

# Skills and Training in the Construction Industry 2016

Final Report - August 2016





Study prepared by BMG Research Ltd from a commission by CITB.

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# 1. Executive Summary

## Introduction

- In March 2016, the CITB commissioned this skills and training survey, with fieldwork being conducted in April, May and June 2016. The survey broadly replicates similar surveys conducted in 2009, 2011 and 2014. The survey's basic themes are recruitment difficulties and skill shortages, skills deficiencies and gaps in established workforces, and training and development activity in the construction industry across the UK.
- Telephone interviews with 1,044 employers (in establishments in which at least 2 people worked) and 156 self-employed individuals in the construction sector were achieved.
- In addition, targets were set for the numbers of interviews in each home nation such that a minimum of 85 interviews were conducted in each of Scotland, Wales, and Northern Ireland. The remaining 929 interviews (77% of the sample) were conducted in England. Within England, further stratification of the sample ensured appropriate representation of the distribution of employers and self-employed businesses across the nine government office regions.
- At the analysis stage, the data was weighted to accurately represent the total population of construction businesses in the UK.

## Industry structure

- The majority of businesses with employees (86%) employ fewer than 10 staff at their site. Most of the remainder (9% of all employers) employ between 10 and 24 staff. Only one in twenty employers (5%) employ 25 or more staff at their site, including 1% that employ at least 100 staff.
- Three-quarters of businesses with employees (73%) operate within the construction sector, with the remainder (27%) operating within professional services.
- More than half of the businesses with employees (55%) have contractor/agency/self-employed workers currently working for them.

## Output constraints

- While there are still concerns regarding insufficient demand/uncertainty in the economy and this continues to be the most frequently mentioned constraint to business sales and output, it was less frequently mentioned than two years ago (12%, compared with 17% in 2014). Labour shortages and access to a skilled workforce were more frequently mentioned this year than in 2014, suggesting that a stronger economic environment has put some pressure on existing workforce skills.





- Overall, more than half of both employers and the self-employed (53% and 56% respectively) did *not* perceive any constraints on their business. This compares with around two-fifths in 2014, which also suggests a more positive economic environment for construction businesses, with fewer constraints, now.
- There is a similar picture with regard to *anticipated* constraints on output in the next 12 months. Again, insufficient demand/uncertainty in the economy is the most likely to be mentioned, but by a higher proportion of businesses than mention it as a recent constraint (25% of employers; 21% of the self-employed).
- The majority of employers reported no change in the number of staff employed in the last 12 months (65%) but, if there had been change, this was more likely to be positive rather than negative: 24% of business reported an increase while 10% reported a decrease.

### Recovery leading to a tightening labour market

- One in six employers (18%) reported that, for *some* of the last year, they have not had enough skilled workers and a further 8% reported that for *all or most* of the last 12 months they had not had enough skilled workers. Both these proportions are slightly higher than in 2014 (13% and 5% respectively).
- More than two-fifths of employers (46%) have tried to recruit skilled labour directly during the last 12 months. This represents a significant increase compared with the 2014 figure of 39% which was also a significant increase on the previous 2011 figure of 26%. This suggests a strong upward trend in recruitment.
- Just over two-fifths of employers (43%) have turned work down in the last 12 months as a consequence of lacking skilled workers. This proportion is significantly higher amongst construction than professional services businesses (47%, compared with 31%).
- Two-fifths of employers (40%) have actually recruited staff in the last 12 months, compared with 33% in 2014.
- In the last 12 months, more than a quarter (28%) of those that have recruited any new direct employees have taken on someone into their first job on leaving school, college or university. This equates to 11% of all employers.
- A similar proportion of businesses (28%) that have recruited education-leavers have also recruited *other* young people – under the age of 25 –who were *not* entering their first post-education job.
- If education-leavers are taken into account, more than three-fifths of businesses that have recruited in the last 12 months (62%) have recruited a young person or education-leaver. This equates to 25% of employers (when those which did not recruit at all are included in the base for the calculation), which is higher than in 2014 (19%).



- Nearly half of employers that have tried to recruit skilled staff have experienced difficulties in filling the positions. This compares with significantly fewer in 2014 (36%). This equates to 30% of all employers, compared with 18% in 2014. Thus, there has been a strong upward trend in the incidence of hard-to-fill vacancies since 2011 (21% in 2011 to 36% in 2014 to 47% in 2016).
- The most frequent recruitment difficulties for businesses within the construction sector were for carpenters/joiners and bricklayers; while professional services businesses were most likely to have difficulty recruiting engineers that were not civil or mechanical engineers.
- The most frequently cited cause of hard-to-fill vacancies is that applicants lack the skills required (88%), while not enough young people being trained in the construction industry is also a significant cause (79%). Both are mentioned to a greater extent this year than in 2014.
- This year, personal skills, such as attitude, motivation and common sense have increased in importance as skills that are difficult to obtain (34%), while a lack of experience and knowledge also continue to be relatively significant (27%).
- Recruitment difficulties have had an impact on 95% of employers that have reported them. This impact is most likely to have been the increased use of overtime and higher workloads for existing staff (74%).
- More than half of employers that have had hard-to-fill vacancies report having lost business or turned down bidding for work (54%), while half of employers (50%) that have had hard-to-fill vacancies cite an increase in operating costs.

### **Skill gaps**

Skill gaps are present but not extensive.

- Twenty per cent of businesses said they had skill gaps in their existing workforces. This figure compares with 8% in 2014 and 10% of employers within the construction sector who said, in UKCES' Employer Skills Survey of 2015, that they had skill gaps. This suggests that there has been a significant increase in the prevalence of skill gaps in the last year or two.
- Among workers, skill gaps most commonly affect scaffolders (29% of those employed in this occupation) and quantity surveyors (28%). Among the self-employed, architects are most likely to have skill gaps (31%).
- The majority of employers reporting skill gaps cite lack of experience or staff having been recently recruited as the reason (37% of those with skill gaps).
- When asked about the impact of skill gaps on business performance, just 16% of employers report that they have had a major impact, with 41% of employers reporting that the impact has been minor.





- The majority of employers (72%) with skill gaps are increasing training activity in order to overcome these gaps.
- The most frequent driver of new skills and knowledge among employers is new legislative or regulatory requirements (60%) closely followed by the introduction of new working practices (53%) and the introduction of new technologies or equipment (also 53%). These drivers have changed little since 2011.
- Among employers in the construction sector, managers/directors are the occupation group most likely to be affected by the need to acquire new skills or knowledge (22%); among those in professional services, architects are most likely to be affected (20%).
- The four areas in which skills and/or knowledge are most frequently reported as needing improving or updating as a result of the drivers are health and safety/first aid (25%), legislation/regulations (22%), general/all sorts (19%) and technical/trade-specific skills (18%).

### Trends in training

The proportion of employers which train their staff has increased and other training indicators are positive.

- Nearly two-thirds of all employers (64%) have funded or arranged any training, on or off-the-job, informal or formal, for any staff in the last 12 months.
- This is a higher proportion than reported in 2014 (57%) and among construction businesses in the UK-wide 2015 Employer Skills Survey (UKCES) (also 57%).
- Employers who provide training were asked about changes in their training in the last 12 months. Across a series of indicators, positive changes from 2011 to 2014 to 2016 were observed. Proportions of workforces trained, training expenditure per trainee, and the amount of training that has led towards recognised qualifications all increased.
- More particularly, 43% of employers have funded or arranged *on-the-job* training for any staff in the last 12 months, compared with 39% in 2014.
- On average, employers provided each person trained with 16 days on-the-job training last year. In 2014, the mean number of on-the-job training days per trainee provided by employers was 8. Hence, there has been an increase over the last two years in the average number of days allocated to on-the job training per trainee trained on-the-job.
- Fifty-three per cent of employers had funded or arranged *off-the-job* training for staff in the last 12 months, compared with 45% in 2014. On average, employers provided each trainee who trained off-the-job with 6 days off-the-job training last year. This is a similar figure to that reported in 2014 (5 days).



- As in 2014, training is most likely to have been provided by private training providers and internally, by staff. There was a higher incidence of training provided by professional institutions or through an industry federation or body in 2016 than in 2014.
- Of employers that provided training in the last 12 months, 42% provided training towards a nationally-recognised qualification. This is a lower proportion in 2014 (50%), which suggests that while the amount of training towards a nationally-recognised qualification has increased within some training employer organisations, fewer have provided qualifications-based training.
- Three-fifths (61%) of employers that funded or arranged training in the last 12 months formally assess whether the training and development received has an impact on the trainee's performance. This is a similar proportion to that reported in 2014 (60%).
- Half of employers *that funded or arranged any training in the last 12 months* (50%) reported that they would have provided more training if they had been able to do so. This is a higher proportion than in 2014 (40%).
- Being unable to spare more time for staff to be away from their jobs (49%) and lack of funds (45%) are the main reasons for these employers not providing more training.
- Respondents who had *not funded or arranged training in the last 12 months* were asked for the reasons why they have not done so. The main reason given was that all staff are fully proficient (63%), although this is a lower proportion than reported in 2014 (81%).

## Apprenticeship

There has been an increase in support for Apprenticeship in the last two years.

- Nearly one in four employers in the construction sub-sectors (23%) currently has staff undertaking Apprenticeships. This is higher than previously (14% in both 2014 and 2011).
- One in seven construction employers (15%) offer Apprenticeship opportunities but do not currently have an apprentice. This is also an increase on 2014 (10%).
- A third of all construction employers (33%) said it was likely that they would take on someone on an Apprenticeship in the next 12 months. This includes 14% that consider the possibility as very likely.
- More than three-fifths of employers that currently have Apprentices (62%) consider it likely that they will take on new Apprentices in the next 12 months. This is a slightly higher proportion than reported in 2014 (55%).



- Compared with 2014, there is no change in the proportion of employers who are *not* currently offering Apprenticeships that consider it likely they will start to offer Apprenticeships in the near future (16% in both 2016 and 2014).
- Employers in the construction sector that offer Apprenticeships were asked if the number of Apprentices and new trainees recruited has changed in the last 12 months. A third (34%) reported that the number has increased, while just 12% reported that the number has decreased.
- The positive trends in the extent to which Apprenticeships are offered noted in 2014 have continued into 2016.



## 2. Background

### Aims and objectives

In March 2016, the CITB commissioned this skills and training survey. The survey broadly replicates similar surveys conducted in summer 2009, early 2011 and early 2014. The survey aims to determine skill needs and training practices amongst both self-employed individuals and employers working in the construction industry across the UK.

### Scope

The survey's basic themes are recruitment difficulties and skill shortages, skills deficiencies and gaps in established workforces and amongst self-employed individuals, and training and development activity.

Where possible, results are benchmarked against findings from the previous skills and training survey in 2014 (the earlier surveys judged as too long ago to provide a sensible comparison), as well as against findings from the nationwide Employer Skills Survey 2015 which is undertaken by the UK Commission for Employment and Skills (UKCES).

### Methodology

In order to meet the research aims and objectives to provide a comprehensive picture of skills and training within the industry a quantitative survey of sector employers and of self-employed individuals currently working in the construction industry was undertaken.

### Sampling

Using IDBR<sup>1</sup> data as a guide, samples of 1,044 employers and 156 self-employed individuals in the construction sector (as defined by a series of 2-digit SIC codes) were achieved. For the employer sample, establishments in which at least 2 people work were included in the survey. Size of business was a key consideration in sampling, with targets set within each of four employer size bands (2-9, 10-24, 25-99, and 100+ employees). The proportion of interviews in each size band was guided by the distribution evident in the IDBR but with deliberate over-representation of larger businesses. This was to ensure that the sample contained an adequate number of these relatively rare businesses. The sample was also stratified according to two broad industry sub-groups, construction and professional services, in a ratio of 79:21 interviews respectively. This approach replicates the approach used in 2011 and 2014. The following table shows a breakdown of the achieved sample by 2-digit SIC and employer size:

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<sup>1</sup> Inter-Departmental Business Register, the UK government's 'official' record of enterprises



## Sector and size of employers surveyed; interviews achieved

SIC code	Number of employees					Total
	Self-employed	2-9	10-24	25-99	100+	
<b>Construction</b>	<b>119</b>	<b>321</b>	<b>223</b>	<b>205</b>	<b>78</b>	<b>946</b>
41 – Construction of buildings	37	119	71	42	21	<b>290</b>
42 – Civil engineering	8	26	23	28	17	<b>102</b>
43 – Specialised construction activities	74	176	129	135	40	<b>554</b>
<b>Professional Services</b>	<b>37</b>	<b>98</b>	<b>38</b>	<b>57</b>	<b>24</b>	<b>254</b>
71 - Architectural and engineering activities; technical testing and analysis	32	85	35	47	14	<b>213</b>
74 - Other professional, scientific and technical activities	5	13	3	10	10	<b>41</b>
<b>Total</b>	<b>156</b>	<b>419</b>	<b>261</b>	<b>262</b>	<b>102</b>	<b>1044</b>

In addition, targets were set for the numbers of achieved interviews in each home nation such that a minimum of 85 interviews were conducted with employers and self-employed individuals in each of Scotland, Wales, and Northern Ireland. The actual number achieved was 93 in Northern Ireland, 92 in Scotland and 86 in Wales. The remaining 929 interviews (77% of the sample) were conducted in England. Within England, further stratification of the sample ensured the appropriate representation of the distribution of employers and self-employed businesses across the nine government office regions (as indicated by IDBR data).

At the analysis stage, the data was weighted to accurately represent the total population of construction businesses in the UK. The employer (2+ employee establishments) and self-employed samples were weighted separately. Further details on the weighting process can be found in appendix 1 of this report.

Contact details for businesses were sourced from Experian's commercial database of establishments.

### *Statistical confidence*

The standard error associated with a given sample estimate is not determined by the size of the population being observed (providing the population is reasonably large), but by the size of the sample itself. In practice, once a sample size exceeds 100 cases (whatever the size of the total population) it is likely to deliver an acceptable degree of accuracy provided it is a random sample.

The samples generated in this research have the following maximum standard errors at the 95% level of confidence:





- Survey of 156 self-employed individuals: maximum standard error of +/-7.8%<sup>2</sup>.
- Survey of 1,044 employers: maximum standard error of +/-3.0%<sup>3</sup>.

Unless stated otherwise, all findings reported are statistically significant, whether reported as a comparison between the 2014 survey and previous surveys or whether a finding for a sub-group is compared with the overall total (minus that sub-group).

### *Questionnaire design and administration*

The questionnaire was designed by BMG and signed-off by the CITB. All interviews were undertaken between 27<sup>th</sup> April 2016 and 17<sup>th</sup> June 2016 and were administered by BMG's in-house call-centre using the Computer Assisted Telephone Interviews (CATI) technique. All survey interviews were designed to take no more than 20-25 minutes to complete. Potential respondents were called on a range of days and times and on up to 10 occasions before being recorded as a non-respondent.

### *Presentation of survey data in the report*

Individual question bases are provided on the graphs and charts in this report. Cross-tabulations were undertaken, based on key variables such as employer sector, size, and nation. Independent t-tests<sup>4</sup> were conducted at the 95% confidence level<sup>5</sup> to identify where differences between groups were statistically significant.

Most data used in this report are rounded to the nearest whole percentage. For this reason, on occasion, data in tables or charts may not add up exactly to 100 per cent.

Data relating to employers' responses to key questions by nation and English region is included in appendix 2 and 3 of this report respectively.

Question numbers and text are referenced alongside each chart and table.

## **The report**

The remainder of the report now sets out research findings.

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<sup>2</sup> This means that in 95% of cases the true value for any binomial response will fall into a maximum of between +/-8% of that observed. So, for example, if 50% of respondents agree, it can be stated that 95% of the time the true value will lie between 42% and 58%.

<sup>3</sup> This means that in 95% of cases the true value for any binomial response will fall into a maximum of between +/-3% of that observed. So, for example, if 50% of respondents agree, it can be stated that 95% of the time the true value will lie between 47% and 53%.

<sup>4</sup> A T-test is a statistical test performed to determine if groups of data are significantly different from each other

<sup>5</sup> Confidence levels are used to indicate the reliability of an estimate



### 3. Profile of businesses and workforces

#### Self-employed individuals

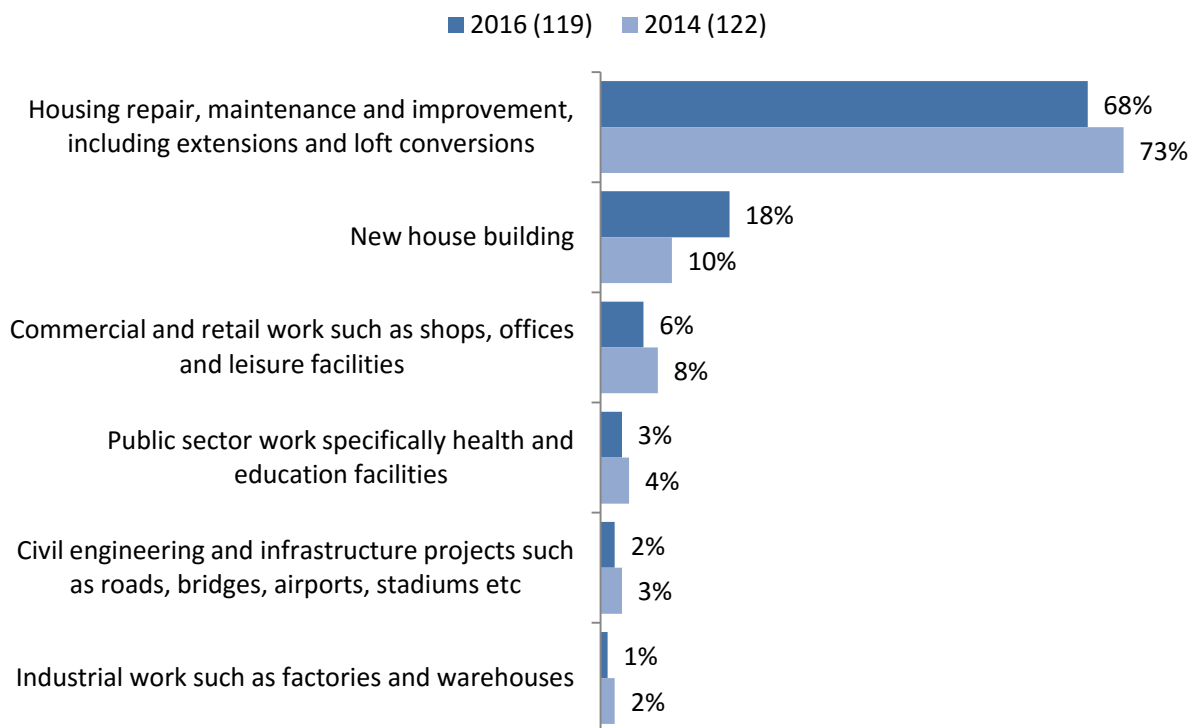
156 interviews were conducted with businesses with no permanent or directly employed staff other than the owner/manager (a self-employed individual).

#### Sector profile (self-employed)

Three-fifths of self-employed individuals within the sample (61%) operate within the construction sector, with the remainder (39%) operating within professional services.

The majority of self-employed individuals within construction (68%) describe most of their business in the last 12 months as coming from housing repair, maintenance and improvement, including extensions and loft conversions. This is a slightly lower proportion than in 2014 (73%). There has been an increase in the proportion of self-employed individuals that work mainly in new house building (18%, compared with 10% in 2014).

**Figure 1: Self-employed individuals' main business area within the construction sector (all self-employed individuals in the construction sector)**



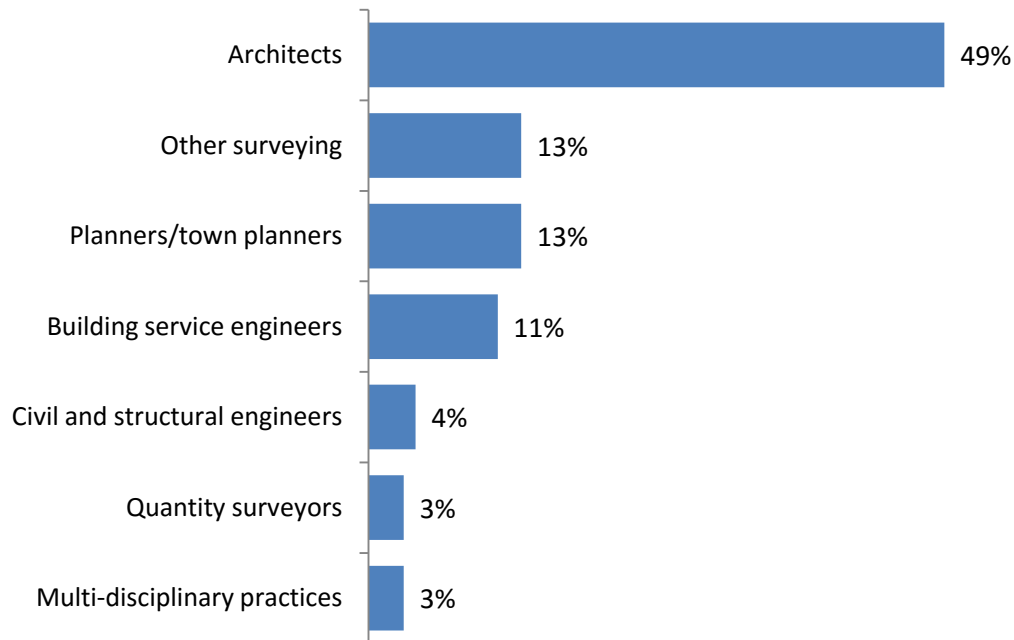
Unweighted sample base in parentheses

QA5 In which one of the following areas has most of your business been in the last 12 months? **READ OUT AND CODE ONE ONLY**

Around half of self-employed individuals within professional services in the sample (49%) are architects. One in eight are planners/town planners or other surveyors (each 13%).



**Figure 2: Self-employed individuals' main business area within the professional services sector (all self-employed individuals in the professional services sector)**



Unweighted sample base in parentheses

QA6 Which of the following most closely describes the main activity of this establishment? **READ OUT AND CODE ONE ONLY**

### Employment of sub-contractors

Although they have no permanent, directly employed staff, around three in ten self-employed individuals (31%) has contractor, agency or other self-employed staff working for them.

The mean number of contractors/agency/self-employed workers per self-employed unit was 1.

### Employers

1,044 interviews were conducted with businesses with employees. These businesses have a minimum of 2 employees (that is, the owner/manager and at least 1 other employee).

### Size profile

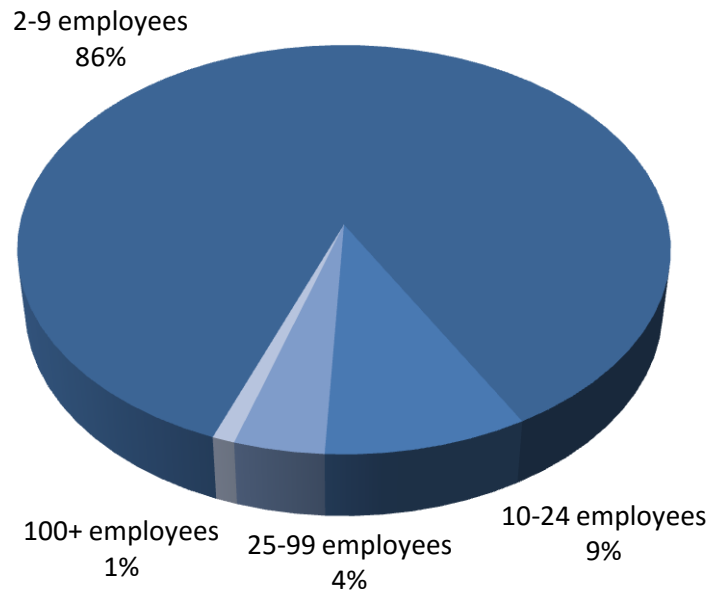
The majority of businesses with employees (86%) employ fewer than 10 staff at their site. Most of the remainder (9% of all with employees) employ between 10 and 24 staff.

Only 5% employ 25 or more staff at their site, including 1% that employs at least 100.

The profile by business size has changed little since 2014.



**Figure 3: Number of employees at that site (all businesses with employees)**



Unweighted sample base in parentheses

QA1 Including yourself and any working proprietors, but excluding any contractor, agency or self-employed workers, how many people are on the payroll at this location? **PROMPT FOR A BEST ESTIMATE, WRITE IN**

The national profiles by business size are similar although there are fewer employers in Northern Ireland within the 2 to 9 employee size band (76%) and slightly more in the 10 to 24 employee size band (15%).

### Sector profile

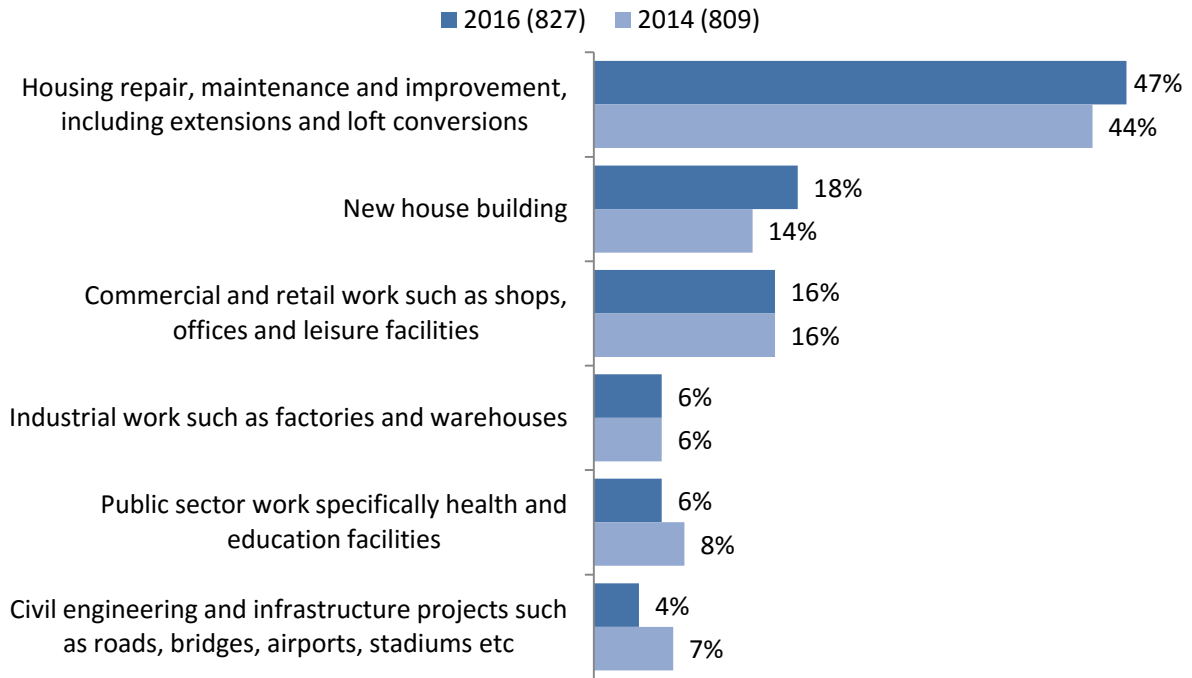
Three-quarters of businesses with employees (73%) operate within the construction sector, with the remainder (27%) operating within professional services.

Approaching half of businesses with employees within construction (47%) describe most of their business in the last 12 months as coming from housing repair, maintenance and improvement, including extensions and loft conversions.

By nation, there is a higher proportion of businesses operating in the housing repair sub-sector than average in Scotland (58%), while around one third of businesses in Northern Ireland mainly operate within new house building (35%) and a significantly higher than average proportion of businesses in Wales (18%) mainly undertake civil engineering and infrastructure projects.



**Figure 4: Employers' main business areas within the construction sector (all construction sector businesses with employees)**



Unweighted sample base in parentheses

QA5 In which one of the following areas has most of your business been in the last 12 months? **READ OUT AND CODE ONE ONLY**

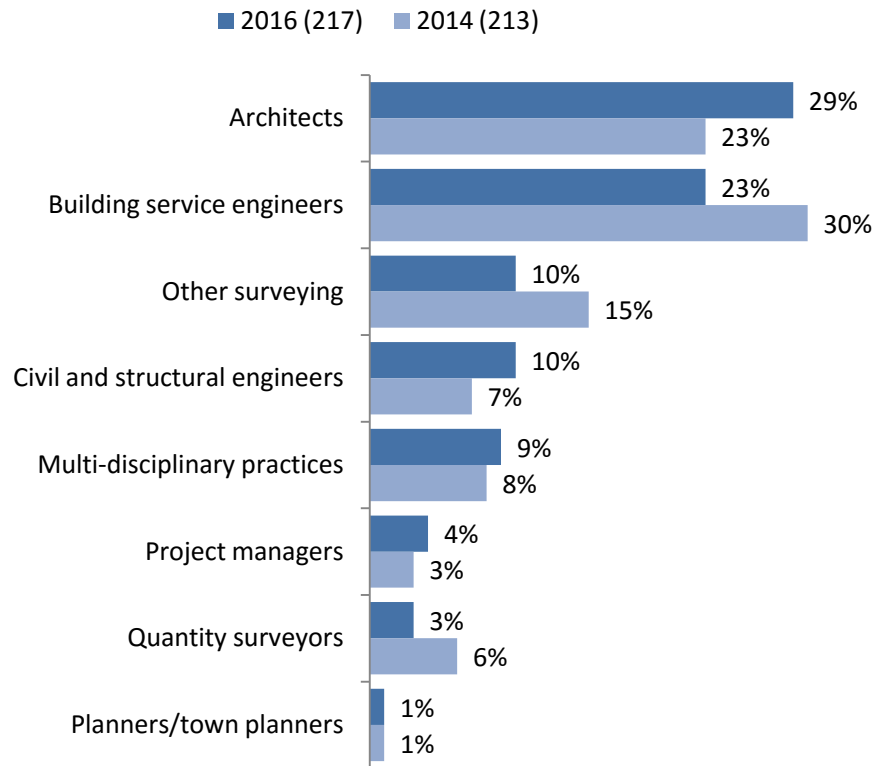
There are differences by business size, with larger businesses significantly more likely to work on civil engineering and infrastructure projects (12% of businesses with 25-99 employees; 33% of those with 100+ employees). Few larger businesses work mainly in the area of housing repair, maintenance and improvement (15% of businesses with 25 or more employees).

Around three in ten employers in professional services (29%) are architectural practices. There has been a shift in the sample from building service engineers; 23% this year, compared with 30% in 2014) to architects (23% in 2014).





**Figure 5: Employers' main business areas within the professional services sector (all professional services businesses with employees)**



Unweighted sample base in parentheses

QA6 Which of the following most closely describes the main activity of this establishment? **READ OUT AND CODE ONE ONLY**

### Employment of sub-contractors

Just over half of the businesses with employees (55%) have contractor/agency/self-employed workers currently working for them. This proportion is significantly higher within construction (62%) than in professional services (37%). It is lowest amongst businesses in Scotland (35%).

The mean number of contractors/agency workers/self-employed working within businesses with employees is 8. This increases with business size:

- 6 within businesses with between 2 and 9 employees
- 8 within businesses with between 10 and 24
- 32 within businesses with between 25 and 99
- 105 within businesses with 100 or more employees

The mean number is higher in construction than in professional services (10, compared with 3).

### Occupation profile of workforce

Employers were asked about the occupations employed in their business and self-employed individuals were asked about their own occupations.



Occupational groups employed in the business, by sector, are summarised in the table below.

**Figure 6: Occupational groups employed – prompted, multiple response (all businesses) \*denotes less than 0.5%**

Column percentages	Employers			Self-employed individuals		
	All employers	Construction	Professional services	Self-employed	Construction	Professional services
Carpenters / joiners	19	26	1	14	22	1
Bricklayers	11	16	*	7	11	1
Painters / decorators	5	7	0	6	9	0
Plasterers	4	6	0	2	3	0
Roofers	3	4	0	6	10	0
Floorers	2	3	0	*	1	0
Scaffolders	1	2	0	0	0	0
Plant and machine operatives	6	8	1	0	0	0
Electricians	6	8	1	6	9	0
Plumbers	8	11	*	8	13	0
Labourers and general operatives	18	25	1	*	1	0
Supervisors	11	15	*	0	0	0
Technical staff	7	9	2	1	2	0
Architects	7	1	22	17	0	43
Architectural technologists	3	0	11	4	0	12
Building service engineers	2	*	7	2	0	4
Civil engineers	2	*	8	2	1	3
Mechanical engineers	4	*	14	4	1	8
Other engineers	8	3	22	1	2	0
Town planners	*	0	1	5	0	13
Technicians	3	*	12	2	1	3
Building surveyors	3	*	8	3	0	8
Quantity surveyors	2	1	6	3	0	7
Landscape designers	*	0	1	*	1	0
Project managers	2	*	6	0	0	0
Scientists	*	0	1	1	0	3
Managers/directors	54	58	44	2	4	0
HR, legal and business professionals	9	9	8	3	0	7
Administrative staff	47	44	54	*	1	0
Staff with no one main role or who multi task	13	14	9	2	3	0
<i>Unprompted additional occupations:</i>						



	Employers			Self-employed individuals		
	All employers	Construction	Professional services	Self-employed	Construction	Professional services
<b>Column percentages</b>						
Estimators	1	1	*	0	0	0
Sales & marketing staff	1	1	1	0	0	0
Road workers/Tarmac layers	0	0	0	0	0	0
Fabricators/Welders	1	1	1	2	3	0
Pavers	0	0	0	1	1	0
Drivers	2	2	2	0	0	0
Tilers	*	1	0	1	1	0
Designers	1	*	3	1	2	0
Glazers	*	*	0	*	1	0
Ground workers	*	*	*	1	2	0
Mechanics	*	*	1	0	0	0
Builders	1	1	0	5	4	7
Cleaners	*	*	*	0	0	0
Other	7	8	7	0	0	0
<i>Unweighted sample bases</i>	<i>1044</i>	<i>827</i>	<i>217</i>	<i>156</i>	<i>119</i>	<i>37</i>

QD1 EMPLOYERS: You said earlier that there were X directly employed staff at this establishment. How many of these are mainly employed as...? SELF-EMPLOYED: In which trade do you mainly work or operate?

The most frequently employed occupations are managers/directors and administrative staff. This reflects the fact that they are present in all businesses, while more specialist construction and professional roles are not.

Self-employed individuals, whilst managing and performing administrative tasks within their own businesses, tend to identify themselves by their trade or profession.

Within construction, employers are most likely to employ carpenters/joiners (26%) and labourers/general operatives (25%), followed by bricklayers (16%) and supervisors (15%). Carpenters/joiners also account for the highest proportion of self-employed individuals within construction (22%), followed by plumbers (13%), bricklayers (11%) and roofers (10%).

Within professional services, employers are most likely to employ architects and engineers other than building service, civil, and mechanical engineers (both 22%), while more than two in five self-employed individuals (43%) are architects.

Looking at the proportion of employees within occupations within businesses with employees highlights the extent to which some occupations are employed in low numbers by large numbers of employers. While carpenters/joiners are employed in a quarter of construction firms, they account for just 9% of all employees. Similarly, labourers and general operatives account for 12% of all employees in construction but are employed by a quarter of employers. More than half of employers employ managers/directors, this occupational group accounts for only 14% of employees sector-wide (construction and professional services). There is a similar picture with



regard to administrative staff (47% of employers; 13% of employees across both sectors).

**Figure 7: Proportion of employees within each occupational group – prompted, multiple response (all employees within businesses with employees) \*denotes less than 0.5%**

Column percentages	All employers	Construction	Professional services
Carpenters / joiners	6	9	1
Bricklayers	2	3	*
Painters / decorators	1	2	0
Plasterers	1	1	0
Roofers	1	1	0
Floorers	1	1	0
Scaffolders	1	1	0
Plant and machine operatives	3	4	*
Electricians	3	4	1
Plumbers	2	3	*
Labourers and general operatives	9	12	3
Supervisors	3	5	*
Technical staff	5	7	1
Architects	3	*	10
Architectural technologists	1	0	2
Building service engineers	1	*	4
Civil engineers	3	*	11
Mechanical engineers	2	*	6
Other engineers	5	2	12
Town planners	*	0	*
Technicians	2	*	5
Building surveyors	1	*	3
Quantity surveyors	1	*	1
Landscape designers	*	0	*
Project managers	1	*	3
Scientists	*	0	1
Managers/directors	14	16	10
HR, legal and business professionals	4	5	2
Administrative staff	13	13	11
Staff with no one main role or who multi task	5	6	4
Estimators	*	*	*
Sales & marketing staff	*	*	*
Road workers/Tarmac layers	0	0	0



Column percentages	All employers	Construction	Professional services
Fabricators/Welders	1	1	1
Pavers	0	0	0
Drivers	*	*	*
Tilers	*	*	0
Designers	1	*	1
Glazers	*	*	0
Ground workers	1	*	1
Mechanics	*	*	*
Builders	*	*	0
Cleaners	*	*	*
Other	3	3	4
<i>Weighted no. of employees</i>	<i>1,340,105</i>	<i>937,504</i>	<i>402,601</i>

QD1 EMPLOYERS: You said earlier that there were X directly employed staff at this establishment. How many of these are mainly employed as...? SELF-EMPLOYED: In which trade do you mainly work or operate?





## 4. Output constraints

### Current constraints

Respondents were asked if any factors currently limited their business's sales and output. Their responses were unprompted.

The most frequently mentioned constraints to business sales and output were insufficient demand/uncertainty in the economy (12% of employers; 8% of self-employed) and labour shortages (11%; 8%).

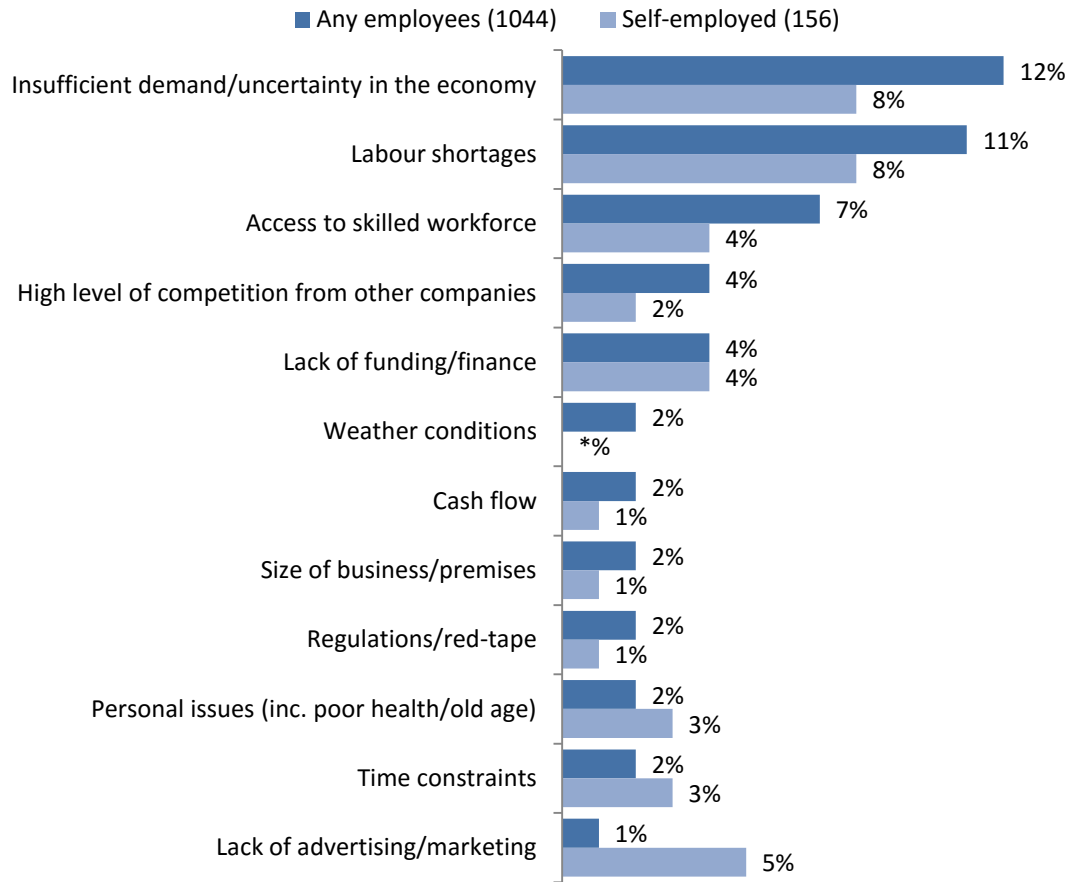
Economic uncertainty was mentioned less frequently than in 2014, particularly amongst the self-employed (17% of employers and 29% of self-employed in 2014). This suggests that there is greater confidence in this respect than two years ago.

Labour shortages were more frequently cited this year than in 2014 (11% of employers; 8% of self-employed in 2016; 4% of employers; 6% of self-employed in 2014). While the same is also true of those that cited access to a skilled workforce as a constraint (7% of employers; 4% of self-employed in 2016; 2% for both employers and the self-employed in 2014). This suggests that demand for skilled workers has increased alongside perceptions of stronger demand and a more certain future.

Overall, around half of businesses (53% of those with employees; 56% of those without) did *not* perceive any constraints on their business (at the time of the survey). This compares with 44% of those with employees and 36% of the self-employed in 2014, which further suggests that business constraints, primarily related to economic conditions, have eased in the last two years.



**Figure 8: Factors that are currently limiting sales and output (businesses with employees/self-employed individuals) \*denotes less than 0.5%**



Unweighted sample bases in parentheses

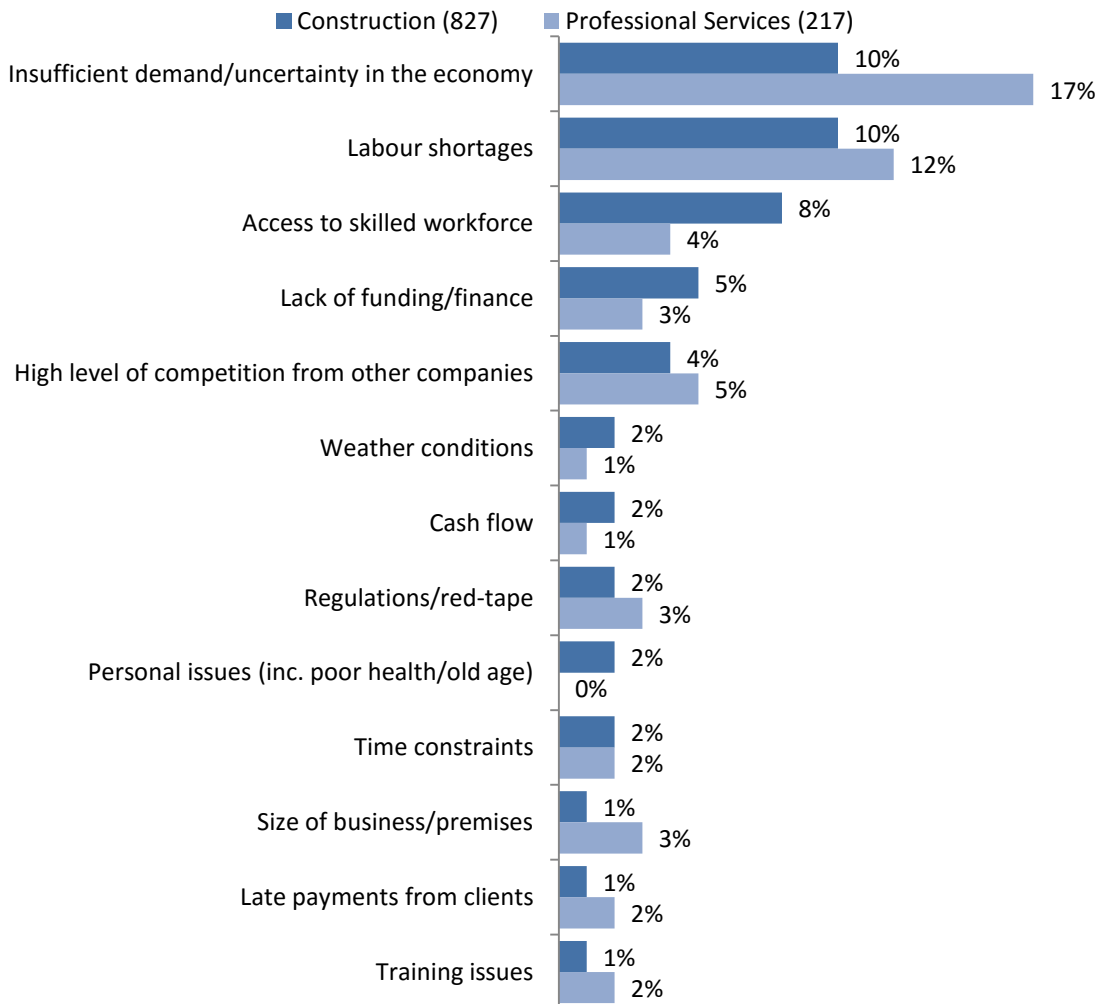
Only factors mentioned by at least 2% of either sub-sample are shown

QB1 What factors, if any, are currently limiting your business? By limiting your business we mean limiting your sales and output **DO NOT READ OUT. CODE ALL THAT APPLY**



By sector, economic uncertainty is more frequently mentioned by employers within professional services (17%) than those in construction (10%).

**Figure 9: Factors that are currently limiting sales and output, by sector (businesses with employees)** \*denotes less than 0.5%



Unweighted sample bases in parentheses

Only factors mentioned by at least 2% of either sub-sample are shown

QB1 What factors, if any, are currently limiting your business? By limiting your business we mean limiting your sales and output **DO NOT READ OUT. CODE ALL THAT APPLY**

A review of limiting factors by nation/region highlights a particularly high proportion of employers in Northern Ireland that mention lack of funding/finance (9%), while these employers are also more likely to mention regulations/red tape (6%) and cash flow (5%) as constraints. Employers in Wales are also significantly more likely to mention regulations/red tape (8%). Within England, labour shortages are significantly more likely than average to be mentioned by employers in the South East (19%), while lack of funding/finance and cash flow are greater concerns in the North East (11% and 10%). Yorkshire and Humber employers are significantly more likely than average to mention insufficient demand/uncertainty in the economy (20%) as a limited factor. The following table sets out a detailed geographical breakdown of constraints:



**Figure 10: Factors that are currently limiting sales and output, by region (businesses with employees)** \*denotes less than 0.5%

Column percentages	All employers	Nation					England GOR							
		England	Northern Ireland	Scotland	Wales	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Insufficient demand/uncertainty in the economy	12	12	10	14	18	6	9	15	18	11	11	9	10	<b>20</b>
Labour shortages	11	10	12	15	9	6	12	7	3	8	<b>19</b>	13	15	1
Access to skilled workforce	7	8	4	3	6	9	*	7	3	11	9	10	9	1
Competition from other companies	4	4	7	*	7	4	8	2	1	<b>9</b>	4	5	5	1
Lack of funding/finance	4	4	<b>9</b>	3	7	*	4	<b>8</b>	<b>11</b>	2	*	7	4	3
Weather conditions	2	2	1	*	*	*	*	2	1	<b>5</b>	1	2	4	*
Cash flow	2	1	<b>5</b>	3	1	3	0	*	<b>10</b>	2	1	3	1	0
Size of business/premises	2	2	2	0	4	2	0	2	0	*	0	<b>4</b>	0	3
Regulations/red-tape	2	2	<b>6</b>	*	<b>8</b>	3	0	2	1	2	1	5	0	*
Personal issues (inc. poor health/old age)	2	2	0	0	0	2	0	3	1	2	3	2	0	0
Time constraints	2	2	0	3	0	4	0	2	0	2	1	<b>6</b>	*	0
Taxation	1	1	0	0	0	0	4	0	0	0	1	2	0	0
Lack of advertising/marketing	1	*	1	<b>3</b>	<b>3</b>	0	0	*	0	*	*	2	1	0
Late payments from clients	1	1	1	3	0	*	<b>4</b>	1	0	0	1	2	0	0
Tendering process	1	*	0	1	0	2	*	1	0	0	*	0	0	0
Training issues	1	2	1	*	1	0	0	0	<b>9</b>	2	2	0	<b>5</b>	4
Political factors inc. EU referendum	1	1	0	0	0	0	<b>3</b>	0	0	0	1	*	1	*
Cost of raw materials/equipment	*	*	0	*	0	0	0	*	0	0	<b>2</b>	*	0	0
Location of business	*	*	1	<b>3</b>	0	0	*	0	0	*	*	0	0	0
Availability of land	*	*	<b>2</b>	0	0	0	0	0	0	*	0	0	1	0
Government procurement	*	*	0	0	1	<b>2</b>	0	0	0	0	0	0	0	0
Other	4	4	6	1	4	3	4	6	*	5	5	5	*	4
Nothing	53	53	42	55	53	64	50	53	58	49	55	45	40	58
Don't know	2	2	3	1	2	*	4	1	0	3	*	*	4	6
<i>Unweighted bases</i>	<i>1044</i>	<i>877</i>	<i>29</i>	<i>93</i>	<i>44</i>	<i>117</i>	<i>63</i>	<i>152</i>	<i>29</i>	<i>109</i>	<i>160</i>	<i>115</i>	<i>55</i>	<i>77</i>

Figures in bold font are significantly higher than average minus the sub-group tested

QB1 What factors, if any, are currently limiting your business? By limiting your business we mean limiting your sales and output **DO NOT READ OUT. CODE ALL THAT APPLY**

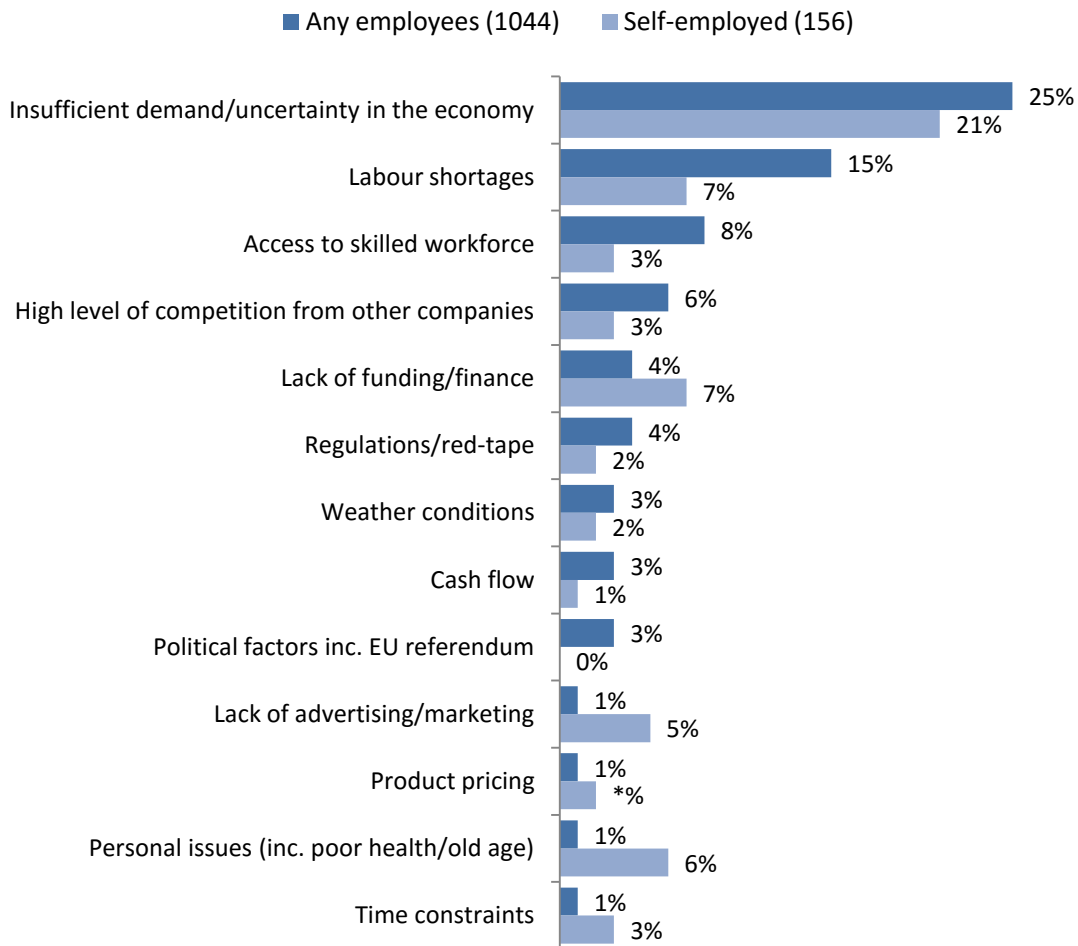


### Anticipated constraints

Looking forward to the next 12 months, insufficient demand/uncertainty in the economy is the most likely to be mentioned (25% of employers; 21% of self-employed individuals). Compared with the outlook in 2014 when 21% of employers and 36% of the self-employed mentioned uncertainty in demand/the economy and also compared with perceptions of constraints during the past 12 months, employers are more pessimistic or, perhaps just cautious, while the self-employed are more confident than they were in 2014, but more in line with employers in their views.

This may just suggest some uncertainty amongst employers and the self-employed in terms of upcoming orders.

**Figure 11: Factors which businesses expect to limit sales and output in the next 12 months (businesses with employees/self-employed individuals) \*denotes less than 0.5%**



Unweighted sample bases in parentheses

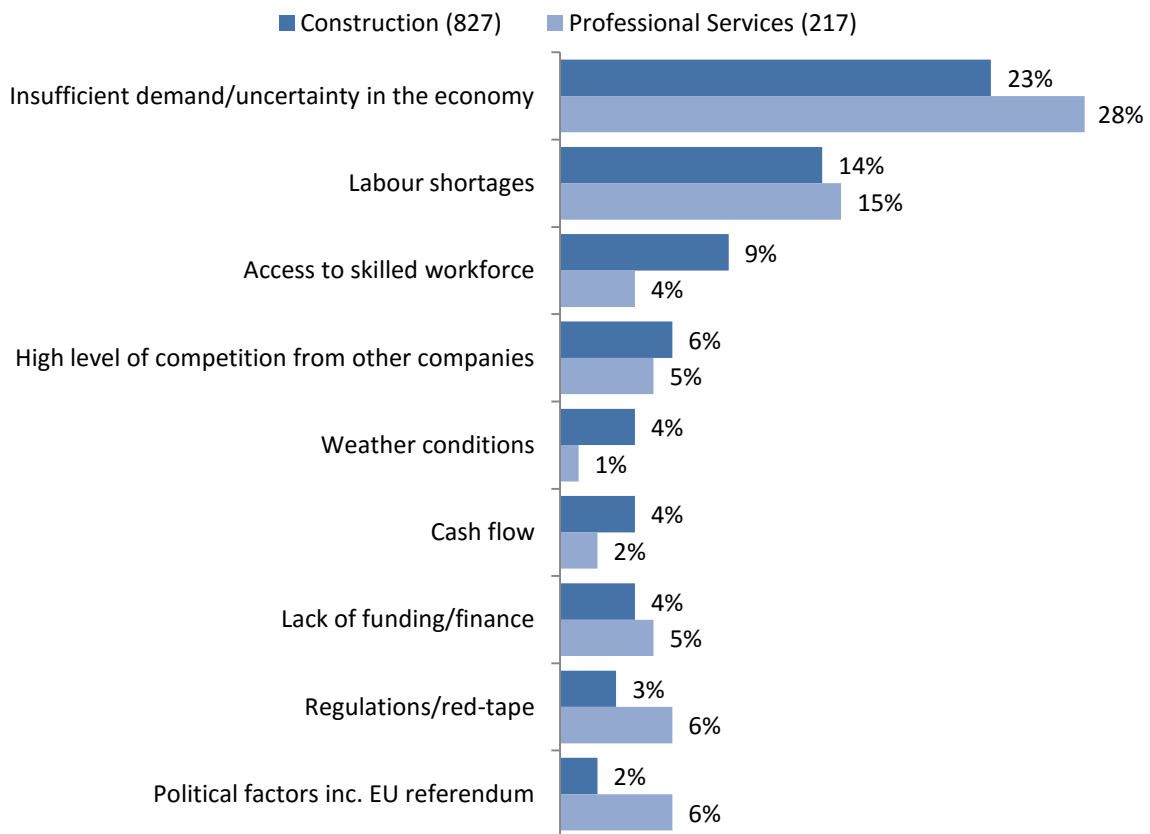
Only factors mentioned by at least 2% of either sub-sample are shown

QB2 And what factors do you think are most likely to limit your business over the next 12 months? **DO NOT READ OUT. LISTEN, PROBE, CODE ALL THAT APPLY**



Around one in four of businesses within both construction and professional services sectors do not anticipate any constraints in the next 12 months (27% and 25% respectively). This underlines a more cautious short term outlook and perhaps preparedness for potential problems. Around a quarter anticipate constraints resulting from continued uncertainty in the economy (23% in construction; 28% in professional services) and around one in seven anticipate labour shortages being an issue in the next 12 months (14%; 15%). Construction businesses are significantly more likely than professional services businesses to expect access to skilled workforce to be a limiting factor for their business in the next 12 months (9%, compared with 4%).

**Figure 12: Factors that businesses expect to limit sales and output in the next 12 months, by sector (businesses with employees) \*denotes less than 0.5%**



Unweighted sample bases in parentheses

Only factors mentioned by at least 2% of either sub-sample are shown

QB2 And what factors do you think are most likely to limit your business over the next 12 months? **DO NOT READ OUT. LISTEN, PROBE, CODE ALL THAT APPLY**





A review of expectations of limiting factors by nation/region highlights a particularly high proportion of businesses in Scotland (23%) citing labour shortages, while the proportion is also slightly higher than average in Northern Ireland (19%). Employers in Wales continue to be more likely to be expecting lack of funding/finance (14%) and regulations/red tape (11%) as constraining factors moving forward. Within England, labour shortages are more likely to be a limiting factor within the South East and South West than elsewhere in the next 12 months (22% and 25% respectively) although this is also more of a concern in the East Midlands than average (21%). Competition from other companies is particularly an issue for employers based in the East of England and East Midlands (10% and 12% respectively). A detailed geographical analysis of anticipated constraints is shown in the following table:

**Figure 13: Factors that businesses expect to limit sales and output, by region (businesses with employees)** \*denotes less than 0.5%

Column percentages	All employers	Nation				England GOR									
		England	Northern Ireland	Scotland	Wales	East Of England	East Midlands	London	North East	North West	South East	South West	Midlands West	Yorkshire and Humber	
Insufficient demand/uncertainty in the economy	25	25	15	21	20	21	24	29	31	25	26	21	19	35	
Labour shortages	15	14	19	<b>23</b>	8	8	21	8	3	8	<b>22</b>	<b>25</b>	17	5	
Access to skilled workforce	8	8	10	3	6	11	4	7	10	8	7	8	13	7	
Competition from other companies	6	6	9	*	3	<b>10</b>	<b>12</b>	2	1	9	5	5	5	8	
Lack of funding/finance	4	3	<b>8</b>	6	<b>14</b>	1	1	4	8	3	*	5	<b>9</b>	4	
Regulations/red-tape	4	3	<b>8</b>	4	<b>11</b>	6	1	*	1	6	2	5	7	4	
Weather conditions	3	2	4	<b>6</b>	6	*	0	5	1	5	*	*	4	7	
Cash flow	3	3	<b>10</b>	*	4	6	<b>8</b>	2	<b>9</b>	0	4	2	1	*	
Political factors inc. EU referendum	3	4	2	*	3	2	*	4	0	4	5	4	0	6	
Shortages of materials/equipment	1	1	0	0	0	2	*	0	<b>4</b>	1	1	0	*	3	
Size of business/premises	1	1	0	3	0	2	0	2	0	*	*	2	0	*	
Lack of advertising/marketing	1	1	0	<b>3</b>	0	0	0	*	0	2	0	2	0	0	
Cost of raw materials/equipment	1	1	1	4	0	2	3	2	0	0	*	0	0	0	
Product pricing	1	1	0	0	0	2	0	1	8	*	1	0	*	*	
Personal issues (inc. poor health/old age)	1	1	0	0	0	0	0	0	0	2	2	<b>4</b>	0	0	
Training issues	1	1	0	0	0	2	3	0	3	*	2	*	5	0	
Time constraints	1	1	0	<b>3</b>	0	0	0	0	<b>9</b>	0	0	2	0	0	
Location of business	1	1	0	<b>3</b>	0	0	*	2	0	2	*	0	0	0	
Fuel prices	1	1	2	1	0	2	0	*	0	<b>3</b>	*	0	0	0	



Column percentages	All employers	Nation					England GOR								
		England	Northern Ireland	Scotland	Wales	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber	
Taxation	*	1	0	0	0	0	<b>4</b>	0	0	0	1	0	0	0	
Tendering process	*	*	0	*	0	<b>2</b>	0	0	0	0	0	0	0	*	
Government procurement	*	*	0	0	0	<b>2</b>	0	0	0	0	0	0	0	0	
Other	7	7	1	10	4	4	12	11	3	11	6	5	*	8	
Nothing	26	26	16	25	36	31	25	33	30	21	26	17	<b>37</b>	19	
Don't know	2	2	4	1	1	*	4	4	1	5	*	3	1	3	
<i>Unweighted bases</i>	<i>1044</i>	<i>807</i>	<i>79</i>	<i>83</i>	<i>75</i>	<i>103</i>	<i>56</i>	<i>137</i>	<i>37</i>	<i>97</i>	<i>144</i>	<i>104</i>	<i>69</i>	<i>60</i>	

Figures in bold font are significantly higher than average minus the sub-group tested

QB2 And what factors do you think are most likely to limit your business over the next 12 months? **DO NOT READ OUT. LISTEN, PROBE, CODE ALL THAT APPLY**

### Trends in employment

Respondents in businesses with employees were asked about changes in the size of their workforces in the last 12 months.

The majority of employers (65%) reported no change in the number of staff employed in the last 12 months but, if there had been change, this was more likely to be positive rather than negative as 24% reported an increase while 10% reported a decrease. This compares with 19% and 11% respectively in 2014.

Trends in employment were similar across sectors, business sizes, nations and most English regions, while employers in the West Midlands are significantly more likely than average to have reported a decrease in the number of staff employed in the last 12 months (18%).

Of those reporting a decrease, around one in three (36%) reported the cause as being general economic factors.



## 5. Skill Shortages, Skill Gaps and Emerging Skill Needs

This section of the report examines the skills which businesses have difficulty in finding when recruiting ('skill shortages') or which are lacking in their existing, current workforces ('skills gaps'). Businesses were also asked to look ahead in order to identify skill needs emerging as a consequence of future projects, diversification, and industry developments.

### Skill Shortages

#### Capacity

All respondents in businesses with any directly employed and/or contracted employees were asked about the relationship, over the last year, between their workload and their ability to resource that workload with the skills they had at their disposal.

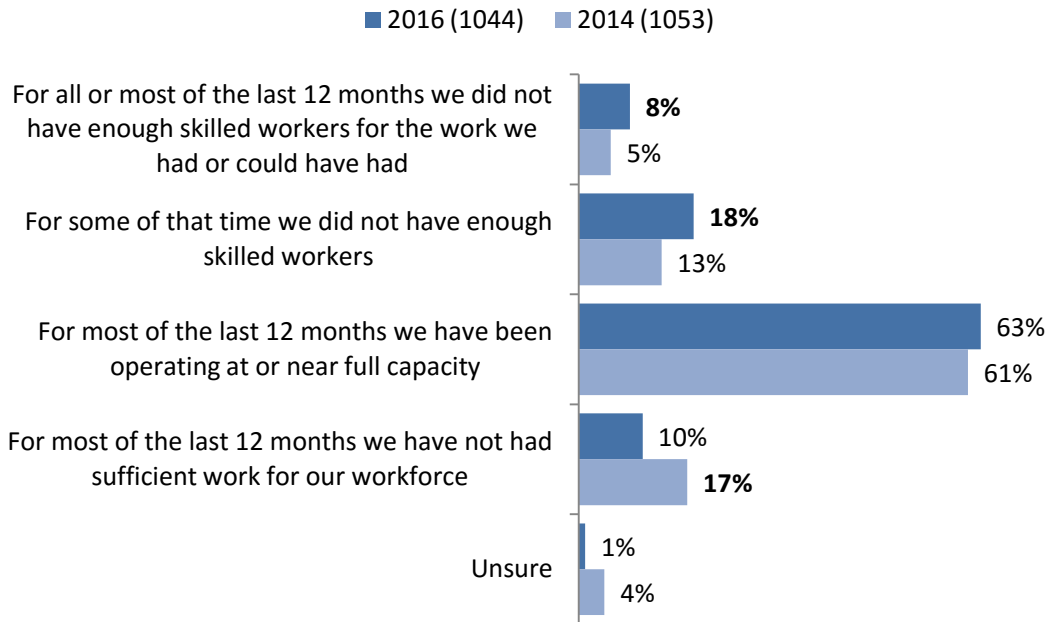
This year one in six (18%) reported that for some of that time that they had not had enough skilled workers and a further 8% reported that for all or most of the last 12 months they had not had enough skilled workers in relation to the work they had or could have had. Both these proportions are higher than in 2014 (13% and 5% respectively).

More than three-fifths of employers (63%) and two-thirds of self-employed individuals that have contract staff (65%) reported having been working at or near full capacity for most of the last 12 months; that is, their workload and skills supply were in balance. While it is a similar picture to that reported in 2014 for employers (61%), the proportion of self-employed individuals that report being at or near full capacity has increased significantly in the last 2 years (42% in 2014).

For a further one in ten employers (10%), there had not been sufficient work for their workforce. This is a significantly lower proportion than reported in 2014 (17%). As in 2014, the proportion is significantly higher than average in Wales (20%).



**Figure 14: Capacity and the use of workforce skills in the last year (businesses with employees)**



Unweighted sample base in parentheses

Figures in bold font are significantly higher than average the comparison year

QC1 Thinking about skills over the last 12 months, which one of the following comes closest to the situation for this establishment? **READ OUT AND CODE ONE ONLY**

While there is little variation by size in terms of having sufficient skilled workers to meet needs, businesses with 100 or more staff are significantly more likely than average (28%) to report that they did not have enough skilled workers at some point in the last 12 months.

By sector, businesses in professional services are more likely than construction businesses to have been operating at or near full capacity in the last 12 months (70% compared to 61%).

Among self-employed individuals with contract staff, less than one in ten (7%) reported a lack of work for their workforce, while, in aggregate, just over one in four for all or most (5%) or for some (23%) of the last 12 months they did not have enough skilled workers.

### Recruitment

Nearly half of employers (46%) have tried to recruit skilled labour directly during the last 12 months.

This is a significant increase compared with the 2014 figure of 39%, and suggests a more dynamic labour market within construction industry than two years ago.

However, among self-employed individuals there is no change with just 4% having tried to recruit staff in the last 12 months.



Just over two in five employers (43%) have turned work down. The proportion that has turned work down is significantly higher in construction than the professional services sector (47%, compared with 31%). Three-fifths of the self-employed that have tried to recruit (60%) have turned work down due to the lack of skilled workers.

More than half of all employers (55%) have sub-contracted work in an attempt to overcome a lack of skilled workers, increasing to 70% of those with 25+ employees and 62% of the self-employed that have tried to recruit.

The proportion that tried to recruit skilled workers in the last 12 months is significantly higher in construction (49%) than in professional services (37%). Furthermore, construction employers are significantly more likely to have tried to recruit skilled self-employed or other indirect labour than those in professional services (47%, compared with 22%); to have tried to recruit Apprentices or less experienced staff to train up (40%, compared with 29%) and also to have sub-contracted work (61%, compared with 41%).

The proportion addressing their lack of skilled workers through recruitment increases with business size as shown in the next table:

**Figure 15: Steps taken to try and tackle a lack of skilled workers in the last 12 months (businesses with employees and the self-employed who have tried to recruit staff in the last 12 months)**

Column percentages	Employers				No. of employees (site based)			
	Employers	Self-employed	Construction	Professional services	2-9	10-24	25-99	100+
Tried to recruit experienced, skilled employees i.e. direct labour	46	42	<b>49</b>	37	43	<b>58</b>	<b>82</b>	<b>88</b>
Tried to recruit skilled self-employed or other indirect labour	40	58	<b>47</b>	22	39	41	<b>61</b>	<b>67</b>
Tried to recruit Apprentices or less experienced staff to train up	37	29	<b>40</b>	29	34	<b>47</b>	<b>67</b>	<b>88</b>
Sub-contracted work	55	62	<b>61</b>	41	53	<b>67</b>	<b>70</b>	<b>70</b>
Turned work down	43	60	<b>47</b>	31	44	37	38	33
None of these	16	8	12	26	17	9	3	0
<i>Unweighted bases</i>	<i>1044</i>	<i>59</i>	<i>827</i>	<i>217</i>	<i>419</i>	<i>261</i>	<i>262</i>	<i>102</i>

Figures in bold font are significantly higher than average minus the sub-group tested

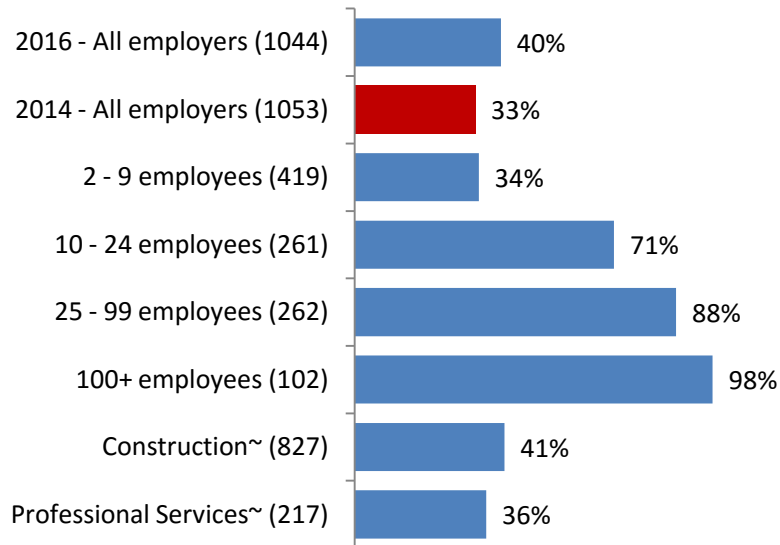
QC3 In the last 12 months, which of the following steps, if any, have you taken to try and tackle a lack of skilled workers?  
**READ OUT AND CODE ONE FOR EACH**

Two-fifths of employers (40%) have actually recruited staff in the last 12 months. This is a higher proportion than in 2014 (33%).



The propensity to have recruited increases with business size; from 34% of businesses with less than 10 employees to 98% of those with 100 or more employees. By sector, construction businesses are slightly more likely than those in professional services to have recruited staff in the last 12 months even though the sectors have similar size profiles.

**Figure 16: Proportion of businesses that have recruited any new direct employees in the last 12 months (businesses with employees)**



Unweighted sample bases in parentheses      ~based on employers only  
 QC4      In the last 12 months, has this establishment recruited any new direct employees?

The proportions that have recruited are significantly higher than average in the North East of England (58%), and significantly lower than average in the North West of England (28%).

### Recruitment of young people/education-leavers

In the last 12 months, over a quarter of those that have recruited any new direct employees (28%) have taken on someone into their first job on leaving school, college or university. This equates to 11% of all employers. These proportions are slightly higher than in 2014 (26% and 8% respectively).

The proportion recruiting into first jobs is slightly higher in professional services (32%) than in construction (27%). It increases with business size, to 67% of businesses with 100 or more employees that recruited at all (66% of *all* 100+ employers).

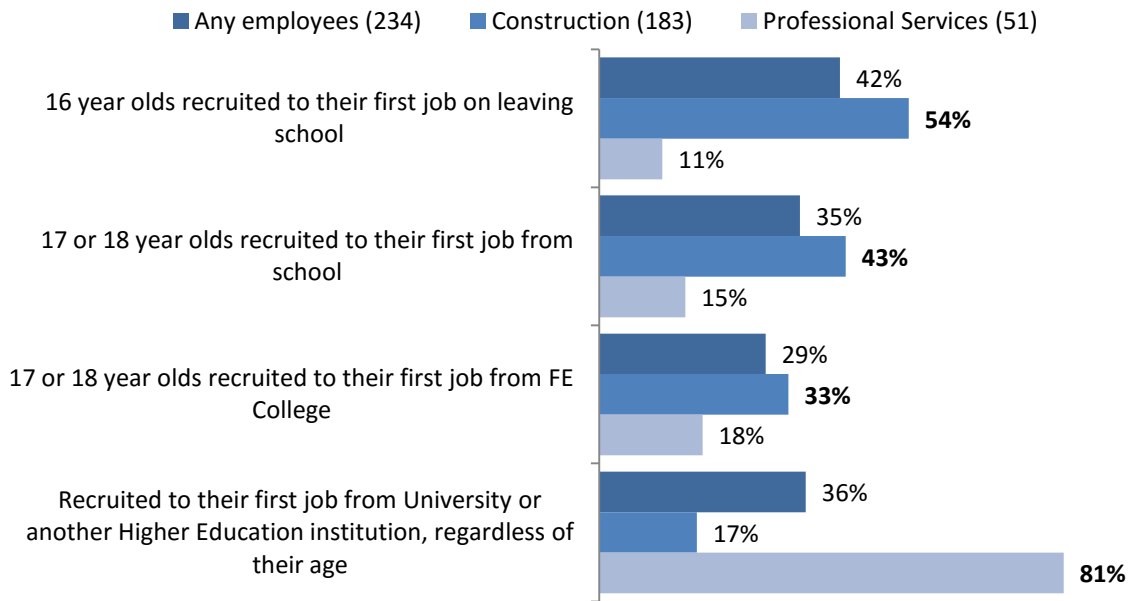
Around one in three employers (36%) that have recruited education-leavers have recruited young people to their first job *from university or another higher education institution*. This increases to 81% of professional services businesses that have recruited education-leavers.





Construction businesses are significantly more likely than those in professional services to have recruited 16 year olds leaving school (54% compared to 11%), 17 to 18 year olds leaving school (43% compared to 15%), and someone straight from an FE college (33%, compared with 18%).

**Figure 17: Proportion of businesses that have recruited any young people/education-leavers in the last 12 months (where recruited education-leavers)**



Unweighted sample bases in parentheses Figures in bold font are significantly higher than average minus the sub-group tested

QC6 Have any of these young recruits been...READ OUT AND CODE ONE FOR EACH

Over one quarter of businesses (28%) that have recruited education-leavers have also recruited *other* young people – under the age of 25 – who were *not* entering their first post-education job.

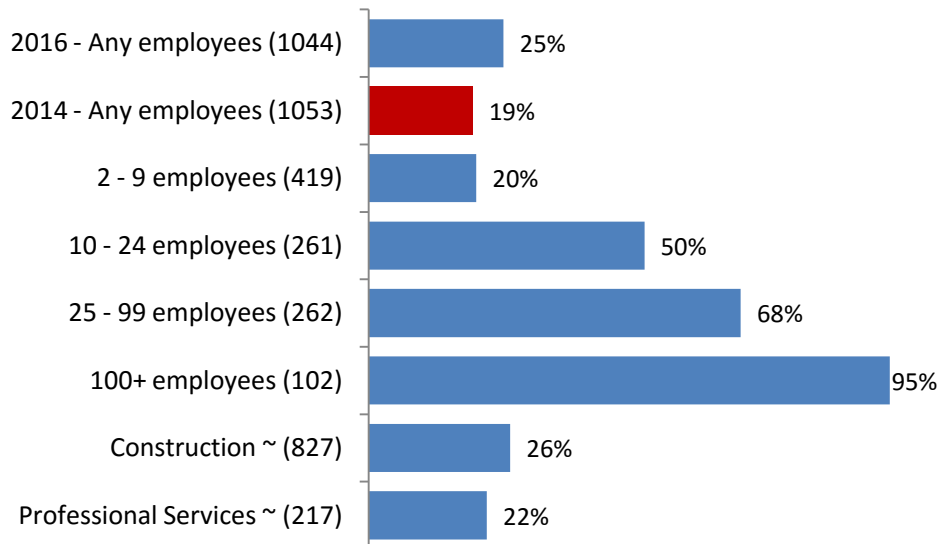
This proportion increases to 71% of businesses with 100 or more staff that have recruited education-leavers. The proportion is similar by sector; 28% in construction compared to 27% in professional services.

Approaching half (47%) of businesses that have recruited any new direct employees in the last 12 months have recruited someone under the age of 25 and not into their first job since leaving education. If education-leavers are taken into account, more than three-fifths of businesses that have recruited in the last 12 months have recruited a young person or education-leaver (62%). This equates to 25% of all businesses with employees (when those which did not recruit at all are included in the base for the calculation), which is a significantly higher proportion than in 2014 (19%).

The next chart summarises the proportion of all businesses with employees that have recruited anyone under the age of 25 and/or anyone into their first job since leaving education in the last 12 months:



**Figure 18: Proportion of businesses that have recruited anyone under 25/education-leavers in the last 12 months, by sector and size (businesses with employees)**



Unweighted sample bases in parentheses

QC5 Of these recruits, were any taken on to their first job on leaving school, college or university?

QC7 Have you recruited anyone else in the last 12 months under the age of 25 who were not recruited to their first job on leaving school, college or university?

### Recruitment difficulties

Approaching half (47%) of employers that have tried to recruit skilled direct or self-employed staff have experienced difficulties in filling the positions. This equates to 30% of all employers. Three-fifths of the self-employed that have tried to recruit in the last 12 months (60%) have experienced difficulties (13% of *all* self-employed individuals).

There has been an increase in the incidence of hard-to-fill vacancies since the 2014, 2011 and 2009 surveys when, respectively, 36%, 21% and 29% of employers that had had vacancies had experienced recruitment difficulties.

Recruitment difficulties are similar by businesses in construction (48% of those who tried to recruit) and professional services (44% of those who tried to recruit). The proportion is higher than average among employers in Northern Ireland (61%) and within the English regions of the East of England (62%), East Midlands (66%), and South West (66%) while lower than average in the North East of England (29%) and the West Midlands (26%).

The chart that follows summarises attempted recruitment and the extent of hard-to-fill vacancies by industry group and business size. Recruitment, of course, increases with size of business. However, recruitment difficulties were more frequent for the small rather than intermediate and large businesses:



**Figure 19: Summary of recruitment activity and difficulties, by sector and size (businesses with employees)**



Unweighted sample bases in parentheses ~based on employers only

QC3 In the last 12 months, which of the following steps, if any, have you taken to try and tackle a lack of skilled workers?  
**READ OUT AND CODE ONE FOR EACH**

QC9 You mentioned that you tried to recruit skilled employees/self-employed staff in the last 12 months. Were any of these vacancies hard-to-fill?

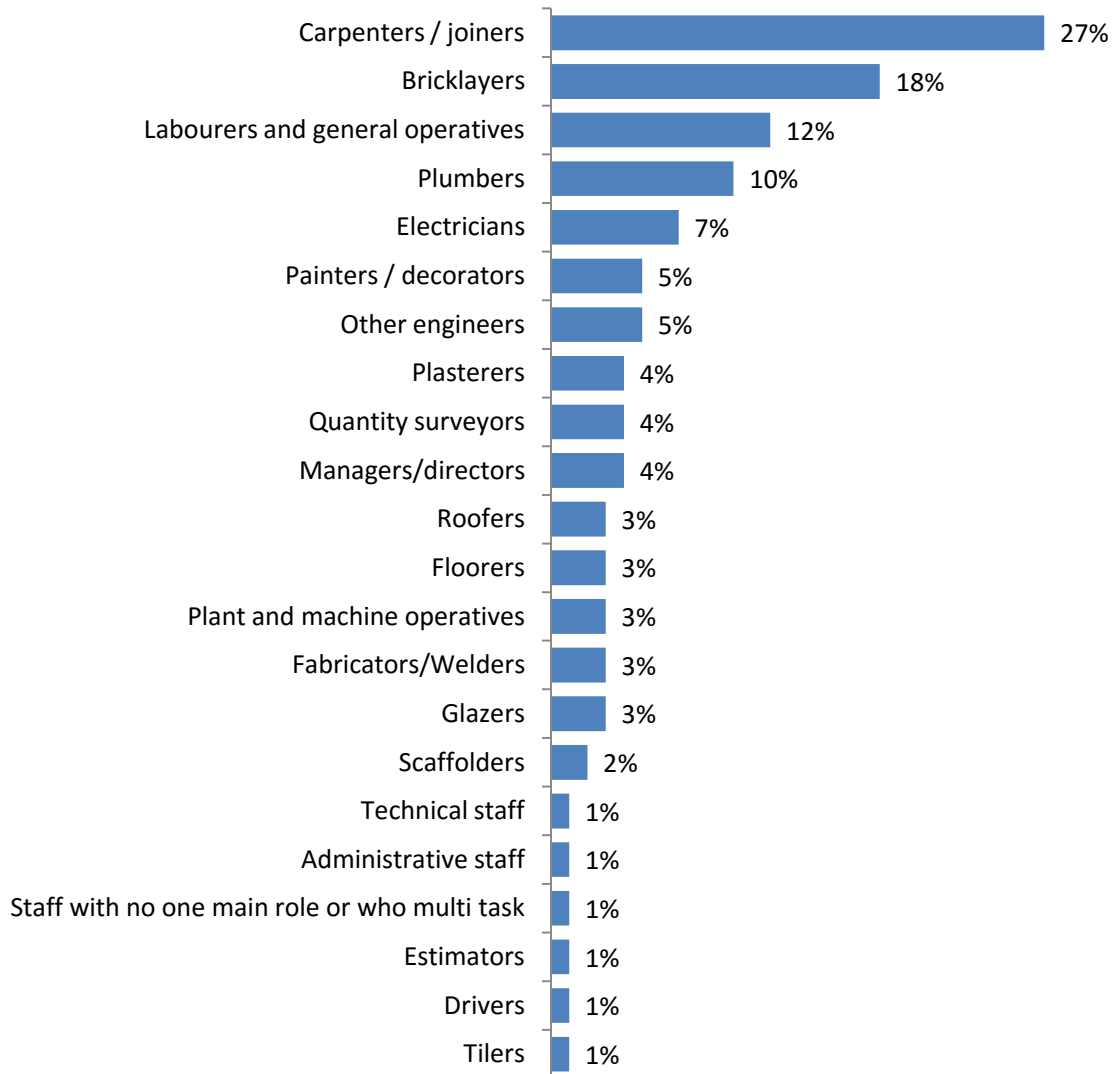
### *Occupations in which hard-to-fill vacancies have been experienced*

Given the diverse range of occupations that are employed, the roles that have been hard to fill are also diverse.

Employers in the construction sector were most likely to have experienced difficulties recruiting for carpenters and joiners, and bricklayers. The following chart shows the proportions of employers that have experienced hard-to-fill vacancies in respect of particular occupations:



**Figure 20: Occupations in which recruitment difficulties have been experienced within the construction sector (employers that have had hard-to-fill vacancies)**



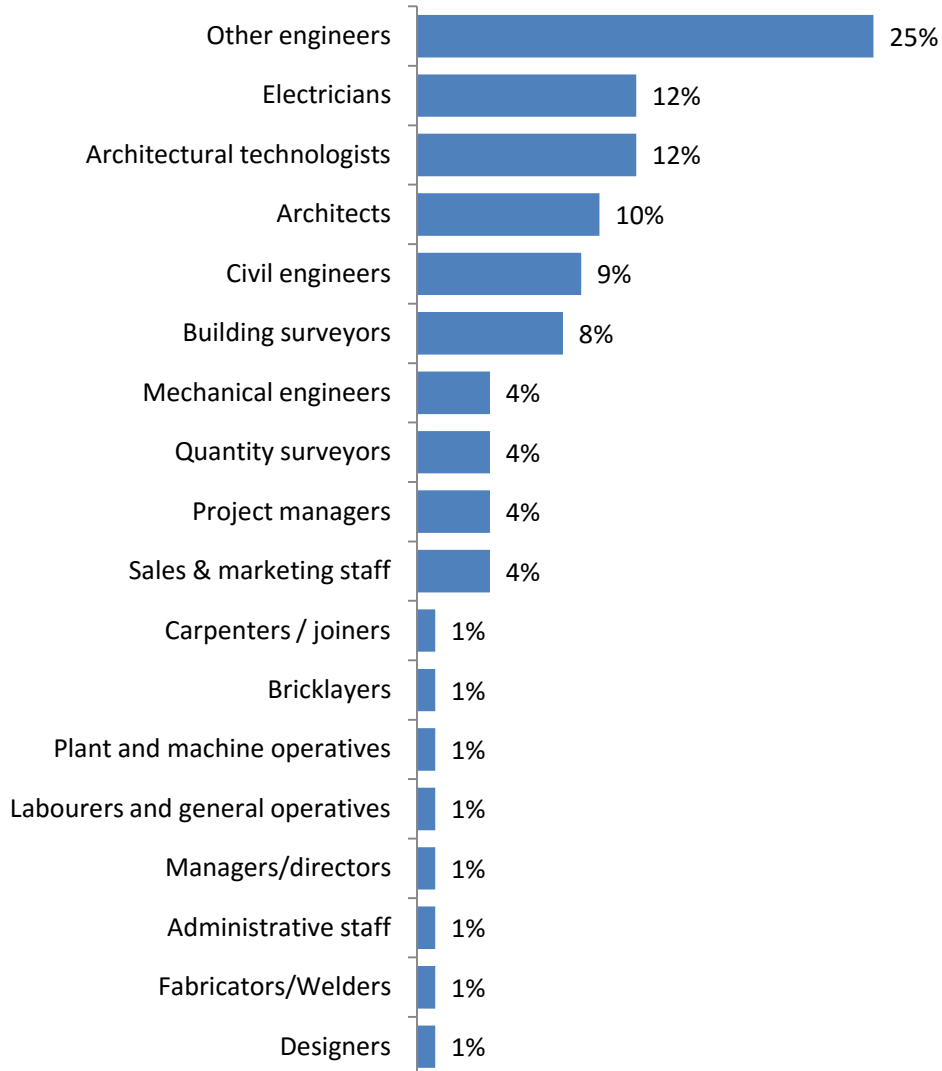
Unweighted sample base = 277

QC10 In which occupations have vacancies been hard-to-fill over the last 12 months? **DO NOT READ OUT. CODE ALL THAT APPLY** only includes occupations mentioned by 1% or more

Of particular significance within professional services businesses is difficulty in recruiting engineers other than civil and mechanical engineers (25% of professional services businesses with any recruitment difficulty):



**Figure 21: Occupations in which recruitment difficulties have been experienced within the professional services sector (employers that have had hard-to-fill vacancies)**



Sample base = 63

QC10 In which occupations have vacancies been hard-to-fill over the last 12 months? **DO NOT READ OUT. CODE ALL THAT APPLY** only includes occupations mentioned by 1% or more

### Causes

Respondents who experienced hard-to-fill vacancies were asked about the main causes of these difficulties. They were given a list of possible causes and asked to specify those that applied.

Among employers, the most frequently cited cause of hard-to-fill vacancies is that applicants lack the skills required (88%). Not enough young people are being trained in the construction industry (79%) is also a significant cause of recruitment difficulties. The causes of hard-to-fill vacancies are similar to those reported in 2014, although lack of skills is mentioned by more employers this year (80% in 2014) and a

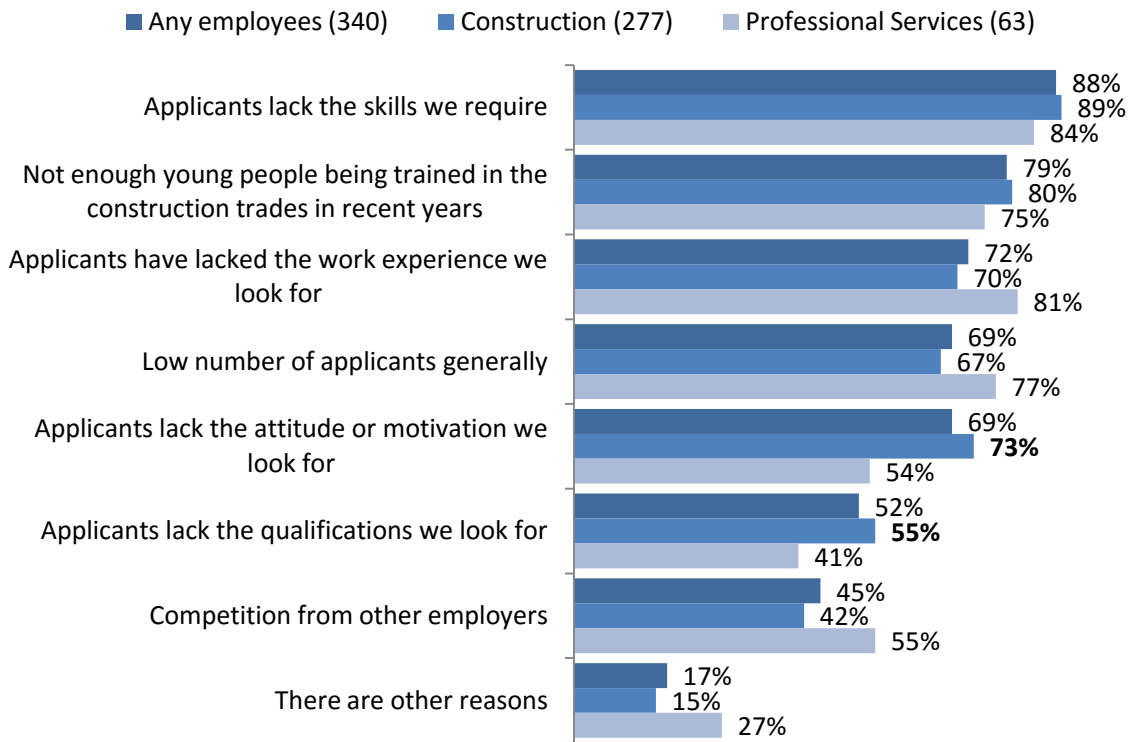


lack of young people being trained is also more frequently mentioned than two years ago (72% in 2014).

A lack of attitude or motivation among applicants is significantly more likely to be cited as a cause of hard-to-fill vacancies by employers in the construction than the professional services sector (73%, compared with 54%).

Larger businesses are more likely than those with fewer than 25 employees to cite competition from other employers as a cause of hard-to-fill vacancies (82% of those with 100+ employees, compared with 58% of businesses with 10 to 24 employees and 42% of businesses with 2 to 9 employees).

**Figure 22: Perceived causes of recruitment difficulties, by sector – prompted, multiple response (employers that have had hard-to-fill vacancies)**



Unweighted sample bases in parentheses

QC12 Which of the following do you feel are the main causes of having hard-to-fill vacancies for skilled staff? **READ OUT AND CODE ALL THAT APPLY** Figures in bold font are significantly higher than average minus the sub-group tested

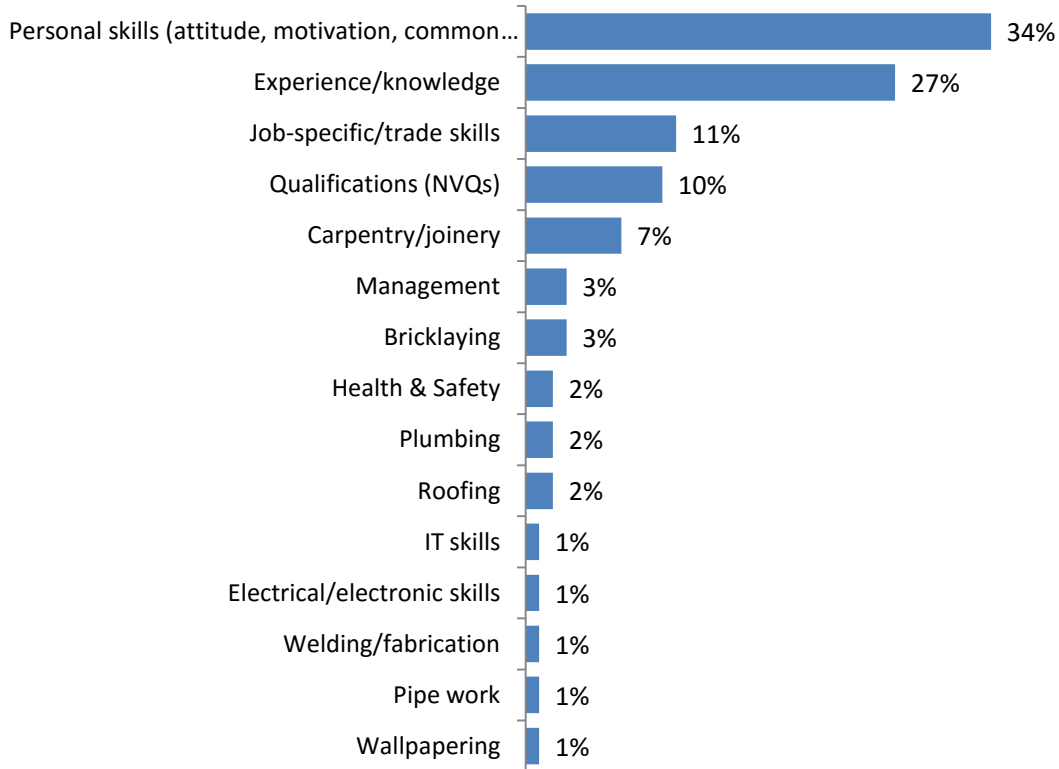
### *Skills which are difficult to obtain*

One in three employers (34%) that have experienced recruitment difficulties specifies a need for personal skills, such as attitude, motivation, and common sense, amongst applicants for job roles. While more than a quarter (27%) cite experience/knowledge relating to that role.





**Figure 23: Skills difficult to obtain from applicants – unprompted, multiple response (employers that have had hard-to-fill vacancies)**



Unweighted sample base = 340

QC13 What have been the two main skills difficult to obtain from applicants? **PROBE FULLY AND WRITE IN**

### *Impact on business*

Recruitment difficulties have had an impact on 95% of employers that have reported them. This is most likely to have been the increased use of overtime and higher workloads for existing staff (74%). This is significantly more likely to have been the effect in professional services than in construction business (84%, compared with 71%).

More than half (54%) of employers that have had hard-to-fill vacancies reported that they have lost business or that they have turned down opportunities to bid for work. This proportion is significantly higher in construction than in professional services (59%, compared with 37%).

Half of employers that have had hard-to-fill vacancies (50%) cite an increase in operating costs. This is most likely to have been an impact suffered by businesses with between 25 and 99 employees (60%).



**Figure 24: Impact of hard-to-fill vacancies – prompted, multiple response (employers that have had hard-to-fill vacancies)**

Column percentages	Employers				No. of employees (site based)			
	Any employees	Self-employed	Construction	Professional services	2-9	10-24	25-99	100+
Increase the use of overtime and the workload for staff generally	74	67	71	<b>84</b>	74	70	80	81
Lose business or turn down bidding for work	54	76	<b>59</b>	37	54	54	46	32
Increase operating costs	50	54	52	42	48	55	<b>60</b>	64
Outsource work	41	54	39	48	40	44	<b>51</b>	40
Miss project deadlines	37	37	38	33	37	41	31	16
Other impacts	8	21	8	7	8	9	9	<b>34</b>
None	5	6	5	4	5	3	5	1
Don't know	0	0	0	0	0	0	0	0
<i>Unweighted bases</i>	<i>340</i>	<i>24</i>	<i>277</i>	<i>63</i>	<i>126</i>	<i>80</i>	<i>93</i>	<i>41</i>

Figures in bold font are significantly higher than average minus the sub-group tested average minus the sub-group tested

QC14 Generally speaking, have hard-to-fill vacancies over the last 12 months caused the company to....? **READ OUT CODES 1-5, ROTATE AND CODE ALL THAT APPLY**

### *Overcoming recruitment difficulties*

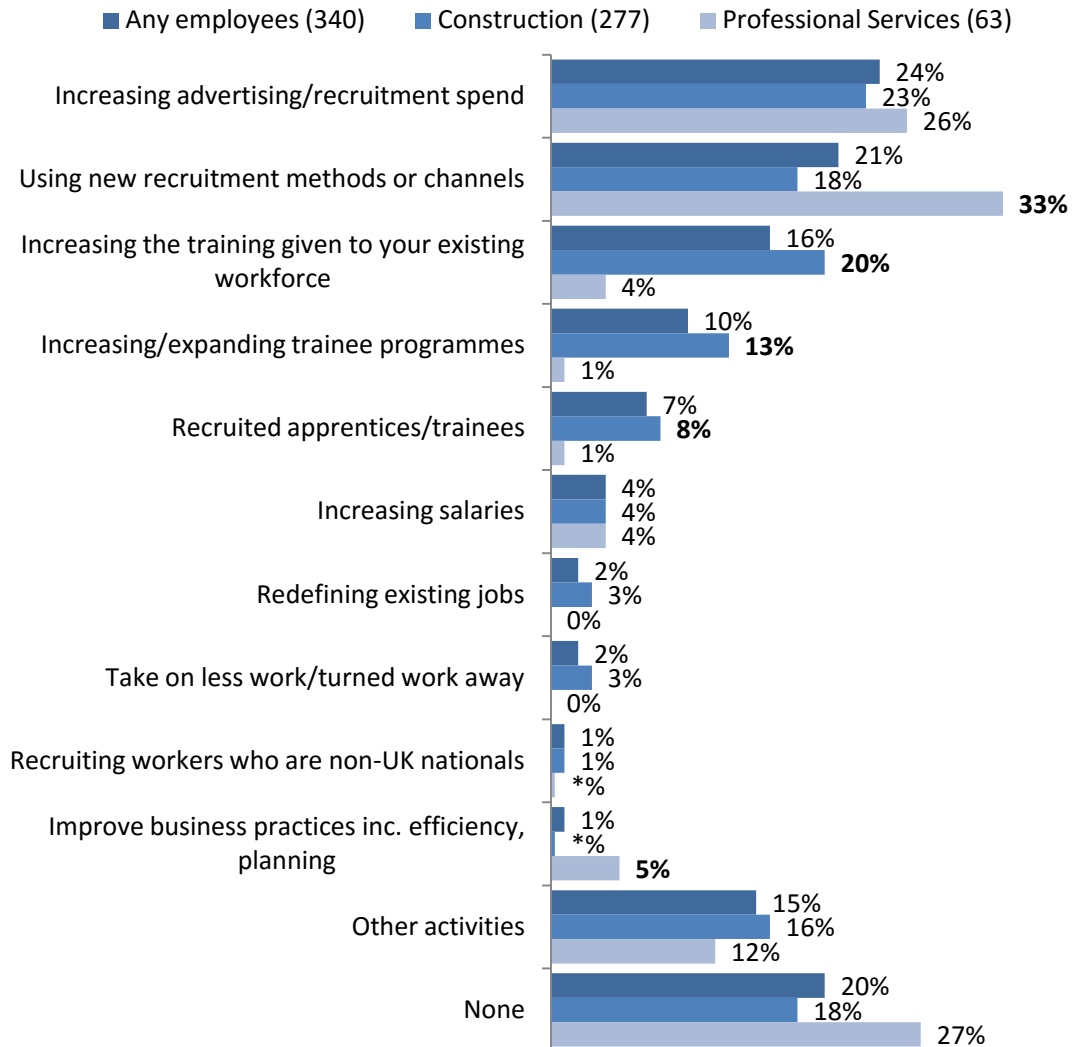
Respondents were asked, without being offered a prompted list, about the steps their business has undertaken to overcome recruitment difficulties.

A quarter of employers (24%) that have had hard-to-fill vacancies have increased their advertising/recruitment spend. One in five (21%) have used new recruitment methods or channels.

Professional services businesses are more likely to use new recruitment methods or channels; 33% used new recruitment methods, compared with 18% of construction businesses. Construction businesses are more likely to have taken steps to increase the training given to the existing workforce (20%, compared with 4%) or increase/expand their trainee programmes (13%, compared with 1%).



**Figure 25: Activities that have been undertaken to overcome recruitment difficulties, by sector – unprompted, multiple response (employers that have had hard-to-fill vacancies) \*denotes less than 0.5%**



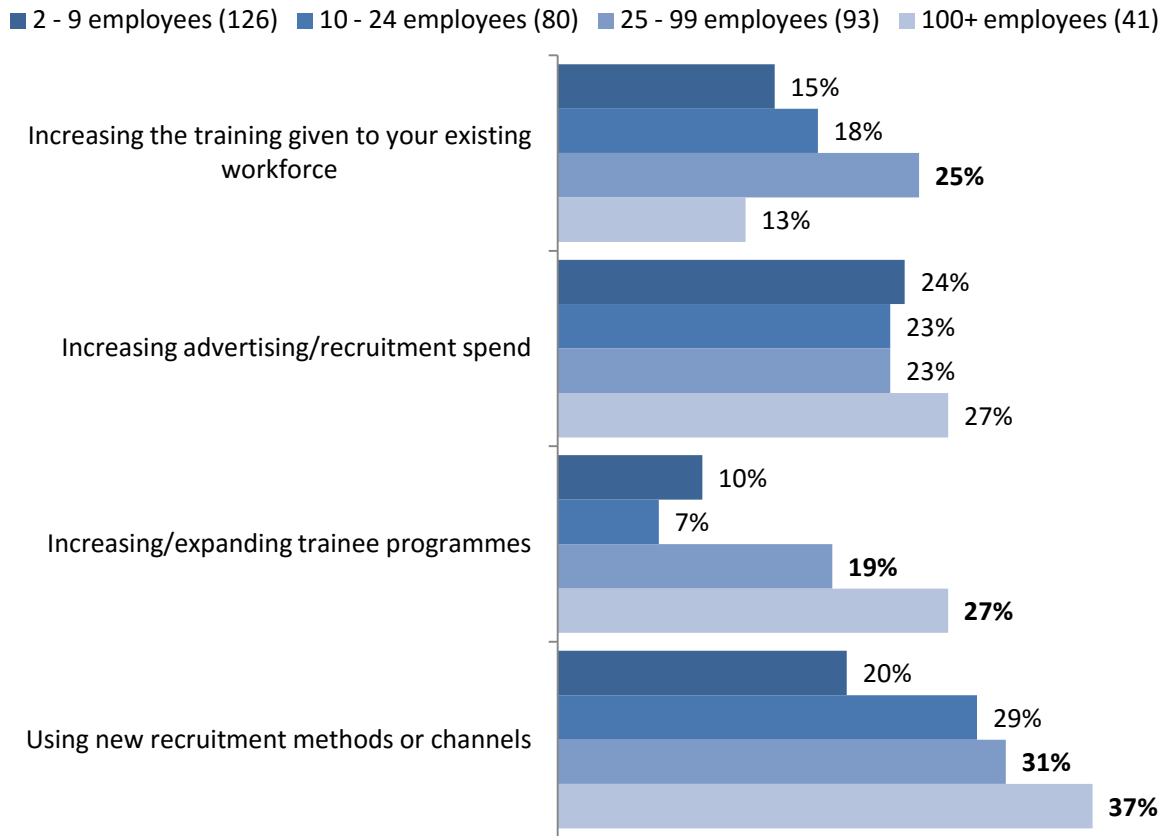
Unweighted sample bases in parentheses

QC15 What, if anything, is this establishment doing to overcome the difficulties that you are having finding candidates to fill these hard-to-fill vacancies? **DO NOT READ OUT. CODE ALL THAT APPLY**

Examination of responses according to size of business (see next chart) shows that businesses with 25 or more employees are more likely to respond to recruitment difficulties by expanding their training programmes:



**Figure 26: Use of training and recruitment methods to overcome recruitment difficulties, by business size – unprompted, multiple response (employers that have had hard-to-fill vacancies)**



Unweighted sample bases in parentheses

Figures in bold font are significantly higher than average minus the sub-group tested average minus the sub-group tested

QC15 What, if anything, is this establishment doing to overcome the difficulties that you are having finding candidates to fill these hard-to-fill vacancies? **DO NOT READ OUT. CODE ALL THAT APPLY**

### Skill Gaps

A fifth of employers (20%) report skill gaps within their workforce, this has significantly increased since 2014 when just 8% cited skill gaps.

The propensity to have skill gaps increases with business size, from 18% of the smallest employers to 44% of those with 100 or more employees.

Amongst employers, the proportion indicating skill gaps is highest in Wales (28%) and lowest in Northern Ireland (16%). Across the English regions, it is significantly lower than average in the East of England (8%).

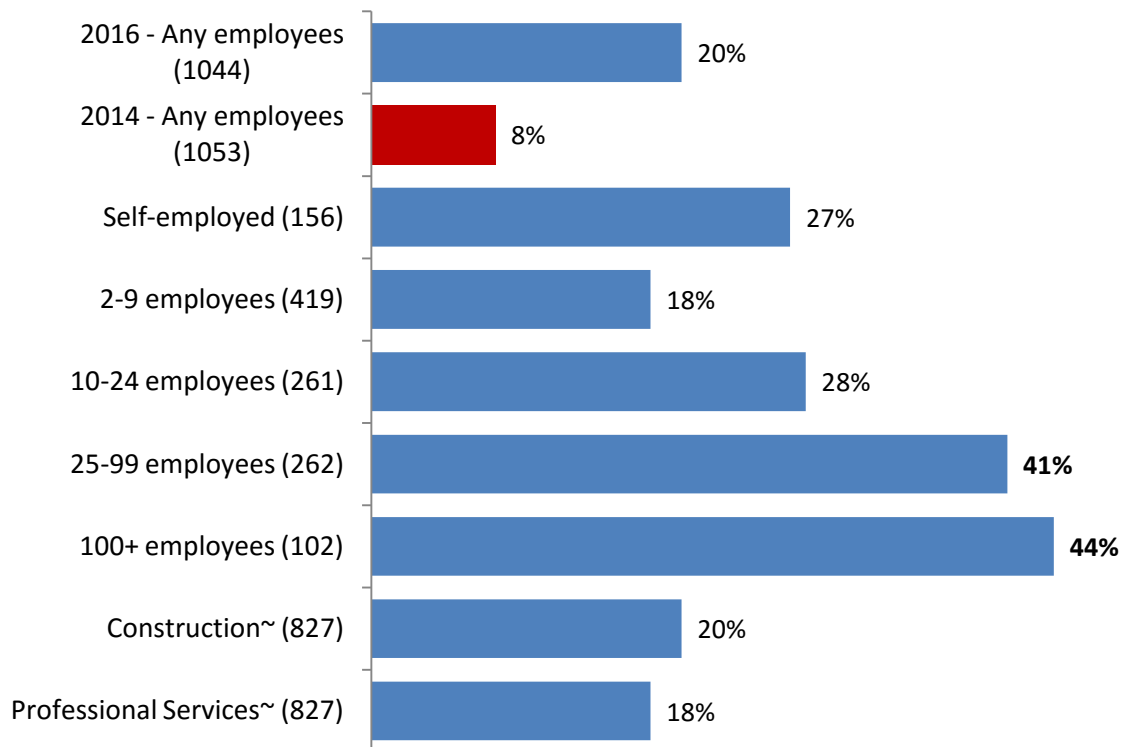
When asked if they themselves are fully proficient, 27% of sole traders/the self-employed admitted to having a need to develop and improve their skills.

The proportion of construction sector employers with skill gaps was reported as 10% by the UK-wide 2015 Employer Skills Survey (UKCES).

The frequency of reported skill gaps by size of business and broad sectors is shown in the following chart:



**Figure 27: Proportion of businesses with skill gaps, by sector and size (all employers/self-employed individuals)**



Unweighted sample bases in parentheses ~ based on employers only

Figures in bold font are significantly higher than average minus the sub-group tested average minus the sub-group tested

QD2 Thinking about these directly employed staff, I'd like to know how many you think are fully proficient at their job i.e. able to do the job to the required level. How many of your existing **OCCUPATION** would you regard as fully proficient at their job?

### Occupations in which skill gaps exist

Respondents provided detailed information on the occupations employed within their businesses and, in the case of the self-employed, the trades that they themselves work in. They were then asked to specify the number of people in each of these occupations that are fully proficient in their jobs.

The most numerous skill gaps, as a percentage of all skill gaps, are those affecting carpenters/joiners (23% of all skills gaps), labourers and general operatives (12%), administrative staff (11%) and managers/directors (11%).

However, focusing on the proportion of workers in each occupational group who have skill gaps offers a different picture. In this alternative way of looking at the issue, skill gaps most commonly affect scaffolders (29% of those employed in this occupation) and quantity surveyors (28%).

Among the self-employed with skill gaps, architects are most likely to have skill gaps (31% each of all those with skill gaps amongst the self-employed). One in seven of the self-employed with skill gaps are architectural technologists (14%), while slightly fewer are carpenters/joiners (12%).



## Skills

Overall, the three main skill areas in which staff with skill gaps require further development include experience and knowledge in general (27%), personal skills (18%), and job specific/trade skills (16%). Qualifications and IT skills are reported as missing by 5% of employers with skill gaps.

The following table also shows a breakdown of employers' reports of types of skill gaps by some key industry occupations. *It is emphasised that, because of the very small numbers of cases, these statistics are illustrative or indicative at best.* The data *may* suggest, however, that management and personal skills are most likely to be insufficient amongst HR, legal and business professionals, and amongst civil engineers there are some gaps in general experience and knowledge:

**Figure 28: Skills required, by occupation in which skill gaps are cited (employers with skill gaps)** \*denotes less than 0.5%

Column percentages	Employers with skill gaps	Carpenters / joiners	Bricklayers	Painters / decorators	Plant and machine operatives	Electricians	Plumbers	Labourers and general operatives	Supervisors	Technical staff	Other engineers	Quantity surveyors	Managers/directors	HR, legal and business professionals	Administrative staff	Staff with no one main role or who multi task
Experience/knowledge (no other detail)	27	39	20	35	15	39	12	19	15	35	17	14	14	9	19	3
Personal skills (attitude, motivation, common sense)	18	16	29	12	7	15	45	25	18	13	21	3	27	64	31	41
Job-specific/trade skills (no other detail)	16	19	10	8	11	7	5	17	11	6	20	2	15	3	26	74
Qualifications (NVQ's)	5	4	3	3	16	2	20	2	2	1	3	5	1	6	14	0
IT skills	5	1	0	0	0	2	1	1	6	13	2	0	2	7	27	40
Management	4	0	3	2	5	0	0	2	20	8	0	0	35	61	3	0
Carpentry/joinery	4	15	10	1	3	0	1	1	2	15	0	0	*	0	3	4
Health & Safety	3	1	5	0	1	0	1	4	0	2	12	0	10	9	0	0
Plumbing	2	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0
Scaffolding	*	*	0	1	0	0	0	1	7	0	0	0	1	0	1	0
Plant operation	*	0	0	0	2	0	0	0	0	0	0	0	*	0	0	0
Roofing	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bricklaying	*	2	13	0	0	0	0	1	0	0	0	0	0	0	0	0
Electrical/electronic skills	*	0	0	0	0	1	0	0	0	0	3	0	0	0	*	0
Welding/fabrication	*	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
Any other skills	28	22	17	28	14	45	3	21	72	37	34	82	33	61	24	42
Don't know	8	1	41	25	49	2	3	18	0	3	1	0	16	4	4	7
<i>Unweighted Bases</i>	<i>312</i>	<i>66</i>	<i>17</i>	<i>21</i>	<i>19</i>	<i>27</i>	<i>22</i>	<i>58</i>	<i>19</i>	<i>37</i>	<i>21</i>	<i>10</i>	<i>39</i>	<i>13</i>	<i>59</i>	<i>19</i>

QD5 **EMPLOYERS:** Thinking about [OCCUPATION] who are not fully proficient, which skills do you feel need improving?  
**SELF EMPLOYED:** Which skills do you feel you need to develop and improve? **PROBE FULLY AND WRITE IN**





As found in 2014, among self-employed individuals with skill gaps, IT skills are the most frequently mentioned gap (20%).

### Causes

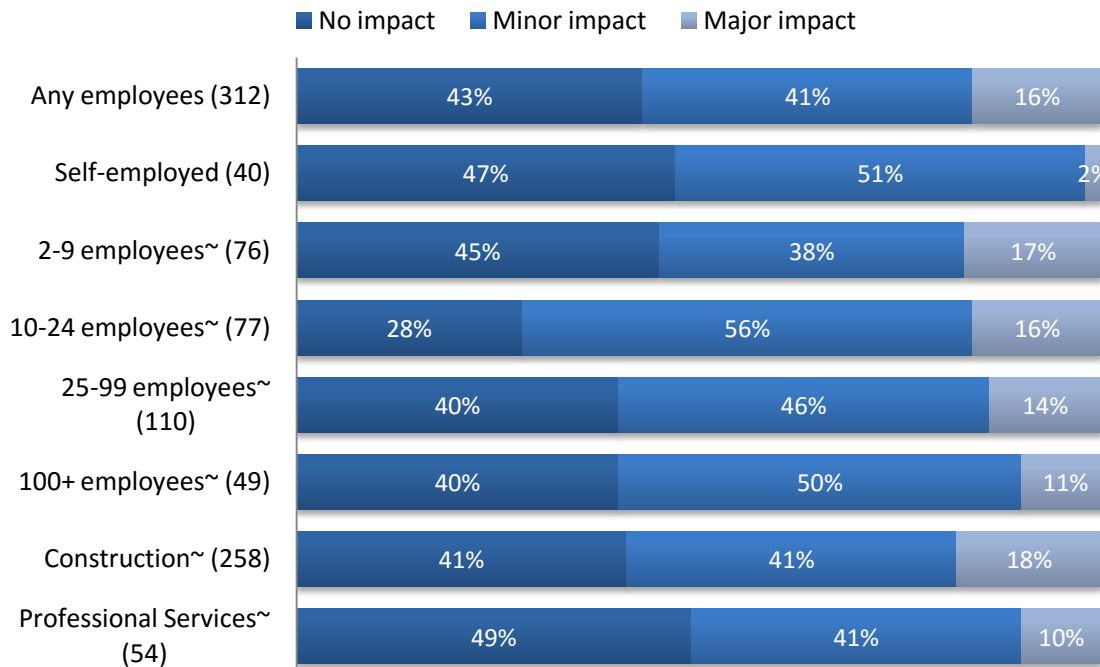
Three-fifths of employers reporting skill gaps cite the fact that employees were in training as the reason (60% of those with skill gaps). More than a third (37%) cites lack of experience or staff having been recently recruited as the reason. One in eight employers with skill gaps (12%) mentioned that staff lack motivation to obtain the necessary skills, while a small minority believe it is due to the lack of opportunity to train and develop the staff in question (7%).

### Impact

When asked about the impact of skill gaps on business performance, just 16% of employers and 2% of self-employed individuals report that they have had a major impact, with 41% of employers and 51% of self-employed individuals reporting that the impact has been minor.

Businesses with between 10 and 24 employees are most likely to report some impact of skill gaps (16% major; 56% minor). By sector, employers in construction are more likely than those in professional services to report a major impact of skill gaps (18%, compared with 10%).

**Figure 29: Extent to which skill gaps impact on business performance, by sector and size (where have skill gaps)**



Unweighted sample bases in parentheses ~ based on employers only

QD6 **EMPLOYERS:** Thinking about your establishment as a whole, does the fact that some of your staff are not fully proficient have an impact on how your establishment performs? **SELF-EMPLOYED:** Does the fact that there are skills you need to develop and improve have an impact on your business? **READ OUT AND CODE ONE ONLY**



Amongst employers with skill gaps, increased use of overtime and increased workloads for staff (65%) and increased operating costs (58%) are the most common ways in which they have impacted on the business. Among the self-employed the most frequent impact of skill gaps is an increase in workload (54%).

**Figure 30: Ways in which skill gaps are impacting on businesses (where have skill gaps)**



Unweighted sample bases in parentheses

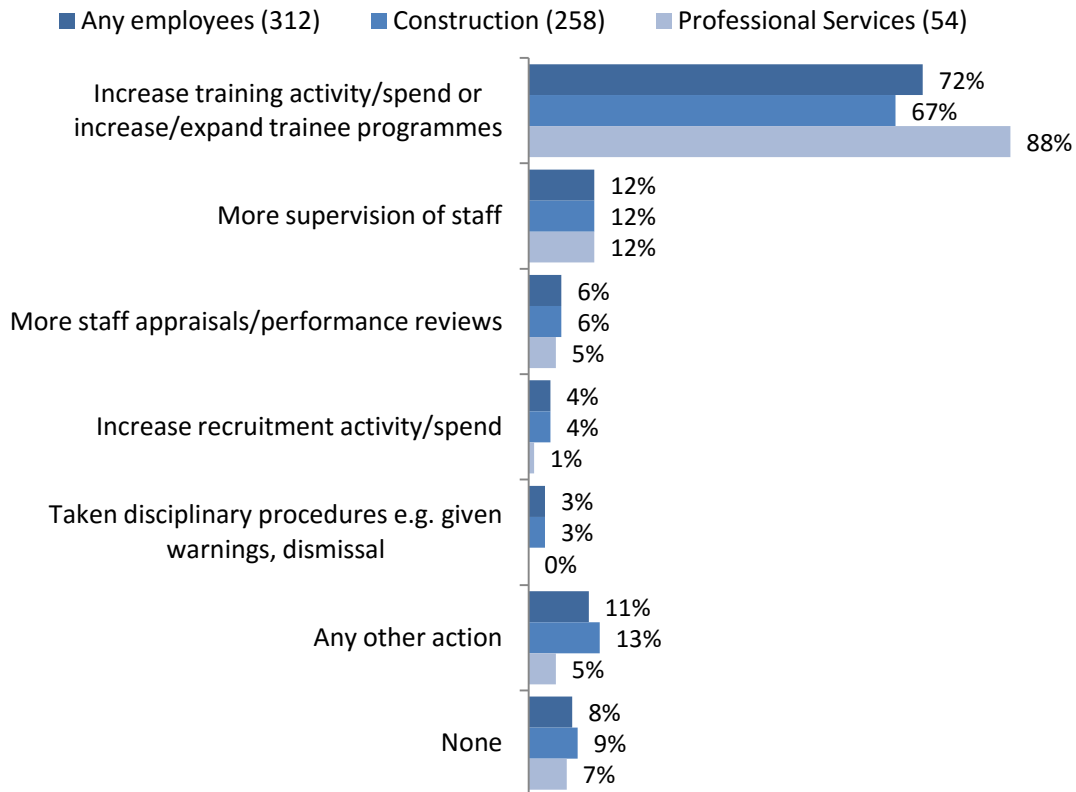
QD7 **EMPLOYERS:** Is the fact that some of your staff are not fully proficient causing this establishment to...? **SELF-EMPLOYED:** Is the fact that you are not fully proficient causing your business to...? **READ OUT AND CODE ALL THAT APPLY**

### Overcoming skill gaps

Most employers with skill gaps (92%) are taking some action to overcome them and, for the majority, this has meant increasing training activity/spend or increasing or expanding their trainee programmes (72%). This proportion increases to 88% of professional services businesses and 91% of 100+ employers with skill gaps.



**Figure 31: Action businesses are taking to overcome skill gaps, by sector - unprompted, multiple response (employers with skill gaps)**



Unweighted sample bases in parentheses

QD8 **EMPLOYERS:** What action, if any, is this establishment taking to overcome the fact that some of the staff are not fully proficient in their job? **SELF-EMPLOYED:** What action, if any, are you taking to develop or improve your skills? **DO NOT READ OUT. CODE ALL THAT APPLY**

Two-fifths (40%) of the self-employed with skill gaps are increasing training activity and spend to overcome skill gaps whilst slightly fewer (37%) are not taking any action.

## Up-skilling

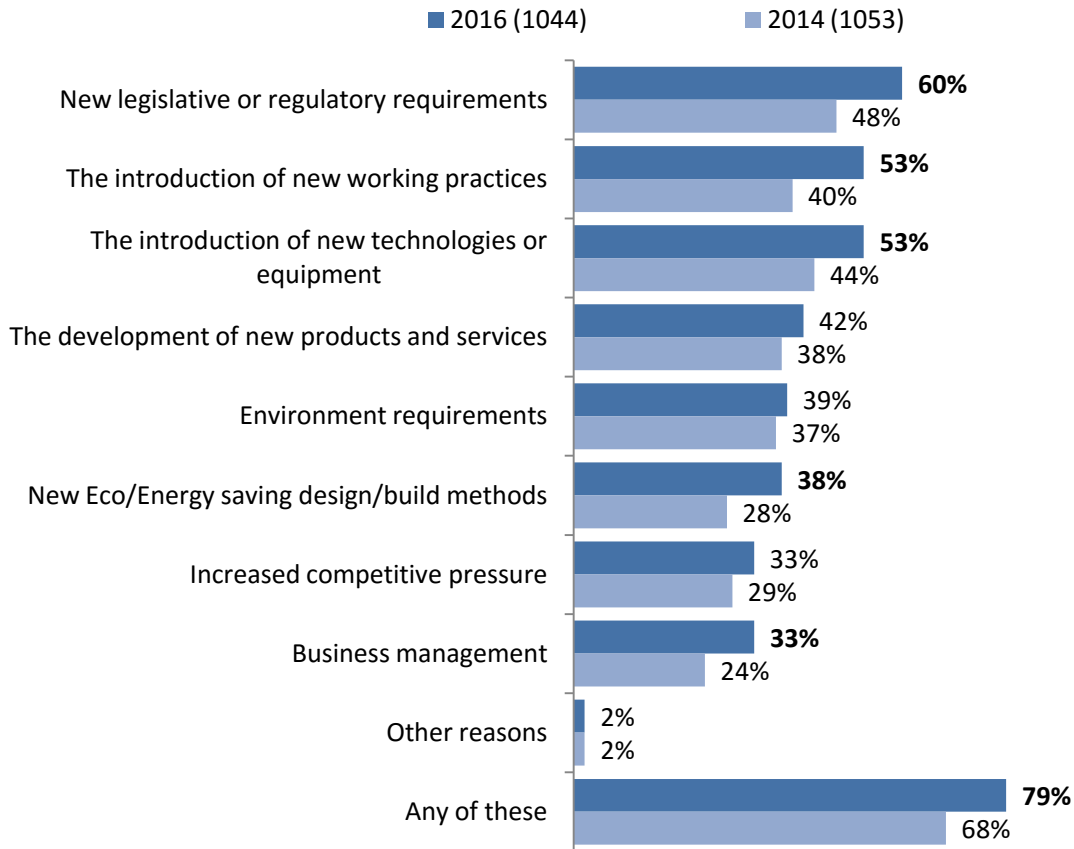
### Drivers of need for new skills and knowledge

All employers were asked whether a range of factors would require new skills in the workforce. Around four-fifths of employers (79%) anticipated that one or more of the factors would have this effect. This has significantly increased compared to 2014 (68%). The proportion is lower than average amongst employers in Scotland (70%).

The most frequent driver of new skills and knowledge among employers is new legislative or regulatory requirements (60%, although only cited by 40% of employers in Scotland), closely followed by the introduction of new technologies or equipment (53%, increasing significantly to 67% in Wales) and the introduction of new working practices (53%, also increasing significantly to 71% in Wales). These were the top three drivers of the need for new skills and knowledge among employers in 2014 although to a lesser extent.



**Figure 32: Drivers of new skills or knowledge - prompted, multiple response (all employers)**



Unweighted sample bases in parentheses

Figures in bold font are significantly higher than average minus the sub-group tested

QE1 **EMPLOYERS:** Over the next 12 months do you expect that employees will need to acquire new skills or knowledge as a result of...? **SELF-EMPLOYED:** Over the next 12 months do you expect to need to acquire new skills or knowledge as a result of...? **READ OUT AND CODE ONE FOR EACH**

There is a similar picture amongst self-employed individuals, with three in four identifying a need to acquire new skills or knowledge (76%) with the drivers of this most likely to be new legislative or regulatory requirements (57%) and the introduction of new technologies and equipment (45%). For these businesses, however, new eco/energy saving design/build methods (44%) and the development of new products and services (42%) feature above the introduction of new working practices (36%).

The extent to which any of these factors is likely to drive the need for improved skills and knowledge in the workforce increases with business size (see following table).



**Figure 33: Drivers of new skills or knowledge, by business size and sector - prompted, multiple response (all respondents)**

Column percentages	Any direct employees	Self-employed	Employers		No. of employees (site based)			
			Construction	Professional services	2-9	10-24	25-99	100+
The development of new products and services	42	42	43	38	41	43	46	<b>61</b>
New Eco/Energy saving design/build methods	38	44	36	42	38	37	34	<b>49</b>
The introduction of new working practices	53	36	<b>55</b>	48	52	55	<b>65</b>	<b>77</b>
The introduction of new technologies or equipment	53	45	50	<b>60</b>	52	57	<b>68</b>	<b>79</b>
New legislative or regulatory requirements	60	57	61	60	59	<b>67</b>	<b>70</b>	<b>78</b>
Increased competitive pressure	33	26	34	30	32	<b>39</b>	<b>44</b>	<b>58</b>
Business management	33	20	34	31	32	36	<b>50</b>	<b>64</b>
Environment requirements	39	31	40	39	38	<b>47</b>	<b>54</b>	<b>69</b>
Other reasons	2	3	2	4	2	3	2	<b>12</b>
Any of these	79	76	79	79	78	82	<b>88</b>	<b>92</b>
Unweighted bases	1044	156	827	217	419	261	262	102

Figures in bold font are significantly higher than average minus the sub-group tested;

QE1 **EMPLOYERS:** Over the next 12 months do you expect that employees will need to acquire new skills or knowledge as a result of...? **SELF-EMPLOYED:** Over the next 12 months do you expect to need to acquire new skills or knowledge as a result of...? **READ OUT AND CODE ONE FOR EACH**

### Occupations affected by the 'drivers'

In terms of the occupations that are likely to be most affected by the need to acquire new skills or knowledge, managers/directors are cited by just over a fifth (22%) of those construction businesses anticipating a need in this respect. This reflects the extent to which this occupation group is present in all businesses as well as managerial responsibility for managing the introduction and effects of the various drivers.

Amongst professional services businesses, architects (20%) are cited as the occupational group most likely to be affected:



**Figure 34: Top 10 occupations affected by the need to acquire new skills or knowledge in the next year, by sector (employers anticipating the need for new skills and knowledge)**

Column percentages	Construction		Professional services
Managers/directors	22	Architects	20
Carpenters/joiners	6	Managers/directors	14
Labourers and general operatives	6	Other engineers	11
Supervisors	5	Architectural technologists	10
Administrative staff	7	Civil engineers	7
Plumbers	4	Building surveyors	6
Electricians	4	Administrative staff	5
Bricklayers	3	Other	5
Technical staff	3	Mechanical engineers	5
Staff with no one main role or who multi task	4	Quantity surveyors	4
<i>Unweighted sample base</i>	<i>613</i>	<i>Unweighted sample base</i>	<i>163</i>

QE2 Which single occupation will be most affected by this need to acquire new skills or knowledge? **PROMPT AS NECESSARY AND CODE ONE ONLY**

### Skills required as a result of the ‘drivers’

The areas in which skills and/or knowledge that need improving or updating that are most frequently reported by employers, include health and safety/first aid (25%); skills and knowledge related to legislation/regulations (22%); general skills and knowledge (19%) and technical/trade-specific skills (18%).

Employers in Northern Ireland are particularly likely to identify technical/trade-specific skills (28%) and these employers are also significantly more likely than average to feel they need to improve or update the skills of their workforce with regard to IT/new software (21%) and green/ecological products and/or practices (12%).

Within Scotland and Wales around a third of employers that report a need to acquire new skills or knowledge are not very specific, citing general skills and knowledge (31% and 32% respectively).

Of the 84% of self-employed individuals who anticipate a future skills need, the most commonly cited skills and knowledge required are in relation to legislation/regulations (30%).



**Figure 35: Skills and knowledge that will need improving or updating over the next 12 months - multiple response (where need to acquire new skills or knowledge)**



Unweighted sample bases in parentheses

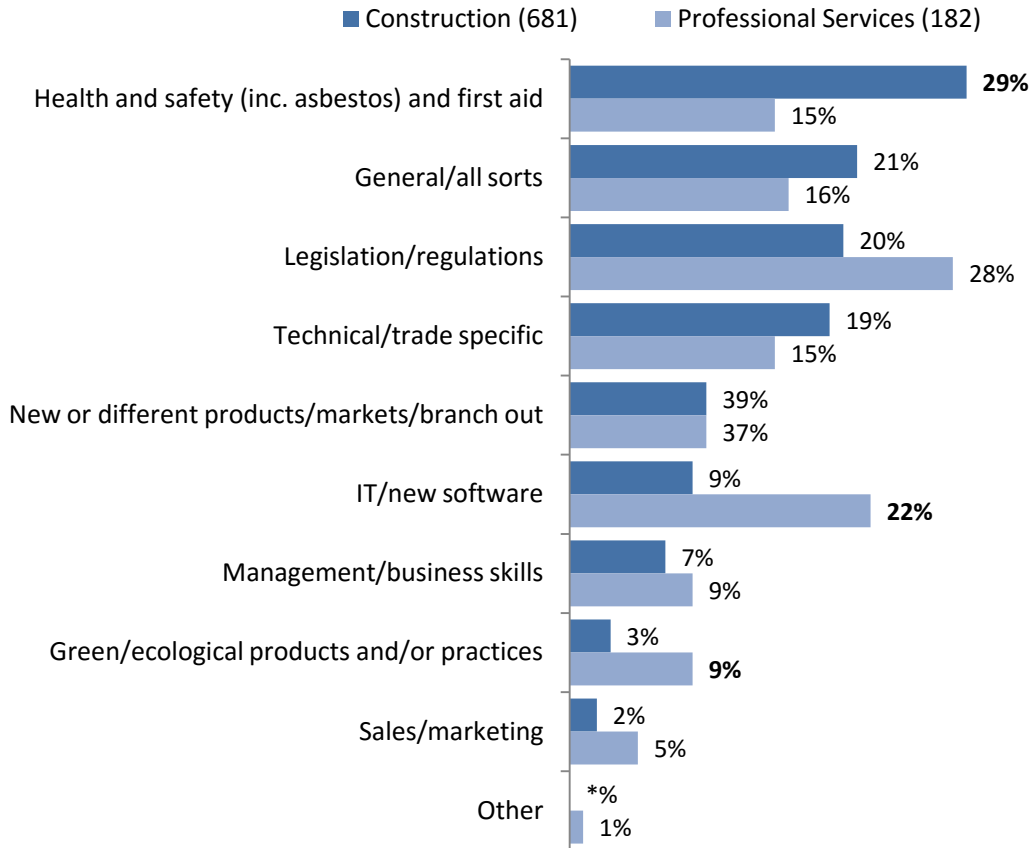
QE3 **EMPLOYERS:** Which skills do you feel will need improving or updating amongst your **STAFF** over the next 12 months? **SELF-EMPLOYED:** Which skills do you feel you will need to improve or update over the next 12 months? **PROMPT AS NECESSARY AND CODE ALL THAT APPLY**

The need to improve or update health and safety skills/knowledge are more frequently cited by construction businesses than those in professional services (29% compared with 15%), while professional services businesses are most likely to cite skills and knowledge related to legislation/ regulations (28% compared with 20% for construction). Professional services businesses are also significantly more likely than construction businesses to cite skills and knowledge related to IT/new software (22%, compared with 9%):





**Figure 36: Skills and knowledge that will need improving or updating over the next 12 months, by sector - multiple response (where need to acquire new skills or knowledge)**



Unweighted sample bases in parentheses

QE3 **EMPLOYERS:** Which skills do you feel will need improving or updating amongst your **STAFF** over the next 12 months? **SELF-EMPLOYED:** Which skills do you feel you will need to improve or update over the next 12 months? **PROMPT AS NECESSARY AND CODE ALL THAT APPLY**



## 6. Workforce Training and Development

This section describes the extent and nature of workforce training and development activity within the construction sector.

Employers and self-employed individuals who had contracted, agency or self-employed staff working for them at the time of survey were asked about training and development of all directly employed or contracted, agency or self-employed staff in the last 12 months.

They were asked to exclude anyone on formal, government-funded Apprenticeships when answering these questions. Apprenticeships are discussed in detail in a later chapter of this report.

Businesses were asked separately about on-the-job and off-the-job training or development activity. On-the-job training is defined as 'activities that would be recognised as training by staff and not the sort of learning by experience that would take place all the time'. Off-the-job training is defined as 'training away from the individual's immediate work position, whether on the premises or elsewhere'.

### Provision of training

Approaching two thirds of all employers (64%) have funded or arranged any training, on or off-the-job, informal or formal, for any staff in the last 12 months.

This is higher than the proportion reported in 2014 and the proportion reported for the construction sector in the UK-wide 2015 Employer Skills Survey (UKCES) (both 57%) .

Around a third of self-employed individuals (31%) have funded or arranged training for themselves or contract workers they are using in the last 12 months.

The propensity to have provided any training increases with business size, with 98% of businesses with 100+ employees providing training; there is little variance in the propensity to train by sub-sector.

The provision of training is also at a higher level than the average of 64% among businesses that have taken on new staff, recruited education leavers and identified skill gaps in their workforces, all of which could be said to have created a need to train:

- 81% of those that have recruited in the last 12 months;
- 87% of those that have recruited education leavers in the last 12 months;
- 84% of employers identifying skill gaps.

Furthermore construction businesses that offer Apprenticeships are more likely to provide any training to their workforce (77%, compared with 56% of those that do not train Apprentices<sup>6</sup>), suggesting a broader support of workforce skills development.

Businesses that have had hard-to-fill vacancies in this period are also more likely than average to have provided training (78%), perhaps to counteract the impact of resulting skill shortages.

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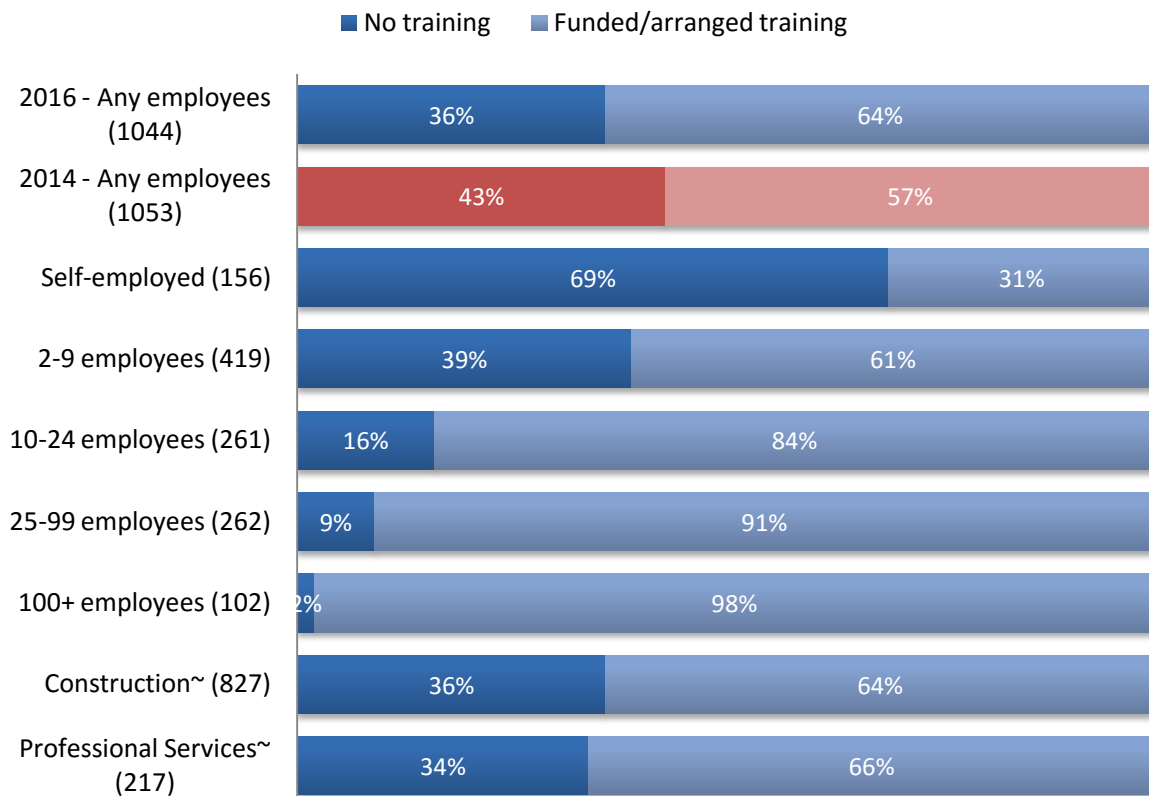
<sup>6</sup> Respondents were asked to exclude Apprenticeship training when reporting on training and development they provide to their workforce.



To some extent, the propensity to train among these sub-groups reflects the fact that these businesses also tend to be larger employers. However, it also reflects the needs to train inexperienced new workers and to respond to skills difficulties.

Employers in Wales (75%) are significantly more likely than average to provide training.

**Figure 37: Proportion of businesses that have funded or arranged any training in the last 12 months, by sector and size (all respondents)**



Unweighted sample bases in parentheses

~ based on employers only

QF1 Over the past 12 months have you funded or arranged any off-the-job training or development for yourself or staff i.e. training away from the individual's immediate work position, whether on your premises or elsewhere?

QF2 Have you funded or arranged any on-the-job or informal training over the last 12 months (whether for yourself, direct staff, the self-employed or others)?

### On-the-job training

Over two-fifths (43%) of all businesses with employees have funded or arranged any on-the-job training for any staff in the last 12 months.

This is a higher proportion to that reported in 2014 and for the construction sector in the 2015 UK-wide Employer Skills Survey (UKCES) (39% and 38% respectively).

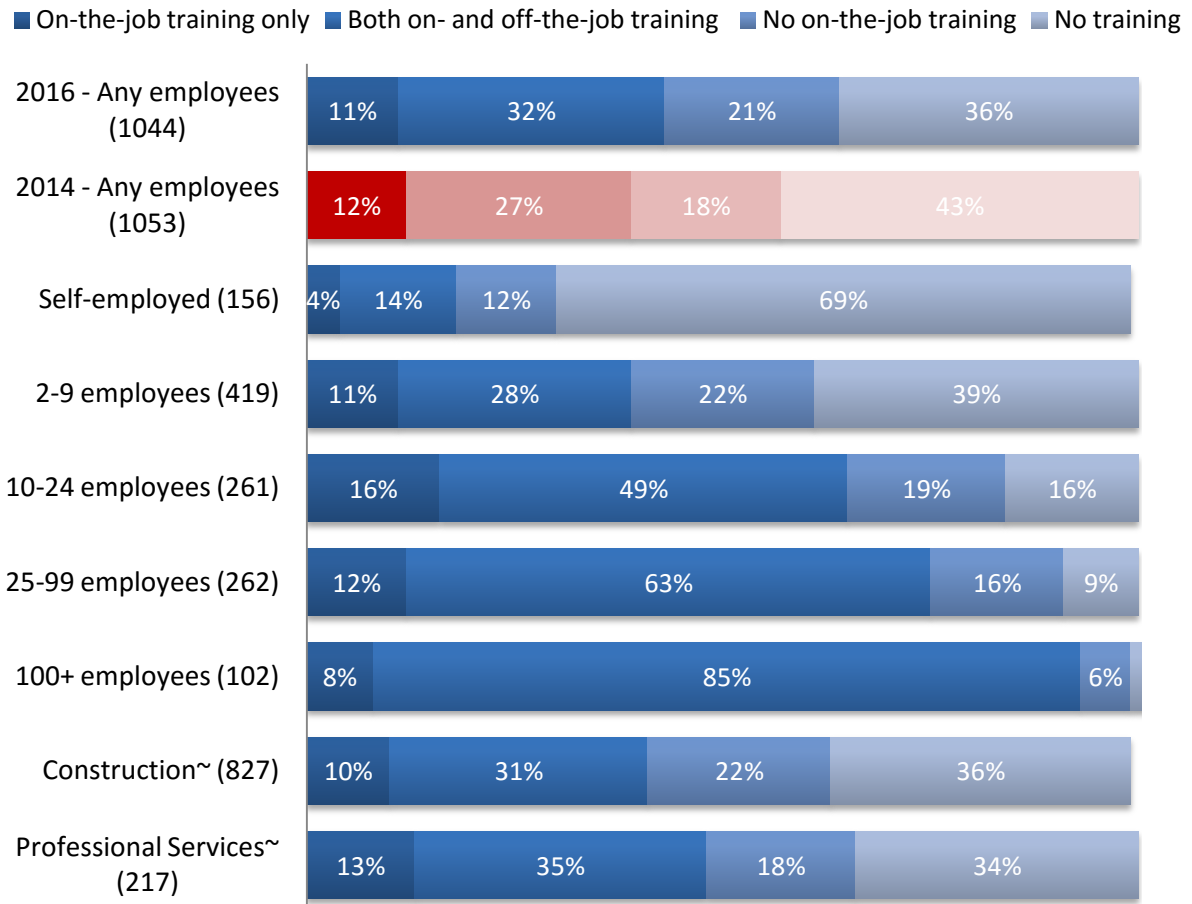
Provision of on-the-job training increases with business size to 93% of 100+ employees and professional services are significantly more likely to offer on the job training than construction businesses (49%, compared to 41%).



One in six self-employed individuals (18%) has funded or arranged on-the-job training for themselves or contract/agency/self-employed workers in the last 12 months:

The following figure summarises these findings.

**Figure 38: Proportion of businesses that have funded or arranged on-the-job training in the last 12 months, by sector and size (all businesses)**



Unweighted sample bases in parentheses

~ based on employers only

QF2 Have you funded or arranged any on-the-job or informal training over the last 12 months (whether for yourself, direct staff, the self-employed or others)?

By nation, employers in Wales (56%) and Northern Ireland (51%) are more likely than average to have funded or arranged any on-the-job training.

### *Scale of on-the-job training provision*

On average, employers provided each person trained with 16 days on-the-job training last year. This represents an increase on the 2014 mean of 8.

The mean number of days on-the-job training provided for each trainee in the last 12 months is higher in the construction sector than in professional services (17 days, compared with 13 days), while by nation, the mean number of days spent on-the-job training is highest in Wales (24 days) and lowest in Scotland (6 days).



The mean among self-employed individuals is 20 days of on-the-job training in the last 12 months.

As a proportion of all employees, 43% have been provided with on-the-job training. This proportion is significantly higher within the construction sector (49%, compared with 30% in professional services).

By nation, the proportion of all employees who have been provided with on-the-job training varies across all four nations:

England	45%
Wales	28%
Northern Ireland	42%
Scotland	39%

### *Profile of workforce receiving on-the-job training*

Within construction the occupations most likely to receive on the job training were labourers, scaffolders and plasterers. While within professional services, the occupations most likely to receive on the job training were scientists, landscape designers (both representing small proportions of the total workforce), civil engineers and other engineers. The data in the table below is indicative, since some of the bases (which are based on employee numbers rather than employers) are low at below 5,000 employees. Please note that respondents were asked to include staff who have since left their business and as such the proportion of the current workforce that have received on-the-job training in the last 12 months can exceed 100%.

**Figure 39: Proportion of employees within occupations that have received on-the-job training in the last 12 months (all employees)**

Construction	Weighted base	%	Professional Services		
			Weighted base	%	
Roofers	13438	53	Architects	41378	59
Bricklayers	32092	42	Civil engineers	44709	62
Plasterers	10882	55	Technicians	20561	41
Plant and machine operatives	43553	43	Quantity surveyors	8546	45
Floorers	6710	42	Building service engineers	15726	54
Managers/directors	146101	22	Mechanical engineers	24620	29
Scaffolders	7408	57	Scientists	2789	103
Carpenters/joiners	85649	46	Administrative staff	42982	19
Painters/decorators	18475	46	Project managers	13467	23
Plumbers	26842	35	Architectural technologists	7782	49
HR, legal and business professionals	44657	15	Other engineers	62835	57
Electricians	43141	46	Managers/directors	41456	20



Construction			Professional Services		
	<i>Weighted base</i>	<i>%</i>		<i>Weighted base</i>	<i>%</i>
Labourers and general operatives	120008	61	Staff with no one main role/multi task	15486	23
Technical staff	68853	49	HR, legal and business professionals	8006	30
Administrative staff	124661	24	Landscape designers	1117	101
Supervisors	45109	30	Building surveyors	13206	40
Staff with no one main role/multi task	52684	27	Town planners	1157	36

F8 And for roughly how many of the [occupation] have you funded or arranged on-the-job training in the last 12 months, including any who have since left?

### Off-the-job training

Just over half (53%) of all businesses with employees had funded or arranged any off-the-job training for staff in the last 12 months.

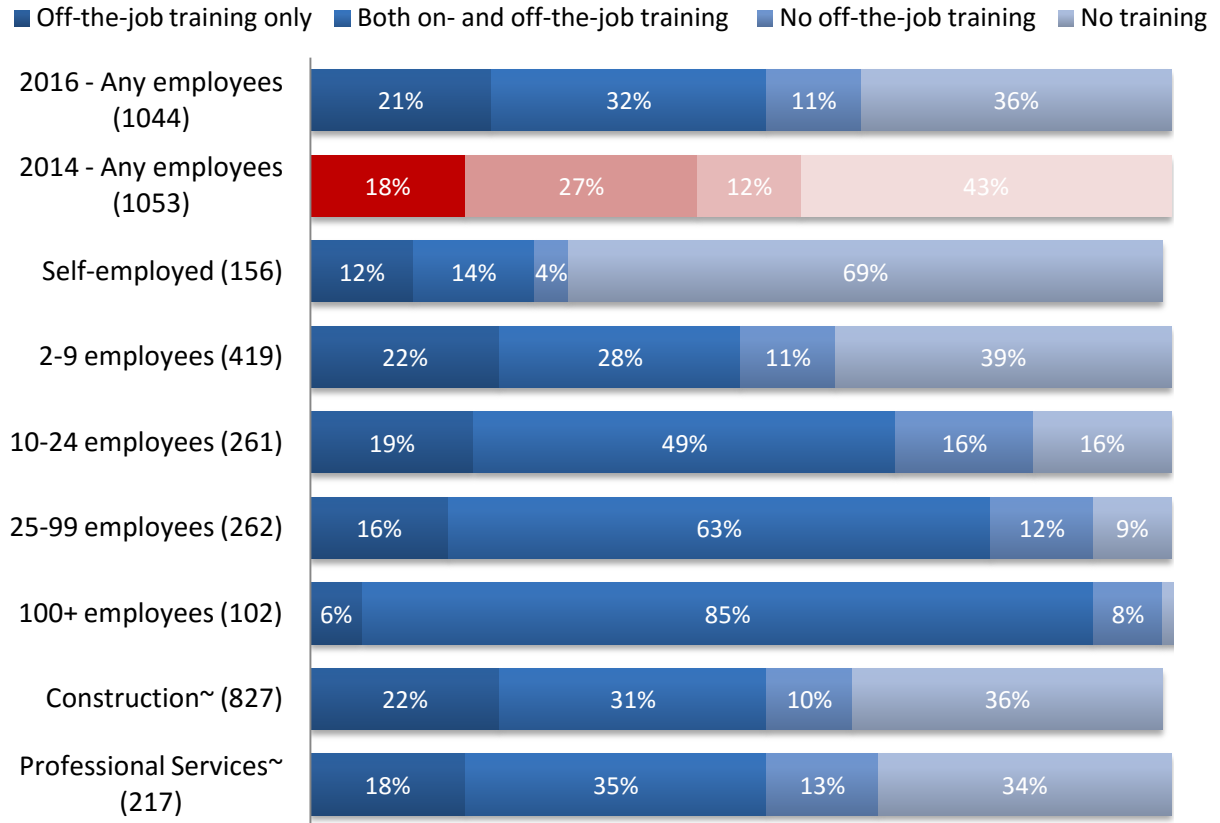
This is a higher proportion than that reported in 2014 (45%) and than that reported for the construction sector in the UK-wide 2015 Employer Skills Survey (UKCES) (46%).

Just over a quarter of self-employed individuals (27%) had funded or arranged any off-the-job training for themselves or contract/agency/self-employed workers in the last 12 months. The provision of off-the-job training increases to 91% of 100+ employees. There is little difference in the propensity to have provided off-the-job training by sector.





**Figure 40: Proportion of businesses that have funded or arranged off-the-job training in the last 12 months, by sector and size (all businesses)**



Unweighted sample bases in parentheses

~ based on employers only

QF1 Over the past 12 months have you funded or arranged any off-the-job training or development for yourself or staff i.e. training away from the individual's immediate work position, whether on your premises or elsewhere?

By nation, employers in Wales are most likely to have funded off-the-job training (64%), with all other nations close to the average.

### Scale of off-the-job training provision

On average, employers provided each trainee who trained off-the-job with 6 days off-the-job training last year. This is similar to the figure reported in 2014 (5 days).

The mean number of days off-the-job training provided to each trainee in the last 12 months is slightly higher in the professional services sector than in construction (7 days, compared with 5 days). There is some variance by business size, which suggests that off-the-job training is more thinly spread over a larger number of trainees in large businesses (6 days within businesses employing 1-9 staff and 25-99 staff; 7 days within businesses employing 10-24 staff and 3 days within businesses employing 100+ staff). There is also some variance by nation, with employers in Northern Ireland providing, on average, twice the number of days per trainee than those in Scotland (8 days, compared with 4 days), and a higher number of days than employers in Wales (5 days) and England (6 day).





The mean among self-employed individuals is 6 days of off-the-job training per trainee in the last 12 months.

The UKCES' 2015 Employer Skills Survey suggests that the average number of training days per trainee per year within construction is 7 days. This figure is not directly comparable with this survey's estimates because it includes both on- and off-the-job training but it provides a useful benchmark which supports the conclusions that a small number of days is spent in training per trainee.

In terms of the share of time between on- and off-the job training, overall, 68% of days spent was for on-the job training. Within professional services a higher proportion of training days was spent in off-the-job training, but on-the-job training still accounts for the greater proportion: 39% off-the-job; 61% on-the-job, compared with 30% off-the-job; 70% on-the-job in construction.

On-the-job training is favoured by all nations apart from Northern Ireland where, overall, it is split equally:

England	32% off-the-job; 68% on-the-job
Northern Ireland	50% off-the-job; 50% on-the-job
Scotland	40% off-the-job; 60% on-the-job
Wales	23% off-the-job; 77% on-the-job

As a proportion of all employees, 37% have been provided with off-the-job training.

This proportion is significantly higher within construction businesses (42%) than within those in professional services (21%).

It varies widely by, with the proportion of all employees that have been provided with off-the-job training being highest in Wales and lowest in Scotland:

Wales	54%
Northern Ireland	46%
England	36%
Scotland	32%

### *Profile of workforce receiving off-the-job training*

When we look at the training data as the proportions of people who received training as a proportion of all employees within each occupation, we can see that there is a very high likelihood of trade occupations, particularly roofers, having received off-the-job training in construction. Within professional services, there is a high likelihood of quantity surveyors receiving off the job training. The data in the table below is indicative, since some of the bases (which are based on employee numbers rather than employers) are low at below 5,000 employees.



**Figure 41: Proportion of employees within occupations that have received off-the-job training (all employees)**

Construction			Professional Services		
	<i>Weighted base</i>	<i>%</i>		<i>Weighted base</i>	<i>%</i>
Floorers	6710	20	Technicians	20561	34
Roofers	13438	89	Architects	41378	35
Painters/decorators	18475	48	Civil engineers	44709	34
Plasterers	10882	48	Quantity surveyors	8546	44
Bricklayers	32092	46	Managers/directors	41433	19
Carpenters/joiners	85649	46	Other engineers	62835	40
Scaffolders	7408	58	Scientists	2789	60
Plumbers	26842	53	Architectural technologists	7782	38
Managers/directors	146101	31	Project managers	13467	21
Electricians	43141	57	Staff with no one main role or who multi task	13486	23
Plant and machine operatives	43553	52	Building service engineers	15726	21
HR, legal and business professionals	44657	14	Mechanical engineers	24620	27
Labourers and general operatives	120008	55	Administrative staff	42982	12
Supervisors	45109	61	Landscape designers	1117	73
Technical staff	68853	34	HR, legal and business professionals	8006	10
Administrative staff	26027	21	Building surveyors	13206	41
Staff with no one main role or who multi task	52684	27	Town planners	1157	38

QF5 And for roughly how many of the [occupation] have you funded or arranged off-the-job training in the last 12 months, including any who have since left?

### Types of training provision

Businesses that funded or arranged training in the last 12 months were asked about the types and sources of training which they used. Seven in ten employers that trained (71%) delivered training in the formats which involved a more experienced worker passing on skills to less experienced staff – effectively on-the-job training – or training delivered by a private training provider (66%).

More than half (58%) of employers that funded or arranged training in the last 12 months have encouraged self-learning (where staff study using books, manuals, CD-ROMs or other materials). Compared with 2014, training was more likely to have been provided by professional institutions, or an FE college.



**Figure 42: Types of training provided – prompted, multiple response (where funded/arranged training)**

Column percentages	Employers				Self-employed	2-9	10-24	25-99	100+
	2016 Employers	2014 Employers	Construction	Professional services					
Training delivered by an FE college	20	16	<b>23</b>	13	9	17	<b>28</b>	<b>41</b>	<b>64</b>
Training delivered by Higher Education	12	9	8	<b>22</b>	5	10	15	<b>26</b>	<b>57</b>
Training delivered by the NCC/CITB Northern Ireland	12	14	<b>15</b>	3	2	11	10	<b>19</b>	<b>39</b>
Training provided by any other private training provider	66	67	<b>69</b>	58	70	63	<b>72</b>	<b>87</b>	<b>88</b>
Training provided by a manufacturer or supplier	42	40	40	47	58	41	46	<b>49</b>	<b>59</b>
Other off-the-job training such as courses or formal instruction	55	52	55	56	49	53	61	<b>75</b>	<b>87</b>
Learning or training from a more experienced worker on-the-job	71	68	70	75	38	69	<b>80</b>	<b>85</b>	<b>91</b>
Any self-learning	58	57	55	<b>67</b>	66	57	59	<b>70</b>	<b>76</b>
Training provided by a Professional Institution	50	44	44	<b>65</b>	59	49	50	<b>66</b>	<b>83</b>
Training delivered by/ through an industry federation/ body	26	21	26	24	11	23	31	<b>39</b>	<b>64</b>
None of these	3	3	3	3	2	3	2	2	0
<i>Unweighted bases</i>	<i>816</i>	<i>738</i>	<i>648</i>	<i>168</i>	<i>44</i>	<i>257</i>	<i>218</i>	<i>241</i>	<i>100</i>

Figures in bold font are significantly higher than average minus the sub-group tested

QF17 Still excluding any apprentices, but thinking about all training in the last 12 months, which of the following types of training provision have you or your staff used in the last year? **READ OUT AND CODE ONE FOR EACH**

The propensity to have used any of the types of training listed increases with business size, reflecting the increased incidence and diversity of training in larger firms. Professional services businesses are more likely to have used training delivered by HE institutions, or a Professional Institution, whilst construction businesses are more likely to have used training delivered by an FE college, a private training provider, or the NCC/CITB Northern Ireland.

Within Northern Ireland, 26% of employers providing training used training delivered by CITB Northern Ireland.

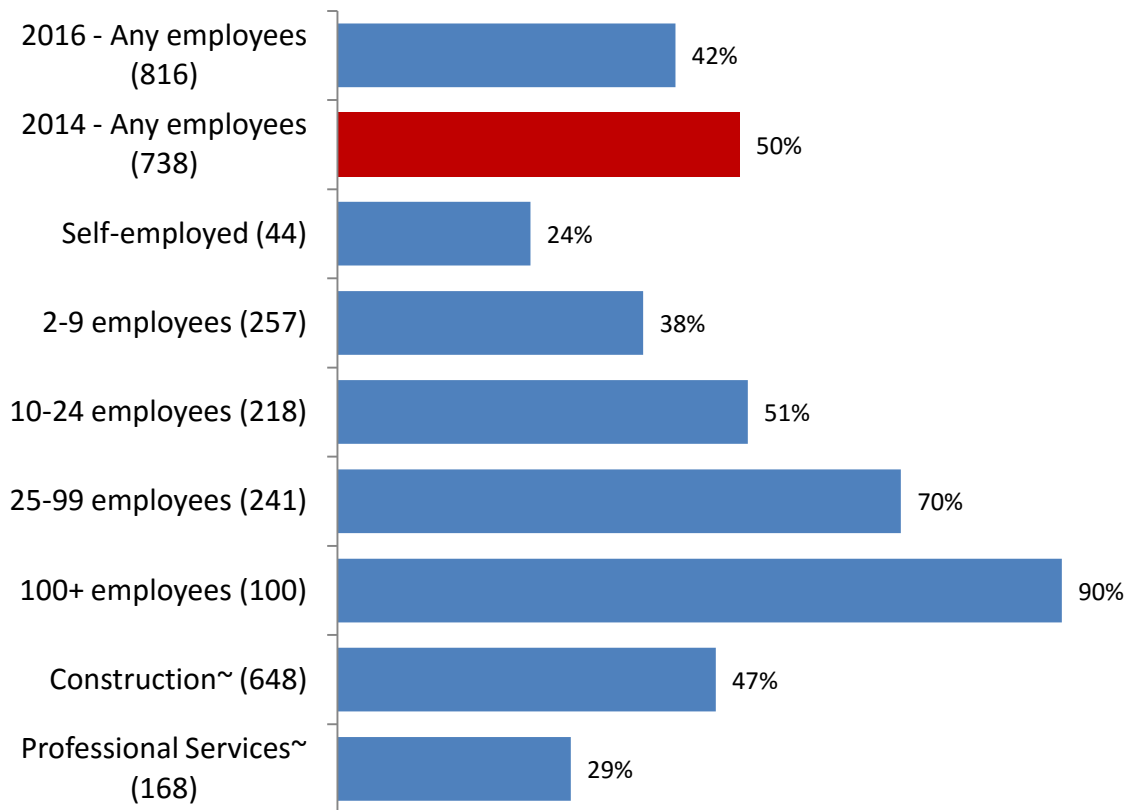


### Qualifications-based training

Of all employers that provided training in the last 12 months, 42% provided training towards a nationally recognised qualification. This proportion increases with business size, and is 24% amongst self-employed individuals. Construction employers are significantly more likely than professional services to provide training towards a nationally recognised qualification (47%, compared to 29%).

There has been a decrease in the provision of qualifications-based training since 2014, when 50% of employers had funded or arranged any. Furthermore, the overall proportion is below that of the figure reported in the 2015 Employer Skills Survey (UKCES) of 53%.

**Figure 43: Proportion of businesses that have trained towards nationally recognised qualifications in the last 12 months, by sector and size (where funded/arranged training)**



Unweighted sample bases in parentheses

~ based on employers only

QF10 **EMPLOYERS:** Thinking now about qualifications, how many people over the last 12 months that you have funded or arranged training for [whether on- or off-the-job,] including labour-only sub-contractors as well as direct employees are or were being trained towards a nationally recognised qualification; such as an NVQ/SVQ? **SELF-EMPLOYED:** Has your training been towards a nationally recognized qualification?

In terms of the extent to which training towards HNC/HND qualifications has been undertaken, there has been a decrease since 2014, with around only 5% of training employers having trained their staff towards HNC/HND qualifications this year.



There has also been a decrease in provision of training towards NVQs/SVQs, with 29% of employers that have trained providing training towards these qualifications, compared with 40% in 2014. Construction employers are more likely to provide NVQs/SVQs than professional services:

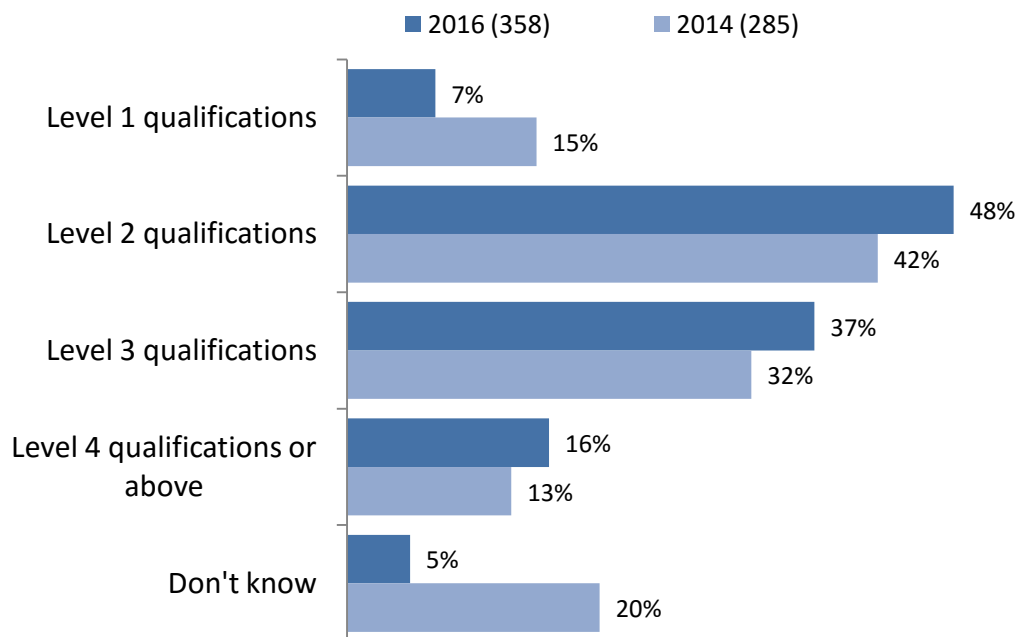
**Figure 44: Proportion of businesses training their staff towards nationally recognised qualifications, by sector and size (where funded/arranged training)**  
 \*based on professional services businesses only

Column percentages	Employers								
	2016 Employers	2014 Employers	Construction	Professional services	Self-employed	2-9	10-24	25-99	100+
NVQ or SVQ	29	40	<b>34</b>	16	8	25	<b>34</b>	<b>60</b>	<b>78</b>
HNC or HND	5	18	6	3	0	4	5	<b>21</b>	<b>59</b>
Degree	3	8	0	<b>12</b>	4	3	3	<b>6</b>	<b>20</b>
None of these	58	50	53	<b>71</b>	76	62	49	30	10
<i>Unweighted bases</i>	816	738	648	168	44	257	218	241	100

Figures in bold font are significantly higher than average minus the sub-group tested QF11/F14/F15

As the next figure shows, training leading to achievement of an NVQ/SVQ is most commonly assessed at Level 2 – 48% of employers that provided NVQ/SVQ-based training trained staff to this level. More than a third (37%) reported that staff trained towards Level 3 NVQs/SVQs:

**Figure 45: Level of NVQs/SVQs worked towards (employers that have trained towards NVQs/SVQs)**



Unweighted sample bases in parentheses

QF12 And what is the main NVQ/SVQ level you have trained staff towards?



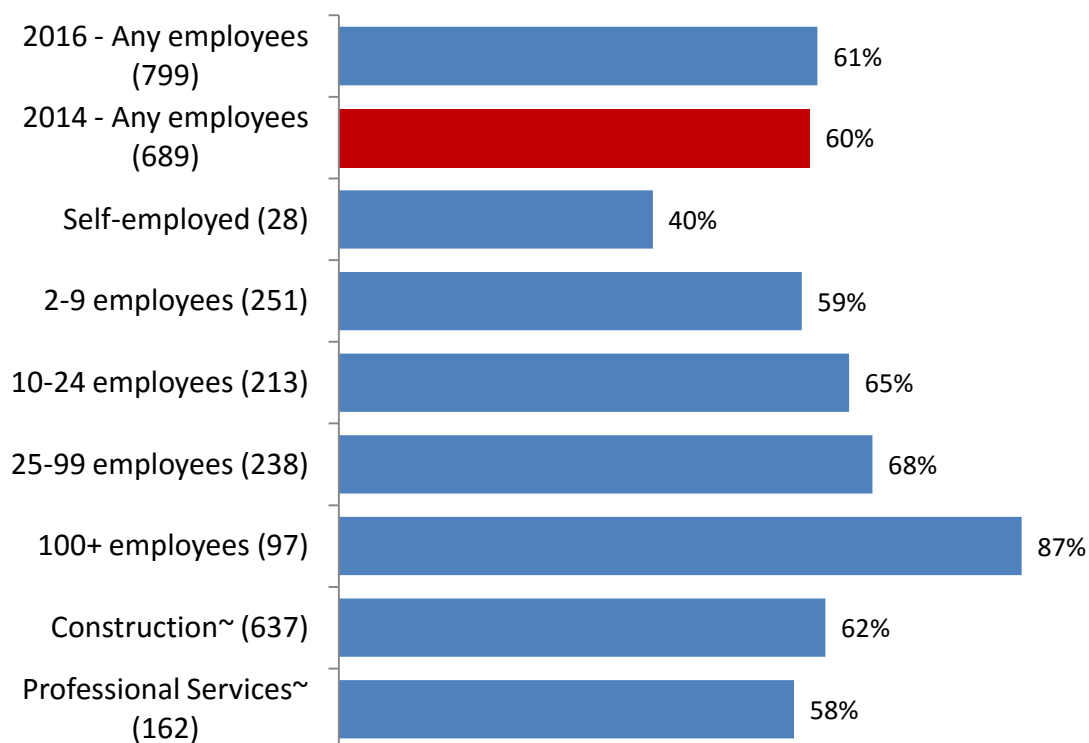
The most frequently cited benefit of training towards NVQ/SVQ Level 1 is considered to be the capacity of this qualification ‘to improve skills set (19% of employers that trained staff at this level). Another perceived benefit is an improvement in competency / ability to do the job (17%), while 12% cited it as a regulatory requirement.

### Assessment of training

Three-fifths of employers that funded or arranged training in the last 12 months (61%) formally assess whether the training and development received has an impact on the trainee’s performance. This is similar to the proportion found in 2014 (60%).

The propensity to formally assess training increases with business size to 87% of businesses with 100 or more staff. Employers within the construction sector are slightly more likely than those in professional services (62%, compared with 58%) to formally assess whether the training and development received has an impact on the trainee’s performance:

**Figure 46: Proportion of businesses that formally assess whether training and development impacts on trainees’ performance, by sector and size (where funded/arranged training)**



Unweighted sample bases in parentheses

~ based on employers only

QF16 And does this establishment/business formally assess whether the training and development received by an employee has an impact on his or her performance?

By nation, significantly higher employers in England formally assess whether training or development has impacted on employees’ performances (63%) in comparison with other nations (all 51%).





### Barriers to (more) training

Half of employers that funded or arranged any training in the last 12 months (50%) reported that they would have provided more training if they had been able to do so.

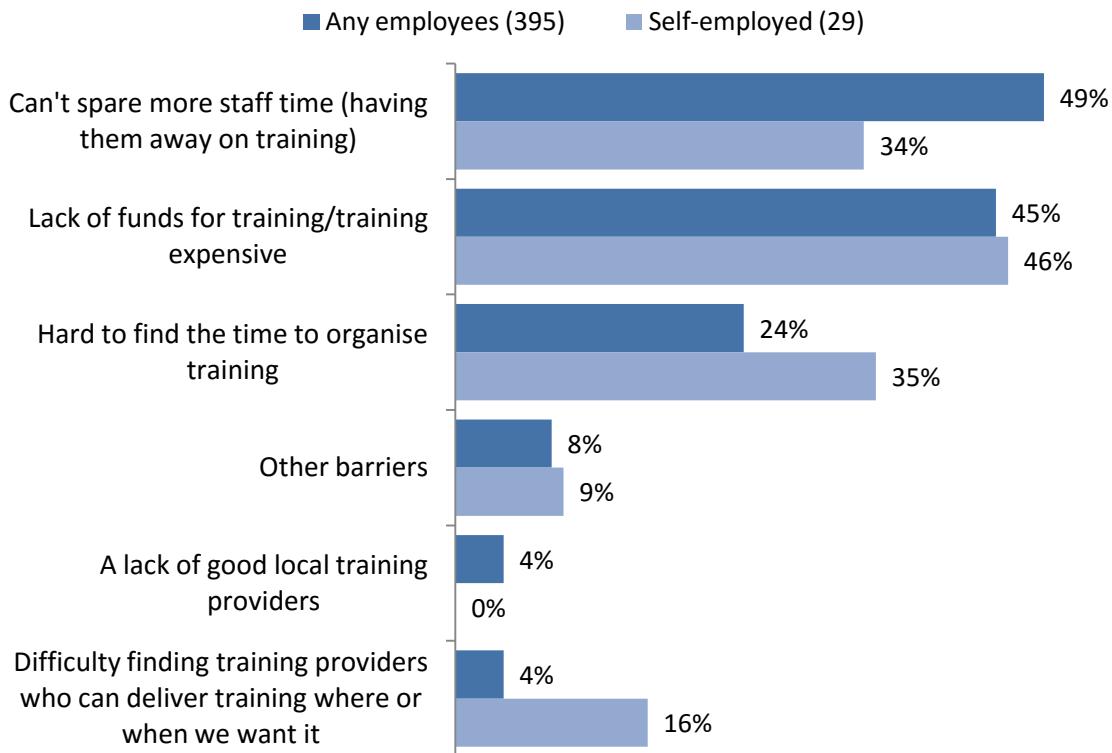
The comparable figure amongst self-employed individuals that provided training is 63%.

Compared with the 2014 survey, both these figures are higher (40% of employers; 37% of self-employed individuals in 2014).

Based on their spontaneous, open, responses, lack of staff time (49%) and lack of funds (45%) are the main reasons for employers not providing more training.

Among self-employed individuals, lack of funds (46%) and lack of staff time (34%) are also joined by the lack of time to organise training (35%) as significant reasons for not doing more training. One in four employers that have trained mentioned that it is hard to find the time to organise training (24%).

**Figure 47: Reasons for not providing more training- unprompted, multiple response (where funded/arranged training)**



Unweighted sample bases in parentheses

QF20 **EMPLOYERS:** What barriers, if any, have there been preventing your establishment providing more training over the last 12 months for staff at this location? **SELF-EMPLOYED:** What has prevented you from taking up more training in the last 12 months?]

Respondents who had *not funded or arranged training in the last 12 months* were asked for the reasons why they have not done so.





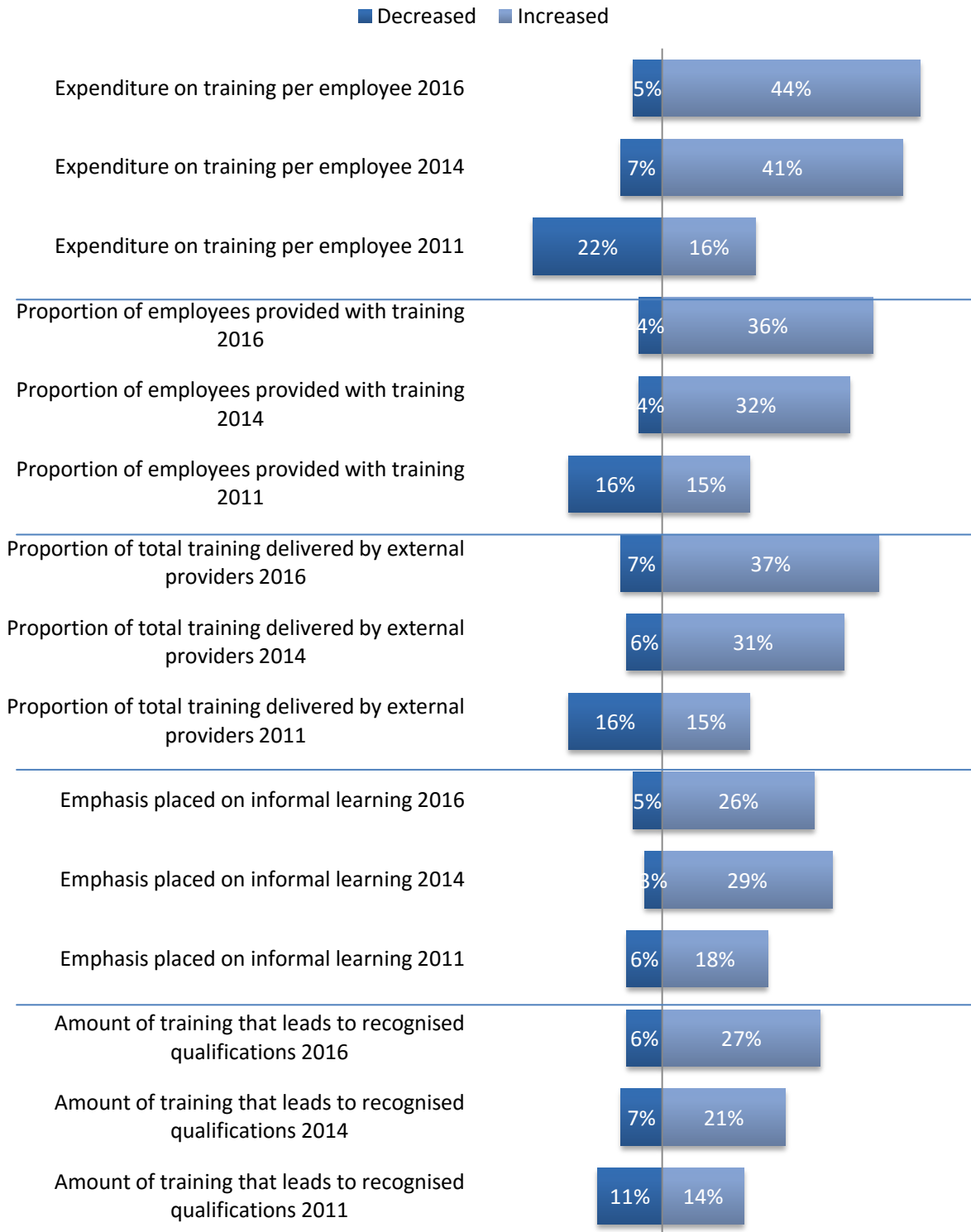
The main reason given for not providing training was that all staff are fully proficient (63%). This is by far the most frequently cited reason, with no more than one in ten citing any other reason including: employees being too busy to go on training courses (6%), employees too busy to provide training (4%), external courses too expensive (4%) and lack of funding (1%).

### **Trends in training and training expenditure**

Respondents in employing businesses which provide training were asked about changes in their training in the last 12 months. Across a series of indicators, a series of very positive changes from 2011 to 2014 to 2016 was observed. Proportions of workforces trained, training expenditure per trainee, and propensity to train towards recognised qualifications all increased substantially, as shown in the following figure:



**Figure 48: Trends in training expenditure and delivery (employers that have provided training in the last 12 months)**



Unweighted sample bases: 2016=816; 2014 = 604; 2011 = 429

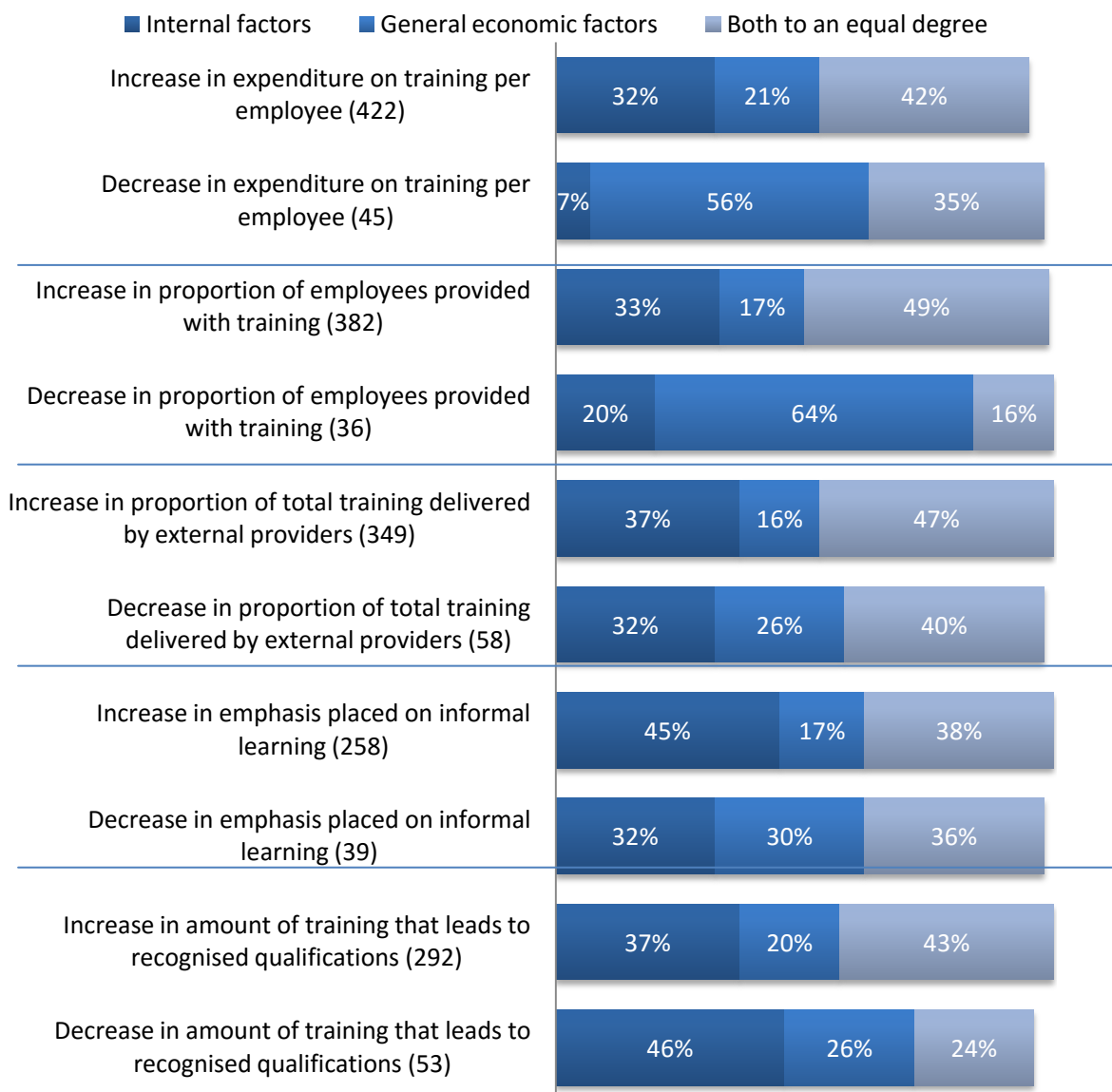
QH1 Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased  
**READ OUT AND CODE ONE FOR EACH**



By nation, employers in Wales are significantly more likely than the average for expenditure on training per employee (15%, compared with an average of 5%), the emphasis placed on informal learning (13%, compared with an average of 5%) and the proportion of total training delivered by an external provider, to have decreased (15%, compared with an average of 7%). With regard to the proportion of total training delivered by an external provider employers in Scotland are also significantly higher than average to have reported a decrease (22%).

From answers to a question about the impact of general economic factors on training, it can be seen (next chart) that general economic factors had significant negative effects for businesses which reduced training but was also implicated to a lesser extent in the decisions of some businesses which increased training:

**Figure 49: Causes of training expenditure and delivery (employers that have experienced an increase or decrease in the last 12 months)**



Unweighted sample bases in parentheses

QH2 Would you say that the increase/decrease in X has been mainly the result of the recent recession or mainly the result of other factors? **READ OUT EACH MENTIONED IN H1 AND CODE ONE FOR EACH**



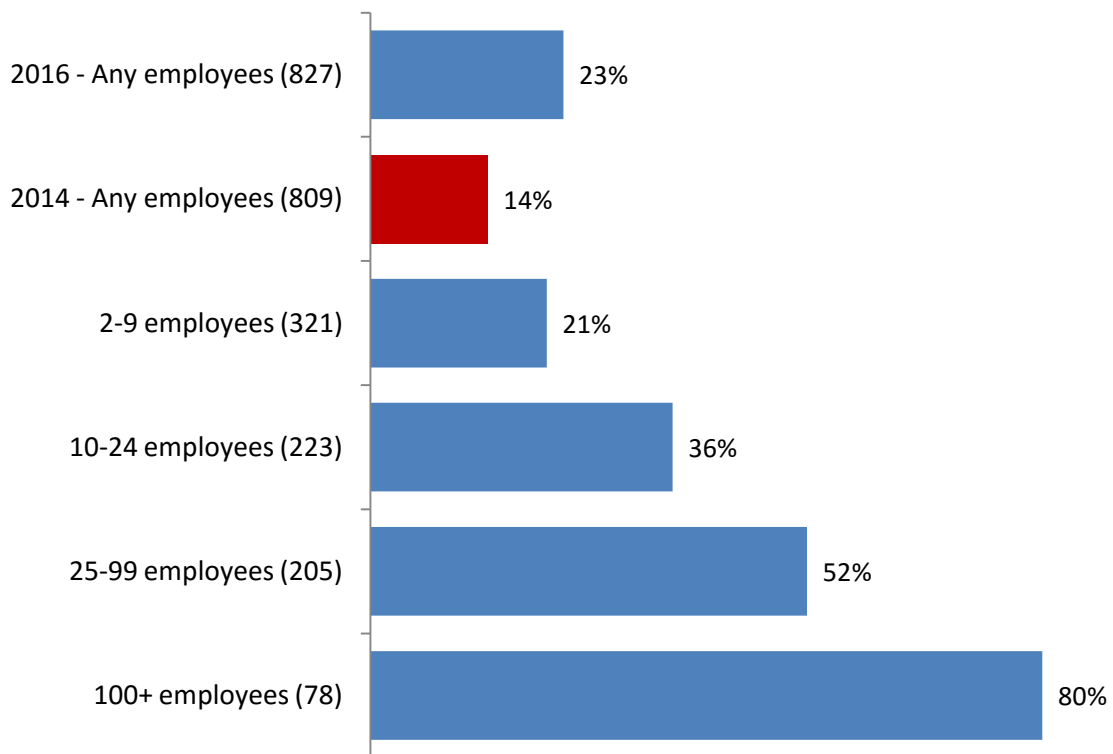
## 7. Apprenticeships

This section explores the use of Apprenticeships amongst employers and self-employed individuals in the construction sector. In addition, businesses were asked, in relevant cases, why they do not offer Apprenticeships and about the likelihood of offering them in the future.

### Take-up of Apprenticeships

Approaching one in four construction employers (23%) currently have staff undertaking them at their site. The propensity to have Apprentices increases with business size to 80% of 100+ employers. It is higher than average amongst employers in Scotland (35%).

**Figure 50: Have apprenticeships (all construction employers)**



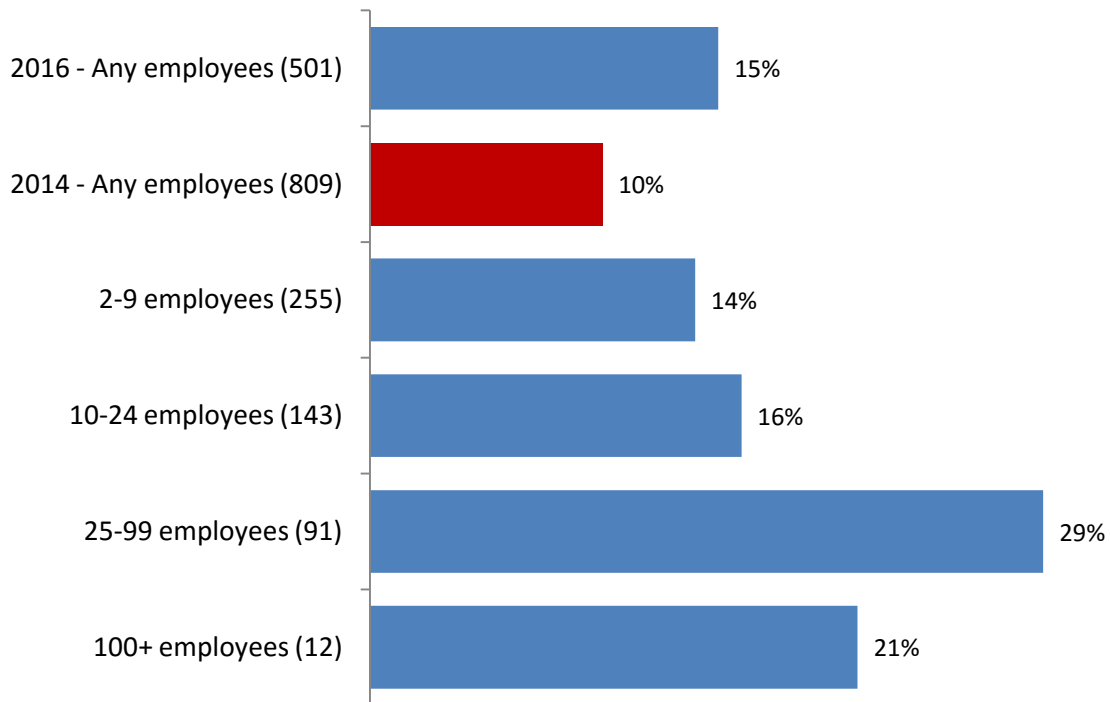
Unweighted sample bases in parentheses

QG3 Do you currently have any staff undertaking Apprenticeships at this site?

Of those that do not currently have Apprentices, 15% offer them at their site. Businesses with between 25 and 99 employees are most likely to offer apprenticeships where they do not currently have apprenticeships working on the site (29%).



**Figure 51: Offering Apprenticeships (all construction employers who do not have any apprenticeships at this site)**



Unweighted sample bases in parentheses

QG4 Do you currently offer [SCOTLAND: Modern] Apprenticeships at this site?

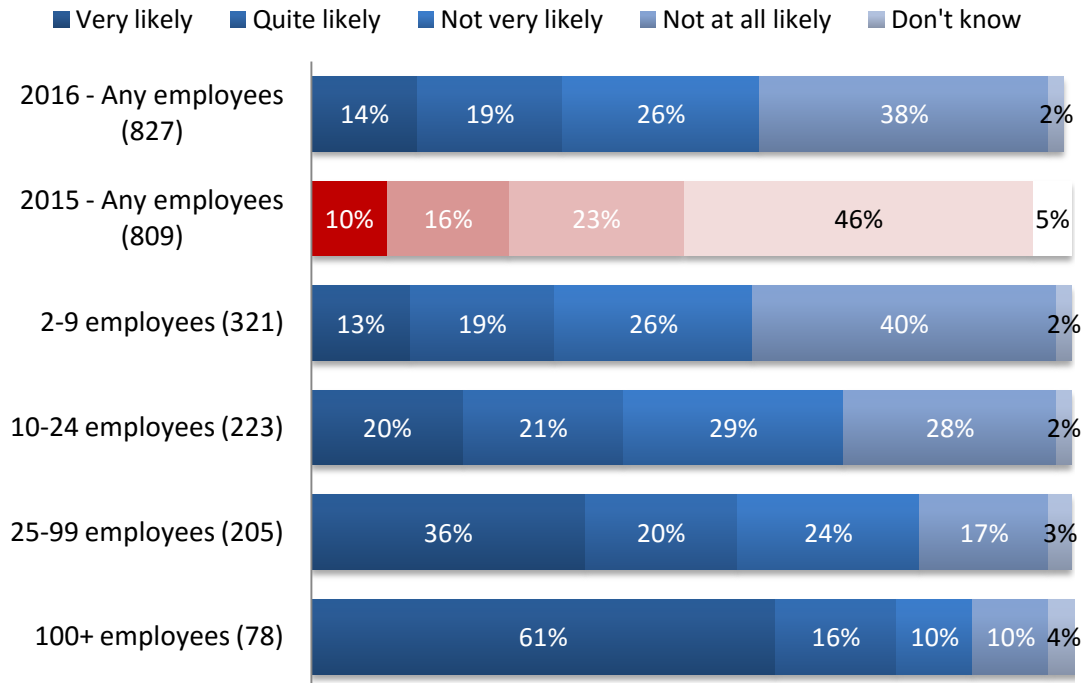
### *Likelihood of future provision of Apprenticeships*

When asked about the likelihood that someone will start an Apprenticeship at their establishment in the next 12 months, a third of all construction employers (33%) said it was likely. This includes one in seven of all (14%) that considered it very likely.

The likelihood of having new Apprentices in the next year increases significantly with business size. By nation, there is an indication that employers in Wales are more likely than average to consider it likely that they will have someone starting an Apprenticeship in the next 12 months (44%).



**Figure 52: Likelihood of offering Apprenticeships in the next 12 months, by business size (all construction employers)**



Unweighted sample bases in parentheses

QG8 Thinking about the next 12 months, how likely is it that this establishment will have someone starting an Apprenticeship? **PROMPT AS NECESSARY AND CODE ONE ONLY**

Focusing on those employers that do not currently have Apprentices, 25% consider it likely (very likely/likely) that they will take someone on in the next 12 months. This proportion, at 16%, is much lower amongst those that do not offer Apprenticeships but is significantly higher, at 67%, amongst those that do not currently have Apprentices but offer them at times.

Compared with 2014, the proportion of employers not currently offering Apprenticeships and are likely to consider doing so in the near future has not changed (16% in 2014).

Just over three-fifths of employers that currently have Apprentices (62%) consider it likely that they will take on new Apprentices in the next 12 months.

### Trend in recruitment of Apprentices and trainees

Employers in the construction sector that offer Apprenticeships were asked if the number of Apprentices and new trainees recruited has changed in the last 12 months. One in three (34%) reported that the number has increased, while 12% reported that the number has decreased.

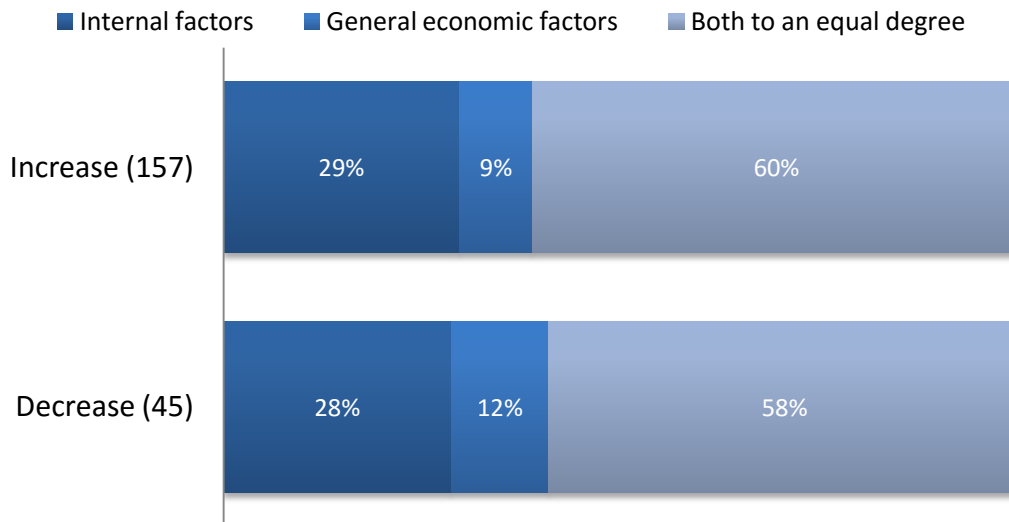
There has been a positive trend when compared with 2014, when 27% reported an increase in the preceding 12 months and 13% a decrease.



By nation, the proportion that has increased the number of Apprentices and new trainees recruited in the last 12 months is significantly higher in England (37%) and significantly lower in Wales (14%).

Both the increase and reduction in the number of Apprentices or new trainees are likely to be the product of both internal and general economic factors. Although general economic factors predominate, internal issues alone are cited by around three in ten employers.

**Figure 53: Perceived causes of growth or reduction in the number of Apprentices or new trainees taken on in the last 12 months (where increased/decreased)**



Unweighted sample bases in parentheses

QH2 Would you say that the [H1/A-G/1 RESPONSE: increase in [H1/A-G/1 RESPONSE]] / [H1/A-G/3 RESPONSE: decrease in [H1/A-G/1 RESPONSE]] has been mainly the result of the recent recession or mainly the result of other factors?  
**READ OUT EACH MENTIONED IN H1 AND CODE ONE FOR EACH**





## 8. Discussion

A substantial survey has examined some key aspects of the UK construction sector's labour market and the recruitment and training activities of the industry's businesses.

### *Constraints on output*

Over half of businesses – 53% – did not perceive *any* constraints on their businesses – a proportion which has risen since 2014 (from 44%). This suggests greater industry buoyancy – a perception which is reinforced by the findings that economic uncertainty was mentioned less frequently as a constraint in 2016 (by 12% of employers) than in 2014 (when the figure was 17%) and that general labour shortages and skill shortages, usually a symptom of growth, were mentioned more frequently as constraints.

This positive view – of an industry continuing to grow in confidence in the years following the global financial crisis – must necessarily be tempered by the fact that fieldwork for the survey took place before the UK's referendum vote to leave the EU. Even at that point, more employers in the survey, 25%, saw economic uncertainty as a *future* constraint on their business than, as above, as a present constraint (12%) and it may be assumed that, following the referendum, that proportion will have increased further.

### *Growth at the time of the survey reflected in labour market indicators*

Increasing levels of business activity in any sector are usually associated with employment growth, increased recruitment, and labour market tightening – expressed as increasing labour and skills shortage. These phenomena were evidently present in the industry when the survey was undertaken:

- Employers were more likely to report employment increases (24%) than decreases (10%) with the 'increase' figure having risen from 19% in 2014 whilst the 'decrease' figure remained the same.
- 46% of employers had tried to recruit skilled labour in the 12 months prior to survey compared with 39% in 2014.
- 40% of employers had actually recruited staff in the previous 12 months compared with 33% in 2014.
- The proportion of employers reporting that there had not been sufficient work for their staff fell from 17% in 2014 to 10% in 2016.
- 18% of employers reported shortage of skilled workers compared with 13% in 2014.
- The proportion of employers reporting hard-to-fill vacancies has increased steadily from 2011 (21%) through 2014 (36%) to 2016 (47%).



### *Recruitment difficulties and skills shortages*

In occupational terms, the broad pattern of where recruitment difficulty occurs remains consistent. Woodworkers and bricklayers remain the most frequently difficult staff to recruit but with recruitment difficulties in many other trades also being reported though in lesser numbers. The figures for frequency of recruitment difficulty of particular occupations may at least partly reflect the base number of staff and of vacancies in the industry rather than particular issues with the training or development of the particular trades – for example, the fact that 18% of employers reported that they had had difficulty in recruiting bricklayers compared with the 3% reporting difficulty recruiting glaziers may simply reflect the relative frequency of jobs and vacancies in these trades. However, it is noticeable that while the broad *order or frequency* of recruitment difficulty associated with different trades was more or less constant between 2014 and 2016 (with woodworkers and bricklayers at the top of the list), the *actual level* of difficulty (in line with the general indicators of labour market tightening noted above) has increased – for example, from 14% to 27% in the case of carpenters and joiners and from 9% to 18% in the case of bricklayers.

Essentially, the industry does not yet show evidence of getting on top of its long-term skill supply problems – these retreating somewhat in industry downturns but re-emerging and accelerating as, at the time of this survey, the industry was expanding.

It remains evident, too, that the ‘skill shortage’ problem is not simply a matter of insufficient numbers of people with the necessary job-specific skills. When employers were asked what skills they found most difficult to find amongst their applicants, three times as many (34%) mentioned personal skills (attitudes, motivations, common sense, etc.) as mentioned job-specific or trade skills (11%) with the ‘personal skills’ difficulty also being mentioned more frequently than lack of experience (27%). Thus, this kind of survey data suggests that winning the industry’s continuing struggle to attract the right calibre of entrants may be at least as important to the overall skills supply position as the efficiency of its systems for developing the technical and practical skills which are needed.

### *Skills gaps*

The survey also shows that 20% of employers report skills gaps in their existing workforces, compared with 8% in 2014.

The survey suggests, however, that the most common source of skills gaps is that they are present in workers who are still being trained or are in their early stages of employment with an employer and haven’t yet got sufficient experience or adjusted to the particular skills needs of that employer. Thus, an increased level of skill gaps is likely to reflect not only an influx of new workers into the industry as it grew over the 2014-2016 period but also increased mobility of workers from employer to employer as opportunities widened.

Only a minority of employers with skill gaps (7%) attributed skill gaps to failure to train affected staff and ‘skill’s gaps were, in fact, most often associated with lack of experience or with poor attitudes and motivations.



Again, therefore, the survey suggests that an apparent ‘skills’ issue for the industry – a rising proportion of employers with skills gaps – is not one which is largely caused by lack of training (indeed, employees *in* training were, as above, a frequent source of skills gaps) but is again associated with a tightening labour market and, to some degree, with the industry’s inability to recruit sufficient people with the personal qualities which employers want.

### *Training and workforce development*

Although it has been suggested above that rates of recruitment difficulty, skills shortages, and skills gaps are often a reflection of levels of demand for industry output and that skills supply problems are not wholly concerned with job-specific skills as such, of course, it remains critical for the industry that it maintains an adequate supply of recruits and a high level of support to industry training.

The survey delivers a series of encouraging findings in this respect:

- 79% of employers (up from 68% in 2014) recognise that various ‘drivers’ (most frequently, legislation and regulation, new working practices, and new technologies) will require new skills and knowledge in the industry.
- Over seven out of ten employers with skills gaps report increasing their training activity or trainee programmes to improve their skills position.
- The proportion of employers who have recently recruited a young person leaving school, college or university increased slightly from 26% in 2014 to 28% in 2016.
- 64% of employers had supplied training to staff in the year prior to survey – up from 57% in 2014 and above the average rate for employers across the construction sector, reported in the 2015 UKCES Employer Skills Survey (also 57%).
- The proportion of employers supplying off-the-job training rose from 45% in 2014 to 53% in 2016.
- The average number of training days supplied to people trained on-the-job rose from eight in 2014 to sixteen in 2016.
- A series of training indicators, including expenditure on training per employee, show consistent gains in positive behaviour across surveys in 2011, 2014, and 2016.
- 23% of employers – up from 14% in 2011 and 2014 – report employing apprentices and 34% report increasing the numbers of apprentices they employ (compared with 27% in 2014).



## *Summary*

In 2014, the report of an earlier edition of this 2016 survey suggested that findings supported a view of an industry recovering successfully from the 2008/2009 recession.

This survey suggests that that recovery was, overall, continued in the 2014 to 2016 period. Industry constraints on output and concern about economic demand reduced.

In parallel with growth, the labour market for construction staff tightened with increases in recruitment difficulty, skills shortages, and skills gaps.

The survey suggests that skills shortages and gaps are not, however, matters which are concerned simply with the stocks and flows of technical, practical, or job-specific skills of the industry. The survey shows that the quality of industry recruits and workers – their attitudes, motivations and other personal qualities are also frequently significant. The industry's concern not just with its formal training systems and levels of training activity but also to improve its attractiveness and image to potential high-quality recruits is, thus, supported with such survey evidence.

However, though training is not, as above, the only solution to skills supply challenges, it is obviously still a critical factor in meeting those challenges. It is encouraging, therefore, that the survey shows varied evidence that industry employers recognise this and are increasing their training activity, intensity, and investment.

Overall, thus, the survey offers a positive picture of the industry's output performance and its responsiveness to skills issues. The question at the time of writing (August 2016) is whether this picture, accurate when survey fieldwork was completed in Spring and early Summer 2016, can and will be maintained in more uncertain economic conditions following the UK's referendum on EU membership.



## Appendix 1: Data weighting

At the pre-analysis stage, to adjust for the deliberate imbalances introduced into the sample in respect of business size and nation and to correct any minor response biases, population estimates from IDBR were used to weight the data. The employer and self-employed business samples were weighted separately. The self-employed business sample was weighted by sector (2 digit SIC code) and nation/region. Interlocking weights by size and sector (2 digit SIC code) and then nation/region weights were applied to the employer sample. The result of this process in each case is a weighted sample profile that reflects the population profile, as indicated by up-to-date IDBR data. The unweighted and weighted sample profiles are presented in the tables that follow:

**Figure 54: Sample profile – self-employed individuals**

	n. Interviews achieved	% of all interviews achieved	n. weighted sample	% of population	Weighting factor applied
<b>Construction</b>	<b>119</b>	<b>76</b>	<b>95</b>	<b>61</b>	<b>0.80</b>
41 – Construction of buildings	37	24	41	26	1.11
42 – Civil engineering	8	5	8	5	1.00
43 – Specialised construction activities	74	47	46	30	0.62
<b>Professional services</b>	<b>37</b>	<b>24</b>	<b>60</b>	<b>39</b>	<b>1.62</b>
71 - Architectural and engineering activities; technical testing and analysis	32	21	55	35	1.72
74 - Other professional, scientific and technical activities	5	3	5.00	3	1.00
England	122	78	132	86	1.08
Northern Ireland	14	9	5	2	0.36
Wales	11	7	5	3	0.45
Scotland	9	6	13	8	1.44
South West	20	13	22	8	1.10
North East	4	3	4	3	1.00
North West	12	8	14	10	1.17
Yorkshire and Humber	4	3	4	6	1.00
East Midlands	12	8	12	6	1.00
West Midlands	9	6	7	7	0.78
East of England	19	12	21	11	1.11



	n. Interviews achieved	% of all interviews achieved	n. weighted sample	% of population	Weighting factor applied
London	14	9	15	17	1.07
South East	28	18	31	17	1.11
<b>UK</b>	<b>156</b>	<b>100</b>	<b>156</b>	<b>100</b>	<b>1.00</b>

**Figure 55: Sector and size of the weighted employer sample; numbers**

	2-9 employees	10-24 employees	25-99 employees	100+ employees	Total
<b>Construction</b>	<b>661</b>	<b>64</b>	<b>27</b>	<b>6</b>	<b>758</b>
41 – Construction of buildings	252	23	10	3	<b>287</b>
42 – Civil engineering	72	10	7	2	<b>90</b>
43 – Specialised construction activities	337	32	11	1	<b>381</b>
<b>Professional services</b>	<b>241</b>	<b>29</b>	<b>13</b>	<b>3</b>	<b>286</b>
71 - Architectural and engineering activities; technical testing and analysis	216	27	12	3	<b>258</b>
74 - Other professional, scientific and technical activities	25	2	1	<1	<b>28</b>
<b>UK</b>	<b>902</b>	<b>93</b>	<b>40</b>	<b>8</b>	<b>1044</b>





**Figure 56: Sample profile – employers**

	n. Interviews achieved	% of all interviews achieved	n. weighted sample	% of population	Weighting factor applied
<b>Construction</b>	<b>827</b>	<b>79</b>	<b>758</b>	<b>72</b>	<b>0.92</b>
41 – Construction of buildings	253	24	287	28	1.13
42 – Civil engineering	94	9	90	9	0.96
43 – Specialised construction activities	480	46	381	36	0.79
<b>Professional services</b>	<b>217</b>	<b>21</b>	<b>286</b>	<b>28</b>	<b>1.32</b>
71 - Architectural and engineering activities; technical testing and analysis	181	17	258	25	1.43
74 - Other professional, scientific and technical activities	36	3	28	3	0.78
<b>England</b>	<b>807</b>	<b>77</b>	<b>877</b>	<b>84</b>	<b>1.09</b>
<b>Northern Ireland</b>	<b>79</b>	<b>8</b>	<b>29</b>	<b>3</b>	<b>0.37</b>
<b>Wales</b>	<b>75</b>	<b>7</b>	<b>44</b>	<b>4</b>	<b>0.59</b>
<b>Scotland</b>	<b>83</b>	<b>8</b>	<b>93</b>	<b>9</b>	<b>1.12</b>
South West	104	10	115	9	1.11
North East	37	4	29	4	0.78
North West	97	9	109	10	1.12
Yorkshire and Humber	60	6	77	7	1.28
East Midlands	56	5	63	6	1.13
West Midlands	69	7	55	7	0.80
East of England	103	10	117	11	1.14
London	137	13	152	15	1.11
South East	144	14	160	15	1.11
<b>UK</b>	<b>1044</b>	<b>100</b>	<b>1044</b>	<b>100</b>	<b>1.00</b>





### *Employment weighting*

A second weighting procedure was also used. Where data is presented based on numbers of employees, such as in the occupational breakdown of the workforce or in reporting the number of employees who have received training, weighting factors have been applied to the employer sample based on IDBR population estimates for employment.

This is necessary because a small number of larger businesses employ a disproportionate large share of the employee population. For example, while 1% of the employer population have 100 or more staff at their site, these businesses account for 25% of employment in the sector.

The unweighted and weighted sample profile following the application of employment weights is set out in the table that follows:

**Figure 60: Sample profile – employers**

	Unweighted % of workforce	% of employee population	Weighting factor applied
<b>Construction</b>	<b>71</b>	<b>71</b>	<b>1.01</b>
41 – Construction of buildings	29	26	0.90
42 – Civil engineering	17	16	0.94
43 – Specialised construction activities	25	29	1.16
<b>Professional services</b>	<b>29</b>	<b>29</b>	<b>1.00</b>
71 - Architectural and engineering activities; technical testing and analysis	29	27	0.93
74 - Other professional, scientific and technical activities	1	2	2.00
2-9 employees	5	35	7.00
10-24 employees	7	17	2.43
25-99 employees	21	23	1.10
100+ employees	67	25	0.37
England	80	82	1.03
Northern Ireland	5	3	0.60
Wales	4	4	1.00
Scotland	11	11	1.00
<b>UK</b>	<b>100</b>	<b>100</b>	<b>1.00</b>

## Appendix 2: Data by Nation

Figures in bold font are statistically significantly higher than the UK average. Figures in italics are statistically significantly lower than the UK average.

All data is based on businesses with any direct employees.

\*denotes a figure of less than 0.5%.

Sector in which business operates					
Base: All employers					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	1044	807	79	83	75
Construction Sector	73%	71%	76%	<b>83%</b>	77%
Professional Services	27%	29%	24%	17%	23%
No. of employees at that site					
Base: All employers					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	1044	807	79	83	75
2-9 employees	86%	87%	76%	88%	82%
10-24 employees	9%	9%	<b>15%</b>	5%	12%
25-99 employees	4%	4%	7%	5%	5%
100+ employees	1%	1%	2%	2%	1%
A5 Main business activity					
Base: All construction employers					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	827	637	64	65	61
New house building	18%	17%	<b>35%</b>	19%	20%
Housing repair, maintenance and improvement, including extensions and loft conversions	47%	47%	20%	58%	46%



Commercial and retail work such as shops, offices and leisure facilities	16%	17%	17%	10%	11%
Industrial work such as factories and warehouses	7%	7%	10%	7%	4%
Civil engineering and infrastructure projects such as roads, bridges, airports, stadiums etc	4%	5%	2%	1%	<b>11%</b>
Public sector work specifically health and education facilities	6%	6%	15%	4%	5%
Something else	1%	1%	2%	1%	4%
Unsure	*%	*%	0%	0%	0%

#### A6 Main business activity

##### Base: All professional services employers

	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	217	170	15	18	14
Architects	21%	23%	13%	17%	14%
Quantity surveyors	3%	4%	0%	0%	0%
Other surveying	11%	11%	0%	11%	21%
Building service engineers	21%	20%	20%	28%	21%
Civil and structural engineers	15%	12%	33%	22%	14%
Planners/town planners	1%	1%	0%	0%	0%
Project managers	4%	5%	7%	0%	0%
Multi-disciplinary practices	15%	12%	27%	22%	21%
Something else	9%	11%	0%	0%	7%



<b>No. of contractor, agency or self-employed staff</b>					
<b>Base: All employers</b>					
	<b>All employers</b>	<b>England</b>	<b>Northern Ireland</b>	<b>Scotland</b>	<b>Wales</b>
Unweighted bases	1044	807	79	83	75
None	45%	43%	37%	65%	45%
1 only	8%	8%	4%	6%	12%
2 - 4	19%	21%	22%	7%	10%
5 - 9	11%	10%	12%	15%	17%
10 - 24	10%	10%	16%	5%	11%
25 - 49	5%	5%	6%	*%	1%
50 - 99	1%	1%	1%	1%	4%
100 - 199	1%	1%	1%	0%	*%
200+	*%	*%	*%	*%	*%
Don't know	*%	1%	*%	*%	*%
<b>B1 What factors, if any, are currently limiting your business? Unprompted, multiple response</b>					
<b>Base: All employers</b>					
	<b>All employers</b>	<b>England</b>	<b>Northern Ireland</b>	<b>Scotland</b>	<b>Wales</b>
Unweighted bases	1044	807	79	83	75
Insufficient demand/uncertainty in the economy	12%	12%	10%	14%	18%
High level of competition from other companies	4%	4%	7%	*%	7%
Labour shortages	11%	10%	12%	15%	9%
Weather conditions	2%	2%	1%	*%	*%
Shortages of materials/equipment	*%	*%	0%	0%	0%
Cash flow	2%	1%	<b>5%</b>	3%	1%
Taxation	1%	1%	0%	0%	0%



Lack of funding/finance	4%	4%	9%	3%	7%
Access to skilled workforce	7%	8%	4%	3%	6%
Size of business/premises	2%	2%	2%	0%	4%
Regulations/red-tape	2%	2%	6%	*%	8%
Lack of advertising/marketing	1%	*%	1%	3%	3%
Late payments from clients	1%	1%	1%	3%	0%
Cost of raw materials/equipment	*%	*%	0%	*%	0%
Product pricing	*%	*%	0%	*%	0%
Tendering process	1%	*%	0%	1%	0%
Personal issues (inc. poor health/old age)	2%	2%	0%	0%	0%
Training issues	1%	2%	1%	*%	1%
Time constraints	2%	2%	0%	3%	0%
Location of business	*%	*%	1%	3%	0%
Availability of land	*%	*%	2%	0%	0%
Political factors inc. EU referendum	1%	1%	0%	0%	0%
Government procurement	*%	*%	0%	0%	1%
Fuel prices	*%	0%	0%	*%	0%
Other	4%	4%	6%	1%	4%
Nothing	53%	53%	42%	55%	53%
Don't know	2%	2%	3%	1%	2%

**B2 And what factors do you think are most likely to limit your business over the next 12 months? Unprompted, multiple response**

**Base: All employers**

	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	1044	807	79	83	75
Insufficient demand/uncertainty in the economy	25%	25%	15%	21%	20%
High level of competition from other	6%	6%	9%	*%	3%



companies					
Labour shortages	15%	14%	19%	<b>23%</b>	8%
Weather conditions	3%	2%	4%	<b>6%</b>	6%
Shortages of materials/equipment	1%	1%	0%	0%	0%
Cash flow	3%	3%	<b>10%</b>	*%	4%
Taxation	*%	1%	0%	0%	0%
Lack of funding/finance	4%	3%	<b>8%</b>	6%	<b>14%</b>
Access to skilled workforce	8%	8%	10%	3%	6%
Size of business/premises	1%	1%	0%	3%	<b>0%</b>
Regulations/red-tape	4%	3%	<b>8%</b>	4%	<b>11%</b>
Lack of advertising/marketing	1%	1%	0%	3%	0%
Late payments from clients	*%	*%	1%	0%	1%
Cost of raw materials/equipment	1%	1%	1%	<b>4%</b>	0%
Product pricing	1%	1%	0%	0%	0%
Tendering process	*%	*%	0%	*%	0%
Personal issues (inc. poor health/old age)	1%	1%	0%	0%	0%
Training issues	1%	1%	0%	0%	0%
Time constraints	1%	1%	0%	3%	0%
Location of business	1%	1%	0%	3%	0%
Availability of land	*%	*%	0%	0%	0%
Political factors inc. EU referendum	3%	4%	2%	*%	3%
Government procurement	*%	*%	0%	0%	0%
Fuel prices	1%	1%	2%	1%	0%
Other	7%	7%	1%	10%	4%
Nothing	26%	26%	16%	25%	<b>36%</b>
Don't know	2%	2%	4%	1%	1%



**C1 Thinking about skills over the last 12 months, which one of the following comes closest to the situation for this establishment?**

**Base: All employers**

	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	1044	807	79	83	75
For all or most of the last 12 months we did not have enough skilled workers for the work we had or could have had	8%	8%	6%	9%	6%
For some of that time we did not have enough skilled workers	18%	18%	25%	16%	9%
For most of the last 12 months we have been operating at or near full capacity	63%	63%	59%	62%	63%
For most of the last 12 months we have not had sufficient work for our workforce	10%	9%	7%	13%	<b>20%</b>
Unsure	1%	1%	2%	*%	3%

**C3 In the last 12 months, which of the following steps, if any, have you taken to try and tackle a lack of skilled workers?**

**Base: All employers**

	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	1053	836	72	74	71
You have tried to recruit experienced, skilled employees i.e. direct labour	46%	47%	53%	39%	42%
You have tried to recruit skilled self-employed or other indirect labour	40%	40%	<b>51%</b>	33%	47%
You have tried to recruit Apprentices or less experienced staff to train up	37%	36%	34%	45%	43%
You have sub-contracted work	55%	56%	66%	42%	64%
You have turned work down	43%	42%	42%	44%	53%
You have tried to recruit any skilled or experienced direct/indirect labour	55%	56%	60%	43%	57%
None of these	16%	15%	17%	22%	12%





C4. In the last 12 months, has this establishment recruited any new direct employees?					
Base: All employers					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	1044	807	79	83	75
Yes	40%	39%	46%	43%	49%
No	60%	61%	54%	57%	51%

C5. Of these recruits, were any taken on to their first job on leaving school, college or university?					
Base: Where have recruited					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	663	508	47	56	52
Yes	28%	26%	26%	<b>40%</b>	<b>45%</b>
No	72%	74%	<b>74%</b>	60%	55%
Don't know	*%	*%	1%	*%	0%

C5. Of these recruits, were any taken on to their first job on leaving school, college or university?					
Base: All employers					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	1044	807	79	83	75
Yes	11%	10%	12%	17%	<b>22%</b>
No	89%	<b>90%</b>	88%	83%	78%
Don't know	*%	*%	*%	*%	0%

C7/C8. Summary of recruitment of under 25's and education leavers					
Base: Where have recruited					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	663	508	47	56	52
Have recruited anyone else under 25 not into their first job	8%	7%	7%	8%	<b>19%</b>
Have recruited anyone under 25	34%	<b>36%</b>	28%	25%	25%



Have not recruited anyone under 25 not into their first job	58%	57%	65%	67%	56%
<b>C9. You mentioned that you tried to recruit skilled employees/self-employed staff in the last 12 months. Were any of these vacancies hard-to-fill</b>					
<b>Base: Where have tried to recruit skilled/ self-employed staff</b>					
	<b>All employers</b>	<b>England</b>	<b>Northern Ireland</b>	<b>Scotland</b>	<b>Wales</b>
Unweighted bases	809	629	57	63	60
Yes	47%	46%	<b>61%</b>	49%	51%
No	51%	52%	38%	49%	49%
Don't know	2%	2%	1%	1%	0%
<b>C9. You mentioned that you tried to recruit skilled employees/self-employed staff in the last 12 months. Were any of these vacancies hard-to-fill?</b>					
<b>Base: All employers</b>					
	<b>All employers</b>	<b>England</b>	<b>Northern Ireland</b>	<b>Scotland</b>	<b>Wales</b>
Unweighted bases	1044	807	79	83	75
Yes	30%	29%	38%	29%	34%
No	70%	71%	62%	71%	66%
<b>D2 &amp; D3. Whether business has skills gaps</b>					
<b>Base: All employers</b>					
	<b>All employers</b>	<b>England</b>	<b>Northern Ireland</b>	<b>Scotland</b>	<b>Wales</b>
Unweighted bases	1044	807	79	83	75
Have skills gaps	20%	19%	16%	21%	28%
No skills gaps	80%	81%	84%	79%	72%



**E1. Over the next 12 months do you expect to need to acquire new skills or knowledge as a result of ...?**

**Base: All employers**

	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	1044	807	79	83	75
The development of new products and services	42%	42%	51%	30%	<b>59%</b>
New Eco/Energy saving design/build methods	38%	39%	27%	26%	37%
The introduction of new working practices	53%	54%	44%	38%	<b>67%</b>
The introduction of new technologies or equipment	53%	53%	50%	42%	<b>71%</b>
New legislative or regulatory requirements	60%	62%	50%	40%	<b>68%</b>
Increased competitive pressure	33%	32%	40%	35%	<b>46%</b>
Business management	33%	33%	32%	28%	<b>49%</b>
Environment requirements	39%	40%	43%	28%	<b>58%</b>
Other reasons	2%	2%	1%	1%	6%
Any of these	79%	79%	76%	70%	<b>88%</b>
None of the above	21%	21%	24%	<b>30%</b>	12%

**E3. Which skills do you feel will need improving or updating amongst your staff over the next 12 months?**

**Base: Where have employees that need to acquire new skills or knowledge**

	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	863	668	62	67	66
Health and safety (inc. asbestos) and first aid	25%	26%	17%	24%	23%
Technical/trade specific	18%	17%	<b>28%</b>	24%	20%
Legislation/regulations	22%	22%	19%	20%	25%
Management/business skills	8%	8%	7%	6%	4%
New or different products/markets/branch out	10%	10%	12%	10%	6%
IT/new software	12%	13%	<b>21%</b>	3%	13%



Green/ecological products and/or practices	5%	5%	<b>12%</b>	8%	6%
Sales/marketing	3%	4%	3%	*%	1%
General/all sorts	19%	18%	20%	<b>31%</b>	<b>32%</b>
Other	1%	1%	3%	0%	*%
Nothing to be improved	11%	11%	4%	13%	6%
Don't know	5%	5%	6%	1%	7%

**F1/F2. Over the past 12 months have you funded or arranged any off-the-job or on-the-job training or development or informal training for yourself or staff?**

Base: All employers

	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	1044	807	79	83	75
Off the job	53%	53%	59%	45%	<b>64%</b>
On the job	43%	42%	51%	45%	56%
Both	32%	31%	40%	31%	45%
Either	64%	64%	70%	58%	75%
Off the job only	21%	22%	20%	13%	19%
On the job only	11%	11%	11%	13%	11%
Neither	36%	36%	30%	42%	25%
Don't know	1%	*%	4%	3%	2%

**F3. Proportion of all staff that have had off-the-job training**

Base: All employees

	All employees	England	Northern Ireland	Scotland	Wales
Unweighted bases	44639	36144	2711	3611	2173
Off-the-job training	40%	39%	42%	28%	<b>59%</b>



F8. Proportion of all staff that have had on-the-job training					
Base: All employees					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	44639	36144	2711	3611	2173
On-the-job training	33%	34%	29%	30%	<b>42%</b>
F6/F9. Proportion of days spent doing on or off the job training					
Base: All training days					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	8366	6595	584	391	796
Off-the-job training	32%	32%	50%	40%	23%
On-the-job training	68%	68%	50%	60%	77%
F10/F11/F14/F15. Whether trained to Nationally recognised qualifications					
Base: All employers					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	1044	807	79	83	75
Nationally recognised qualification	27%	27%	30%	23%	32%
NVQ or SVQ	19%	18%	25%	21%	24%
HNC or HND	3%	4%	6%	3%	1%
Degree	2%	2%	3%	2%	2%
None of these	73%	73%	70%	77%	68%



F10/F11/F14/F15. Whether trained to Nationally recognised qualifications					
Base: Where funded/ arranged any training					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	816	629	61	63	63
Nationally recognised qualification	42%	42%	43%	40%	43%
NVQ or SVQ	29%	28%	35%	37%	32%
HNC or HND	5%	6%	8%	5%	1%
Degree	3%	3%	5%	3%	3%
None of these	58%	58%	57%	60%	57%
F16. And does this establishment/business formally assess whether the training and development received by an employee has an impact on his or her performance?					
Base: Where provided training for any staff					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	799	615	61	62	61
Yes	61%	<b>63%</b>	51%	51%	51%
No	38%	36%	49%	49%	49%
Don't know	1%	2%	0%	0%	0%
F17. Still excluding any apprentices, but thinking about all training in the last 12 months, which of the following types of training provision have you or your staff used in the last year?					
Base: Where funded/ arranged any training					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	816	629	61	63	63
Training delivered by an FE college	20%	20%	<b>33%</b>	28%	12%
Training delivered by Higher Education (e.g. university)	12%	13%	19%	4%	3%
Training delivered by the National Construction College (NCC)/ CITB Northern Ireland	12%	12%	<b>26%</b>	9%	9%



Training provided by any other private training provider	66%	65%	<b>84%</b>	57%	<b>80%</b>
Training provided by a manufacturer or supplier	42%	43%	35%	47%	29%
Other off-the-job training such as courses or formal instruction	55%	57%	61%	44%	48%
Learning or training where a more experienced worker demonstrates techniques and passes on skills to less experienced staff while working alongside them on-the-job	71%	70%	76%	<b>82%</b>	76%
Any self-learning where staff study using books, manuals, CD-ROMs or other materials	58%	57%	51%	<b>67%</b>	<b>64%</b>
Training provided by a Professional Institution for example for Continuing Personal Development	50%	51%	49%	46%	48%
Training delivered by/ through an industry federation/ body e.g. FMB	26%	23%	40%	38%	36%
None of these	3%	3%	3%	1%	0%

**F18. You mentioned that you have not taken up any training over the past 12 months. What are the reasons for this?**

**Base: Where have not provided training**

	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	222	173	18	19	12
The courses interested in are not available locally	0%	0%	0%	0%	0%
The quality of the courses or providers locally is not satisfactory	1%	1%	0%	0%	0%
I don't know what provision is available locally	0%	0%	0%	0%	0%
The start dates or times of the courses are inconvenient	1%	1%	0%	1%	0%
External courses are too expensive	4%	4%	2%	2%	2%





Managers have lacked the time to organise training	3%	4%	0%	0%	12%
Employees are too busy to give training	4%	4%	6%	0%	22%
Employees are too busy to go on training courses	6%	6%	0%	7%	10%
All our staff are fully proficient	63%	61%	82%	84%	44%
No need/it's not required	7%	8%	7%	0%	0%
Lack of funding	1%	1%	0%	0%	12%
Training is done internally/on-the-job	3%	3%	9%	0%	0%
Other reasons	8%	7%	6%	13%	12%
No particular reason	10%	10%	10%	6%	20%
Don't know	1%	1%	0%	0%	0%

**F19. If you could have done, would you have provided MORE training for staff than you were able to over the last 12 months?**

**Base: Where funded/ arranged any training**

	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	816	629	61	63	63
Yes	50%	49%	47%	60%	58%
No	50%	51%	53%	39%	42%
Don't know	*%	*%	0%	1%	0%

**G3. Do you currently have any staff undertaking Apprenticeships at this site?**

**Base: Where in construction and have employees**

	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	827	637	64	65	61
Yes	23%	23%	16%	<b>35%</b>	20%
No	76%	77%	81%	65%	80%
Don't know	1%	*%	2%	*%	0%



G4. Do you currently offer (Modern) Apprenticeships at this site?					
Base: Where in construction, have employees but do not currently have any apprentices					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	501	385	46	31	39
Yes	15%	15%	14%	11%	<b>26%</b>
No	85%	85%	86%	89%	74%
Don't know	*%	*%	1%	0%	0%
G8. Thinking about the next 12 months, how likely is it that you/ this establishment will have someone starting an Apprenticeship?					
Base: Where in construction					
	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	827	637	64	65	61
Very likely	14%	15%	17%	10%	13%
Quite likely	19%	19%	12%	20%	<b>31%</b>
Not very likely	26%	25%	33%	<b>40%</b>	18%
Not at all likely	38%	40%	30%	29%	38%
Don't know	2%	2%	8%	*%	0%
Summary: Likely	33%	34%	29%	30%	44%
Summary: Not likely	64%	65%	63%	69%	56%



H1/1. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased : Expenditure on training per employee

Base: Where funded/ arranged any training

	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	816	629	61	63	63
Increased	44%	<b>46%</b>	38%	29%	36%
Stayed the same	50%	49%	52%	61%	49%
Decreased	5%	4%	10%	9%	<b>15%</b>
Don't know	1%	2%	0%	1%	1%

H1/2. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased : Proportion of employees provided with training

Base: Where funded/ arranged any training

	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	816	629	61	63	63
Increased	36%	38%	40%	23%	31%
Stayed the same	59%	58%	56%	<b>71%</b>	60%
Decreased	4%	4%	4%	7%	9%
Don't know	*%	1%	0%	0%	0%

H1/3. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased. : Proportion of any employees' training delivered by external providers

Base: Where funded/ arranged any training

	All employers	England	Northern Ireland	Scotland	Wales
Unweighted bases	816	629	61	63	63
Increased	37%	39%	32%	28%	36%
Stayed the same	54%	55%	60%	51%	49%
Decreased	7%	5%	8%	<b>22%</b>	15%



Don't know	2%	2%	*%	*%	0%
<b>H1/4. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased : Emphasis placed on informal learning</b>					
<b>Base: Where funded/ arranged any training</b>					
	<b>All employers</b>	<b>England</b>	<b>Northern Ireland</b>	<b>Scotland</b>	<b>Wales</b>
Unweighted bases	816	629	61	63	63
Increased	26%	27%	27%	14%	17%
Stayed the same	67%	65%	69%	<b>78%</b>	70%
Decreased	5%	4%	4%	8%	13%
Don't know	3%	3%	0%	*%	0%
<b>H1/5. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased : Amount of training that leads to recognised qualifications</b>					
<b>Base: Where funded/ arranged any training</b>					
	<b>All employers</b>	<b>England</b>	<b>Northern Ireland</b>	<b>Scotland</b>	<b>Wales</b>
Unweighted bases	816	629	61	63	63
Increased	27%	27%	19%	22%	30%
Stayed the same	67%	67%	69%	67%	63%
Decreased	6%	5%	<b>13%</b>	11%	8%
Don't know	1%	1%	0%	*%	0%
<b>H1/6. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased : Number of Apprentices and new trainees recruited by your establishment</b>					
<b>Base: All construction employers that offer Apprenticeships</b>					
	<b>All employers</b>	<b>England</b>	<b>Northern Ireland</b>	<b>Scotland</b>	<b>Wales</b>
Unweighted bases	403	306	28	37	32
Increased	34%	37%	30%	23%	14%
Stayed the same	53%	52%	54%	58%	<b>69%</b>



Decreased	12%	11%	8%	19%	17%
Don't know	*%	0%	8%	0%	0%
<b>H1/7. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased: Number of staff employed at your establishment?</b>					
<b>Base: All employers</b>					
	<b>All employers</b>	<b>England</b>	<b>Northern Ireland</b>	<b>Scotland</b>	<b>Wales</b>
Unweighted bases	1044	807	79	83	75
Increased	24%	23%	31%	28%	32%
Stayed the same	65%	65%	55%	62%	64%
Decreased	10%	11%	11%	10%	4%
Don't know	1%	1%	2%	0%	0%



### Appendix 3: Data by English Government Office Regions

Figures in bold font are statistically significantly higher than the UK average. Figures in italics are statistically significantly lower than the UK average.

All data is based on businesses with any direct employees.

\*denotes a figure of less than 0.5%.

Sector in which business operates										
Base: All employers										
	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
Construction Sector	71%	69%	65%	68%	63%	66%	79%	75%	67%	77%
Professional Services	29%	31%	35%	32%	37%	34%	21%	25%	33%	23%
No. of employees at that site										
Base: All employers										
	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
2-9 employees	85%	86%	84%	86%	92%	86%	85%	84%	86%	82%
10-24 employees	10%	8%	12%	11%	5%	9%	10%	9%	8%	10%
25-99 employees	4%	5%	3%	3%	2%	4%	4%	6%	5%	6%
100+ employees	1%	1%	1%	1%	1%	1%	1%	1%	2%	1%



No. of contractor, agency or self-employed staff										
Base: All employers										
	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
None	43%	53%	41%	35%	57%	47%	35%	39%	44%	56%
1 only	8%	6%	14%	4%	1%	9%	9%	7%	7%	9%
2 - 4	21%	17%	17%	15%	26%	21%	27%	19%	30%	20%
5 - 9	10%	8%	12%	11%	9%	7%	10%	16%	6%	6%
10 - 24	10%	6%	5%	15%	4%	10%	11%	14%	10%	7%
25 - 49	5%	7%	4%	11%	1%	4%	7%	1%	1%	1%
50 - 99	1%	1%	1%	5%	*%	*%	1%	1%	0%	*%
100 - 199	1%	*%	1%	2%	3%	*%	*%	3%	*%	1%
200+	*%	1%	5%	*%	0%	*%	*%	*%	0%	*%
Don't know	1%	*%	*%	1%	0%	2%	*%	0%	*%	*%
Main business activity										
Base: All construction employers										
	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	637	81	46	95	30	78	119	83	55	50
New house building	17%	14%	16%	11%	29%	17%	15%	<b>37%</b>	8%	10%
Housing repair, maintenance and improvement, including extensions and loft conversions	47%	54%	57%	58%	42%	34%	55%	36%	39%	28%
Commercial and retail work such as shops, offices and leisure facilities	17%	20%	19%	18%	4%	15%	16%	13%	16%	24%





Industrial work such as factories and warehouses	7%	*%	7%	*%	7%	13%	6%	4%	16%	20%
Civil engineering and infrastructure projects such as roads, bridges, airports, stadiums etc	5%	4%	1%	8%	2%	6%	2%	3%	2%	9%
Public sector work specifically health and education facilities	6%	7%	*%	5%	0%	11%	3%	4%	15%	9%
Something else	1%	*%	0%	*%	16%	*%	2%	2%	2%	*%
<b>Main business activity</b>										
<b>Base: All professional services employers</b>										
	<b>England</b>	<b>East Of England</b>	<b>East Midlands</b>	<b>London</b>	<b>North East</b>	<b>North West</b>	<b>South East</b>	<b>South West</b>	<b>West Midlands</b>	<b>Yorkshire and Humber</b>
Unweighted bases	170	22	10	42	7	19	25	21	14	10
Architects	27%	17%	13%	<b>43%</b>	25%	25%	32%	25%	30%	16%
Quantity surveyors	4%	0%	0%	6%	0%	6%	7%	7%	0%	0%
Other surveying	11%	17%	0%	2%	0%	15%	3%	17%	31%	16%
Building service engineers	23%	32%	39%	12%	25%	31%	29%	4%	15%	22%
Civil and structural engineers	9%	3%	0%	9%	33%	10%	17%	12%	7%	0%
Planners/town planners	1%	*%	0%	0%	0%	0%	0%	10%	0%	0%
Project managers	5%	8%	10%	6%	2%	0%	0%	13%	1%	0%
Multi-disciplinary practices	8%	23%	13%	1%	0%	7%	2%	2%	15%	15%
Something else	13%	0%	26%	21%	14%	7%	10%	11%	0%	32%



**B1 What factors, if any, are currently limiting your business? Unprompted, multiple response**

Base: All employers

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
Insufficient demand/uncertainty in the economy	12%	6%	9%	15%	18%	11%	11%	9%	10%	20%
High level of competition from other companies	4%	4%	8%	2%	1%	9%	4%	5%	5%	1%
Labour shortages	10%	6%	12%	7%	3%	8%	19%	13%	15%	1%
Weather conditions	2%	*%	*%	2%	1%	5%	1%	2%	4%	*%
Shortages of materials/equipment	*%	*%	0%	0%	1%	*%	*%	0%	1%	0%
Cash flow	1%	3%	0%	*%	10%	2%	1%	3%	1%	0%
Taxation	1%	0%	4%	0%	0%	0%	1%	2%	0%	0%
Lack of funding/finance	4%	*%	4%	8%	11%	2%	*%	7%	4%	3%
Access to skilled workforce	8%	9%	*%	7%	3%	11%	9%	10%	9%	1%
Size of business/premises	2%	2%	0%	2%	0%	*%	0%	4%	0%	3%
Regulations/red-tape	2%	3%	0%	2%	1%	2%	1%	5%	0%	*%
Lack of advertising/marketing	*%	0%	0%	*%	0%	*%	*%	2%	1%	0%
Late payments from clients	1%	*%	4%	1%	0%	0%	1%	2%	0%	0%
Cost of raw materials/equipment	*%	0%	0%	*%	0%	0%	2%	*%	0%	0%
Product pricing	*%	*%	*%	0%	*%	*%	*%	0%	0%	*%
Tendering process	*%	2%	*%	1%	0%	0%	*%	0%	0%	0%
Personal issues (inc. poor health/old age)	2%	2%	0%	3%	1%	2%	3%	2%	0%	0%
Training issues	2%	0%	0%	0%	9%	2%	2%	0%	5%	4%
Time constraints	2%	4%	0%	2%	0%	2%	1%	6%	*%	0%



Location of business	*%	0%	*%	0%	0%	*%	*%	0%	0%	0%
Availability of land	*%	0%	0%	0%	0%	*%	0%	0%	1%	0%
Political factors inc. EU referendum	1%	0%	3%	0%	0%	0%	1%	*%	1%	*%
Government procurement	*%	2%	0%	0%	0%	0%	0%	0%	0%	0%
Fuel prices	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	4%	3%	4%	6%	*%	5%	5%	5%	*%	4%
Nothing	53%	64%	50%	53%	58%	49%	55%	45%	40%	58%

**B2 And what factors do you think are most likely to limit your business over the next 12 months? Unprompted, multiple response**

Base: All employers

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
Insufficient demand/uncertainty in the economy	25%	21%	24%	29%	31%	25%	26%	21%	19%	35%
High level of competition from other companies	6%	10%	12%	2%	1%	9%	5%	5%	5%	8%
Labour shortages	14%	8%	21%	8%	3%	8%	22%	<b>25%</b>	17%	5%
Weather conditions	2%	*%	0%	5%	1%	5%	*%	*%	4%	7%
Shortages of materials/equipment	1%	2%	*%	0%	4%	1%	1%	0%	*%	3%
Cash flow	3%	6%	8%	2%	9%	0%	4%	2%	1%	*%
Taxation	1%	0%	4%	0%	0%	0%	1%	0%	0%	0%
Lack of funding/finance	3%	1%	1%	4%	8%	3%	*%	5%	9%	4%
Access to skilled workforce	8%	11%	4%	7%	10%	8%	7%	8%	13%	7%
Size of business/premises	1%	2%	0%	2%	0%	*%	*%	2%	0%	*%
Regulations/red-tape	3%	6%	1%	*%	1%	6%	2%	5%	7%	4%
Lack of advertising/marketing	1%	0%	0%	*%	0%	2%	0%	2%	0%	0%



Late payments from clients	*%	*%	0%	1%	*%	0%	0%	0%	0%	0%
Cost of raw materials/equipment	1%	2%	3%	2%	0%	0%	*%	0%	0%	0%
Product pricing	1%	2%	0%	1%	8%	*%	1%	0%	*%	*%
Tendering process	*%	2%	0%	0%	0%	0%	0%	0%	0%	*%
Personal issues (inc. poor health/old age)	1%	0%	0%	0%	0%	2%	2%	4%	0%	0%
Training issues	1%	2%	3%	0%	3%	*%	2%	*%	5%	0%
Time constraints	1%	0%	0%	0%	9%	0%	0%	2%	0%	0%
Location of business	1%	0%	*%	2%	0%	2%	*%	0%	0%	0%
Availability of land	*%	0%	0%	0%	0%	*%	0%	0%	0%	0%
Political factors inc. EU referendum	4%	2%	*%	4%	0%	4%	5%	4%	0%	6%
Government procurement	*%	2%	0%	0%	0%	0%	0%	0%	0%	0%
Fuel prices	1%	2%	0%	*%	0%	3%	*%	0%	0%	0%
Other	7%	4%	12%	11%	3%	11%	6%	5%	*%	8%
Nothing	26%	31%	25%	33%	30%	21%	26%	17%	37%	19%



**C1 Thinking about skills over the last 12 months, which one of the following comes closest to the situation for this establishment?**

**Base: All employers**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
For all or most of the last 12 months we did not have enough skilled workers for the work we had or could have had	8%	9%	4%	13%	8%	7%	5%	10%	13%	0%
For some of that time we did not have enough skilled workers	18%	15%	12%	16%	18%	9%	25%	27%	18%	21%
For most of the last 12 months we have been operating at or near full capacity	63%	63%	79%	60%	60%	64%	67%	56%	59%	66%
For most of the last 12 months we have not had sufficient work for our workforce	9%	13%	5%	10%	15%	16%	3%	7%	10%	12%
Unsure	1%	0%	0%	2%	0%	5%	*%	*%	*%	0%

**C3 In the last 12 months, which of the following steps, if any, have you taken to try and tackle a lack of skilled workers?**

**Base: All employers**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
You have tried to recruit experienced, skilled employees i.e. direct labour	47%	32%	51%	51%	38%	47%	56%	47%	47%	40%
You have tried to recruit skilled self-employed or other indirect labour	40%	40%	27%	45%	35%	39%	43%	43%	49%	32%
You have tried to recruit Apprentices or less experienced staff to train up	36%	29%	27%	27%	27%	39%	41%	40%	37%	54%
You have sub-contracted work	56%	57%	60%	56%	46%	54%	63%	50%	49%	59%
You have turned work down	42%	46%	52%	36%	35%	34%	41%	59%	36%	34%



You have tried to recruit any skilled or experienced direct/indirect labour	56%	53%	51%	59%	39%	59%	62%	56%	61%	50%
None of these	15%	16%	9%	20%	33%	19%	11%	14%	13%	5%

**C4. In the last 12 months, has this establishment recruited any new direct employees?**

**Base: All employers**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
Yes	39%	34%	39%	37%	58%	28%	43%	39%	38%	48%
No	61%	66%	61%	63%	42%	72%	57%	61%	62%	52%
Can't recall	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

**C5. Of these recruits, were any taken on to their first job on leaving school, college or university?**

**Base: Where have recruited**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	508	62	35	80	26	61	94	66	47	37
Yes	26%	36%	33%	15%	28%	25%	25%	26%	22%	26%
No	74%	64%	67%	85%	72%	75%	75%	74%	78%	74%
Don't know	*%	0%	0%	0%	0%	*%	*%	0%	*%	0%

**C5. Of these recruits, were any taken on to their first job on leaving school, college or university?**

**Base: All employers**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
Yes	10%	12%	13%	6%	17%	7%	11%	10%	9%	13%
No	90%	88%	87%	94%	83%	93%	89%	90%	91%	87%
Don't know	*%	0%	0%	0%	0%	*%	*%	0%	*%	0%



**C7/C8. Summary of recruitment of under 25's and education leavers**

**Base: Where have recruited**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	508	62	35	80	26	61	94	66	47	37
Have recruited anyone else under 25 not into their first job	7%	<b>15%</b>	12%	4%	5%	3%	7%	11%	5%	2%
Have recruited anyone under 25	36%	27%	35%	44%	6%	33%	34%	48%	36%	38%
Have not recruited anyone under 25 not into their first job	57%	58%	53%	52%	<b>89%</b>	64%	60%	41%	59%	60%

**C9. You mentioned that you tried to recruit skilled employees/self-employed staff in the last 12 months. Were any of these vacancies hard-to-fill**

**Base: Where have tried to recruit skilled/ self-employed staff**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	629	79	41	102	30	81	115	78	57	46
Yes	46%	<b>62%</b>	66%	40%	29%	38%	44%	<b>66%</b>	26%	35%
No	52%	38%	34%	59%	69%	58%	54%	34%	67%	64%
Don't know	2%	0%	0%	1%	1%	4%	2%	*%	7%	1%

**C9. You mentioned that you tried to recruit skilled employees/self-employed staff in the last 12 months. Were any of these vacancies hard-to-fill?**

**Base: All employers**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
Yes	29%	37%	33%	25%	21%	25%	31%	39%	18%	22%
No	70%	63%	67%	74%	78%	72%	68%	61%	78%	78%
Don't know	1%	0%	0%	1%	1%	3%	1%	0%	4%	0%





D2 & D3. Whether business has skills gaps										
Base: All employers										
	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
Have skills gaps	19%	8%	19%	21%	18%	16%	25%	24%	17%	23%
No skills gaps	81%	92%	81%	79%	82%	84%	75%	76%	83%	77%
E1. Over the next 12 months do you expect to need to acquire new skills or knowledge as a result of ...?										
Base: All employers										
	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
The development of new products and services	42%	33%	25%	50%	35%	40%	46%	50%	49%	32%
New Eco/Energy saving design/build methods	39%	26%	31%	41%	40%	38%	49%	47%	39%	34%
The introduction of new working practices	54%	46%	35%	56%	61%	55%	60%	57%	60%	52%
The introduction of new technologies or equipment	53%	48%	46%	61%	62%	52%	57%	47%	48%	57%
New legislative or regulatory requirements	62%	59%	51%	62%	57%	57%	70%	70%	69%	58%
Increased competitive pressure	32%	27%	21%	42%	42%	23%	31%	39%	32%	30%
Business management	33%	31%	36%	39%	37%	35%	31%	39%	19%	20%
Environment requirements	40%	41%	33%	48%	15%	40%	38%	48%	37%	30%
Other reasons	2%	3%	3%	1%	2%	3%	2%	1%	0%	3%
Any of these	79%	85%	62%	80%	69%	76%	85%	83%	75%	78%
None of the above	21%	15%	<b>38%</b>	20%	31%	24%	15%	17%	25%	22%



### E3. Which skills do you feel will need improving or updating amongst your staff over the next 12 months?

Base: Where have employees that need to acquire new skills or knowledge

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	668	91	41	111	29	78	123	91	54	50
Health and safety (inc. asbestos) and first aid	26%	32%	32%	17%	27%	27%	29%	16%	28%	34%
Technical/trade specific	17%	15%	20%	12%	22%	27%	12%	23%	14%	15%
Legislation/regulations	22%	17%	34%	24%	4%	20%	21%	32%	19%	18%
Management/business skills	8%	10%	1%	9%	15%	10%	4%	14%	9%	4%
New or different products/markets/branch out	10%	10%	7%	9%	3%	14%	9%	6%	15%	14%
IT/new software	13%	13%	14%	15%	3%	22%	6%	11%	<b>27%</b>	8%
Green/ecological products and/or practices	5%	*%	*%	2%	*%	4%	8%	6%	<b>16%</b>	5%
Sales/marketing	4%	3%	0%	2%	*%	<b>12%</b>	2%	5%	5%	0%
General/all sorts	18%	15%	10%	19%	28%	7%	22%	23%	18%	16%
Other	1%	2%	0%	0%	4%	*%	0%	*%	1%	0%
Nothing to be improved	11%	15%	12%	11%	12%	7%	10%	14%	11%	12%
Don't know	5%	*%	*%	7%	2%	7%	8%	1%	2%	9%



**F1/F2. Over the past 12 months have you funded or arranged any off-the-job or on-the-job training or development or informal training for yourself or staff?**

**Base: All employers**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
Off the job	53%	51%	30%	62%	30%	68%	54%	47%	52%	57%
On the job	42%	34%	32%	50%	40%	30%	40%	46%	56%	53%
Both	31%	26%	24%	41%	16%	25%	31%	30%	41%	37%
Either	64%	59%	38%	71%	55%	73%	63%	63%	67%	74%
Off the job only	22%	25%	6%	22%	15%	<b>43%</b>	23%	17%	11%	20%
On the job only	11%	9%	8%	9%	24%	5%	9%	16%	15%	16%
Neither	36%	41%	<b>62%</b>	29%	45%	27%	37%	37%	33%	26%

**F5. Proportion of all staff that have had off-the-job training**

**Base: All employees**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	36144	5950	2380	5779	1606	5080	3826	5538	4187	1798
Off-the-job training	39%	45%	35%	37%	35%	46%	37%	28%	40%	55%

**F8. Proportion of all staff that have had on-the-job training**

**Base: All employees**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	36144	5950	2380	5779	1606	5080	3826	5538	4187	1798
On-the-job training	34%	54%	43%	30%	37%	33%	25%	21%	28%	40%



<b>F6/F9. Proportion of days spent doing on or off the job training</b>										
<b>Base: All training days</b>										
	<b>England</b>	<b>East Of England</b>	<b>East Midlands</b>	<b>London</b>	<b>North East</b>	<b>North West</b>	<b>South East</b>	<b>South West</b>	<b>West Midlands</b>	<b>Yorkshire and Humber</b>
Unweighted bases	6595	518	314	898	346	772	1753	620	452	922
Off-the-job training	32%	50%	58%	58%	17%	69%	25%	27%	32%	13%
On-the-job training	68%	50%	42%	42%	83%	31%	75%	73%	68%	87%
<b>F10/F11/F14/F15. Whether trained to Nationally recognised qualifications</b>										
<b>Base: All employers</b>										
	<b>England</b>	<b>East Of England</b>	<b>East Midlands</b>	<b>London</b>	<b>North East</b>	<b>North West</b>	<b>South East</b>	<b>South West</b>	<b>West Midlands</b>	<b>Yorkshire and Humber</b>
Unweighted bases	807	103	56	137	37	97	144	104	69	60
Nationally recognised qualification	27%	27%	22%	28%	21%	27%	23%	32%	20%	37%
NVQ or SVQ	18%	15%	22%	17%	10%	18%	16%	23%	17%	22%
HNC or HND	4%	4%	8%	5%	4%	1%	3%	2%	1%	5%
Degree	2%	4%	*%	1%	3%	3%	2%	2%	1%	4%
None of these	73%	73%	78%	72%	79%	73%	77%	68%	80%	63%
<b>F10/F11/F14/F15. Whether trained to Nationally recognised qualifications</b>										
<b>Base: Where funded/ arranged any training</b>										
	<b>England</b>	<b>East Of England</b>	<b>East Midlands</b>	<b>London</b>	<b>North East</b>	<b>North West</b>	<b>South East</b>	<b>South West</b>	<b>West Midlands</b>	<b>Yorkshire and Humber</b>
Unweighted bases	629	77	37	112	28	78	110	81	57	49
Nationally recognised qualification	42%	46%	59%	39%	39%	36%	37%	50%	30%	51%
NVQ or SVQ	28%	25%	58%	23%	19%	24%	25%	36%	26%	30%
HNC or HND	6%	6%	21%	7%	8%	2%	5%	3%	1%	7%
Degree	3%	7%	1%	2%	5%	3%	3%	3%	1%	6%
None of these	58%	54%	41%	61%	61%	64%	63%	50%	70%	49%



**F16. And does this establishment/business formally assess whether the training and development received by an employee has an impact on his or her performance?**

Base: Where provided training for any staff

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	615	76	37	106	28	74	109	81	56	48
Yes	63%	50%	81%	56%	60%	63%	64%	64%	61%	78%
No	36%	46%	19%	44%	40%	33%	36%	36%	39%	18%
Don't know	2%	4%	0%	*%	0%	4%	1%	*%	*%	4%

**F17. Still excluding any apprentices, but thinking about all training in the last 12 months, which of the following types of training provision have you or your staff used in the last year?**

Base: Where funded/arranged any training

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	629	77	37	112	28	78	110	81	57	49
Training delivered by an FE college	20%	19%	<b>44%</b>	13%	20%	22%	25%	17%	21%	13%
Training delivered by Higher Education	13%	15%	24%	17%	12%	2%	7%	<b>25%</b>	16%	6%
Training delivered by the National Construction College (NCC)	12%	14%	13%	13%	4%	15%	11%	14%	8%	3%
Training provided by any other private training provider	65%	69%	67%	66%	67%	63%	64%	57%	67%	69%
Training provided by a manufacturer or supplier	43%	44%	55%	55%	23%	29%	46%	43%	38%	34%
Other off-the-job training such as courses or formal instruction	57%	61%	74%	66%	59%	45%	57%	46%	60%	52%
Learning or training where a more experienced worker demonstrates techniques and passes on skills to less experienced staff while working alongside them on-the-job	70%	68%	67%	75%	60%	64%	66%	70%	87%	69%



Any self-learning where staff study using books, manuals, CD-ROMs or other materials	57%	69%	50%	64%	57%	49%	53%	52%	54%	61%
Training provided by a Professional Institution	51%	53%	79%	68%	52%	41%	37%	50%	58%	39%
Training delivered by/ through an industry federation/ body	23%	24%	42%	25%	11%	21%	25%	21%	23%	20%
None of the above	3%	0%	9%	3%	0%	7%	3%	3%	1%	4%

**F19. If you could have done, would you have provided MORE training for staff than you were able to over the last 12 months?**

**Base: Where funded/arranged any training**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	629	77	37	112	28	78	110	81	57	49
Yes	49%	44%	40%	56%	39%	41%	52%	64%	33%	44%
No	51%	56%	60%	44%	61%	59%	48%	36%	67%	56%
Don't know	*%	1%	0%	*%	0%	0%	*%	0%	0%	0%

**G3. Do you currently have any staff undertaking Apprenticeships at this site?**

**Base: Where have employees and have heard of apprenticeships**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	637	81	46	95	30	78	119	83	55	50
Yes	23%	22%	44%	14%	8%	28%	22%	30%	21%	13%
No	77%	78%	56%	86%	92%	69%	78%	69%	79%	87%
Don't know	*%	*%	*%	0%	0%	3%	*%	*%	1%	0%



**G4. Do you currently offer (Modern) Apprenticeships at this site?**

Base: Where have employees and have heard of apprenticeships but do not currently have any apprentices

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	385	48	21	69	18	40	82	43	32	32
Yes	15%	5%	12%	3%	28%	<b>36%</b>	9%	20%	19%	23%
No	85%	<b>95%</b>	88%	<b>97%</b>	72%	64%	91%	80%	81%	77%
Don't know	*%	*%	0%	*%	0%	0%	0%	0%	0%	0%

**G8. Thinking about the next 12 months, how likely is it that you/ this establishment will have someone starting an Apprenticeship?**

Base: Where construction sector

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	637	81	46	95	30	78	119	83	55	50
Very likely	15%	9%	19%	8%	17%	21%	12%	23%	23%	11%
Quite likely	19%	10%	24%	27%	17%	18%	22%	14%	7%	22%
Not very likely	25%	27%	13%	32%	31%	16%	21%	30%	25%	24%
Not at all likely	40%	54%	44%	31%	35%	36%	44%	32%	44%	39%
Don't know	2%	*%	1%	2%	0%	9%	*%	*%	1%	4%





**H1/1. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased: Expenditure on training per employee**

**Base: Where funded/arranged any training**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	629	77	37	112	28	78	110	81	57	49
Increased	46%	53%	70%	40%	35%	38%	59%	43%	56%	30%
Stayed the same	49%	43%	27%	59%	47%	59%	35%	51%	36%	61%
Decreased	4%	4%	2%	1%	19%	3%	3%	1%	8%	9%
Don't know	2%	*%	*%	1%	0%	*%	3%	5%	*%	1%

**H1/2. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased: Proportion of employees provided with training**

**Base: Where funded/arranged any training**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	629	77	37	112	28	78	110	81	57	49
Increased	38%	56%	60%	35%	35%	25%	46%	27%	29%	34%
Stayed the same	58%	40%	39%	60%	60%	72%	48%	72%	71%	53%
Decreased	4%	4%	1%	3%	5%	3%	5%	1%	*%	13%
Don't know	1%	*%	*%	2%	0%	*%	0%	0%	*%	*%



**H1/3. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased: Proportion of employees' training delivered by external providers**

**Base: Where funded/arranged any training**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	629	77	37	112	28	78	110	81	57	49
Increased	39%	56%	71%	31%	32%	35%	41%	32%	54%	20%
Stayed the same	55%	39%	28%	58%	61%	59%	54%	63%	44%	70%
Decreased	5%	4%	1%	9%	7%	3%	3%	5%	2%	5%
Don't know	2%	0%	*%	2%	0%	4%	2%	0%	*%	5%

**H1/4. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased: Emphasis placed on informal learning**

**Base: Where funded/arranged any training**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	629	77	37	112	28	78	110	81	57	49
Increased	27%	24%	14%	25%	38%	21%	42%	34%	17%	21%
Stayed the same	65%	66%	85%	63%	56%	72%	55%	66%	83%	61%
Decreased	4%	7%	1%	7%	1%	3%	*%	0%	1%	13%
Don't know	3%	3%	*%	5%	5%	4%	3%	0%	*%	5%



**H1/5. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased: Amount of training that leads to recognised qualifications**

**Base: Where funded/arranged any training**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	629	77	37	112	28	78	110	81	57	49
Increased	27%	32%	38%	16%	45%	12%	37%	27%	25%	37%
Stayed the same	67%	67%	61%	79%	55%	78%	55%	64%	69%	57%
Decreased	5%	*%	1%	5%	0%	6%	6%	9%	*%	6%
Don't know	1%	*%	0%	*%	0%	4%	2%	0%	6%	*%

**H1/6. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased: Number of Apprentices and new trainees recruited by your establishment**

**Base: Where have direct employees and offer apprenticeships**

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	306	38	28	30	16	50	46	46	28	24
Increased	37%	32%	49%	21%	10%	43%	58%	28%	44%	21%
Stayed the same	52%	66%	39%	66%	51%	39%	41%	65%	56%	54%
Decreased	11%	2%	12%	13%	39%	19%	1%	7%	*%	26%
Don't know	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%



H1/7. Finally, we are interested to know what trends you have experienced in training spend and training delivered at this establishment in the last 12 months? Please tell me if each of the following has increased, stayed the same or decreased: Number of staff employed at your establishment

Base: All employers

	England	East Of England	East Midlands	London	North East	North West	South East	South West	West Midlands	Yorkshire and Humber
Unweighted bases	807	103	56	137	37	97	144	104	69	60
Increased	23%	22%	22%	21%	35%	25%	26%	17%	26%	27%
Stayed the same	65%	69%	63%	71%	61%	65%	65%	69%	52%	58%
Decreased	11%	10%	14%	9%	4%	7%	9%	14%	18%	11%
Don't know	1%	0%	0%	0%	0%	3%	*%	0%	4%	4%

Study prepared by BMG Research from a commission by CITB.



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