

THE BLACK COUNTRY

# Digital Skills Plan

JANUARY  
**2020**

Black Country LEP



# Digital Skills Plan

**Digital literacy is a language; the more digital skills you have, the better you can speak it.**

The UK is in the middle of a digital skills transformation. Everyone is having to understand how to make the most of new tech opportunities for both life and work and understand how tech is impacting the 'traditional' view of the world.

By 2030 the job market will look dramatically different.

The Black Country has a clear ambition to be a digital economy, recognising that every key sector in the region is being transformed by the impact of new and emerging technologies:

## Industry 4.0

is the trend towards automation and data exchange in manufacturing technologies and processes.

It is this transition that is labelled **Industry 4.0** to represent the fourth revolution in manufacturing.



# Priority Propositions



***'Digital is therefore both a sector in its own right and also an enabler of productivity gains and growth in the wider economy, not least as the impact of Industry 4.0 transforms many of the region's sectors.'***

This vision is encapsulated in the 'Black Country Digital Strategy'. The strategy sets out the digital strengths of the Black Country and identifies the many opportunities that exist. The intention is that by developing digital activity, it will lead to a step change in development across the Black Country.

However, there are significant skills challenges. Across the Black Country, an estimated 25 - 30% of residents have never used the internet, despite the Black Country having amongst the highest rates of superfast and ultrafast broadband connectivity across the Country.

Directly linked to Industry 4.0 is the Black Country's participation in the UK's first multi-city 5G test-bed, with the West Midlands region becoming the first in the UK to trial new 5G applications and services at scale. While this will enhance connectivity, the lack of digital skills will severely impact the potential for innovation.



# Skills for the Supply Chain

**Technology is an important enabler across the Black Country, it has driven both growth and innovation in manufacturing and engineering.**

The increasing adoption of digital technologies by businesses in other sectors creates significant job opportunities, but also drives increased demand for skills.

## **Baseline Digital Skills**

Within the Black Country, there are 129,000 households and 274,000 residents in postcodes where people are more likely than the UK average to be 'internet non-users'. Furthermore, it is estimated that 203,000 people in the Black Country lack baseline digital skills. These skills include using the internet, social networking and MS Office.

Baseline digital skills such as Microsoft Office and other productivity software tools are commonly required in jobs across all skills levels and have become a ticket to entry in the labour market. Digital skills are essential requirements for two-thirds of UK Standard Occupational Classification (SOC) occupations and carry with them a wage differential over non-digital roles.


## **Digital Roles**

The Black Country has long been associated with being a low skill area and the advent of new highly skilled jobs is likely to intensify this. While baseline digital skills are vital across all occupations, specific digital skills serve as a ticket to middle and high-skills jobs. Many middle and high-skill occupations have a key digital skill area that lies at the heart of the job.

*One or more specific digital skills are required in 18% of low-skill jobs, 59% for middle-skills jobs.*

Job growth is expected to be particularly concentrated in areas such as software development, software engineering and web development. Within these occupations, Nesta (Which Digital Skills do you Really Need) identified animation, multi-media production, design in engineering and research and data analysis as the most promising digital skills for the future workforce.

*This requirement, created by Industry 4.0 will increase demand for digital savvy graduates as businesses look to employ candidates straight from university, favouring those who can bring some experience as well as those who combine technology and commercial skills.*



**“Even baseline digital skills (spreadsheets or presentation software, for example) pay 17% higher wages than non-digital middle-skill jobs”**

*Burning Glass Technologies  
2019*

# Skills Capital

**Investments in organisations that provide training in digital and professional skills improve the talent pipeline, push all levels of technology organisations forward, and benefit communities.**

The Black Country LEP has invested £117m into skills capital, including:

- **Walsall College Digital, Engineering and Construction Expansion**
- **Dudley Institute of Technology**
- **Large Scale 5G Testbed**
- **Elite Centre for Manufacturing Skills**
- **Fab Lab**



## Skills for the Future

**Educational attainment in the Black Country is improving, but remains below the national average at both Key Stage 2 and 4.**

A key challenge for the skills system is to align the delivery of a high-quality, industry informed curriculum, with opportunities for young people to gain real industry experience.

Engagement with employers has emphasised the importance of gaining experience by 'learning on the job' through industry placements and internships. These offer excellent opportunities to better understand the current needs of industry.

Technology should play a vital role in education. The Black Country LEP is keen to improve ICT skills in primary, secondary and further education so that local residents have the required skill set to fill local vacancies, contributing to the innovation and growth of the region. The pipeline for digital skills, as with all skills, should start in schools.

***“Opportunity is scalable. It grows when it’s shared. Investments in organisations that provide training in digital and professional skills improve the talent pipeline, push all levels of technology organisations forward, and benefit communities.”***

*Jatinder Sharma OBE  
Principal & Chief Executive,  
Walsall College Education  
Board Lead (FE)*

# Upskilling

**People and digital skills are key to growth through innovation, however, the mismatch between business skill needs and resident skill levels is a big productivity challenge.**

The overall output gap in the Black Country is £11.6bn and accounts for up to 70% of the wider WMCA productivity deficit. Within this, the lack of suitable skills is estimated to be £1.66bn.

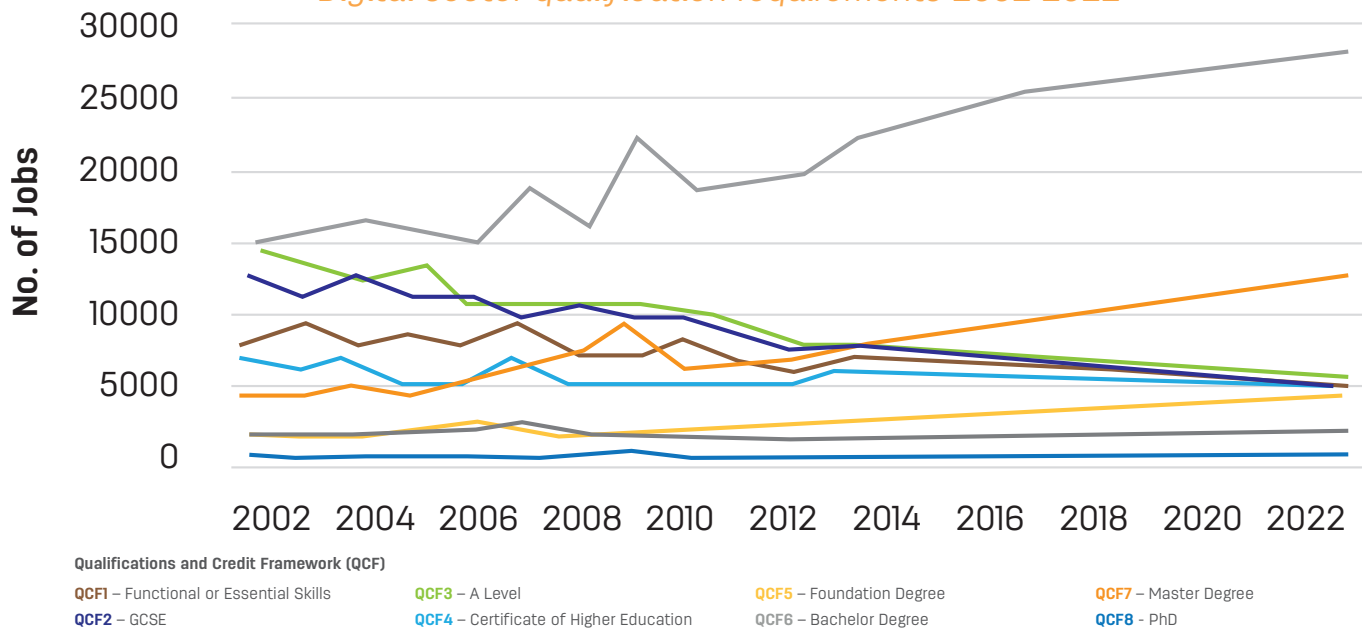
Across the Black Country, there is an increasing need for skills at degree level and above. In contrast, there is forecast to be a decline in jobs at qualification levels 1,2 and 3 (up to A Level) and modest increases elsewhere.

The demand for degree level and above skills has consequences for current and future digital provision – there is a need to provide the digital sector with high level candidates to match the demand of an increasingly technical and highly skilled industry.

By 2022, 57% of digital sector jobs in the West Midlands will require a level 6 qualification (a first degree) or higher; in 2002 this figure was 32%. In 2002 levels 1, 2 and 3 made up over 50% of jobs; in 2022 they will make up a little over 25%.

The digital skills gap is an opportunity for people of all ages – not just young people – to jump into a new sector or to get a better job in their current one.

*Digital sector qualification requirements 2002-2022*



## Digital Skills for the Unemployed

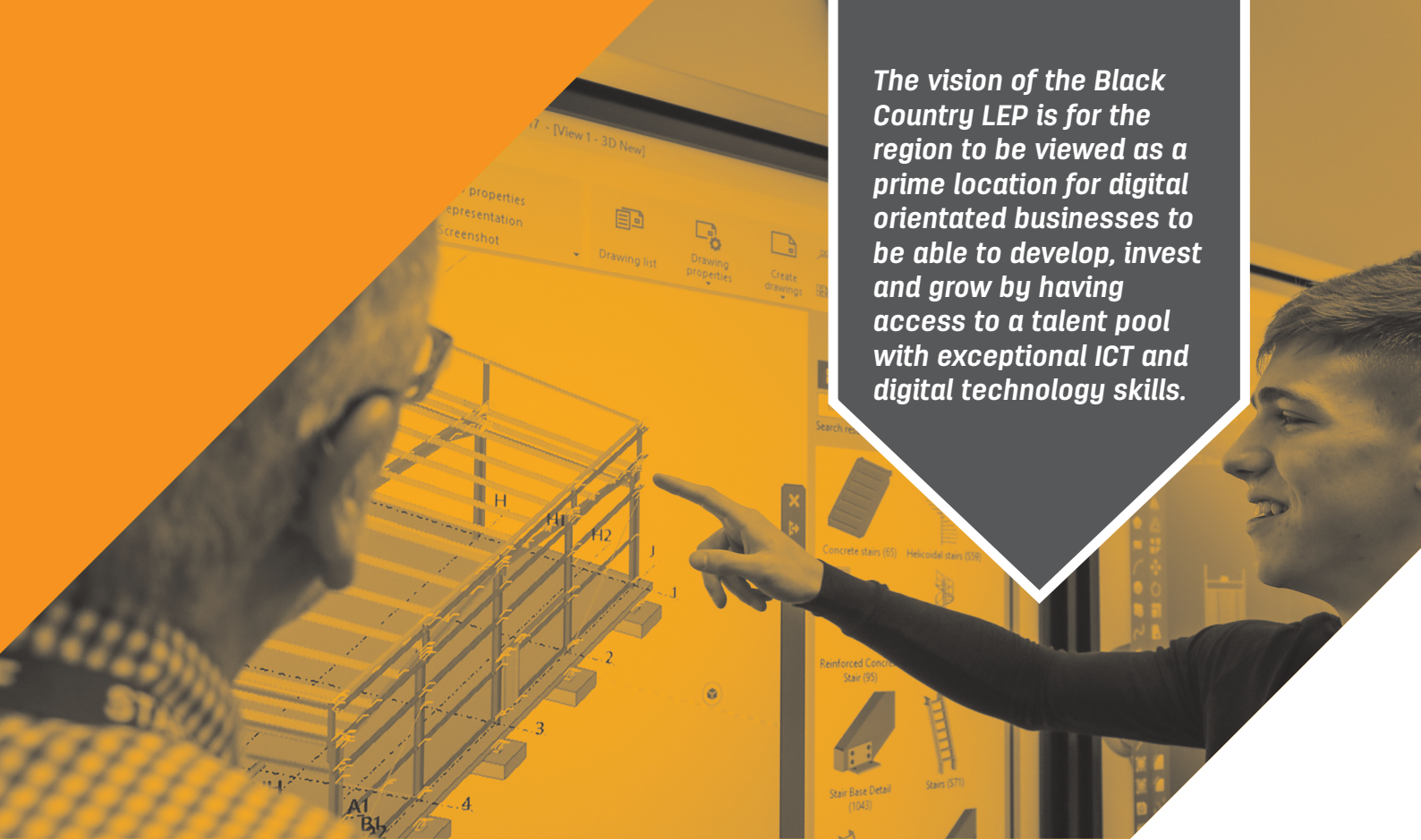
The lack of basic ICT skills amongst Black Country residents is inhibiting their employment opportunities. Unemployed people who get online could increase their chances of getting employment and people with good ICT skills earn between 3% and 10% more than people without such skills.

Jobcentre Plus estimates that 20% of people currently unemployed lack the skills and/or capacity to apply for benefits online without additional support. This amounts to over 16,000 people across the Black Country.

Developing digital skills offers job seekers a ticket to entry, but it takes more than that to take full advantage of the digital economy. Specific digital skills define career fields, and propel workers into roles that pay more, offer advancement, and are less vulnerable to being automated.

To this end, the WMCA has secured over £200m in funding to tackle skills issues for West Midlands residents - which includes the £126m annual Adult Education Budget.

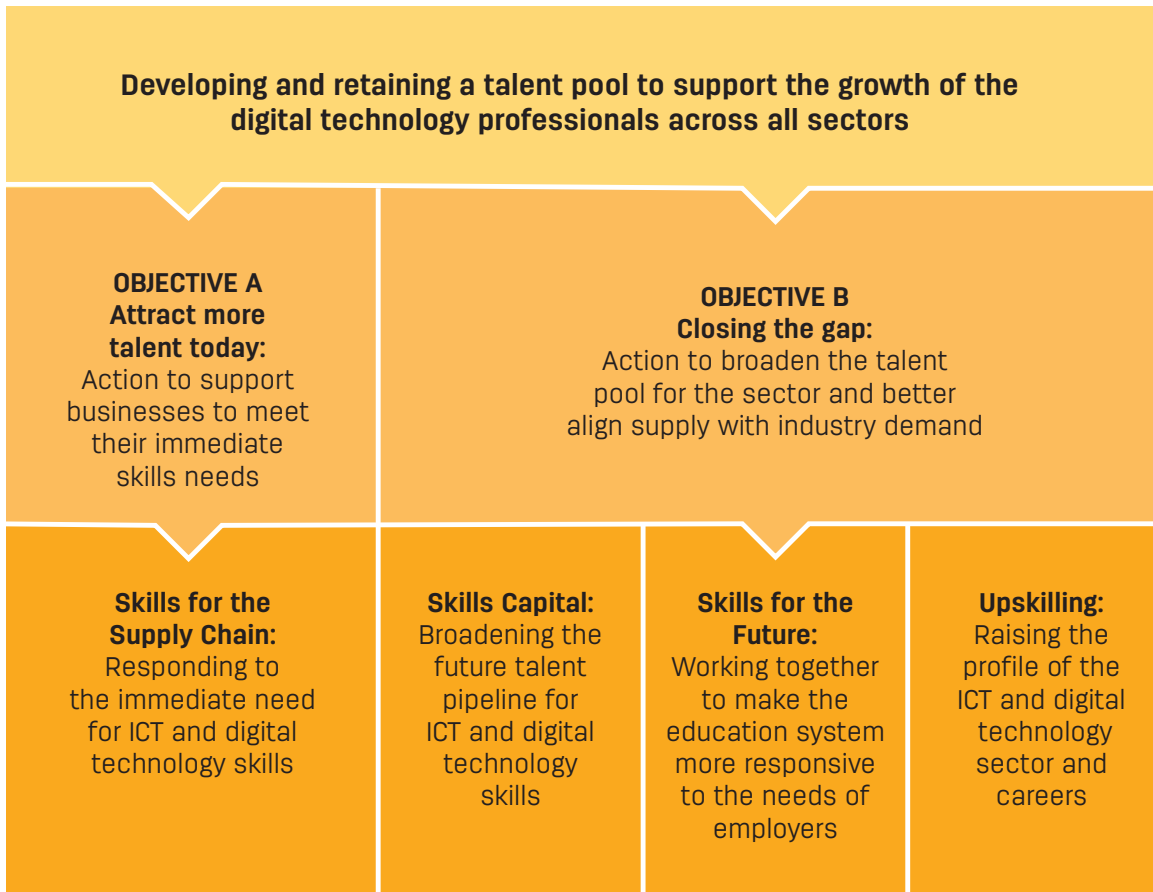
There is now a greater emphasis on digital provision which encompasses the £5m Digital Retraining Fund which went 'live' in March 2019.



*The vision of the Black Country LEP is for the region to be viewed as a prime location for digital orientated businesses to be able to develop, invest and grow by having access to a talent pool with exceptional ICT and digital technology skills.*

## Digital Skills Implementation Plan

In order to achieve this ambition, the Black Country LEP needs to ensure a fit for purpose skills system that meets the needs of digital enterprises now and in the future.



Objective	Action Plan Interventions	Measure of Success
<b>Skills for the Supply Chain</b>		
<ul style="list-style-type: none"> <li>Support the up-skilling of ICT and digital technology workforce in the priority sectors</li> <li>Increase the pipeline of talent to meet current needs</li> <li>Establish a Black Country 'Kitemarking' initiative for Black Country businesses</li> </ul>	<ul style="list-style-type: none"> <li>Work with partners to develop and spearhead new models of delivery, responding to priority sector demand. Specifically:               <ul style="list-style-type: none"> <li><b>Aerospace.</b> Increase apprenticeships particularly around coding</li> <li><b>Automotive.</b> Establish an Institute of Technology in tandem with the Digital Engineering Academy to develop an 'automotive career pathway'</li> <li><b>Rail.</b> Work with HE institutions like Birmingham Centre for Research, Railway and Education (BCRRE) to accelerate higher-level skills to embrace the digitisation of rail</li> <li><b>Construction.</b> Work with CITB to design and deliver new skills provision</li> <li><b>Metals.</b> Create a Black Country Metals Sector Fund</li> </ul> </li> <li>Support each priority sector to establish employer/trainer workshops for the top 5 shortage areas</li> </ul>	<ul style="list-style-type: none"> <li>Black Country residents to match the national average in Level 3 and Level 4 qualifications</li> <li>Increase Total GVA from the digital/creative sector by £500m</li> <li>Black Country businesses to be rewarded with a 'kitemark' for offering digital skills training</li> </ul>
<b>Skills Capital</b>		
<ul style="list-style-type: none"> <li>Raise digital skill levels through greater collaboration between training institutes and industry bodies</li> </ul>	<ul style="list-style-type: none"> <li>Extend the Black Country 'Skills Factory' to develop relevant frameworks for priority sectors based on sectorial need</li> <li>Set up Black Country 'Innovation Factory' to provide mentoring and strategic support on innovation to supply chain firms</li> <li>Maximise Black Country digital assets to raise the profile of the Black Country as a 'digital' region</li> </ul>	<ul style="list-style-type: none"> <li>Engage businesses and career influencers to clearly communicate career opportunities associated with digital technologies</li> <li>Maximise Black Country to raise the profile of the Black Country as a 'digital' region</li> </ul>
<b>Skills for the Future</b>		
<ul style="list-style-type: none"> <li>Ensure the education system is aligned with the needs of businesses for digital skills</li> <li>Encourage more young people to choose a career in digital technologies including more graduates.</li> </ul>	<ul style="list-style-type: none"> <li>Local partners and industry to work with Government to re-focus parts of the school curriculum to place a greater emphasis on subjects relating to priority sectors</li> <li>Ensure that the new T-Levels 'Technical Pathway' from September 2020 is fully integrated into the pipeline of talent delivery</li> <li>Greater engagement with the Enterprise Advisor Network to ensure high quality careers advice aligns to up to date LMI</li> <li>Promote high quality digital careers and opportunities in the region's priority sectors</li> </ul>	<ul style="list-style-type: none"> <li>Increase the number of students studying digital based subjects by 200%</li> <li>Enterprise Adviser Network to increase Employer Encounters' and 'Employer Experiences' to 75% in the Black Country</li> </ul>
<b>Upskilling</b>		
<ul style="list-style-type: none"> <li>To reduce the number of unemployed people who lack the skills to get online</li> <li>Ensure a greater emphasis on digital through AEB provision</li> </ul>	<ul style="list-style-type: none"> <li>Re-train and upskill adults who are working in low paid, insecure employment (at risk of automation)</li> <li>Explore recruitment issues with employers to identify digital opportunities for the unemployed</li> <li>Test what financial support needs to be provided for adults to re-train</li> </ul>	<ul style="list-style-type: none"> <li>20% increase in digital sector employment</li> <li>To reduce the number of residents who have never used the internet to zero</li> <li>To equal national performance for residents with no qualifications</li> </ul>

## DISCOVER MORE

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