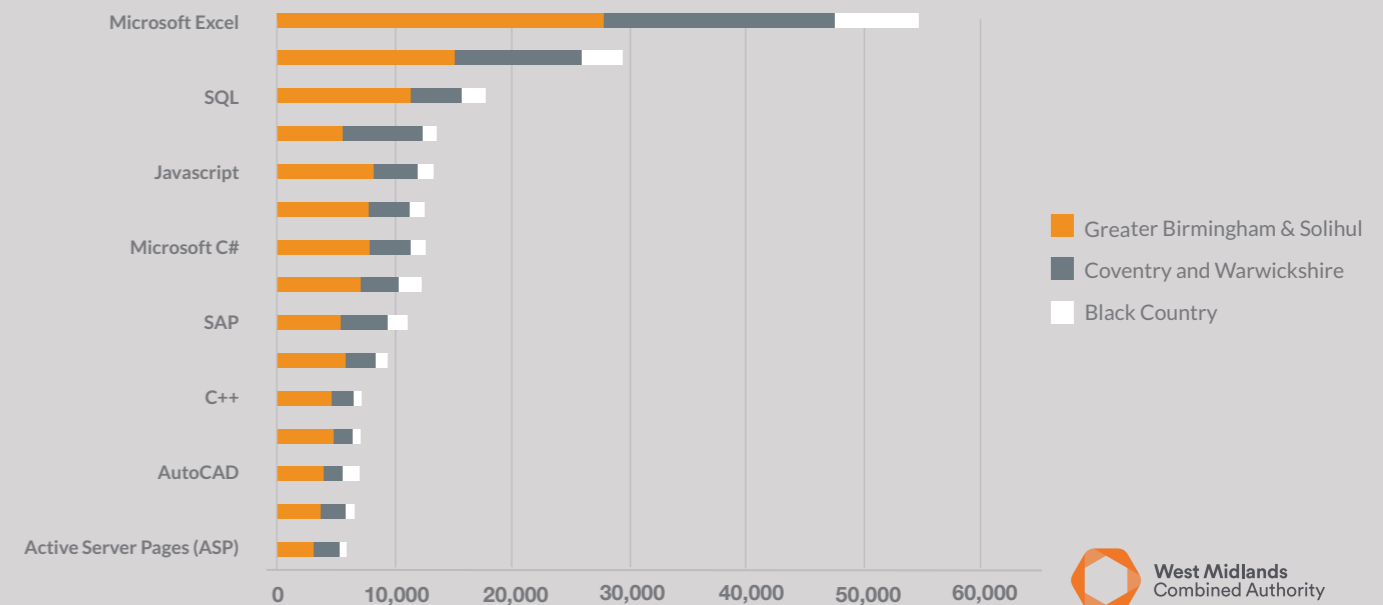
Information and Communications sector 2017 (specialised skills)



Information and Communications sector 2017 (skill clusters)



Computer and programming' skills (all vacancies)



Routeways into the sector

The government has introduced a range of new qualifications to help address skills shortages and these include digital and cyber security apprenticeships (including degree apprenticeships) and T-levels (technical level qualifications) which are due to be phased in from 2020. 95% of UK games companies are small to medium businesses with the majority employing fewer than five people – rather than relying on traditional recruitment methods, building up experience and making useful contacts could go a long way.

Employers in the creative industries are looking for a combination of digital, creative and project-related skills in addition to any specialist job related experience.

Career Learning Pilot

The Career Learning Pilot can support individuals to grow their skills and identify their career goals. This is intended to drive up skill levels of people in work and help to improve productivity where higher skill levels are associated with higher earning and being in work.

For instance

- those qualified to Level 3 earn 10% more than those without this level of skills
- advanced apprentices at Level 3 can earn £117,000 more over their career
- those with Level 4 skills earn on average twice as much as those with no qualifications (Prospects.ac.uk)

Visit www.wmca.org.uk/what-we-do/productivity-skills

Developments in the region

STEAMhouse is a £48.3m scheme which aims to transform the former Typhoo tea factory in Birmingham into a new form of collaborative innovation centre focused around STEAM (science, technology, engineering, arts and maths), ensuring that the needs of the creative economy are more closely aligned to scientific and technological developments.

The **Digital Heritage Hub** at the University of Birmingham works with museums, galleries and many small businesses

Information Systems and Learning Technology Research Centre at the University of Wolverhampton is working with Google and Microsoft on a European level

Further info

www.creativeskillset.org

www.creative-choices.co.uk

www.bubble-jobs.co.uk

www.thetechpartnership.com/tech-future-careers

www.techfuturegirls.com

www.ada.ac.uk

<https://siliconcanal.co.uk>

<http://careers.hs2.org.uk>

