Digital Skills Business Survey 2020

For Serco and the Stoke-on-Trent and Staffordshire Local Enterprise Partnership

30 April 2020

RESEARCH

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This report has been commissioned by the Skills Support for the Workforce programme, delivered by Serco in partnership with the Stoke-on-Trent & Staffordshire LEP.

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Project number:	SKILL01-8537
Title:	Stoke and Staffordshire Digital Skills Survey
Location:	S:\ProjectFiles\S\Serco\SKILL01-8537_Stoke_Staffordshire_Digital_Skills_Survey\Reports\Serco_SSLEP_Digital_Skills_Business_Survey_2019_V3F.doc
Date:	30 April 2020
Report status:	Final
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This research has been carried out in compliance with the International standard ISO 20252, (the International Standard for Market and Social research), The Market Research Society's Code of Conduct and UK Data Protection law

1. Executive Summary

- This research sets out to gain a better understanding of local skills demand issues so that resources can be allocated more effectively and local training provision can be more targeted, hence helping Stoke-on-Trent and Staffordshire businesses to improve productivity and achieve their potential.

- A telephone and parallel online survey was completed with 303 businesses from across Stoke-on-Trent and Staffordshire between 7 February and 21 February 2019 (with the online survey remaining open for a further month). To ensure a representative sample, quota targets were set on SIC, number of employees and Local Authority area.

- Data from the IDBR highlights that 89% of businesses operating in Stoke-on-Trent and Staffordshire have fewer than 10 employees and survey data highlights that the majority have operated within the area for more than 10 years and are private businesses.

Skills shortages

- 9% (27) [1] of businesses had current skills shortage vacancies (vacancies that are hard to fill due to a lack of skills, qualifications or experience amongst applicants), rising to 15% (5) amongst those with 10 or more employees.

- A wide variety of skills shortage areas exist with the most common relating to technical or practical skills - affecting 79% (21) of businesses with a skills shortage. Several more generic skills are also a problem, including 'general common sense' (71%, 19), 'attitude and work ethic' (56%, 15) and 'suitable work experience' (49%, 13).

- Nearly half (47%, 13) of those reporting a skills shortage vacancy said that this included a digital related skills shortage, which equates to 4% of all businesses.

- Programming languages and coding skills were the most common problem areas (mentioned by 30% (8) of businesses with skills shortages), followed by digital / web design skills (25%, 7) and data analysis skills (24%, 6). These tended to be very sector specific in nature, with some caused by a fundamental problem with supply and others caused by competition from other better paid industries.

Skills gaps

- 8% (26) of businesses had a skills gap amongst their current workforce, rising to 18% (6) amongst those with 10 or more employees.

- Again, the exact nature of skills gaps varies greatly by sector. The most common skills gaps concern technical or practical skills (affecting 53% (13) of businesses with a skills gap), flair and imagination (50%, 13) and problem-solving skills (50%, 13).

- Nearly two-thirds (65%, 17) of those reporting a skills gap said that this involved some type of digital skill, which equates to just 6% of all businesses.

[1] *Figures after the percentages represent the actual number of respondents giving that answer (based on weighted data).*

- The most frequent digital skills gap related to Microsoft Office, mentioned by 36% (9) of businesses with a skills gap. This was followed by set-up, support and management of computer systems and networks (26%, 7), CRM software skills (25%, 6), digital marketing skills (24%, 6) and IT security (23%, 6). Many different skills gaps were referenced by businesses, again underlining the fact that the digital skills required varies by sector.

- The digital skills gaps that exist tend to affect all age groups, however evidence suggests that some areas e.g. Microsoft Office and digital marketing skills are more prominent amongst older age groups.

- The fact that some SMEs outsource IT work, and other core functions involving software such as accounting, may also impact on the relatively limited extent to which they seem to be impacted by IT related skills gaps and shortages.

Impact of skills shortages and gaps

- Where a digital skills gap exists this is likely to have a significant negative impact on business, with higher operating costs and having to outsource more work being the most common. For a small number of businesses skills gaps are evidently inhibiting growth.

- Most businesses are doing what they feasibly can to address the skills gaps that exist, which commonly involves training but this also impacts on business as it takes up precious time and resource, particularly when delivered on-the-job by another member of staff.

Training and development

- Half (49%, 149) of businesses in Stoke-on-Trent or Staffordshire don't have any form of training plan, budget or skills analysis, and there is limited interest in support with developing a digital skills analysis of the workforce. Those facing current skills gaps or shortages were more likely to have training plans or a skills analysis of the workforce already, suggesting that the issues faced are not down to a lack of a structured approach.

- 44% (133) of businesses had arranged or funded training or development in the past 12 months, increasing to 79% (26) of those with 10 or more employees. Those facing current skills gaps or shortages were also more likely to have done so, hence underlining the high level of action in response to skills issues.

- This training or development may have covered any subject area, but 15% (46) of all businesses had arranged or funded digital specific training or development in the past 12 months.

- Digital training was most commonly delivered online/using e-learning - 70% (32) of those arranging or undertaking digital training having used this method; followed by instructor led / classroom training either offsite (64%, 29) or onsite (59%, 27). It is clear however that specific skills or occupations will dictate which method is most practical.

- Nearly a fifth (18%, 55) of businesses said that they didn't expect any digital skills needs to arise in the future, but for others the most common tool or method for delivering digital skills training in the future was online/e-learning - 45% (136) of businesses would use this method; followed by instructor led / classroom training either offsite (41%, 124) or onsite (41%, 125). However, current circumstances may lead businesses to consider new methods or tools given the need to move training out of the classroom.

- Nearly two-thirds (64%, 193) of businesses do not face any barriers to training, but where they do exist the cost of training and the impact of having staff away from work tend to cause the biggest issues. Those facing current skills gaps or shortages are unfortunately more likely to face such barriers.

Attitudes to technology

- Businesses were generally very positive about their ability to understand and use digital technology. Two-thirds (67%, 166) NET: agreed (combining strongly agree and agree) that 'we understand the skills our staff need to use digital technology in our business' and 61% (153) NET: agreed that 'we have the confidence and skills to try out new digital technology'.

- However, there were lower levels of confidence in relation to training - 54% (129) NET: agreed that 'our business encourages and helps staff understand and increase their own digital skills' and just 38% (90) NET: agreed that 'we have training in place to allow our staff to increase their digital skills'.

- Microbusinesses (those with 1-9 employees) were less likely than those with 10 or more employees to agree with each of these statements, underlining the additional challenges faced by the smallest of employers. For example, 36% (76) of businesses with 1-9 employees and 52% (14) of those with 10 or more employees NET: agreed that 'we have training in place to allow our staff to increase their digital skills'.

- One in ten (9%, 26) businesses were concerned about the impact that automation and robotics might have on them in the future, which primarily related to technology replacing humans - mentioned by 49% (13) of businesses that are concerned; other concerns varied from automation/robotics providing increased competition (16%, 4), uncertainty over how to use it or keep up to date with it (15%, 4), a loss of skills (10%, 3) and impacts on social interaction (9%).

Future technology use

- To provide insight into future digital technology usage, businesses were asked what barriers existed to them using more digital technology. More than half (54%, 164) said that there were 'no barriers', with a wide range of other responses given by the remaining businesses.

- The most common barriers cited were 'time to invest in upskilling staff' (mentioned by 14% (41) of businesses), 'cost' (12%, 36), 'no need for digital technology' (8%, 25) and 'a lack of understanding or awareness' (6%, 17).

- Covid-19 is and will continue to have an impact on businesses, but digital technology has facilitated business continuation by enabling remote working and addressing skills issues through online tools and training opportunities. Predicting how that might impact on businesses in the future is difficult but methods of doing business will likely change and in some cases that might alter the emphasis on digital technology and hence change training requirements.

2. Introduction

Skills Support for the Workforce (SSW) is a programme co-financed by the Education and Skills Funding Agency (ESFA) and European Social Fund (ESF).

It aims to upskill employees within small and medium-sized enterprises by providing recognised, accredited qualifications and bespoke training courses to enhance employees' skills, increase competitiveness and boost the local economy.

Serco Employment, Skills and Enterprise (ESE) is the Prime Contractor of the SSW programme in the Stoke-on-Trent & Staffordshire Local Enterprise Partnership region and delivers training through a network of expert training providers.

This research has been funded by ESFA and ESF as part of the SSW programme, to provide research on the current and future skills needs of the Local Enterprise Partnership.

Qa Research is pleased to submit this research report to Serco and the Stoke-on-Trent and Staffordshire Local Enterprise Partnership (SSLEP). It is based on the findings from a quantitative survey of businesses and follow-up depth interviews carried out between February and April 2020.

This research comes at a time when rapid advances continue to be made in artificial intelligence (AI), robotics and other technologies, which is impacting on industries throughout the UK economy. These advances are changing the nature of the jobs that need to be done, and the skills needed to do them, at a considerable rate.

Some members of the UK's workforce do not possess the required level of digital literacy skills to keep up with this pace of change, and hence it can be difficult for employers to fill roles and train existing staff. It is therefore important that skills needs are identified to ensure that provision is optimised and, where required, support can be provided to organisations that may find the process overwhelming which can inhibit growth. This has particular importance for SMEs, which make up a very high proportion of businesses across the UK and are also typically impacted more by barriers related to time and money.

Through gaining a better understanding of local skills demand issues, resources can be allocated more effectively and local training provision (through Serco's Skills Support for the Workforce (SSW) programme) can be more targeted, hence helping Stoke-on-Trent and Staffordshire improve its productivity and achieve its potential.

To gather this data, a robust survey of businesses was carried out, and supplemented with a series of follow-up depth interviews, and the findings from this survey are outlined in this report

3. Aims and objectives

The main objectives of this research were to;

- Undertake a survey amongst a **robust and representative sample** of Stoke-on-Trent and Staffordshire SMEs that includes participation by some important small and medium sized businesses.
- **Identify the main challenges that businesses face** and how these can be addressed.
- Establish what **digital skills shortages and gaps exist** and what support might best be provided to resolve these issues.
- Investigate whether these issues **impact on certain sectors or age groups** more than others.
- Review to what **extent employers are already attempting to fill these shortages and gaps** through training or development.
- Establish any **digital skills barriers** that employers have which are preventing growth and increased productivity of their businesses.
- Determine how Serco, SSLEP and individual training providers can **support businesses to overcome challenges** and ensure business growth is not inhibited through the lack of appropriately skilled staff.

4. Methodology

4.1 Quantitative survey

To gather the required data a telephone survey was undertaken, with a parallel online survey made available to widen the opportunity to participate.

The sample for the telephone survey was sourced from Dun & Bradstreet. A sample of 3,000 in scope businesses were selected based on the quota specification, in order to achieve the required number of interviews by SIC, business size and area. Where available a senior decision maker was tagged to the sample, but this was not available in all cases.

To ensure that a representative sample of respondents was interviewed, quota targets were set to control the proportion of interviewed businesses by Standard Industrial Classification (SIC) code, number of employees and Local Authority area.

The quota targets were broadly representative of the business population of Stoke-on-Trent and Staffordshire (based on data from the 2019 IDBR for enterprises), however, micro businesses (fewer than 10 employees) were deliberately under-sampled to increase the number of small and medium sized businesses included in the sample for analysis purposes. Additionally, some under-sampling and over-sampling by SIC was also applied to ensure that sectors with higher employment levels were adequately represented in the data. Weighting was applied at the analysis stage to ensure that the final sample was representative of the business community in Stoke-on-Trent and Staffordshire.

Qa Research carried-out the telephone survey with an achieved sample of 300 businesses between Friday 7 February and Friday 21 February 2020.

The online survey was scripted by Qa Research and a link was then provided to Serco and SSLEP for inclusion on websites and in newsletters or emails, thereby allowing any business to access and complete the survey directly. The online link was sent out on 27 February and remained live until 25 March 2020. Just 3 responses were submitted during this period.

All data processing, coding and data preparation was carried out in-house by Qa Research.

Based on the business population of 39,155 SMEs in the Stoke-on-Trent and Staffordshire area, the overall sample of 303 provides data which in research terms means we can be 95% confident that the data at an overall level has a variance of no more than +/-5.6% accuracy.

4.2 Follow-up interviews

A series of 10 follow-up telephone interviews were then carried out with businesses who participated at the survey stage and had agreed to a follow-up interview. The objective of these follow-up calls was to further investigate responses given and gain a more detailed understanding of skills needs and the barriers faced.

Of the 303 businesses participating in the first stage, a total of 76 agreed to take part in a follow-up interview which provided a sample frame for recruitment. The aim was to recruit a mixture of businesses based on sector (including advanced manufacturing, logistics and construction), area and whether they had digital skills gaps, faced barriers or were addressing digital skills needs already.

Due to the impact of Covid-19 on business, and the associated availability of contacts, the interviews were postponed until mid-April when business availability was slightly improved. Interviews took place between Monday 20th April and Thursday 30th April 2020.

The final sample comprised businesses from the following industries: manufacturing (two), logistics /transport (two), construction (one), creative/digital (one), machinery hire (one), hospitality (one), professional/financial services (one) and automotive (one). Two businesses had current skills gaps.

All but one of the businesses were micro sized (with between 1 and 9 employee), with the other business having 30 employees.

Interviewers used a set discussion guide (included in the appendix for reference).

Please note that the results of qualitative research cannot be projected onto the overall population, due to the sample selection, interviewing methods and sample size.

The results of the interviews are used to add additional detail to the key findings section of the report (section 5), and four case studies are included in section 6.

5. Key findings

This section outlines the key findings from the survey.

5.1 Sample profile

This section details the profile of respondent businesses.

Firstly, the table below details the profile of businesses by SIC code, based on data from the IDBR and compares this with the unweighted achieved sample and the weighted sample.

Figure 1. Business activity - SIC

SIC	All Enterprises (IDBR 2019)		Achieved Sample (Unweighted)		Achieved Sample (Weighted)	
A - Agriculture, forestry and fishing	2,860	7.3%	13	4.3%	22	7.3%
B - Mining and quarrying	15	0.0%	0	-	-	-
C - Manufacturing	2,805	7.2%	69	22.8%	22	7.3%
D - Electricity, gas, steam and air conditioning supply	40	0.1%	1	0.3%	0	0.0%
E - Water supply; sewerage, waste	140	0.4%	1	0.3%	1	0.3%
F - Construction	5,755	14.7%	32	10.6%	45	14.9%
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	6,210	15.9%	41	13.5%	48	15.8%
H - Transportation and storage	2,280	5.8%	20	6.6%	18	5.9%
I - Accommodation and food service activities	2,270	5.8%	25	8.3%	18	5.9%
J - Information and communication	1,920	4.9%	10	3.3%	15	5.0%
K - Financial and insurance activities	665	1.7%	1	0.3%	5	1.7%
L - Real estate activities	1,275	3.3%	3	1.0%	10	3.3%
M - Professional, scientific and technical activities	5,285	13.5%	33	10.9%	41	13.5%
N - Administrative and support service activities	3,000	7.7%	10	3.3%	23	7.6%
O - Public administration and defence; compulsory social security	145	0.4%	0	-	-	-
P - Education	640	1.6%	10	3.3%	5	1.7%
Q - Human health and social work activities	1,420	3.6%	14	4.6%	11	3.6%
R - Arts, entertainment and recreation	690	1.8%	13	4.3%	5	1.7%
S - Other service activities	1,735	4.4%	7	2.3%	13	4.3%
Base	**39,155**		**303**		**303**	

For some SIC codes the unweighted, achieved sample differs from the profile of all businesses due to the over and under-sampling of certain types of businesses.

This was carried out to ensure that a robust number of businesses were interviewed in key sectors, particularly those with high employment levels, for analysis purposes.

The weighting applied corrected for these differences and consequently the weighted, achieved sample aligns with the IDBR profile. All findings in this report are based on the weighted sample and we can, therefore, be confident that the survey sample reflects the LEP area business population by SIC code.

The table below shows the profile of businesses based on the number of employees. Weighting has also been applied to correct for the deliberate under-sampling of micro-sized businesses.

Figure 2. Number of employees

Number of employees	All Enterprises (IDBR 2019)		Achieved Sample (Unweighted)		Achieved Sample (Weighted)	
Micro (0 to 9)	34,810	89.3%	223	73.6%	270	89.1%
Small (10 to 49)	3,580	9.2%	59	19.5%	28	9.2%
Medium-sized (50 to 249)	610	1.6%	21	6.9%	5	1.7%
Base	**39,000**		**303**		**303**	

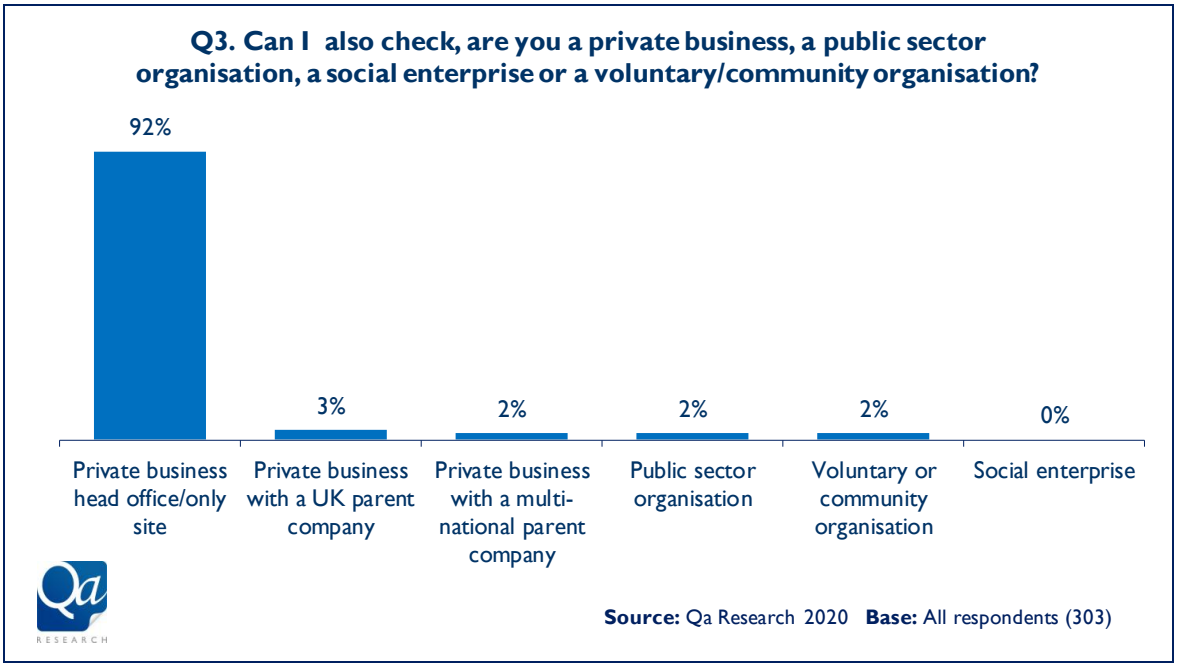
Quotas were also set on the proportion of businesses interviewed in each Local Authority area. The table below shows how weighting has been applied to ensure the final sample is representative of the business population across the LEP area.

Figure 3. Local Authority area

Area	All Enterprises (IDBR 2019)		Achieved Sample (Unweighted)		Achieved Sample (Weighted)	
Cannock Chase	3,385	8.6%	19	6.3%	26	8.6%
East Staffordshire	4,760	12.2%	34	11.2%	37	12.2%
Lichfield	4,815	12.3%	32	10.6%	37	12.2%
Newcastle-under-Lyme	3,530	9.0%	26	8.6%	27	8.9%
South Staffordshire	4,660	11.9%	38	12.5%	36	11.9%
Stafford	5,360	13.7%	49	16.2%	42	13.9%
Staffordshire Moorlands	4,165	10.6%	32	10.6%	32	10.6%
Stoke-on-Trent	6,140	15.7%	57	18.8%	47	15.5%
Tamworth	2,345	6.0%	16	5.3%	18	5.9%
Base	**39,155**		**303**		**303**	

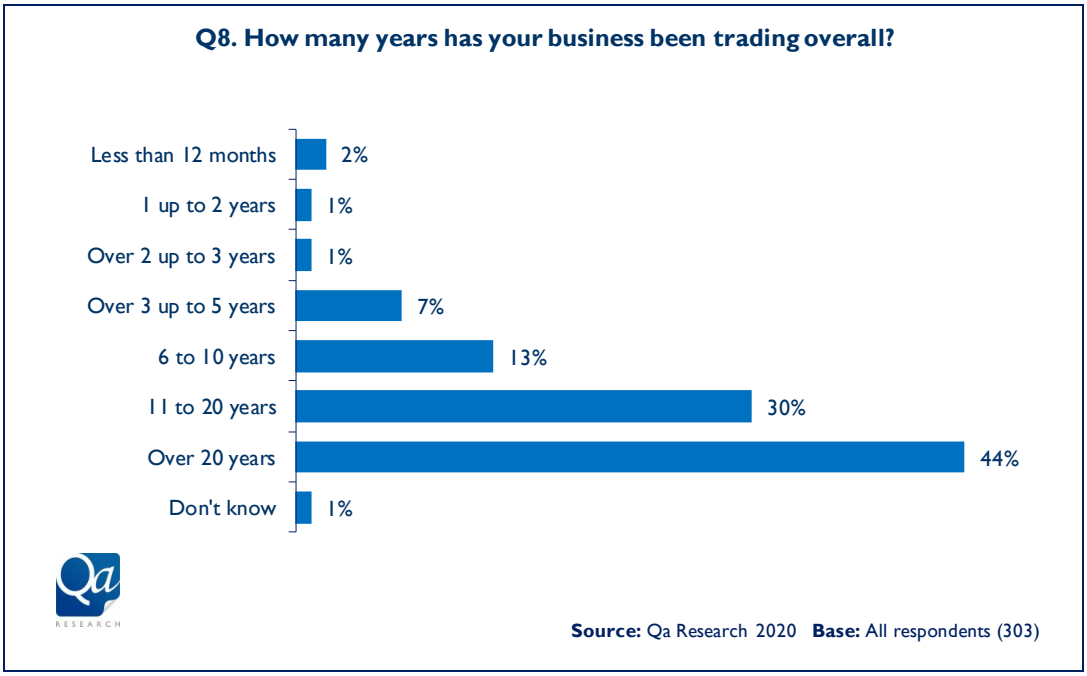
As shown in the below chart, the vast majority of businesses were private businesses and the site interviewed was the head office or only site (92%). A small minority were a private business with a UK parent company (3%), a private business with a multi-national parent company (2%), a public sector organisation (2%) or a voluntary/community organisation (2%).

Figure 4. Type of business



A question was also included to explore how long businesses had been operating. As shown below the majority of businesses had been operating for more than 10 years (30% between 11 and 20 years, and 44% for more than 20 years). Businesses started more recently (those operating for NET: up to 5 years) were most likely to operate in the SIC codes Q. Human health and social work (31%) and I. Accommodation and food services activities (26%).

Figure 5. Number of years business has been operating



5.2 Current skills shortages

This section explores the incidence of skills shortage vacancies in businesses, and the exact nature of the type of skills, qualifications or experience that they are finding it hard to find.

In total, 9% of businesses reported that they had current skills shortage vacancies (vacancies that are hard to fill due to a lack of skills, qualifications or experience amongst applicants). This is slightly higher than the proportion of all UK businesses reporting a skills shortage vacancy (6%).[2]

Businesses with 10 or more employees (15%) were more likely than those with 1-9 employees (8%) to have current skills shortage vacancies. Results should be treated with caution due to low base sizes, however, businesses operating within J. Information and communication (43%) were particularly likely to have current skills shortage vacancies.

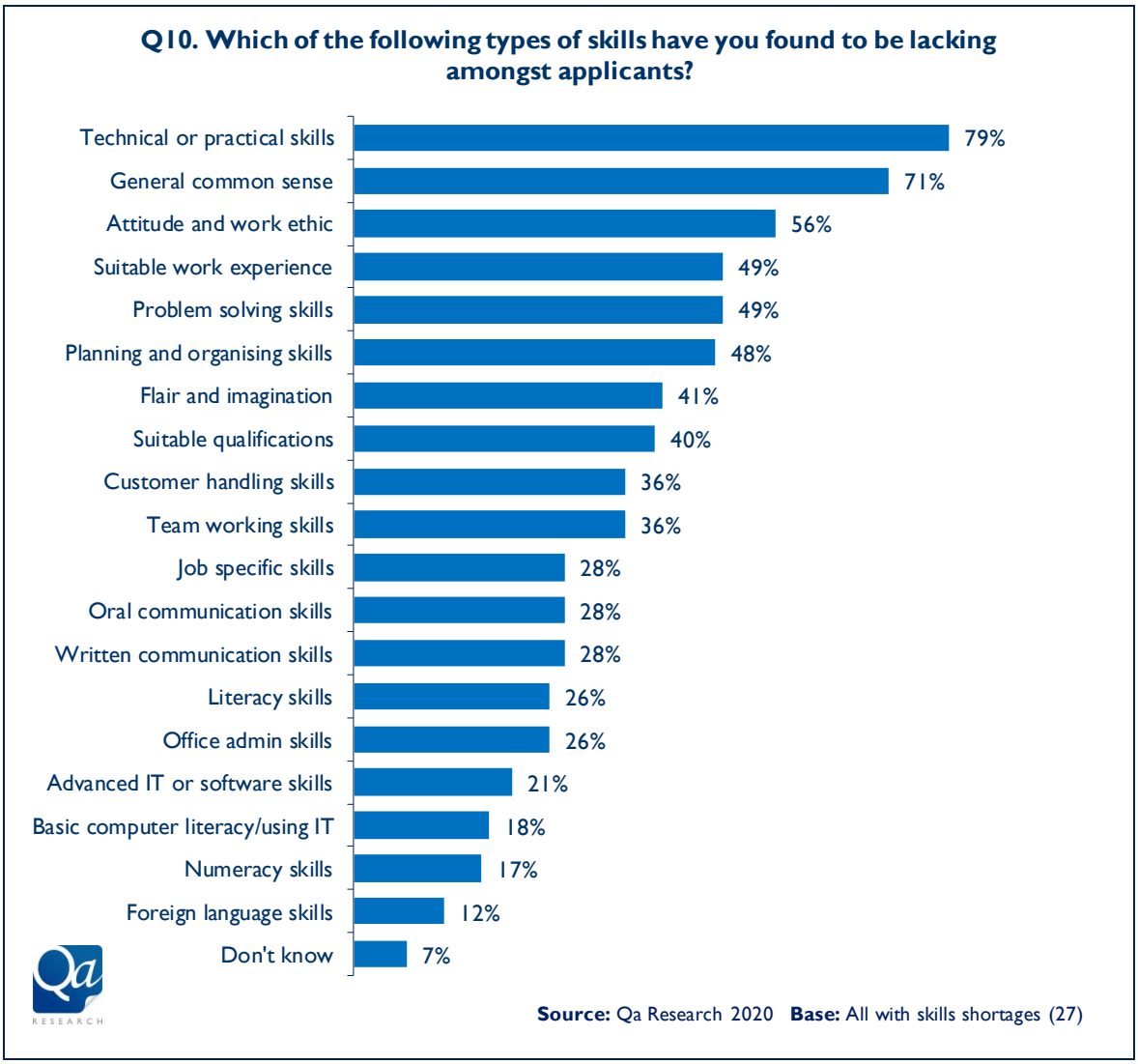
Specific skills lacking amongst applicants are shown in the following chart, which is based on those reporting a skills shortage vacancy only.

Where vacancies do exist, it is clear that the exact skills shortages underpinning them vary greatly. The most common type of skill mentioned was 'technical or practical skills' (79%), followed by a number of more generic skills including 'general common sense' (71%), 'attitude and work ethic' (56%) and 'suitable work experience' (49%).

IT specific skills shortages were only reported by a very small number of businesses in Stoke-on-Trent and Staffordshire. 'Advanced IT or software skills' (21%) and 'basic computer literacy or using IT' (18%) were only mentioned by around a fifth of those reporting current skills shortage vacancies (just 2% of all businesses in each case).

[2] UKCES, UK Employer Skills Survey (2017)

Figure 6. Areas of skills shortage amongst applicants



During the follow-up interviews a number of businesses underlined the importance of some of these generic skills, including, job specific skills and attitude and work ethic. Some are causing a huge issue in relation to skills shortages:

"99% of those coming out of college fully trained haven't got a clue. They need to be able to see what is going on and what could cause that problem and that skillset doesn't exist. There is no point in taking on anyone who has come out of the college. Even the best kids lack basic job specific knowledge." (Automotive, Staffordshire Moorlands)

"We find it hard to find enough people who are willing to do a manual job. Too many want to sit at a desk and use technology. We just can't find class 2 lorry drivers or lift supervisor skills so have to find someone and train them up which takes time." (Machinery Hire, Lichfield)

Other industries highlighted the importance of other generic skills and are mindful that digital skills should not be prioritised at the expense of others:

"I would always prioritise employing people that are passionate, I'm not so worried about the digital skills. They can learn from the people who know where we are going, but passion is harder to find". (Construction, Lichfield)

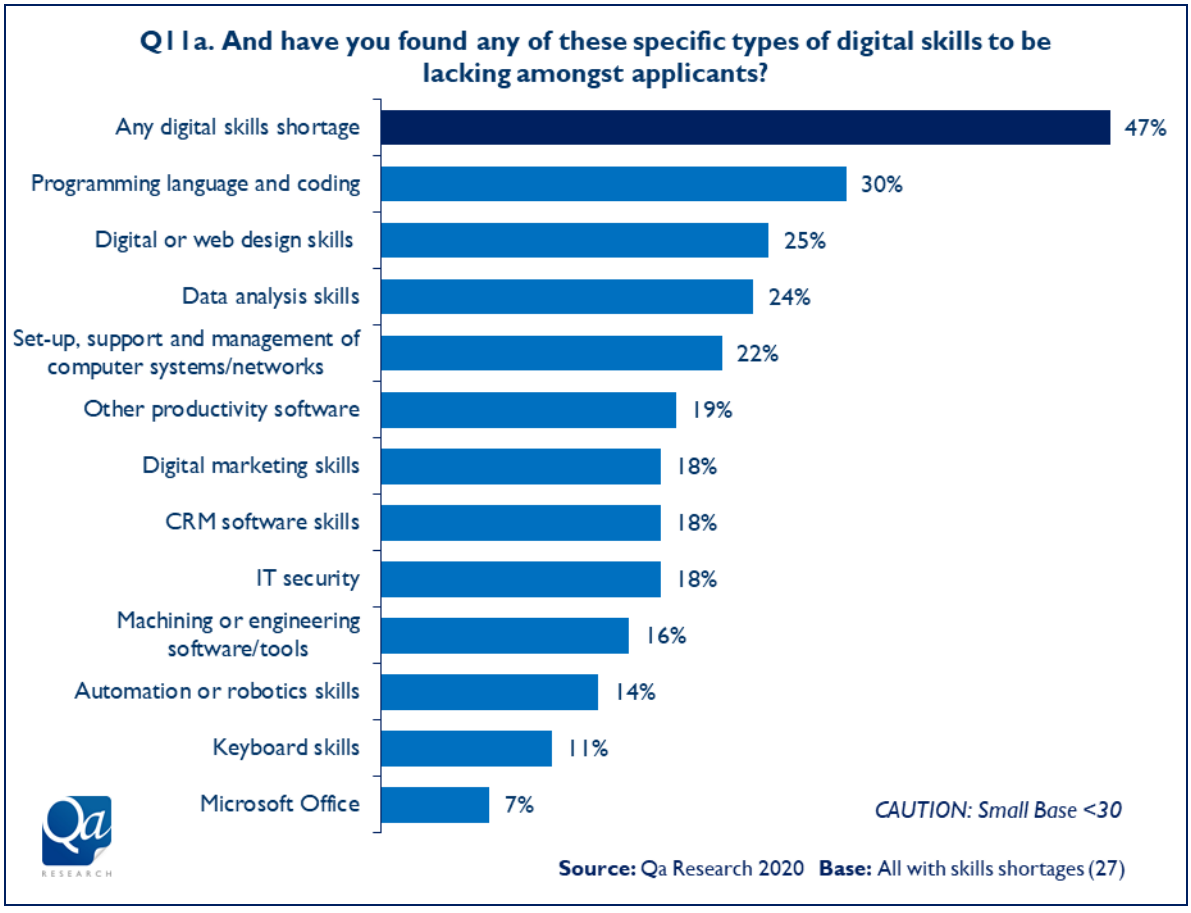
Businesses were also prompted with a list of digital specific skills that they might have found lacking amongst applicants. Results are shown in the following chart, which is again based on those reporting a skills shortage vacancy only.

Nearly half (47%) of those reporting a skills shortage vacancy said that this included some type of digital skill. This equates to just 4% of all businesses, which fall into the following sectors: C. Manufacturing, F. Construction, G. Wholesale and retail trade; repair of motor vehicles or motorcycles, H. Transportation and storage, I. Accommodation and food services activities, J. Information and communication, M. Professional, scientific and technical activities, Q. Human Health and Social Work Activities, and R. Arts, entertainment and recreation.

A wide variety of digital skills were mentioned, with 'Programming language and coding skills e.g. Java, SQL, Python' the most frequent digital skill lacking in applicants (mentioned by 30% of businesses with current skills shortages). The next most common digital skills found lacking in applicants were 'digital or web design skills' and 'data analysis skills e.g. Stata, Big Data, Data Science' (25% and 24% respectively).

Many digital skills shortages were referenced by businesses, underlining the fact that the digital skills required varies from sector to sector.

Figure 7. Digital skills found lacking amongst applicants



The 13 businesses reporting these digital skills shortages were asked to state the specific occupations that they were having difficulties with. The most frequent responses were IT/software development roles (4 businesses) and engineering or technical roles (3 businesses).

During the follow-up interviews a small number of businesses provided further details about the digital skills shortages currently impacting on their business. In both cases they related to industry specific programming or software skills in the Automotive sector (C++ programming and digital networks such as CAN bus systems) and in the Engineering sector (G-code programming). In both cases this is more an issue with attracting those with the relevant skills to the sector, as the lure of better paid or higher-profile industries is significant.

"The problem is they have to be a technician who gets their hands dirty pulling an engine apart, but also a computer engineer. So it's two different industries rolled into one and the programmers who are good with C++ don't want to work in the car industry, so we are left trying to train ourselves if we can find someone with the natural talent." (Automotive, Staffordshire Moorlands)

One other interviewee who works in a niche industry also described an impending skills shortage, something that can occur frequently in niche fields, but past experience shows that this will be easy to resolve given the skills levels and number of people required:

"Our next project will require freight tracking technology and someone who can use it as it isn't within the capabilities of our existing staff. I'm pretty sure this won't exist in North Staffordshire, but the suppliers of the technology often provide training to go with it. Any great critical mass there would be issues but in small quantities (2-4 people) it has never been a problem before as the workforce is highly paid and skilled." (Logistics, Newcastle-under-Lyme)

5.3 Current skills gaps

This section explores the degree to which businesses felt that skills gaps exist amongst their current workforce (skills that need developing or are missing amongst the current workforce). Again, businesses were prompted with lists of general and digital specific skills.

In total, 8% of businesses reported that a skills gap existed amongst their current workforce. This is lower than the proportion of all UK businesses reporting a skills gap i.e. that at least one member of staff is not fully proficient at their job (13%).[3]

Businesses with 10 or more employees (18%) were more likely than those with 1-9 employees (7%) to have a skills gap amongst their current workforce. Results should be treated with caution due to low base sizes, however, businesses operating within J. Information and communication (32%) were the most likely to have a skills gap amongst their current workforce.

Specific skills gaps existing amongst the current workforce are shown in the following chart, which is based on those reporting a skills gap only.

As with areas of skills shortage, the exact nature of skills gaps varies greatly. The most common type of skills gap mentioned was again 'technical or practical skills' (53%), followed by 'flair and imagination' (50%) and 'problem solving skills' (50%).

[3] UKCES, UK Employer Skills Survey (2017)

Job specific skills (44%) most commonly included references to manufacturing or management skills. All other skills gaps are ranked in the below chart, and again IT skills did not affect a high number of businesses.

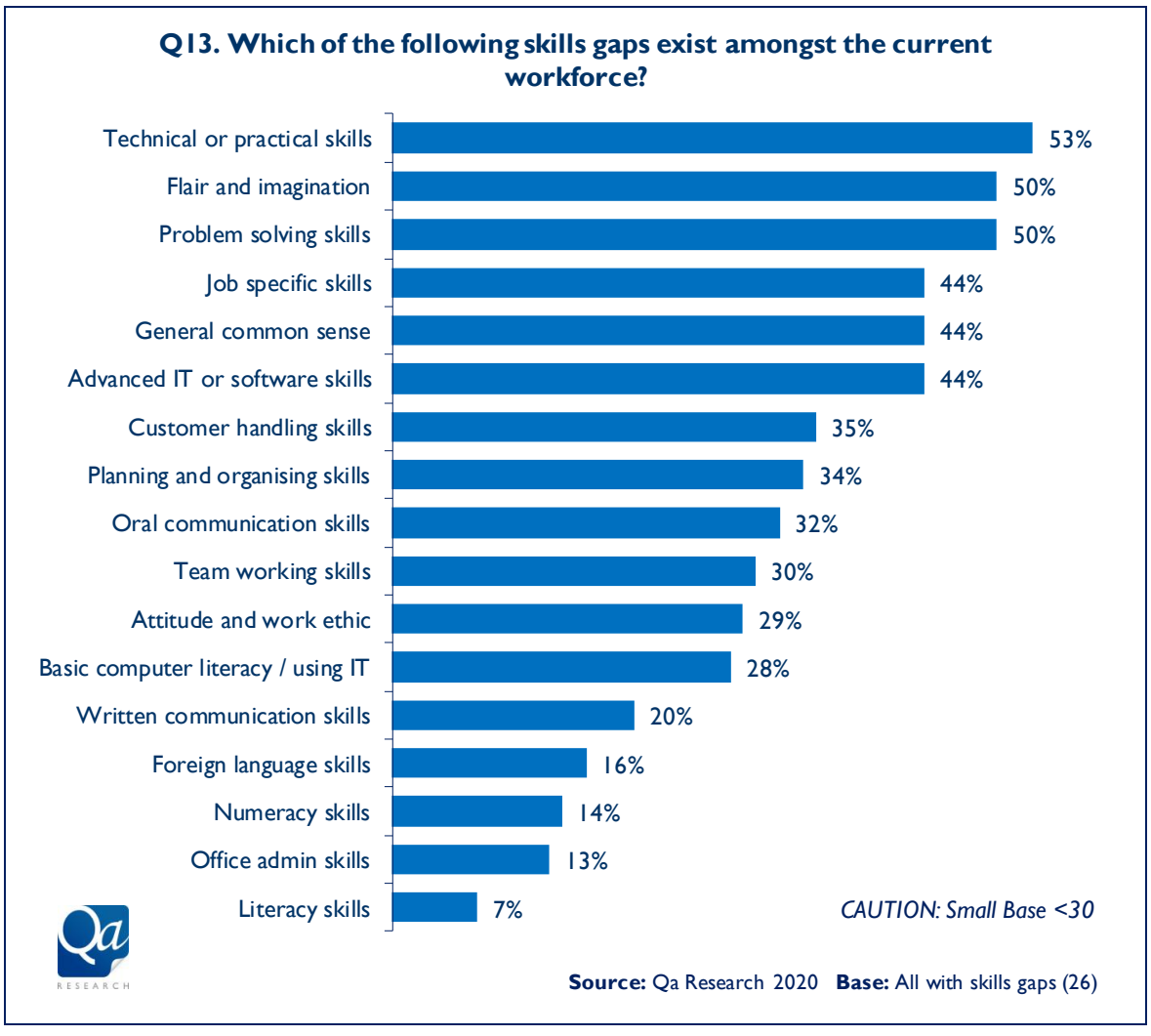
The follow-up interviews suggested that one reason for IT related skills not being in short supply, is that SMEs (particularly Micro sized ones) often outsource this type of work.

"Our main use of digital would be on the IT side, but we outsource all of that to a company in London and they are great. They keep us ahead of the game." (Professional/Financial services, Stafford)

The same approach seems to be taken by SMEs with other core functions such as accounts, which might otherwise cause additional skills shortages or gaps.

"We used to employ someone who did the accounts and payroll, but it was pretty complicated and required a greater level of expertise really. We outsource that now and it works well, it's one less thing to have to worry about or try and keep up-to-date with skills wise." (Machinery Hire, Lichfield)

Figure 8. Areas of skills gaps that exist amongst current workforce



During the follow-up interviews one business elaborated on the skills shortages within their industry, explaining that as they were having to train some job specific skills up themselves a skills gap can exist for some time.

With the turnover in some industries this is an issue, such as in this example where job specific skills such as lorry drivers are in short supply:

"We have to find someone and train them up which takes time. It's hard to keep them on board too, the last 5 or 6 people taken on have gone elsewhere after investment in training." (Machinery Hire, Lichfield)

Another observation was made about skills that are lacking more widely within the industry (not specific to the respondent's business):

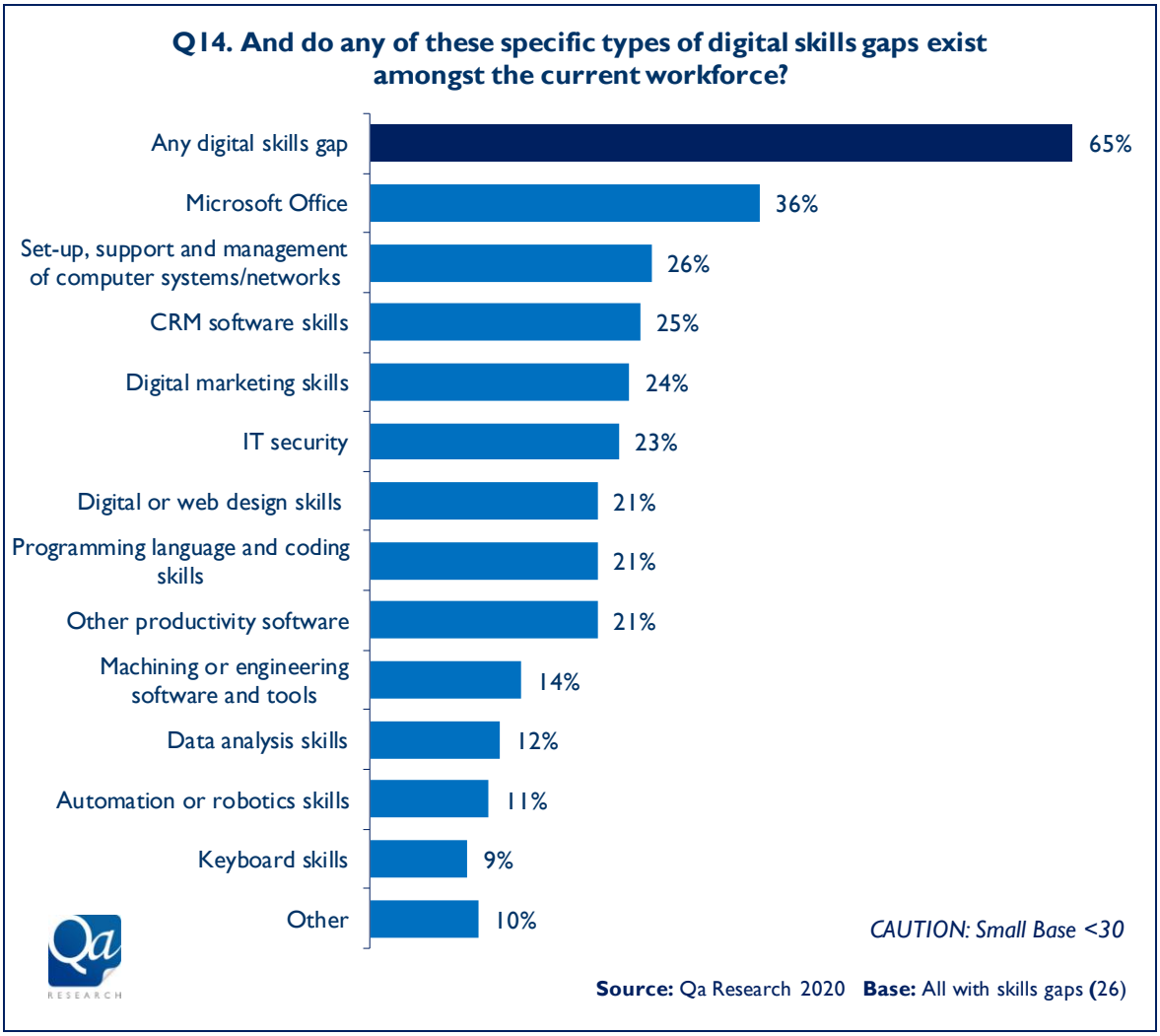
"We shouldn't lose sight of interpersonal skills and in a digital world empathy, compassion and communication are still important. I often work with people who have lost the ability to influence or understand what is being asked for because the way we work has changed." (Creative/Digital, Tamworth)

Businesses were again prompted with a list of digital specific skills gaps that might exist amongst the current workforce. Results are shown in the following chart, which is again based on those reporting a skills gap only.

Nearly two-thirds (65%) of those reporting a skills gap said that this involved some type of digital skill. This equates to just 6% of all businesses, and they fall into the following sectors: C. Manufacturing, F. Construction, G. Wholesale and retail trade; repair of motor vehicles or motorcycles, I. Accommodation and food services activities, J. Information and communication, M. Professional, scientific and technical activities, Q. Human health and social work activities. Digital skills gaps affected businesses of all sizes.

A wide variety of digital skills were mentioned, with 'Microsoft Office' (36%) the most frequent digital skills gap. This was followed by 'set-up, support and management of computer systems and networks' (26%), 'CRM software skills' (25%), 'digital marketing skills' (24%) and 'IT security' (23%). Many different skills gaps were referenced by businesses, again underlining the fact that the digital skills required varies from sector to sector.

Figure 9. Digital skills gaps that exist amongst current workforce



Where a specific digital skills gap existed, businesses were asked to state whether this typically affected employees aged under 25, employees aged 25-49 or employees aged 50 and over. Due to the small number of businesses reporting each individual skills gap (varying from 2 businesses up to 9 businesses) results must be treated with caution, however, employees aged 25-49 were generally the most likely age group to be affected by each digital skills gap. The exceptions being Microsoft Office, other productivity software and digital marketing skills, which were all more likely to affect those aged 50 and over.

The 17 businesses reporting digital skills gaps were asked which specific occupations they affected. A number of different occupations were referenced, with the most frequent being sales roles (3 businesses), engineering or technical roles (3 businesses) and admin roles (2 businesses).

As with the generic skills, the follow-up interviews suggested that some digital skills gaps also existed due to the fundamental issues with either a supply of new-entrants or the attraction of other industries, for example C++ programming skills in the automotive sector and G-code skills in the engineering sector. They also showed the variety and specificity of digital skills that are required within a range of businesses depending on their sector of work and extent to which core functions are kept in-house.

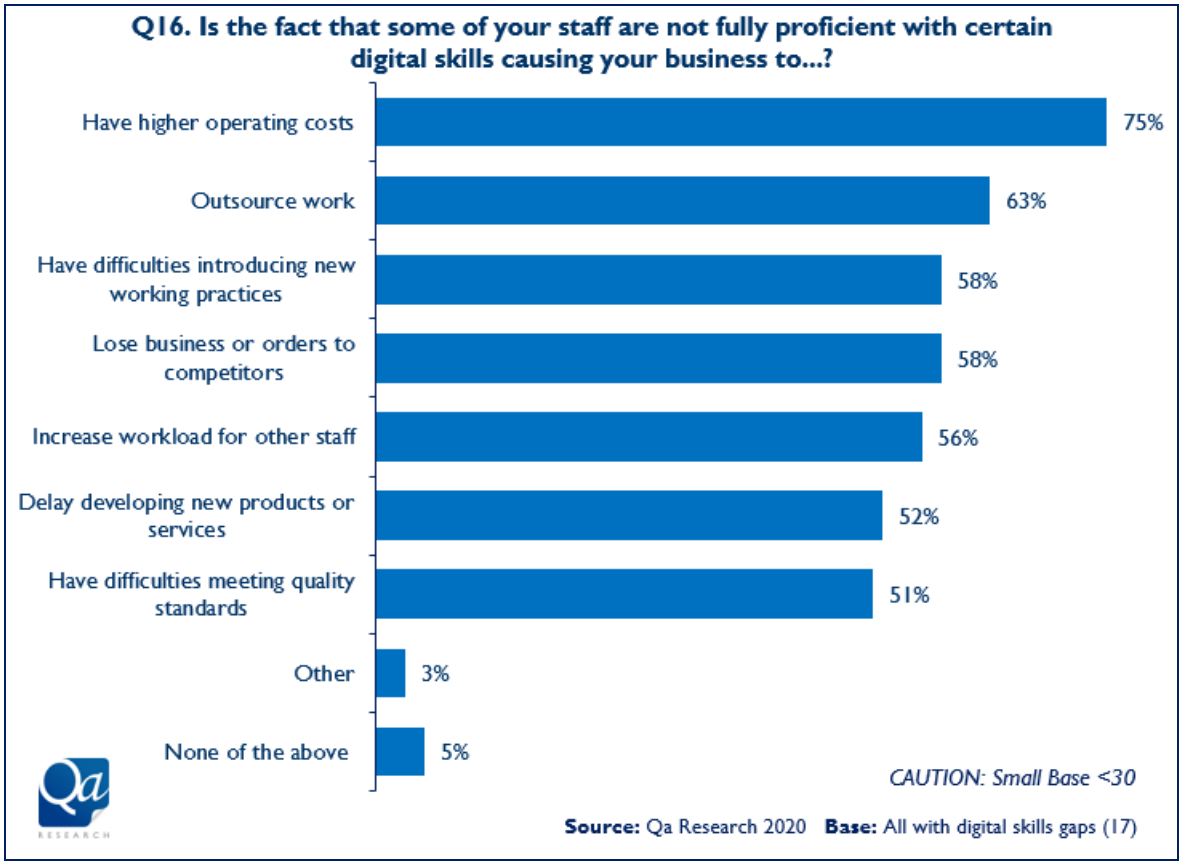
Digital marketing skills will take on an even greater importance in the future, and whilst most businesses felt they had this under control already (or didn't need to as theirs was such a niche market), one business explained that given the current pandemic they would now need to look at digital marketing skills to secure the future of the business:

"In the last month I have been considering another potential gap which is digital marketing. I think we need to get up to speed with that, but it wouldn't be a case of upskilling existing staff. We would need to get someone new and ideally 'young' into the business who knows about Instagram and Facebook." (Logistics, Newcastle-under-Lyme)

5.4 Impact of skills shortages and gaps

Businesses reporting a digital skills gap amongst their current workforce were then asked about the impacts of this shortfall. As shown below, the majority of the 17 businesses affected by a current digital skills gap did feel that there was a negative impact on the business (just 5% said that none of the listed impacts applied to their business). The most common impact was that the digital skills gap was causing the business to 'have higher operating costs' (75%), whilst more than three-fifths (63%) said that it was causing them to 'outsource work'. More than half of those with a digital skills gap reported various other impacts (as listed below), showing that for the minority of businesses with a skills gap, there is a resultant negative impact on their work.

Figure 10. Impact of digital skills gaps



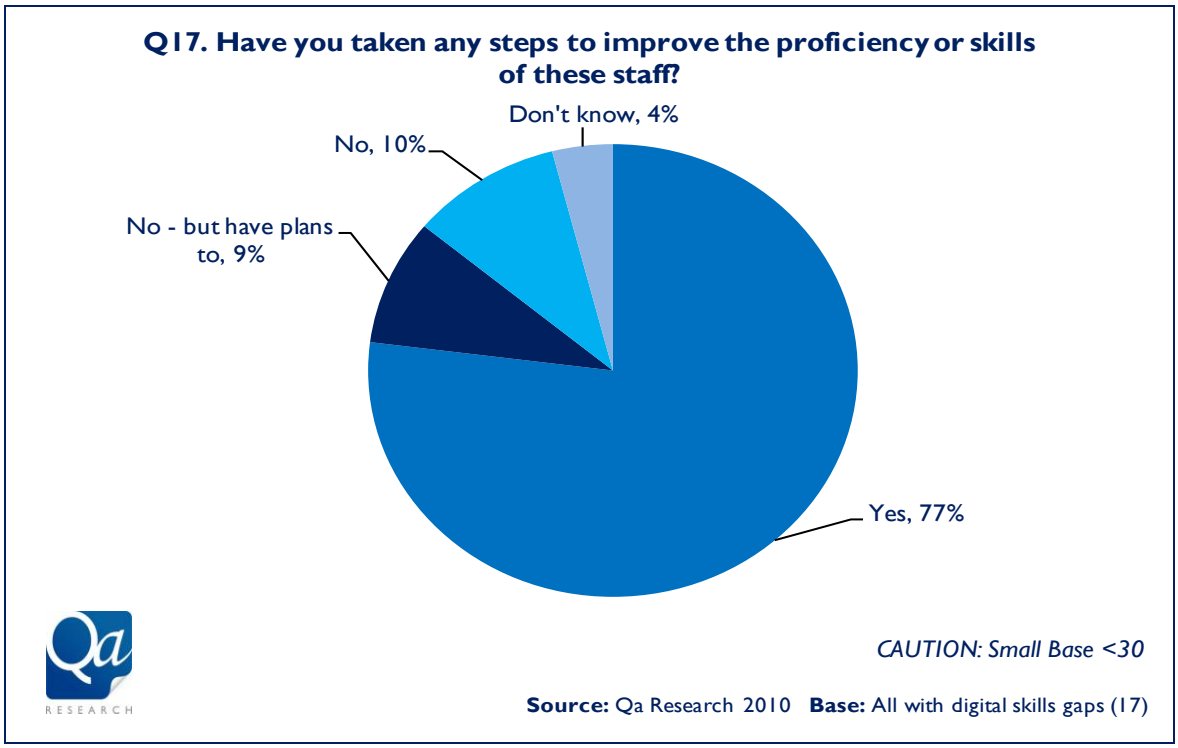
The follow-up interviews further investigated the direct impacts of digital skills gaps on businesses. Of the two interviewees experiencing current digital skills gaps (both programming/ engineering related), both had experienced multiple negative impacts.

The skills gaps that exist are ultimately costing the business and inhibiting growth, such as the situation described by this interviewee:

"We were actually offered a bigger premises last year which would have doubled our floor space. We could fill the bays no problem work wise, but we just don't have enough people and we can't find one engineer let alone more. So regrettably we had to turn it down." (Automotive, Staffordshire Moorlands)

Businesses reporting a digital skills gap were also asked whether they had taken any steps to improve staff proficiency or skills. More than three-quarters (77%) had taken steps already, with an additional 9% having plans to do so. Businesses that had not yet taken any steps (NET: No and No – but have plans to), were all micro-sized businesses (with between 1 and 9 employees).

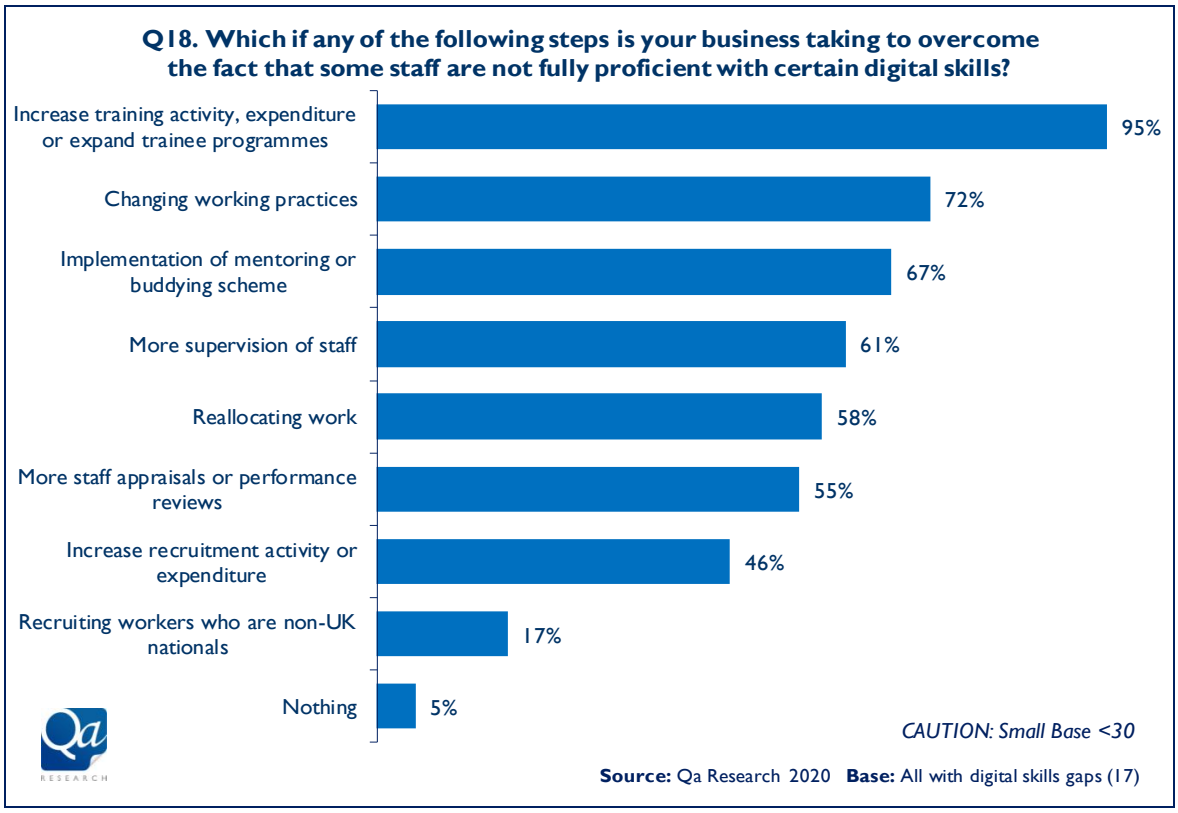
Figure 11. Whether taken steps to improve proficiency or skills



Businesses reporting a digital skills gap were then asked what steps they had taken to overcome it. This included businesses responding no at the previous question, as some of the steps listed may not have occurred to businesses when answering the unprompted question.

The vast majority (95%) of businesses with a digital skills gap had increased training activity, expenditure or expanded trainee programmes to overcome the fact that some staff were not fully proficient. Other steps commonly taken included changing working practices (72% of businesses having taken this step), implementing mentoring or buddying schemes (67%) and increasing supervision of staff (61%). Just 17% had taken the step of recruiting workers who are non-UK nationals to fill such skills gaps.

Figure 12. Steps taken to overcome digital skills gap



Of the two interviewees experiencing current digital skills gaps (programming/engineering specific), both are taking various steps to improve the skills of their staff. As microbusinesses, both face various barriers to training and hence are undertaking additional on-the-job training and in one case sending on courses where time or money allows. In both instances the business owner is responsible for the on-the-job training, but this takes up precious time and resource.

"The two operators need to be able to cross-over onto the other machine, so they need to understand both types of programming. We can't afford the ShopMill training via the manufacturer, but I can do that myself as it's not too complicated to pick up. The G-code will be harder and take up too much time though so will probably need to be offsite with no distractions." (Engineering, East Staffordshire)

5.5 Training and development

This section explores the extent to which training and development is undertaken within businesses, both in general and specific to digital skills. Preferences for future digital skills training is also explored.

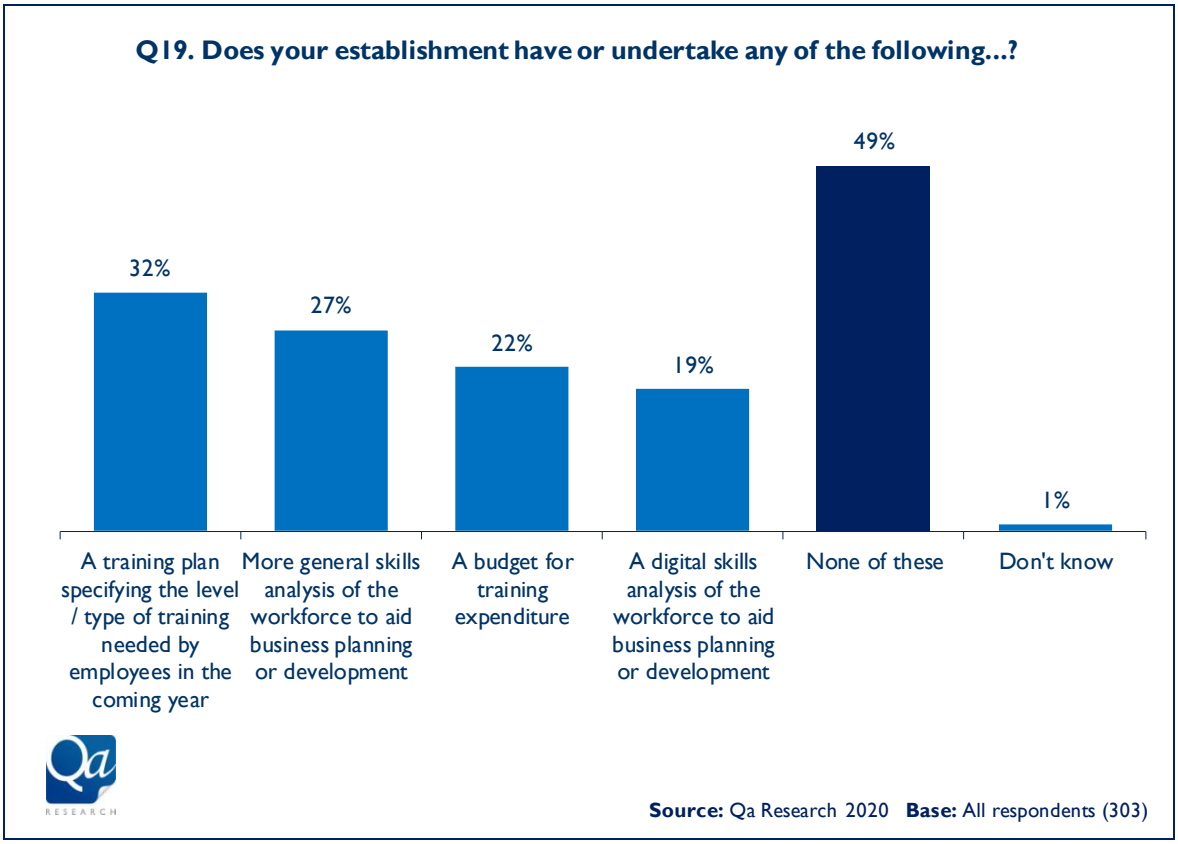
5.5.1 Existence of a training plan, budget or skills analysis

All businesses were asked whether their establishment has a training plan or budget or has undertaken a digital skills analysis or more general skills analysis of the workforce.

As shown below, the approach that businesses take is split evenly between those who utilise some form of plan, budget or skills analysis and those who don't utilise any (49%).

A third (32%) of businesses have a training plan that specifies the level and type of training needed by employees in the coming year, whilst slightly fewer (27%) have undertaken a general skills analysis of the workforce. Around a fifth have either a training budget (22%) or a specific digital skills analysis of the workforce (19%).

Figure 13. Approach to training and development



Micro businesses with between 1 and 9 employees were the most likely to say that they had '*none of these*' (53%).

Results should be treated with caution due to low base sizes, however, businesses operating within C. Manufacturing (58%), G. Wholesale and retail trade; repair of motor vehicles and motorcycles (76%), J. Information and communication (60%) N. Administrative and support service activities (66%) and S. Other service activities (74%) were the most likely to say '*none of these*'.

Interestingly those businesses reporting a skills shortage within the business were more likely than those without any skills shortages to have each of a training plan, budget and both a digital and general skills analysis. Just 35% of those reporting a skills shortage didn't have any of these things, compared to 51% of those with no skills shortage.

The same trend is evident when comparing those reporting skills gaps to those without (28% of those reporting a skills gap didn't have any of these things, compared to 51% of those with no skills gap), suggesting that the issues faced are not down to a lack of a structured approach on the part of the business. Comparative data is shown in the following two charts.

Figure 14. Approach to training and development, by existence of skills shortages

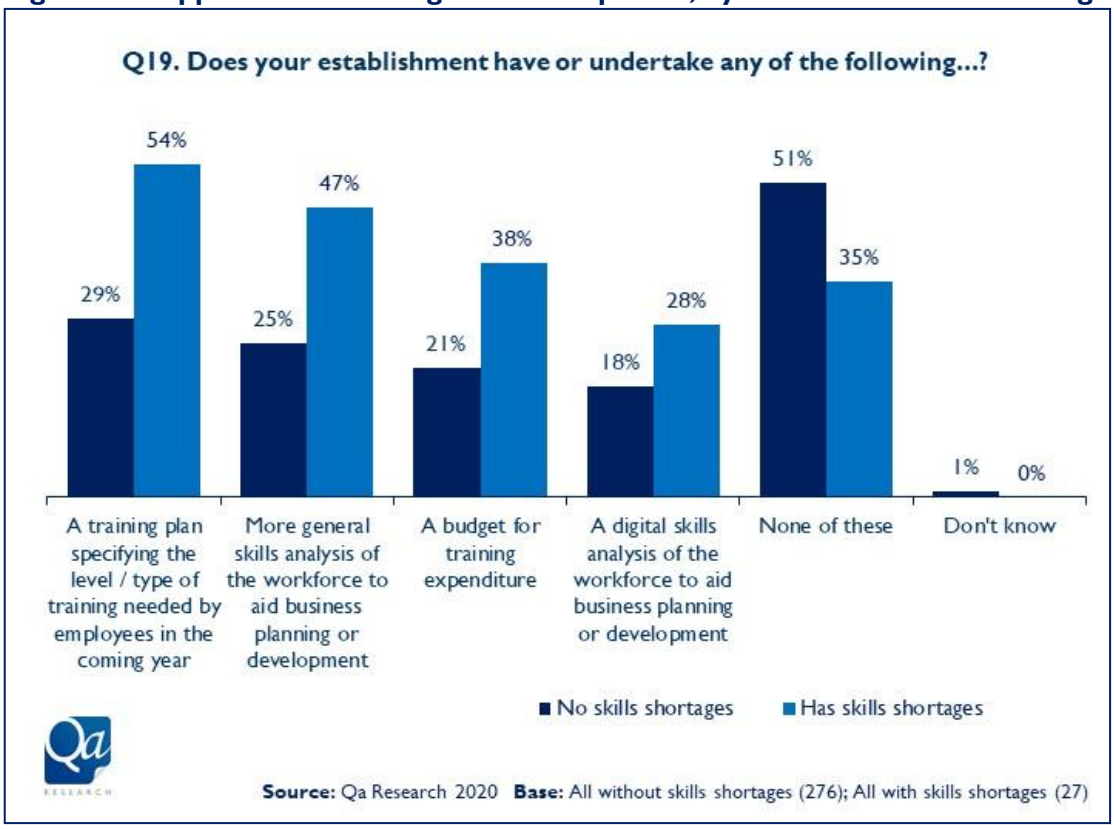
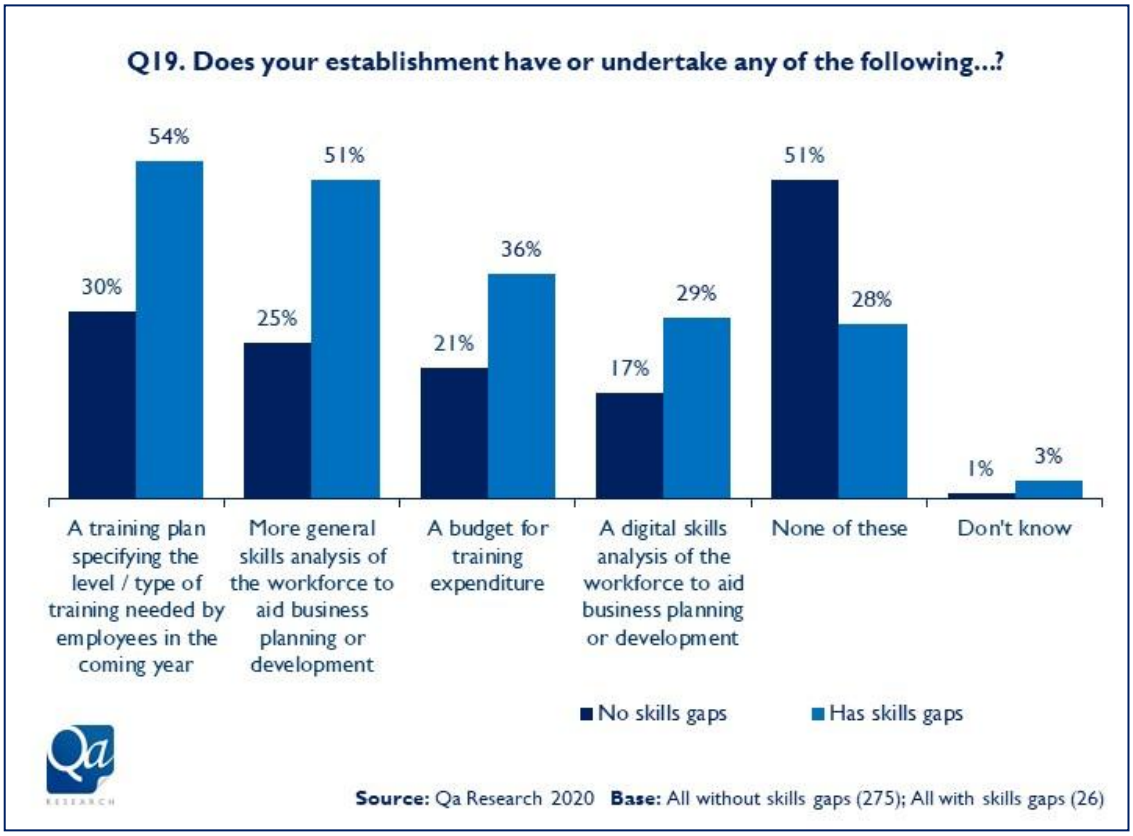


Figure 15. Approach to training and development, by existence of skills gaps



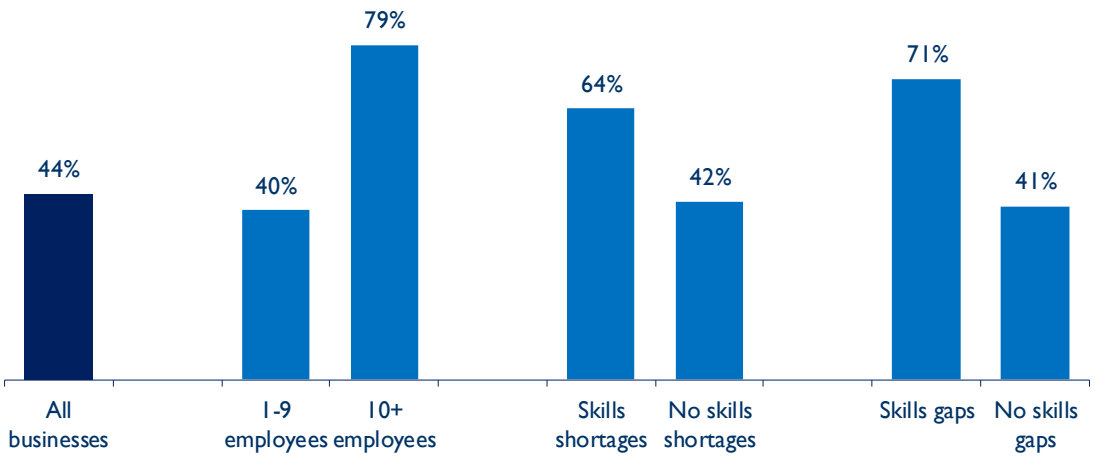
One in ten (9%) businesses that did not already have a digital skills analysis said that they would be interested in support from a local Growth or Skills Hub to develop or undertake such a skills analysis, which primarily included micro-sized employers (1-9 employees). Unsurprisingly businesses with current skills shortages (15%) or skills gaps (13%) were slightly more likely to be interested in such support.

In the follow-up discussions with businesses, it was clear that regardless of the existence of a formal training plan or skills analysis of the workforce, all business owners were actively interested in playing a part in the upskilling of their workforce. They were generally proactive in seeking training or development options, prepared to invest in the upskilling of their workforce, and all knew exactly where to go to access the training required.

5.5.2 Provision of training or development in past 12 months

A total of 44% of businesses had arranged or funded training or development in the past 12 months. Micro sized businesses (those with 1-9 employees) were less likely than those with 10 or more employees to have arranged or funded training or development (40% and 79% respectively). Interestingly businesses with current skills shortages (64%) were more likely than those without (42%) to have done so. The same pattern existed when comparing businesses with skills gaps to those without (71% and 41% respectively). This corresponds with the high proportion of businesses taking steps to improve the proficiency of staff (as reported in section 5.4).

Figure 16. Provision of training or development in past 12 months



Results should be treated with caution due to low base sizes, however, businesses operating within A. Agriculture, forestry and fishing (63%), C. Manufacturing (52%), F. Construction (52%), and Q. Human health and social work activities (68%) were the most likely to have arranged or funded training or development in the past 12 months.

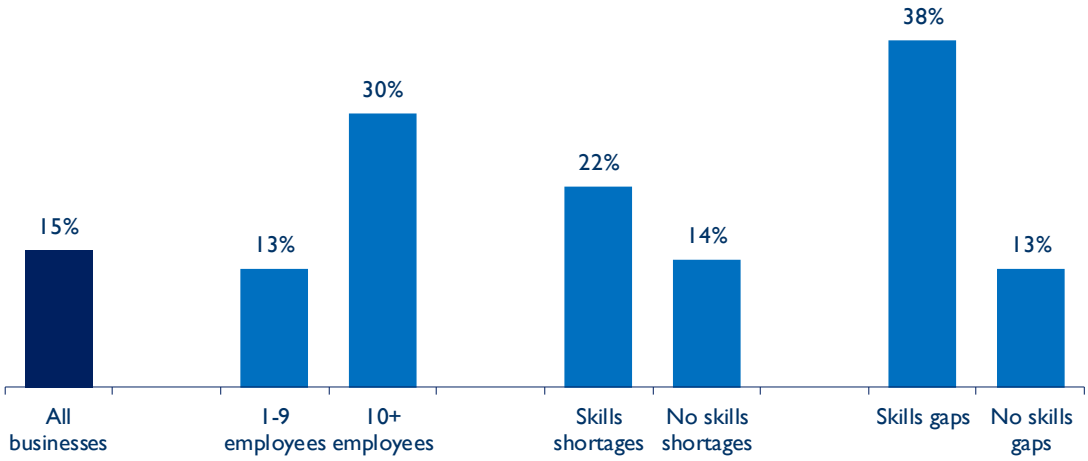
Conversely, businesses operating within G. Wholesale and retail trade; repair of motor vehicles and motorcycles (28%) and S. Other service activities (27%) were the least likely to have arranged or funded training or development in the past 12 months.

Businesses arranging or funding training or development in the past 12 months were asked whether this had included any digital related training or development. More than one third (35%) had provided digital skills specific training or development during this period, which equates to 15% of all businesses.

The following chart shows the proportion of all businesses that had provided digital skills training or development, and comparative information for various sub-groups. Those with 10 or more employees (30%), current skills shortages (22%) and current skills gaps (38%) were all more likely to have provided digital skills training or development in the past 12 months.

In addition, and being cautious of low base sizes, businesses operating within M. Professional, scientific and technical activities (32%) and Q. Human health and social work activities (36%) were the most likely to have arranged or funded digital training or development in the past 12 months. Conversely, businesses operating within G. Wholesale and retail trade; repair of motor vehicles and motorcycles (8%) and S. Other service activities (0%) were the least likely to have done so.

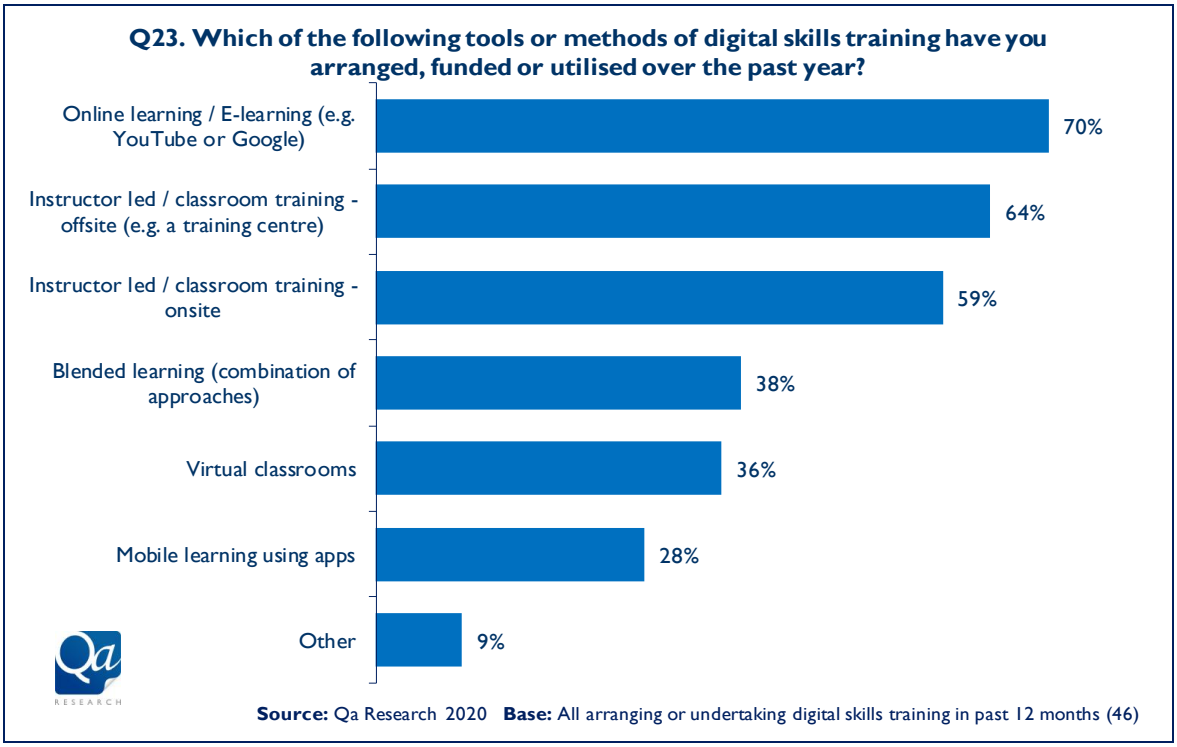
Figure 17. Provision of digital training or development in past 12 months



Source: Qa Research 2020 **Base:** All respondents (303), 1-9 employees (270), 10+ employees (33), skills shortages (27), no skills shortages (276), skills gaps (26), no skills gaps (275)

Businesses arranging or funding digital training or development in the past 12 months used a variety of methods or tools to do so. Online/e-learning being the most common (70%), followed by instructor led / classroom training either offsite (64%) or onsite (59%). Other responses mentioned by a small minority of businesses included reading books and mentoring.

Figure 18. Methods of digital training or development in past 12 months



The follow-up interviews confirmed that businesses used different methods of training depending on the industry. A lot of job specific training is done on-the-job, something that works well for SMEs where skills can be shared within the business. Within a business different methods might be used for specific skills or occupations, such as within this business which places great importance on external training for new recruits:

"Face to face training is really important for us as we can get feedback from trainers on new recruits. Refresher courses we would do online, which helps the business as it can be done around the job." (Machinery Hire, Lichfield)"

Where digital training is concerned this again commonly appears to be dictated by the nature of the skill concerned, for example complicated programming might best be tackled offsite where distractions are minimised or a particular manufacturer might provide specific formats of training for individual pieces of software or equipment. For several SMEs however being able to fit in around work is an important factor, such as in this example:

"The webinars I have done recently on desk research, the digital customer journey and digital analytics have been very useful. I usually like training to be more interactive, but it has been a great benefit being able to stop it and pick up later to fit in with my work." (Creative/Digital, Tamworth)

Logistics can also play a part, and where IT or accounting support is outsourced, this lends itself well to particular methods of training:

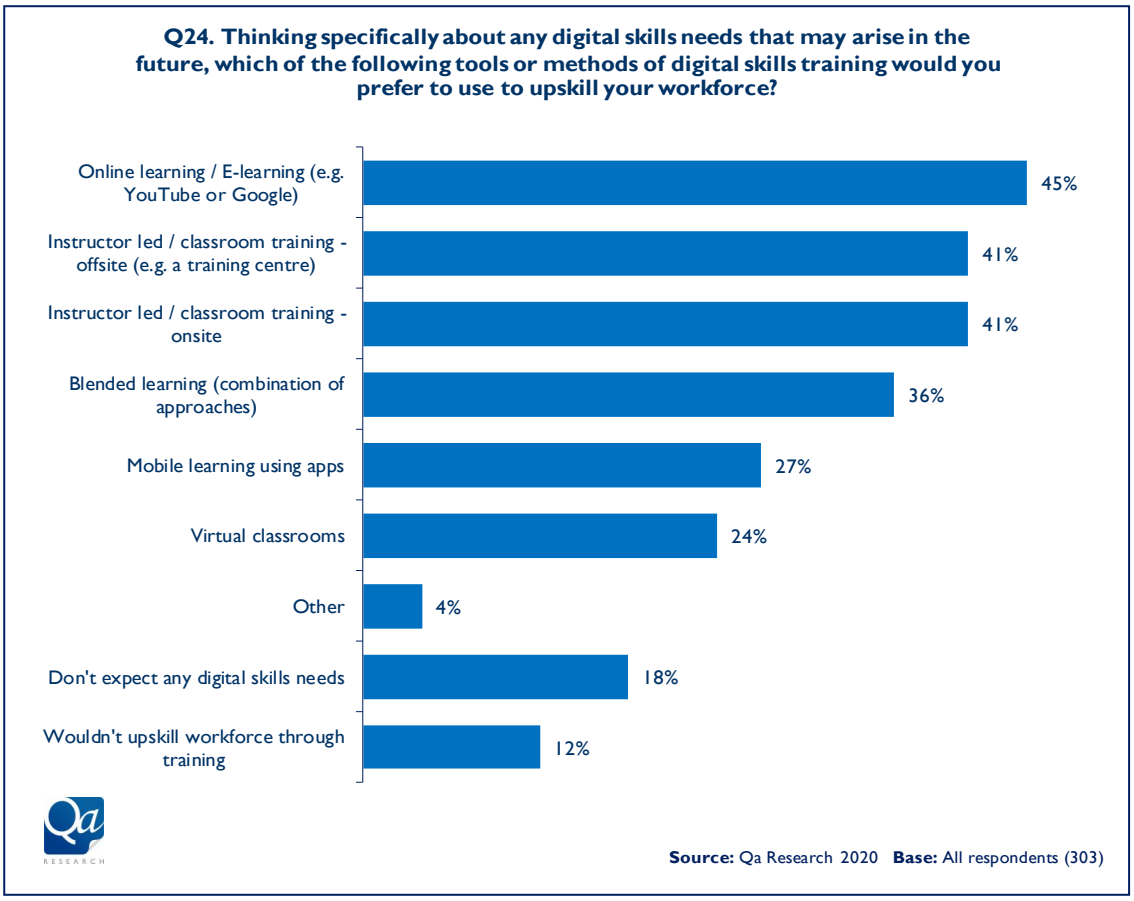
"Our IT consultancy would help out with any digital training and they are based in London, so we do it remotely using WebEx. That has worked well previously so we will continue using that method." (Professional/Financial services, Stafford)

5.5.3 Preferences for future digital training or development

The same list of training delivery tools and methods was presented to all businesses and they were asked which they would prefer to use to upskill their workforce should digital skills needs arise in the future. Nearly a fifth (18%) said that they didn't expect any digital skills needs to arise in the future, whilst a further 12% said that they wouldn't use training to upskill the workforce.

Amongst those who did state a preference, the most common tool or method for delivering digital skills training in the future was online/e-learning (45% of businesses would use this method), followed by instructor led / classroom training either offsite or onsite (both 41%). As with existing methods of training, mobile learning and virtual classrooms were less popular, but were nevertheless still a viable option for around a quarter of businesses (27% and 24% respectively).

Figure 19. Methods of digital training or development in past 12 months



Those with 1-9 employees (20%) were more likely than those with 10 or more (6%) to say that they didn't expect any digital skills needs in the future.

In addition, but being cautious of low base sizes, businesses operating within F. Construction (24%), H. Transportation and storage (36%), L. Real estate activities (32%) and S. Other service activities (36%) were the most likely to say that they didn't expect any digital skills needs in the future.

Some interesting trends also exist regarding the method of training preferred by different businesses. For example, those operating within J. Information and communication (84%), I. Accommodation and food services (64%) and M. Professional, scientific and technical activities (58%) were particularly likely to prefer online/e-learning methods of upskilling the workforce.

The follow-up interviews took place following the lockdown imposed in March 2020 and several businesses reflected on what they had already learnt about the way that training might differ in the future, which might potentially impact on the above results. Where classroom methods of delivery might have been prioritised in the past, different methods of delivery have successfully now been trialled or considered:

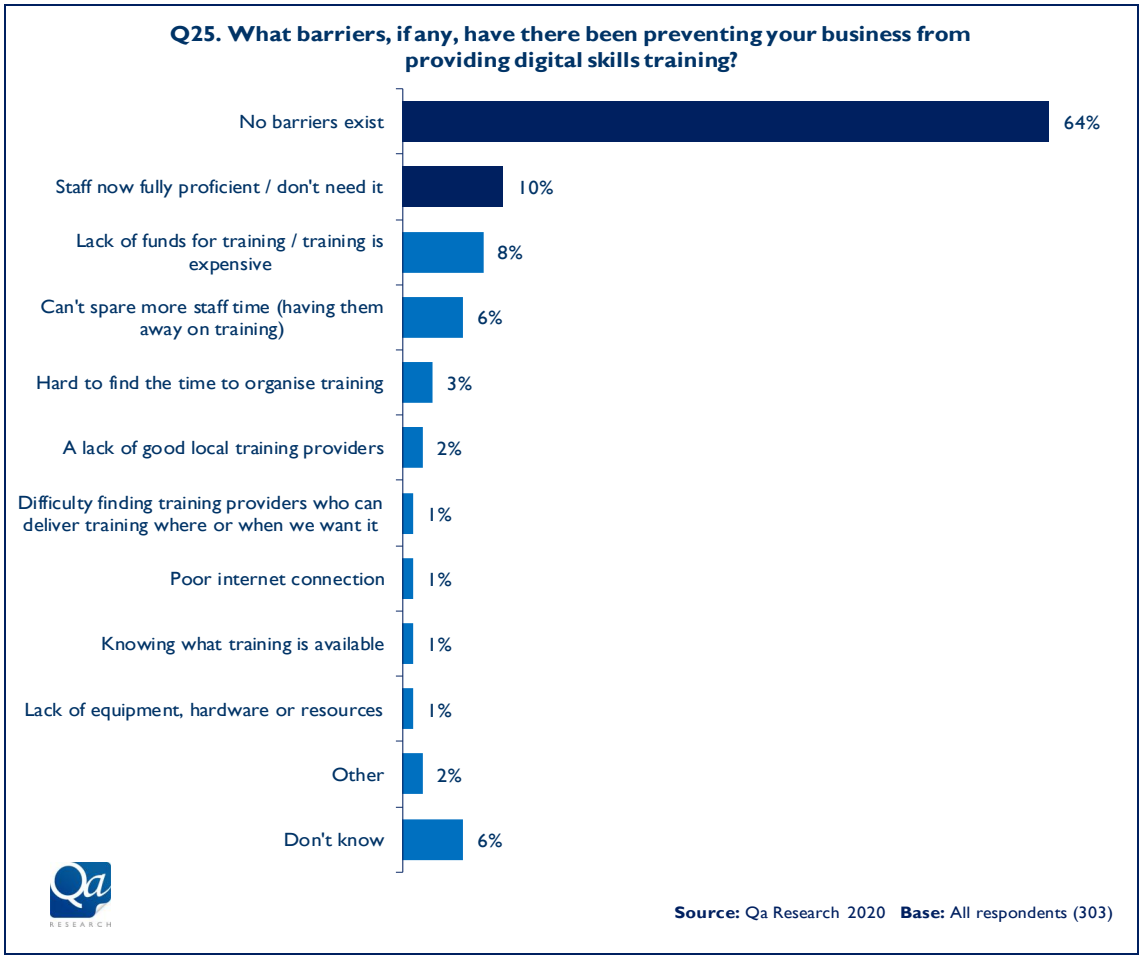
"This week I have had a lot of offers of online training appear in my inbox. Nothing that would benefit the business right now, but it did make me think that things like manual handling or radio frequency awareness, which would always have been classroom based before, could actually easily be done online. Ultimately that would also be a more cost-effective way of doing it too." (Machinery Hire, Lichfield)"

5.6 Barriers to training and development

When asked what barriers, if any, prevent their business from providing digital skills training nearly two-thirds (64%) stated that 'no barriers exist'. A further 10% said that their staff are now fully proficient and that training isn't required (hence meaning that as a result, currently there are no barriers to training).

Of those that did face barriers, the most common was a 'lack of funds for training / training is too expensive' (a barrier for 8% of businesses). This was followed by 'can't spare more staff time (having them away on training)' (a barrier for 6%) and 'hard to find the time to organise training' (3%). A variety of other barriers exist but only for a small minority of businesses.

Figure 20. Barriers to training or development



No significant differences exist between businesses of different sizes, with a minority facing the barriers set out in the above chart.

Businesses with current skills shortages were more likely to face barriers to training (just 42% cited no barriers, compared to 66% of those without current skills shortages). They were more likely to cite a 'lack of funds for training / training is too expensive' (a barrier for 25%, compared to 7% of those without current skills shortages), that they 'can't spare more staff time' (a barrier for 16%, compared to 5% of those without current skills shortages) and that it is 'hard to find the time to organise training' (20%, compared to 1%).

Likewise, businesses with current skills gaps were also more likely to face barriers to training (just 22% cited no barriers, compared to 68% of those without current skills gaps). They were more likely to cite a 'lack of funds for training / training is too expensive' (a barrier for 35%, compared to 6% of those without current skills gaps) and that it is 'hard to find the time to organise training' (24%, compared to 1%).

The follow-up interviews supported these findings, with most businesses explaining that they knew where to access training and appreciated the benefits of doing so even though that came at a cost to the business. The barrier that caused the most problems for those spoken to was committing time to training (hence seeing the benefit of online methods). Particularly where training is likely to be classroom based away from the business this presents an issue:

"I'm happy to pay for training it's just getting harder and harder finding the time as it leaves production time down and we can't afford that to happen at the moment." (Engineering, East Staffordshire)

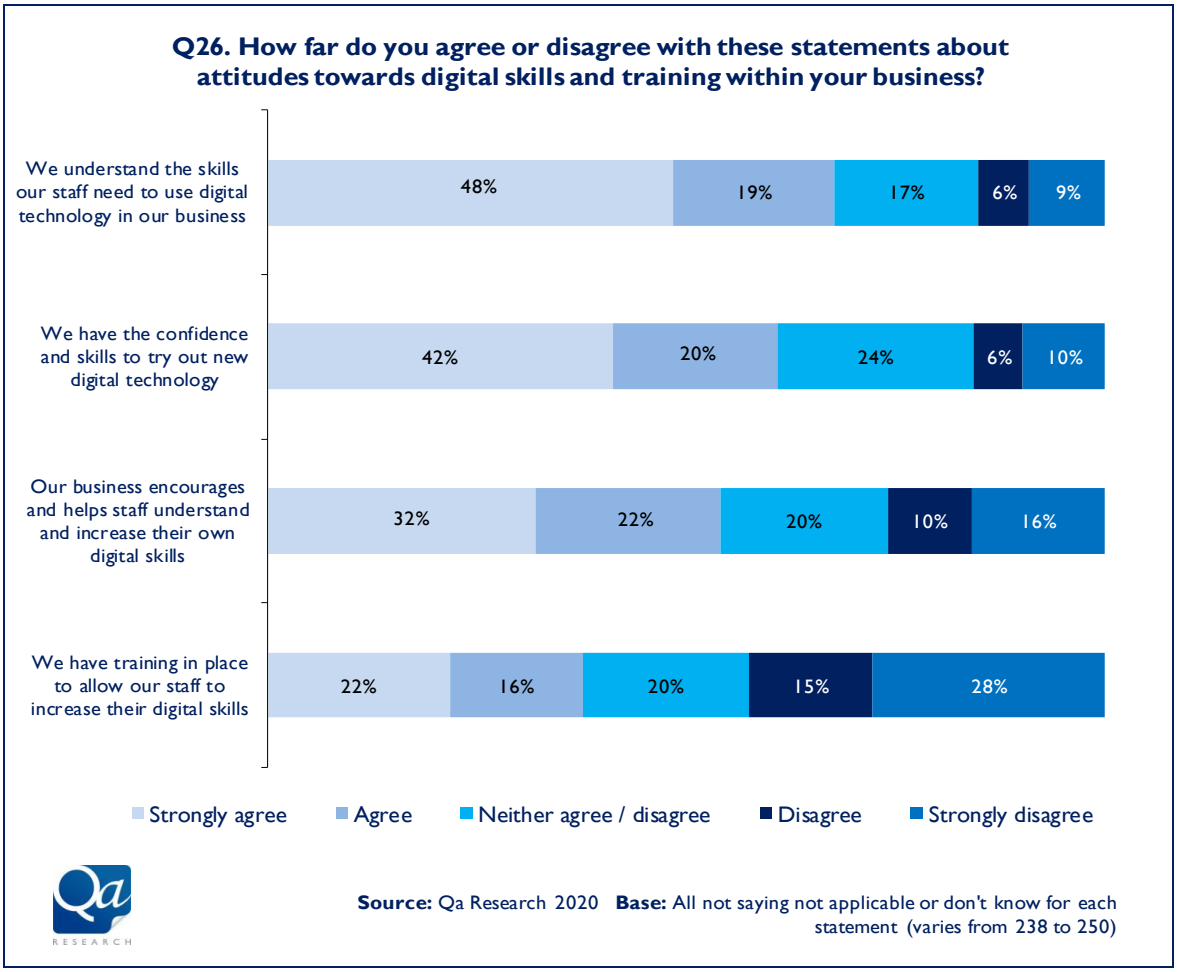
It was also noted by one business that the timing and location of digital courses isn't always helpful:

"A lot of BIC courses are in remote locations and I think uptake would be greater if they were more local. Evening courses in the Aston Triangle are very off-putting as you have to walk a long way from the car-park and travelling on my own in the evening that puts me off." (Creative/Digital, Tamworth)

5.7 Attitudes to training, development and technology

Respondents were also asked to what extent they agreed or disagreed with four statements about the role that digital skills and training plays within their business. The following chart ranks these statements in order of the percentage responding 'strongly agree'. Responses of not applicable or don't know have been omitted from the data to ensure comparability across each score (amounting to around a fifth of businesses for each statement).

Figure 21. Attitudes to training or development



Overall businesses were very positive about the fact that 'we understand the skills our staff need to use digital technology in our business' with two-thirds (67%) NET: agreeing (combining strongly agree and agree) with the statement, including 48% that strongly agreed.

A slightly lower proportion of businesses (61%) NET: agreed that 'we have the confidence and skills to try out new digital technology', including 42% that strongly agreed.

Whilst these results suggest that digital technology itself is embraced within businesses, responses to the other two statements suggest that there might be less confidence in relation to training and skills.

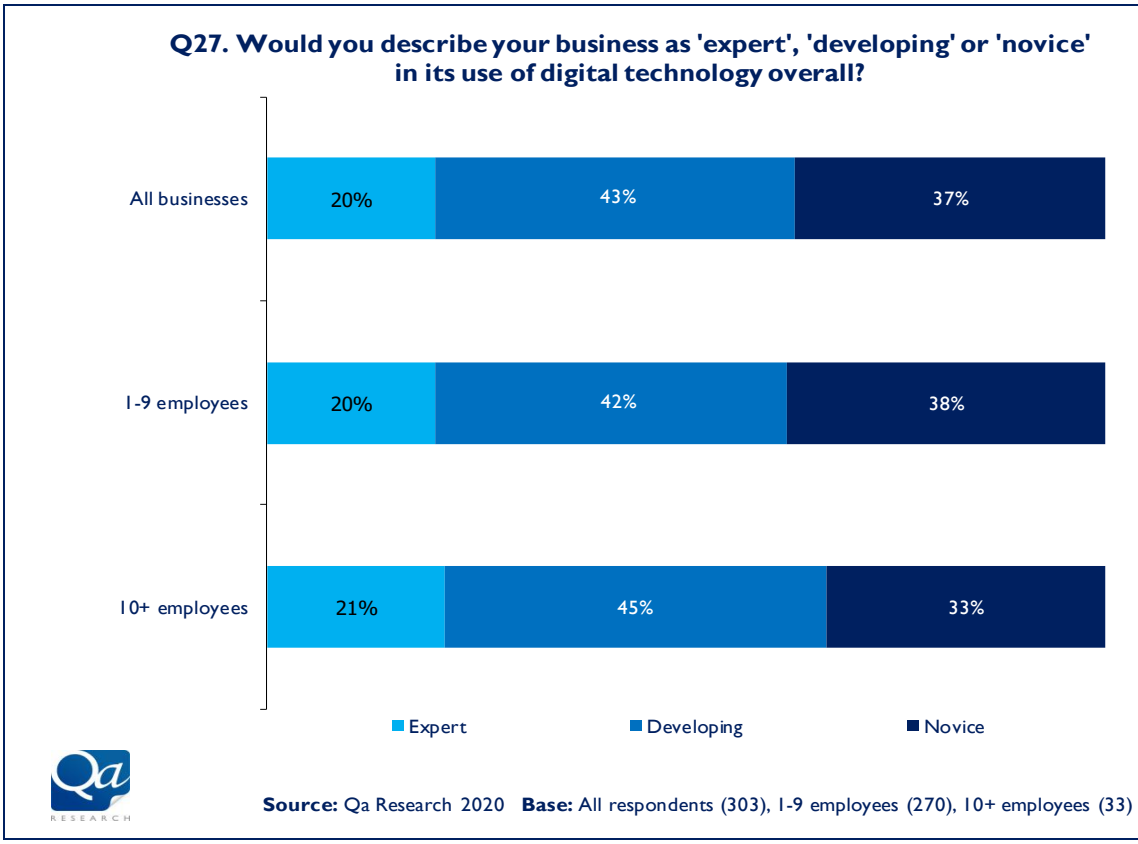
More than half of businesses (54%) NET: agreed that 'our business encourages and helps staff understand and increase their own digital skills', whilst just 38% NET: agreed that 'we have training in place to allow our staff to increase their digital skills'.

Across each of the four statements, businesses with 1-9 employees were less likely than those with 10 or more employees to agree with each one. For example, 36% of businesses with 1-9 employees and 52% of those with 10 or more employees NET: agreed that 'we have training in place to allow our staff to increase their digital skills'.

Some variation in attitudes was evident between different sectors. Looking specifically at the statement 'we have training in place to allow our staff to increase their digital skills', the following sectors were the least likely to NET: agree - A. Agriculture, forestry and fishing (20%), H. Transportation and storage (14%) and N. Administrative and support service activities (17%).

Businesses were also asked to assess whether they felt that their business was expert, developing or novice in its use of digital technology. The following chart shows that one fifth (20%) of businesses described themselves as 'experts', with a further 43% saying 'developing' and 37% 'novice'. Few differences existed between businesses of different sizes.

Figure 22. Level of digital technology usage



Results should be treated with caution due to low base sizes, however, businesses operating within J. Information and communication (63%) and K. Financial and insurance activities (100%) were the most likely to describe their business as 'expert' in its use of digital technology. Conversely those operating within A. Agriculture, forestry and fishing (64%), F. Construction (47%), I. Accommodation and food services (48%) and N. Administrative and support service activities (74%) were the most likely to describe their business as 'novice'.

5.8 Future technology usage

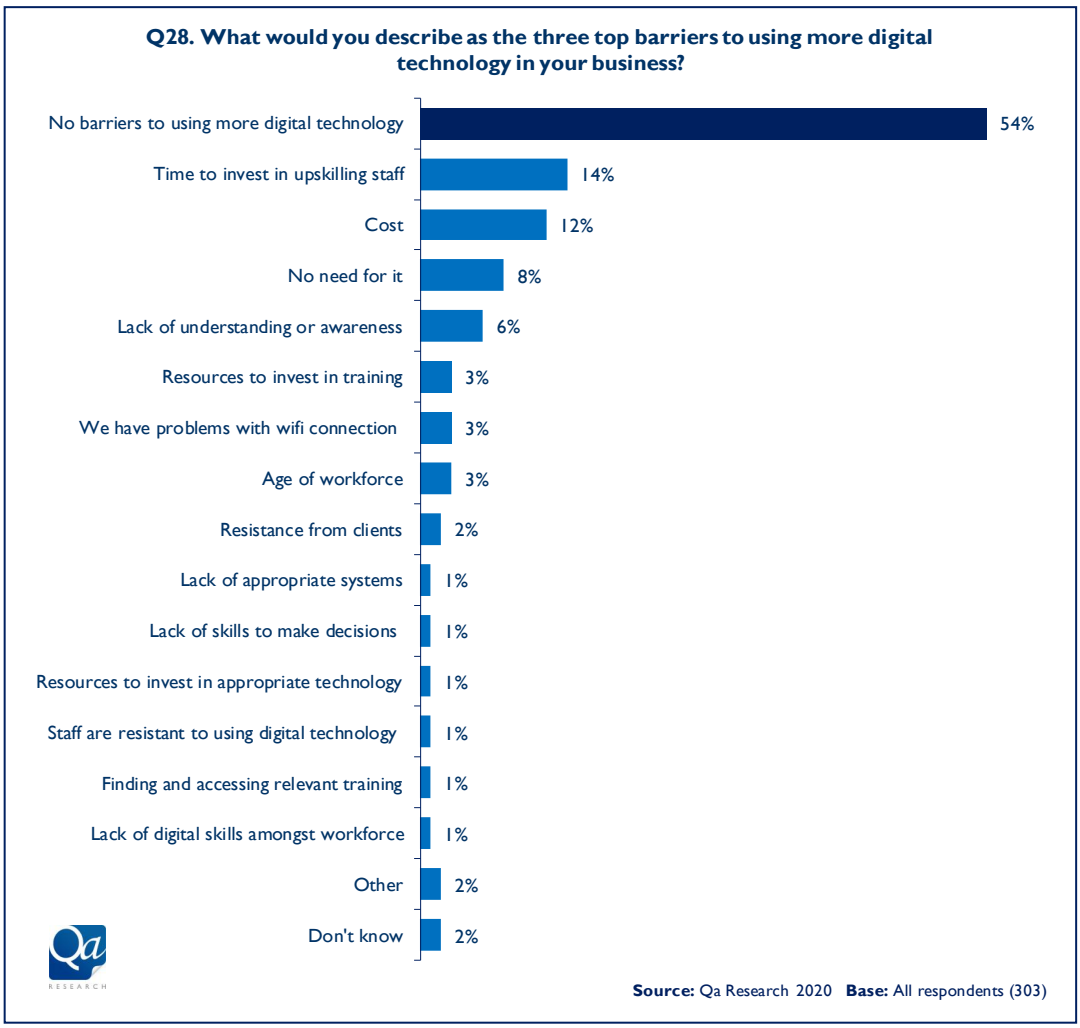
This section provides insight into any specific barriers to using more digital technology, concerns regarding the role that automation might play in the future and finally the impact of Covid-19 on the role that technology plays.

5.8.1 Barriers to using more digital technology

To provide further insight into future digital technology usage, businesses were also asked what barriers existed to them using more digital technology. More than half (54%) said that there were 'no barriers', with a wide range of other responses given by the remaining businesses. The most common barriers cited were 'time to invest in upskilling staff' (mentioned by 14% of businesses), 'cost' (12%), 'no need for digital technology' (8%) and 'a lack of understanding or awareness' (6%).

No significant differences existed by business size, and also few differences existed between those describing their business as expert, developing or novice. The main difference was that those describing their business as 'novice' or 'expert' in their use of digital technology were more likely to state that there were no barriers to using more digital technology (61% and 58% respectively) than those describing their business as 'developing' (47%).

Figure 23. Barriers to using more digital technology



The follow-up interviews supported this evidence, in that some SMEs clearly face issues with sparing time for training and that has a knock-on effect on digital technology usage. One business with an 'expert' understanding of digital platforms for marketing speculated about the extent to which other businesses might be aware of some of the options that are available to them in such a fast-changing marketplace. The extent to which this might be true is unclear, however, information on what is available in a clear format could be useful for some businesses:

"I get an email from Marketing Week which is great for outlining quickly what is new and what the business could benefit from. Perhaps more businesses should be made aware of information like this, especially those that are industry specific and free of charge to subscribe to. Also, signposting and access to a library of online training, which can be accessed at a time that suits the business would be really useful." (Creative/Digital, Tamworth)

Another explained that using more digital technology is linked to demand, so not a barrier as such, but business must be guided by what customers want:

"There is a lot more technology coming online for garment printing, but it is expensive. We don't do screen printing at the moment because demand doesn't justify that expense but if enough people came along wanting it we would consider it." (Manufacturing, Tamworth)

One further issue arising from the follow-up interviews regarded the red tape associated with funding and this has created a particularly difficult barrier for one business in relation to training:

"The major barrier for us right now is that funding is always dependent on creating jobs. This doesn't work with automation, I've looked into various funds and hit a brick wall every time." (Engineering, East Staffordshire)

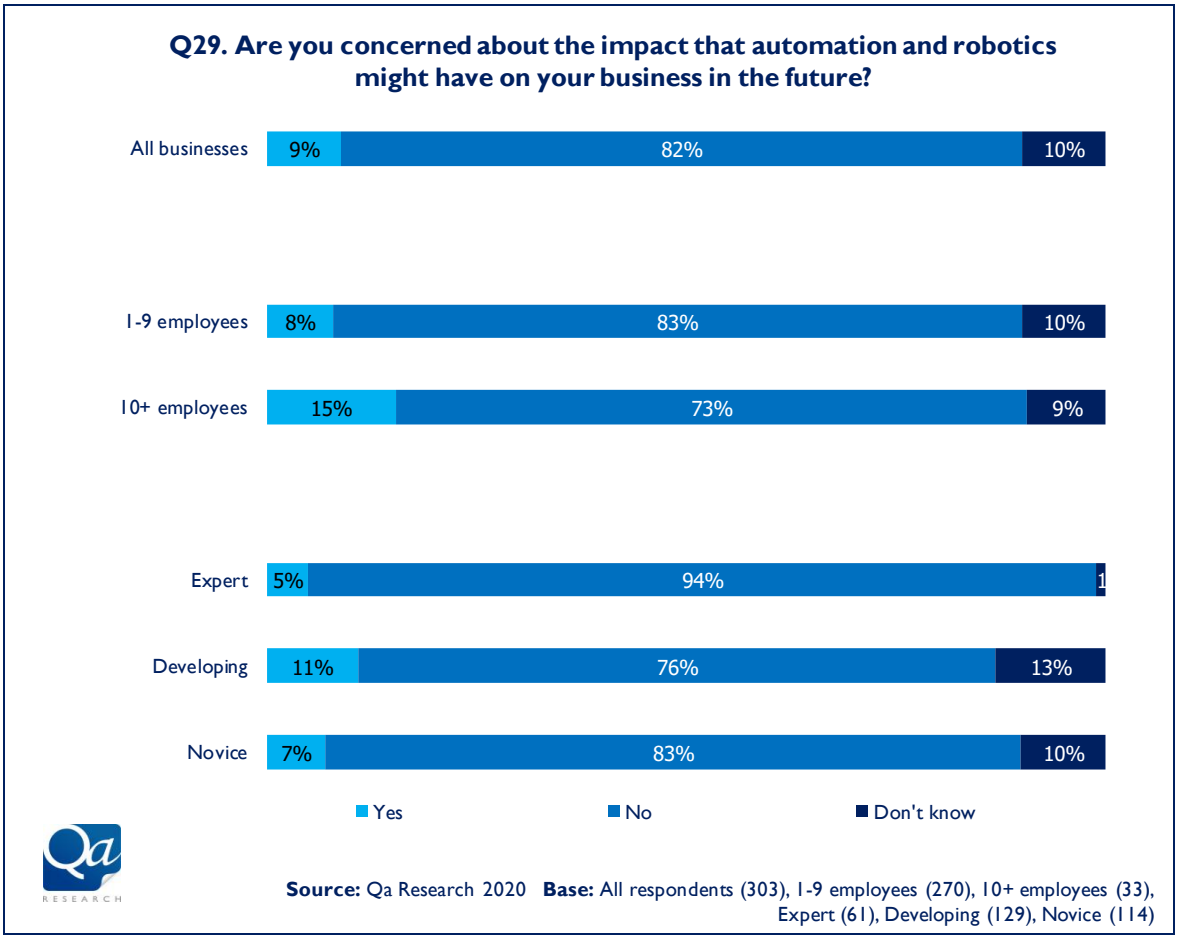
5.8.2 Impact of automation and robotics

To gauge future impacts of technology, businesses were asked whether they were concerned about the impact that automation and robotics might have on them in the future. Around one in ten (9%) said that they were concerned, with a similar proportion (10%) not sure, but the majority (82%) said that it is not a concern for them.

Businesses with 10 or more employees were more likely than those with 1-9 employees to be concerned (15% and 8% respectively).

Businesses with a higher level of understanding of digital technology (those rating themselves as 'expert') were the least likely to be concerned about the impact that automation and robotics might have on them in the future (5% were concerned). With a tiny proportion saying don't know, the vast majority of this group are not concerned (94%).

Figure 24. Concern over impact of automation and robotics

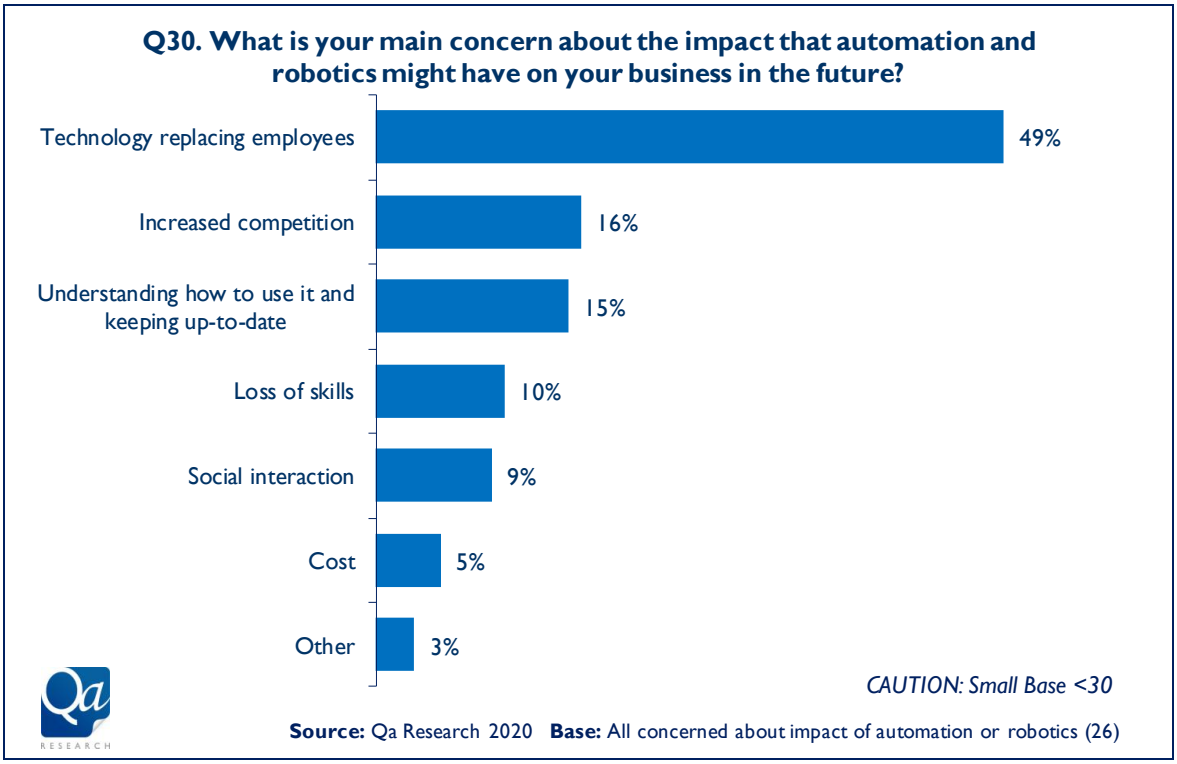


Source: Qa Research 2020 **Base:** All respondents (303), 1-9 employees (270), 10+ employees (33), Expert (61), Developing (129), Novice (114)

Results should be treated with caution due to low base sizes, however, businesses operating within J. Information and communication (27%) were the most likely to be concerned about the impact that automation and robotics might have on them in the future. Conversely those operating within C. Manufacturing (6%), F. Construction (5%), I. Accommodation and food services (0%), L. Real estate activities (0%) and S. Other service activities (0%) were the least likely to be concerned.

Amongst businesses who were concerned for the future, the most common concern regarded technology replacing humans (mentioned by 49% of businesses that are concerned). Other concerns varied from automation/robotics providing increased competition (16%), uncertainty over how to use it or keep up to date with it (15%), a loss of skills (10%) and impacts on social interaction (9%).

Figure 25. Main concern about the impact of automation and robotics



5.8.3 Impact of Covid-19 on future digital technology use

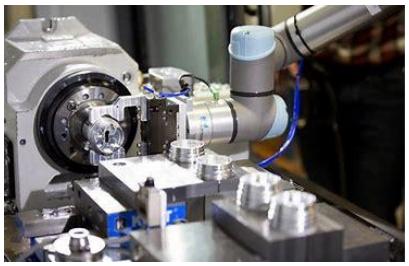
The follow-up depth interviews explored the impact that Covid-19 was having on businesses and, unsurprisingly, fortunes were mixed dependent on business sector. For some sectors business has become busier, for others it has required different ways of working (e.g. a pub/restaurant that is now operating a village shop), and unfortunately some business has inevitably taken a downturn (e.g. international work has ceased) or stopped altogether.

For some of those spoken to digital technology has facilitated business continuation by enabling remote working and even where training is concerned webinars have enabled upskilling to continue where required.

One thing that did emerge is that some businesses are using this time as an opportunity to reflect on the future and consider how that future might look. They are aware that trade will be impacted, methods of doing business will likely change and in some cases that might alter the emphasis on digital technology and hence change training requirements.

"For various reasons I have fears for whether the business can come back from this. I've spent this time thinking about other options though and 3D printing is something I would possibly pursue and that would mean more digital needs where the training in concerned." (Machinery Hire, Lichfield)

6. Case studies



6.1 Business A - Engineering

- Business A is active in the Engineering sector
- It has been based in East Staffordshire for 17 years
- It currently has 4 employees
- Component parts are produced in a range of materials for clients across the UK and in other international markets. There is healthy competition within the UK, but the main threat to UK engineering is from China and India.
- Digital technology is intrinsic to what they do and in the past year they have invested in automated machinery to cut costs, but the future of this is finely balanced

Challenges faced

- Competition faced from China and India is intense as they can produce so cheaply (even though the quality is not as good). This is a major challenge to UK engineering. Something needs to be done e.g. through taxation to make it more inefficient for them to sell in the UK.
- Automation could help to cut costs, but the automated technology purchased has created a challenge in that the software is complex, but the machinery manufacturer charges premium rates to access support or training. The business simply can't afford to fund this.
- Limited by just engineering a component not an end product so can't win any major aerospace contracts.

Skills issues

- The business can't afford to pay someone the wages that the top programming skills would command. They are very expensive in the UK compared to overseas, and ultimately are better paid in other industries.
- Therefore they employ operators that are reliable and conscientious but not highly skilled. Still hard to find!
- Because they need to work on different machines (not have a specialism as they would have years ago) it is important that they are willing to learn.
- The two current operators need to crossover, so they understand the programming on the other machinery (ShopMill and G-code).

Approach to training and development

- Varies by training required - some software is harder to understand and learning needs to be distraction free, hence G-code would need to be offsite.
- The owner has the requisite skills so some easier training can be done in-house e.g. the crossover to ShopMill. Formal training for that is very expensive.

Barriers

- Even if training was free it still leaves production time down, and it's getting harder and harder finding the time.
- Funding for training is always dependent on creating jobs so they can't access it. This doesn't work with automation e.g. a recent purchase of a bar feeder as it doesn't create jobs.
- They would love to invest in 'cobots' (collaborative robots that interact with humans in a shared space) but the lack of job creation prevents any financial support.

6.2 Business B - Marketing

- Business B falls into the creative and digital sector
- It is based in Lichfield and was founded in 2006
- It currently has 1 employee
- The business provides a variety of marketing services, with an increasing focus on digital marketing. It is a competitive industry, but they have a loyal customer base and expect that to continue with the current emphasis on digital marketing.

Challenges faced

- Digital platforms are always evolving e.g. Facebook analytics and this a constant challenge in terms of keeping up with the tools.
- Also, it is difficult to keep up to date with new technology such as Zoom and Microsoft Teams. A best practice guide or 'things you might find useful this week' email that is industry specific would be useful.
- Broadband speed is also an issue, not for the business itself but some clients can't download files sent through to them so it does indirectly impact.

Skills issues

- Notwithstanding the issues with keeping up to date with new and changing technology or platforms, it is also important to remember that interpersonal skills are also key. In a digital world empathy, compassion and communication are being somewhat forgotten.
- Has recently undertaken training to extend knowledge of desk research and the digital customer journey e.g. stats for devices most used for internet searches. Where skills gaps arise they are easily filled, it is a constantly evolving industry so it's goof to keep on top of it.

Approach to training and development

- As a member of the Chartered Institute of Marketing continuing professional development is essential so keeps a look out for opportunities.
- Google is a great resource for digital upskilling to keep on top of your own development.
- Ask people! Colleagues or peers, such as a graphic designer or web development agency, frequently help where an answer isn't obvious.
- The business has benefitted from classroom-based training through the Business Innovation Centre (BIC), which attracts other local businesses and provides a networking opportunity.
- Webinars are incredibly useful at the moment. Interactive training is preferred but webinars have the benefit of being able to hit pause to fit in around work.

Barriers

- It takes time to keep up with the digital world and no business ever has enough time.
- Knowing what is available helps, and access to a library of training opportunities online, that businesses can access when it suits them would be helpful. Marketing Week provides a useful free weekly email which more people should be made aware of. The same would apply in other industries where similar free communications can be subscribed to.
- A lot of courses are in remote locations e.g. evening courses in Aston Triangle are very off-putting as you have to walk miles from carpark. Uptake would be greater if locations better.

6.3 Business C - Automotive

- Business C repairs motor vehicles in the automotive industry
- It currently has 4 employees
- It has been based in Staffordshire Moorlands since 2014
- As an independent specialist they are highly regarded and have a loyal customer base. They were offered a bigger premises last year, and would have enough work, but the challenge of recruiting even one or two skilled engineers would be enormous.
- Digital is intrinsic to diagnosing problems in modern vehicles as nearly everything is driven by electronics and software

Challenges faced

- The primary challenge is in finding engineers who can understand why an item is faulty. But there would have to be a huge overhaul of current training and education to address this.

Skills issues

- 99% of those coming out of college fully trained don't have the skill to understand a fault, they simply read the diagnostic so they are not employable.
- Programmers who are good with C++ don't want to work in the car industry as other industries are more appealing.
- Specific areas lacking include knowledge of CAN bus systems, communication networks and software.

Approach to training and development

- Given the skills supply issue, the business is left having to find someone who has the natural ability to understand how the machinery works and then train them up. Most recently took on a third employee and had to train up internally.
- When a new vehicle came out that used optical fiber systems, they read up on optical fibers to learn more about it. When you understand the basics, it is simpler to take this approach.
- As software evolves the same will apply in the future, so ongoing development will be managed internally.

Barriers

- There are no barriers to training, just the supply of new entrants at the outset.

6.4 Business D - Construction

- Business D is a consultancy servicing the construction industry
- It has been based in Lichfield for 9 years
- It currently has 3 employees
- As a specialist building services consultancy, with expertise in building regulation, energy performance certification and thermal modelling, they service the construction industry over a wide area.
- They use a variety of software and modelling techniques so digital is key to the business
- However, wider workforce reliance on screens is frustrating as interpersonal skills are important.

Challenges faced

- At the current time, work in the construction industry has come to a halt but there is work to be done in the background. Expectation that work will return to normal.
- Digital technology is in many respects good for the construction industry, but it shouldn't replace interpersonal skills.
- Would like to see a move away from builders replicating the same house over and over in every community around the UK, and digital technology can help to overcome this through e.g. thermal modelling.
- Some industry specific software e.g. building regulations features some very out of date figures, such as carbon emissions, which needs to be addressed.

Skills issues

- Prefers to employ freelancers who are hard-working and want to offer a service off their own back.
- There is a shortage of people who can use thermal modelling software. This would be beneficial to the local area in terms of building more cheaply but also more effectively.

Approach to training and development

- Encourages staff to undertake training and develop skills.
- Software houses tend to have their finger on the pulse and provide updates, which is simple enough to self-train when they come through so doesn't envisage needing to seek support.
- Would pay more to undertake training in a familiar environment conducive to learning, rather than classroom based.

Barriers

- The cost of training is worthwhile but for many small businesses it is not something budgeted for.

7. Conclusions

This research provides a robust assessment of the views of the business community in Stoke-on-Trent and Staffordshire amongst a representative sample of firms from all sectors.

A number of businesses face skills gaps and/or shortages, which tend to be very sector specific in nature hence meaning that the training needs arising are varied in nature. Some of these skills issues are caused by a fundamental problem with supply and others are caused by competition from other better paid or higher-profile industries.

The specific digital skills lacking commonly concern programming languages and coding skills; digital marketing or web design skills; and Microsoft Office. The fact that some SMEs outsource IT work may impact on the relatively limited extent to which some IT skills seem to be causing issues for businesses.

For a small number of businesses, the digital skills gaps that exist are having a negative impact and evidently inhibiting growth. Businesses are nevertheless doing what they can to address the skills gaps that exist, which commonly involves training, but this also impacts on business as it takes up precious time and resource.

Those facing current skills gaps or shortages were more likely to have a training plan and a skills analysis of the workforce already and were also more likely to have undertaken training or development in the last 12 months. This suggests that action is commonly being taken in response to skills issues.

The evidence suggests that business owners are generally proactive in seeking training or development options. They are also prepared to invest in the upskilling of their workforce and tend to know exactly where to go to access the training required.

Methods and tools used to deliver training or development is very much dictated by the skill concerned, with some better suited to classroom-based delivery away from distractions. However, online/e-learning is the most popular method amongst businesses, particularly as that fits in better around the working day for many. Current circumstances may further necessitate the use of online training methods, even for subjects that might previously have been delivered face to face.

Where barriers to training exist the cost of training and the impact of having staff away from work tend to cause the biggest issues. These are particular issues for microbusinesses and evidence also suggests that they have less confidence in being able to address skills and training amongst their workforce.

Future digital skills needs will doubtless be impacted by Covid-19, with some businesses facing a potential change in direction, others placing more emphasis on digital marketing and new methods of delivering training coming to the fore.

8. Appendix

8.1 Quantitative survey

Good morning/afternoon. My name is xxxx and I'm calling from Qa Research. We have been commissioned by Staffordshire County Council, Stoke-on-Trent City Council and Serco, to conduct telephone interviews with selected businesses in Stoke-on-Trent and Staffordshire, as part of the SSLEP Digital Skills Survey

The survey asks about digital skills shortages and gaps that may exist within your business and the training that may be required as a result both now and in the future. Your participation is important to ensure that the needs of organisations like yours are fully considered in the future.

The findings will help Staffordshire County Council, Stoke-on-Trent City Council and Serco to identify digital skills barriers and how best training opportunities can be promoted to ensure growth is not inhibited.

May I speak to a decision maker regarding workforce and skills who is based at this site, such as an owner, director, or manager?

WHEN PUT THROUGH TO A POTENTIAL RESPONDENT REPEAT INTRO

Can I just check that you are an appropriate senior person to discuss the skills gaps and training needs that may exist within your organisation?

INTERVIEWER INSTRUCTION (IF REQUIRED): You should be able to answer questions about current and future skills needs within the organisation and the support that you might require with this.

We would really appreciate it if you would be able to spare some time to participate in this research. The interview should take no more than 15 minutes depending on your answers. Would it be convenient to conduct the interview now?
INTERVIEWER (IF REQUIRED): If you would like to speak to someone at Serco about this research you can contact Ruth Bardsley, Senior Performance Manager, 07738 897278 or at Ruth.Bardsley@serco.com

This interview will be carried out according to the Market Research Society's Code of Conduct and all your answers and information you provide will be treated as confidential in accordance with the Data Protection Act and GDPR legislation. Your answers will not be linked to your company.

The legal basis for this research is 'consent' and the data controller for this research is Qa Research. If you'd like to see a copy of the Privacy Information Notice that accompanies this survey we can provide you with this. This details the background to this research, how your data will be kept securely and your rights.

This call will be recorded, but for internal quality procedures only. Is this OK?

SECTION 1: ABOUT YOUR BUSINESS

First, we just need to ask you a few profile questions to ensure we speak to a good cross-section of businesses and organisations.

Q1. We have [import company name] as your company name, is that correct?
Yes
No

ASK Q2 IF 'NO' AT Q1, IF 'YES' GO TO Q3
Q2. What is your company name?
CODES OPEN

Q3. Can I also check, are you a private business, a public sector organisation, a social enterprise or a voluntary/community organisation? INTERVIEWER: IF PRIVATE BUSINESS CHECK WHETHER HEAD OFFICE/ONLY SITE OR HAS A PARENT COMPANY IN UK OR OVERSEAS
SINGLECODE
A private business – head office/only site
A private business – with a UK parent company
A private business – with a multi-national parent company
A public sector organisation
A social enterprise
A voluntary or community organisation

SHOW IF 'A PUBLIC SECTOR ORGANISATION' AT Q3
Just to say that in the following questions I will refer to 'your business', but I note that your organisation is actually a public sector organisation.

ASK ALL
Q4. I have [IMPORT SIC FIELD FROM SAMPLE] as a general classification for your business. Does this sound right?
SINGLECODE
Yes
No

ASK Q5 IF 'NO' AT Q4, IF 'YES' GO TO Q6.

Q5. What is your main business activity at this site?
PROMPT: What is the main product or service of this business?
CODES OPEN

CODE TO SIC 2007 AS FOLLOWS:
A. Agriculture, forestry and fishing
B. Mining and quarrying
C. Manufacturing
D. Electricity, gas, steam and air conditioning supply
E. Water supply; sewerage, waste management and remediation activities
F. Construction
G. Wholesale and retail trade; repair of motor vehicles and motorcycles
H. Transportation and storage
I. Accommodation and food services activities
J. Information and communication

K. Financial and insurance activities
L. Real estate activities
M. Professional, scientific and technical activities
N. Administrative and support service activities
O. Public Administration and Defence; Compulsory Social Security
P. Education
Q. Human Health and Social Work Activities
R. Arts, entertainment and recreation
S. Other service activities

ASK ALL

Q6. How many people does your business employ at this site?
PROBE FOR BEST ESTIMATE. WRITE IN AND CODE BELOW.
INCLUDE FULL AND PART TIME
INCLUDE TEMPORARIES/CASUALS, BUT NOT AGENCY STAFF
NUMERICAL RESPONSE
CODE TO BANDS BELOW
1-9
10-49
50–99
100-249
250+ - THANK AND CLOSE
Don't know

Q7. Which Local Authority area is your company based in?
SINGLECODE
Cannock Chase
East Staffordshire
Lichfield
Newcastle-under-Lyme
South Staffordshire
Stafford
Staffordshire Moorlands
Stoke-on-Trent
Tamworth
Other - THANK AND CLOSE

Q8. How many years has your business been trading overall? PROBE FOR AN ANSWER
SINGLECODE
Less than 12 months
1 up to 2 years
Over 2 up to 3 years
Over 3 up to 5 years
6 to 10 years
11 to 20 years
Over 20 years
Don't know

SECTION 2: SKILLS SHORTAGES AND GAPS

Q9. Do you currently have any skills shortage vacancies in your business? These are vacancies that are hard to fill due to a lack of skills, qualifications or experience amongst applicants.
SINGLECODE
Yes
No
Don't know

ASK Q10 and Q11a IF 'YES' AT Q9, OTHERS GO TO Q12

Q10. Which of the following types of skills have you found to be lacking amongst applicants? READ OUT
MULTICODE
Basic computer literacy / using IT
Advanced IT or software skills
Oral communication skills
Written communication skills
Customer handling skills
Team working skills
Foreign language skills
Problem solving skills
Planning and organising skills
Numeracy skills
Literacy skills
Office admin skills
Technical or practical skills
Job specific skills (please record)
Attitude and work ethic
General common sense
Flair and imagination
Suitable qualifications
Suitable work experience
Any other skills (please specify)
Don't know

Q11a. And have you found any of these specific types of digital skills to be lacking amongst applicants? READ OUT
MULTICODE
Key board skills
Microsoft Office
Other productivity software e.g. project management software or Enterprise Resource Planning (ERP)
Programming language and coding skills e.g. Java, SQL, Python
Set-up, support and management of computer systems and networks
IT security i.e. how to protect yourself/ your systems
Data analysis skills e.g. Stata, Big Data, Data Science
Digital or web design skills
CRM software skills e.g. Salesforce or Microsoft Dynamics
Digital marketing skills e.g. social media or analytics tools e.g. Google Analytics
Automation or robotics skills e.g. Robotic Process Automation (RPA)

Machining or engineering software and tools e.g. CNC machining or computer aided design (CAD – 2D or 3D modelling)
Any other digital skills shortages (please specify)
No digital skills shortages

ASK Q11b IF DIGITAL SKILLS SHORTAGES AT Q11a, OTHERS GO TO Q12
Q11b. In what specific occupations or roles are you finding digital skills to be lacking amongst applicants?
CODES OPEN
Don't know

ASK ALL
Q12. Does your business have any skills gaps amongst the current workforce?
INTERVIEWER NOTE: THESE ARE SKILLS THAT NEED DEVELOPING OR ARE MISSING AMONG THE CURRENT WORKFORCE
SINGLECODE
Yes
No
Don't know

ASK Q13 and Q14 IF 'YES' AT Q12, OTHERS GO TO Q19
Q13. Which of the following skills gaps exist amongst the current workforce? READ OUT
MULTICODE
Basic computer literacy / using IT
Advanced IT or software skills
Oral communication skills
Written communication skills
Customer handling skills
Team working skills
Foreign language skills
Problem solving skills
Planning and organising skills
Numeracy skills
Literacy skills
Office admin skills
Technical or practical skills
Job specific skills (please record)
Attitude and work ethic
General common sense
Flair and imagination
Any other skills (please specify)
Don't know

Q14. And do any of these specific types of digital skills gaps exist amongst the current workforce? READ OUT
MULTICODE
Key board skills
Microsoft Office
Other productivity software e.g. project management software or Enterprise Resource Planning (ERP)
Programming language and coding skills e.g. Java, SQL, Python
Set-up, support and management of computer systems and networks

IT security i.e. how to protect yourself/ your systems
Data analysis skills e.g. Stata, Big Data, Data Science
Digital or web design skills
CRM software skills e.g. Salesforce or Microsoft Dynamics
Digital marketing skills e.g. social media or analytics tools e.g. Google Analytics
Automation or robotics skills e.g. Robotic Process Automation (RPA)
Machining or engineering software and tools e.g. CNC machining or computer aided design (CAD – 2D or 3D modelling)
Any other digital skills gap (please specify)
No digital skills gaps

ASK Q15-18 IF ANY DIGITAL SKILLS GAP AT Q14, IF NO DIGITAL SKILLS GAP GO TO Q19

Q15a. And again for each of the digital skills gaps that exist within the current workforce, which age groups do they typically apply to? READ OUT
MULTICODE
Employees aged under 25
Employees aged 25-49
Employees aged 50 and over

LOOP - IMPORT LIST FROM ANSWERS IN Q14

Q15b. In what specific occupations or roles do these digital skills gaps exist within your current workforce?
CODES OPEN
Don't know

Q16. Is the fact that some of your staff are not fully proficient with certain digital skills causing your business to…? READ OUT
MULTICODE
Lose business or orders to competitors
Delay developing new products or services
Have difficulties meeting quality standards
Have higher operating costs
Have difficulties introducing new working practices
Increase workload for other staff
Outsource work
Other (please specify)
None of the above
Don't know

Q17. Have you taken any steps to improve the proficiency or skills of these staff?
SINGLECODE
Yes
No – but have plans to
No
Don't know

Q18. Which if any of the following steps is your business taking to overcome the fact that some staff are not fully proficient with certain digital skills? READ OUT
MULTICODE
Increase training activity, expenditure or expand trainee programmes
Reallocating work
Increase recruitment activity or expenditure
More staff appraisals or performance reviews
Implementation of mentoring or buddying scheme
More supervision of staff
Recruiting workers who are non-UK nationals
Changing working practices
Other: specify
Nothing
Don't know

SECTION 3: TRAINING AND DEVELOPMENT

ASK ALL
Q19 Does your establishment have or undertake any of the following…? READ OUT
MULTICODE
A training plan that specifies in advance the level and type of training your employees will need in the coming year
A budget for training expenditure
A digital skills analysis of the current workforce to aid business planning or development
More general skills analysis of the current workforce to aid business planning or development
Neither of the above
Don't know

ASK Q20 IF DO NOT HAVE OR UNDERTAKE A DIGITAL SKILLS ANALYSIS AT Q19, OTHERS GO TO Q21
Q20. Would you be interested in support from a local Growth or Skills Hub to develop or undertake a digital skills analysis of your workforce?
Yes
No
Don't know

ASK ALL
Q21. Over the past 12 months, have you arranged or funded any training or development for employees? Please include both on-the job training and off-the-job or informal training and development.
SINGLECODE
Yes
No
Don't know

ASK Q22 IF 'YES' AT Q21, OTHERS GO TO Q24
Q22. And over the past 12 months, have you arranged or funded any off-the-job or on-the job training or development for employees at this site which is specifically linked to digital skills?
SINGLECODE
Yes
No
Don't know

ASK Q23 IF Yes AT Q22, OTHERS GO TO Q24

Q23. Which of the following tools or methods of digital skills training have you arranged, funded or utilised over the past year? READ OUT

MULTICODE

Instructor led / classroom training - onsite
Instructor led / classroom training - offsite (e.g. a training centre)
Virtual classrooms
Online learning / E-learning (e.g. YouTube or Google)
Mobile learning using apps
Blended learning (a combination of approaches)
Other (please specify)
Don't know
None of the above

ASK ALL

Q24. Thinking specifically about any digital skills needs that may arise in the future, which of the following tools or methods of digital skills training would you prefer to use to upskill your workforce? READ OUT

MULTICODE

Instructor led / classroom training - onsite
Instructor led / classroom training - offsite (e.g. a training centre)
Virtual classrooms
Online learning / E-learning (e.g. YouTube or Google)
Mobile learning using apps
Blended learning (a combination of approaches)
Other (please specify)
Don't Know
Don't expect any digital skills needs (DO NOT READ OUT)
Wouldn't upskill the workforce through training (DO NOT READ OUT)

Q25. What barriers, if any, have there been preventing your business from providing digital skills training? DO NOT READ OUT

MULTICODE

Lack of funds for training / training is expensive
Can't spare more staff time (having them away on training)
Staff now fully proficient / don't need it
Staff not keen
A lack of good local training providers
Lack of provision (e.g. courses are full up)
Difficulty finding training providers who can deliver training where or when we want it
A lack of appropriate training / qualifications in the subject areas we need
Hard to find the time to organise training
Lack of knowledge about training opportunities and/or suitable courses
Other (please specify)
Don't Know
No barriers exist

Q26. I am going to read some statements about attitudes towards digital skills and training within your business. For each one, please tell me how far you agree or disagree giving your answer on a scale of 1-5, where 1 means you disagree strongly and 5 means you agree strongly.
SINGLECODE
1 – Disagree strongly
2
3
4
5 – Agree strongly
Not applicable
Don't know

LOOP - RANDOMISE ORDER OF ASKING
We understand the skills our staff need to use digital technology in our business
Our business encourages and helps staff understand and increase their own digital skills
We have training in place to allow our staff to increase their digital skills
We have the confidence and skills to try out new digital technology

SECTION 4: USE OF DIGITAL TECHNOLOGY

Q27. Would you describe your business as 'expert', 'developing' or 'novice' in its use of digital technology overall?
SINGLECODE
Expert
Developing
Novice

Q28. What would you describe as the three top barriers to using more digital technology in your business? DO NOT READ OUT
MULTICODE
Lack of skills to make decisions
Time to invest in upskilling staff
Resources to invest in appropriate technology
Resources to invest in training
Staff are resistant to using digital technology
We have problems with wifi connection
Lack of appropriate systems
Lack of leadership from employers and managers
Other (please specify)
No barriers to using more digital technology

Q29. Are you concerned about the impact that automation and robotics might have on your business in the future?
SINGLECODE
Yes
No
Don't know

ASK Q30 IF 'YES' AT Q29, OTHERS GO TO Q31

Q30. What is your main concern about the impact that automation and robotics might have on your business in the future?
CODES OPEN

Q31. Do you have any other comments that you'd like to make about digital skills and training?
CODES OPEN

SECTION 5: Consent to Re-contact

The final question asks for your consent to re-contact you.

D1. As part of this research we, Qa Research, will be carrying out some further interviews with people who have completed this survey to ask them for a bit more detail about the answers they have given. This would take the form of a telephone interview lasting around 20 minutes and would be an opportunity for you to tell us more about the issues we've discussed today. Would you be happy to be re-contacted by us for this reason?
SINGLECODE
Yes
No

D2. Would you like to be made aware of the outcome of the survey and kept up to date with latest Skills Advisory Panel (SAP) developments? If you agree Staffordshire County Council or Stoke-on-Trent City Council will only re-contact you for this purpose (not for marketing or selling) and will treat your contact details as strictly confidential (they will not pass them on to any third party).
SINGLECODE
Yes
No

IF 'YES' AT D1 or D2 ASK D3, OTHERS THANK & CLOSE

D3. Can I take some contact details please?
Name:
Phone:
Email:
Business Name:

Thank you for taking the time to complete this survey.

8.2 Qualitative discussion guide

This script provides a guide for the research and wherever possible the interviewer will seek to keep questions in order. However, feedback from the interviewee may lead to having to adjust the nature of the questions and the sequence of questioning.

Introduction and context

Thanks for agreeing to take part in this in-depth interview for Staffordshire County Council, Stoke-on-Trent City Council and Serco. This interview follows on from the survey that you recently undertook and aims to understand more about skills and workforce development in your business.

The results from this interview and the survey will be used to determine how best training opportunities can be promoted to ensure growth is not inhibited.

Explain nature of interview:
- All information provided will be treated confidentially
- No right or wrong answers
- Audio recording for analysis purposes – is that ok?
- Lasts approx. 30 mins depending on how much you have to say
- Any questions?

Section 1 Business background

Reconfirm details collected in quantitative stage:
- Main sector of business and products/services
- How long in business
- Size

Also cover
- Workforce skill levels (high, medium, low)
- Use of digital / AI / automation to produce, distribute or market products/services

Section 2 Business challenges: current and future

How is business going at the moment?

- Up/Down/Steady?
- What impact has Covid-19 had?

How do you expect business levels to be over the next few years?

- Up/Down/Steady?
- What impact might Covid-19 have on your business going forward?

What would you say are the main challenges the business faces over the next five years? *Probe for..*

- External / macro factors
- Internal / micro factors

What are the main things you think might change in the next five years that might impact your business?

- Does this reflect your wider industrial sector?

(If not already mentioned) How do you think technological change or advancement might impact on your business?

- What about automation or artificial intelligence (where machines may take on tasks previously delivered by people), to what extent are you aware of these concepts?
    - To what extent might this impact your business in the next five years?
    - *If necessary* And how might this impact on the productivity of your business?

- What other digital sector changes might impact on your business? *Probe for...*

- Possible opportunities – explain
- Possible threats – explain
- How significant is the threat / opportunity? Why?
- Will technology or automation affect the number of employees that you require in your business in the future?
    - Do you expect this to be long term or temporary?

Section 3 Recruitment into digital roles

Referring to any relevant survey data:
Thinking specifically now about digital or artificial intelligence (AI) related skills within your business. Has the demand for staff with digital or AI related skills increased in the last three years?

- What has driven this change? (probe whether e.g. technological change, need to reduce costs, staff turnover, to remain competitive, meet customer needs)?

Have your expectations about digital or AI skills levels changed over this time? *Probe for...*

- The proportion of roles requiring digital or AI skills?
- The level required i.e. basic or advanced digital skills?

Have you recruited into any digital or AI roles?

- How easy was it?
- How well equipped are new entrants? Are any skills lacking E.g. software packages?
- To what extent has this impacted on business growth/turnover/productivity?

Aside from digital roles, have you experienced any difficulties recruiting into any other roles in the past year? *Probe for...* areas of work/roles in which skills shortages exist.

Section 4 Skills gaps and shortages: current and future

Referring to any relevant survey data: We are now going to talk about skills and training within your workforce now and in the future. To what extent do you feel your current workforce has the right level of digital skills to deliver your product / service?

- Why do you say this?

If do not have the right level of skills and referring to survey data: You told us previously that the following skills gap exists within the current workforce….

  - Could you tell me a little more about these skills?
  - Does it vary by particular business areas or occupations? If so, in which areas?
  - Have you tried to recruit to fill these digital skills gaps? Or develop existing staff?
  - To what extent does this impact on business growth/turnover/productivity?

Do any other digital skills gaps occur to you now?

To what extent do you feel your business will need the workforce to have different skills over the next five years?

- Why is this? Does technology play a role?
- What impact might this have on business growth/turnover/productivity?

If different skills needed, what type of skills and why?

- How about digital skills?

(If not mentioned already) how about automation. To what extent do you see skills needing to be different or adapt in relation to automation?

Section 5 Preferred channels / types of training provision

If provided training or development in past year and referring to survey data: You mentioned that you have provided digital skills training in the last 12 months?

- Can you tell me a little more about the format that the training took?
- Who provided it?
- Was it successful in filling the skills gap?

If you did need to up-skill your workforce in the next five years, how would you go about this?

- What methods of training would appeal?
- Why these preferences?

If looking for external help / courses where would you look for what is available?

  - Google search and then call / email
  - Use someone you already know – who?
  - Contact the local authority

- To what extent would this apply if seeking to develop digital skills or skills related to automation?

Section 6 Barriers to training

If barriers to training exist and referring to survey data: You mentioned that barriers exist to accessing training specifically relating to digital skills?

- Could you tell me more about these barriers

If no barriers exist, what about more general skills? Do barriers exist?

What have you done/would you do to overcome these barriers?

What support would best help you to overcome these barriers to training?

Section 7 Final comments

Do you have any final suggestions or comments?

Repeat assurances about confidentiality

Thank you very much for your time today