

# People power sector report

## Digital





**20k**  
new jobs in  
programming and  
software  
development



# Introduction

As Britain prepares itself to broker a new relationship with the EU, the skills gaps and shortages we have grappled with for years look set to increase significantly. This uncertainty is particularly difficult for certain industries who are most heavily reliant on a steady flow of international labour and haven't yet built up the right infrastructure to home-grow the talent they need.

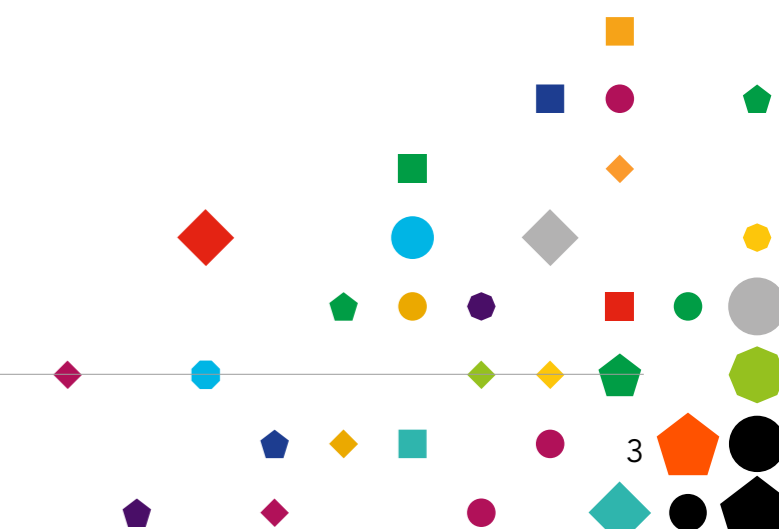
There are a number of highly skilled and highly paid jobs in the information and communication sector, and the number of those roles is expected to rise in the future. For example, we can expect to see around 20,215 new jobs in programming and software development and around 13,013 new jobs for information technology and telecommunications professionals. Each of these roles often pays an hourly wage well in excess of the national average.

Specialist roles such as digital analysts, marketing and IT staff are among the most difficult to fill across all industry sectors that we researched, with almost a third (32%) of employers saying they struggle to find the right people for these roles. Within the information and communication sector this rises to 34% of employers who struggle to find these specialists to join their business.

Within this sector, employers believe that this struggle to recruit skilled workers will be the primary factor impacting the productivity of their business over the next three to five years. The biggest impact that skills gaps have on their business is higher operating costs and increased salaries, rather than the loss of business to competitors, which had the least impact.

To better understand the skills gaps and shortages currently facing businesses in the information and communication sector, we spoke to employers about their growth plans, skills and development issues, and factors affecting their ability to succeed.

What emerged was a strong belief in the power of training, where almost two thirds of employers say that companies need to invest more in training their staff in order to tackle skills gaps in the UK. Information and communications was the industry sector most likely to name this as a solution to skills gaps.



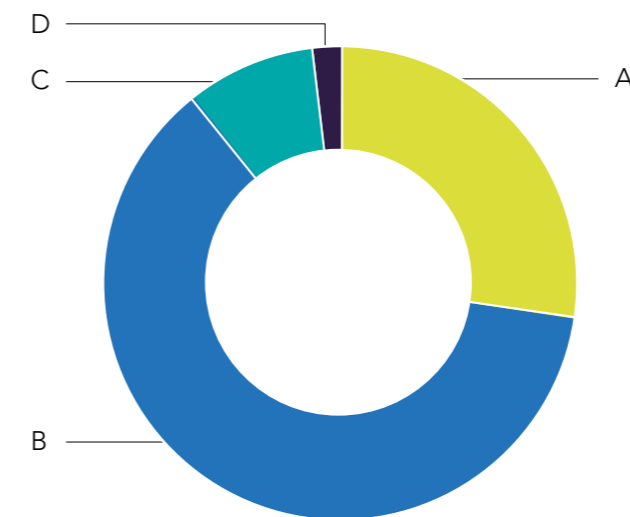
# Quantitative findings

1. Will your business grow in the next 12 months?
2. What internal factors might impact upon the productivity of your business over the next three to five years?
3. What external factors might impact upon the ability of your business to grow over the next three to five years?
4. What type of roles are you planning to recruit for in the next three to five years?
5. Do you currently struggle to recruit the skilled staff you need?
6. If yes, which job levels do you struggle to recruit most?
7. If yes, why do you have problems recruiting skilled staff?
8. In the next three to five years do you believe skills gaps in your business are likely to change?
9. What kind of impact do skills gaps have on your business?
10. How effective are the measures you have in place to address skills gaps in your business?
11. If you anticipate having to increase salaries to get the skilled staff you need in the next one to three years, how much do you think you will have to increase salaries by?
12. How do you encourage entrants to the workplace in your business?
13. What kind of training do you offer your staff?
14. What value do your training programmes bring to the business?
15. Currently what percentage of your staff come from the European Union?
16. What measures have you put in place, if any, to mitigate the negative impact of Brexit on your business's ability to recruit skilled people (tick all that apply)?
17. How do you believe that the skills gaps should be tackled in the UK?
18. Which piece of Government policy do you think will be most effective at tackling skills gaps?



## 1. Will your business grow in the next 12 months?

89% of employers in the information and communication sector anticipate either significant or moderate growth in 2018/19, while almost 10% say that growth will remain flat. Just 3% expect their businesses to shrink.

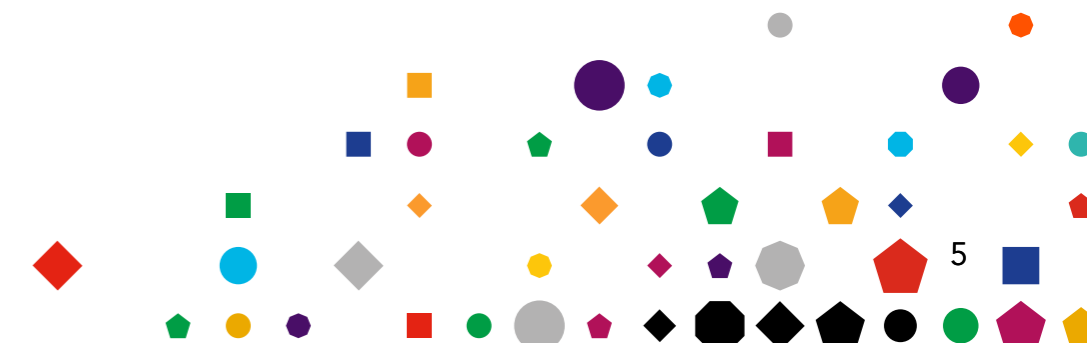


A. We will grow significantly	28%
B. We will grow moderately	61%
C. We will remain the same	8%
D. We will shrink moderately	3%
E. We will shrink significantly	-
F. Other, please specify	-



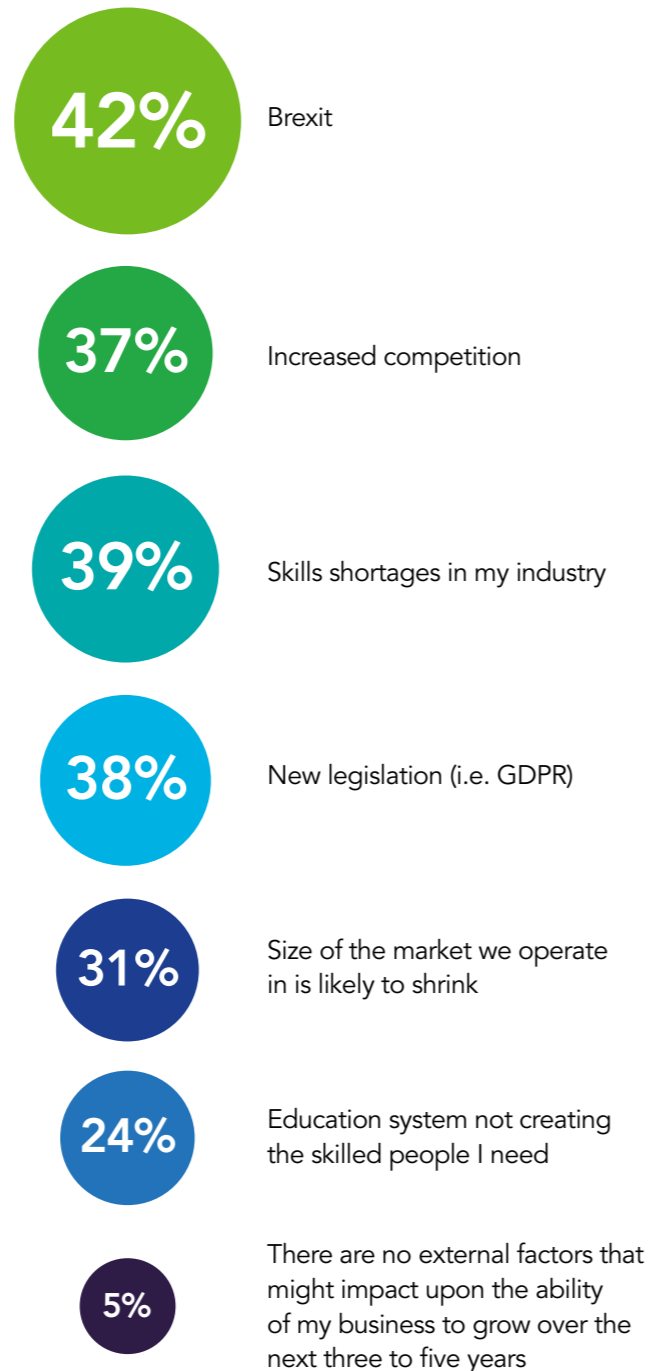
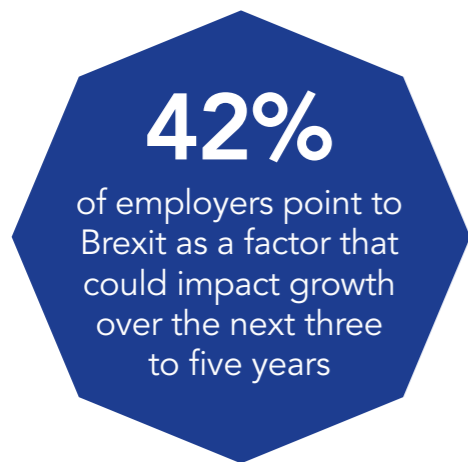
## 2. What internal factors might impact upon the productivity of your business over the next three to five years?

Recruitment is a significant concern for 41% of employers in this sector, who claim that their struggle to recruit skilled staff has a direct impact on productivity. Around the same amount (40%) are also concerned with limitations of their existing staff, who do not have the right skillset.



### 3. What external factors might impact on the ability of your business to grow over the next three to five years?

Brexit dominates concerns for employers in this sector, with 42% identifying it as the single greatest factor that could impact the ability of their business to grow in the next three to five years. However, skills shortages and new legislation are also major factors that could impact productivity, according to 39% and 38% of employers respectively. And an increase in competition was identified by 37% of employers in this sector.



### 4. What type of roles are you planning to recruit for in the next three to five years?

It's no surprise that the information and communication sector plans to recruit specialists, such as digital analysts, marketers and IT experts, in the next three to five years (according to 44% of employers). However, on-the-job trainees, in the form of apprentices, are almost as popular, with 41% of employers planning to recruit them in the medium term. Graduates, too, are predicted to be in demand by 38% of employers, the same amount who will be seeking extra managerial support.



**41%**  
Apprentices (on a training scheme)

**44%**  
Specialists (non-managerial) ie: digital analysts, engineers, marketing, IT

**28%**  
Experienced core staff ie: secretaries, security,

**38%**  
Managers

**38%**  
Graduates (on a graduate training scheme)

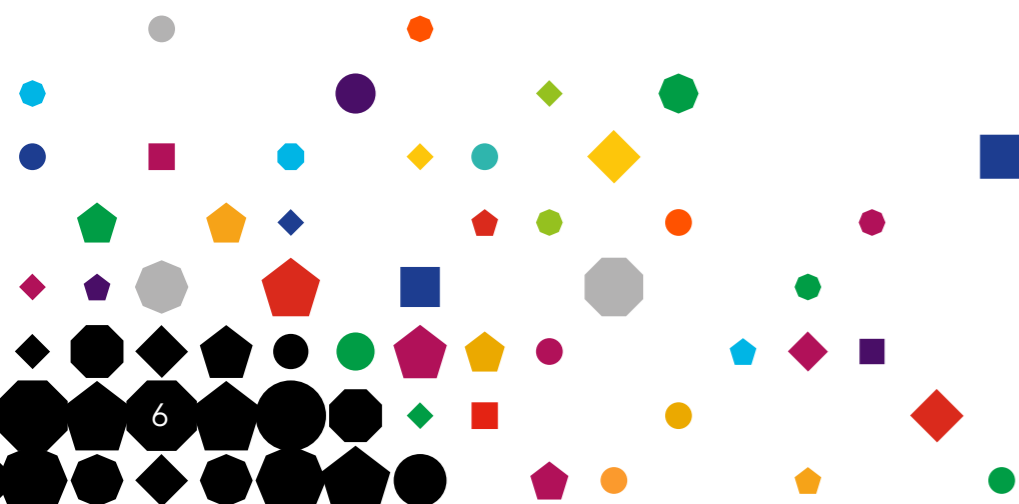
**34%**  
Team leaders

**27%**  
Entry level roles ie: school/college leavers

**37%**  
Traineeship (on a training scheme)

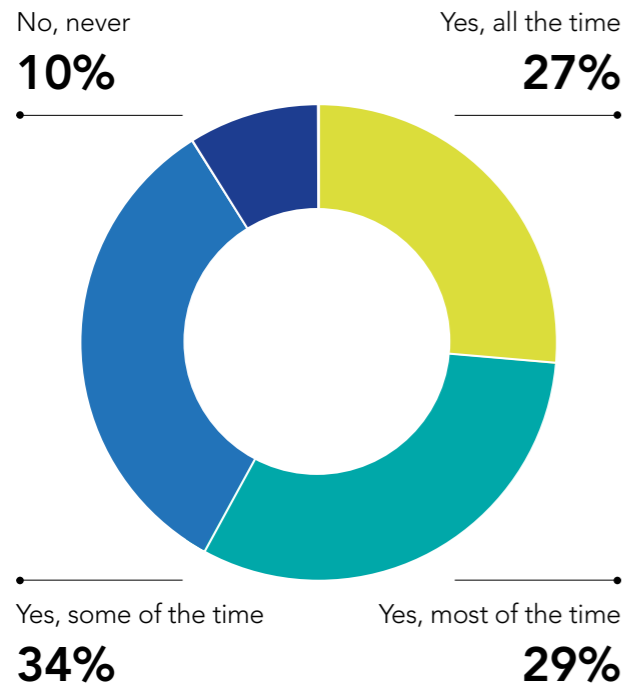
**28%**  
Senior leaders

**3%**  
There are no roles I am planning to recruit for in the next three to five years



### 5. Do you currently struggle to recruit the skilled staff you need?

90% of employers in this sector are currently experiencing difficulties in recruiting the skilled staff that they need.



### 6. If yes, which job levels do you struggle to recruit most?

The same type of staff that employers are planning to recruit in the next three to five years, they are currently struggling to attract to their businesses: non-managerial specialists. Around a quarter of employers are looking for staff at every level – graduate trainees, apprentices and senior staff, as well as core staff with experience in different skills.

Specialists (non-managerial) ie: digital analysts, engineers, marketing, IT	34%
Experienced core staff ie: secretaries, security,	25%
Managers	20%
Senior leaders	27%
Team leaders	16%
Apprentices (on a training scheme)	27%
Entry level roles ie: school/college leavers	19%
Graduates (on a graduate training scheme)	25%
Traineeship (on a training scheme)	16%
There is no job level I struggle to recruit for the most	2%
Other, please specify	—

### 7. If yes, why do you have problems recruiting skilled staff?

The sector is a competitive one, which causes recruitment problems for 38% of employers. 34% say that their business is in the wrong location to attract the skilled staff that they require, while the same amount say that they are being let down by the UK education system, which is not creating young people with the skills that are needed for a career in the sector.

High level of competition for skilled people in the area	37%
UK education system doesn't create the skills we need	34%
We can't compete on salaries/benefits	25%
The location of our business	34%
We aren't able to offer progression opportunities within the business	25%
We don't have the budget to train staff appropriately	9%
Our industry is not desirable	19%
I don't know	2%
Other, please specify	—

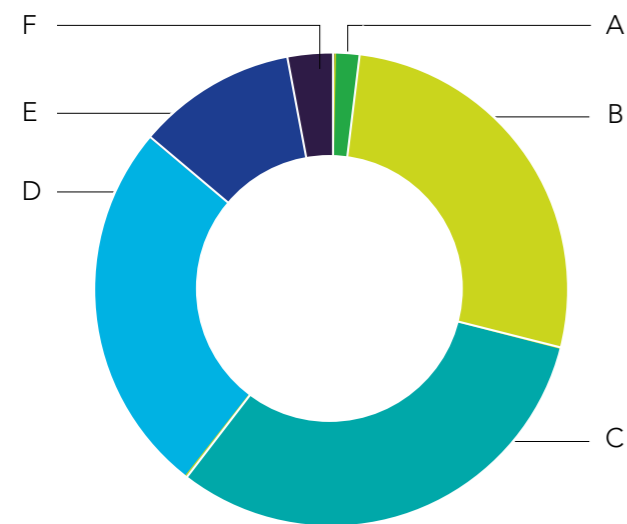


UK education system doesn't create the skills we need



### 8. In the next three to five years do you believe skills gaps in your business are likely to change?

Unusually, this sector is optimistic about the prospect of an improvement in skills gaps – 37% believe that they will get better in the medium term, compared with 29% who think that they will get worse.



A. Get much worse	2%
B. Get somewhat worse	27%
C. Stay the same	31%
D. Get somewhat better	25%
E. Get much better	11%
F. There are no skills gaps in my business	4%



### 9. What kind of impact do skills gaps have on your business?

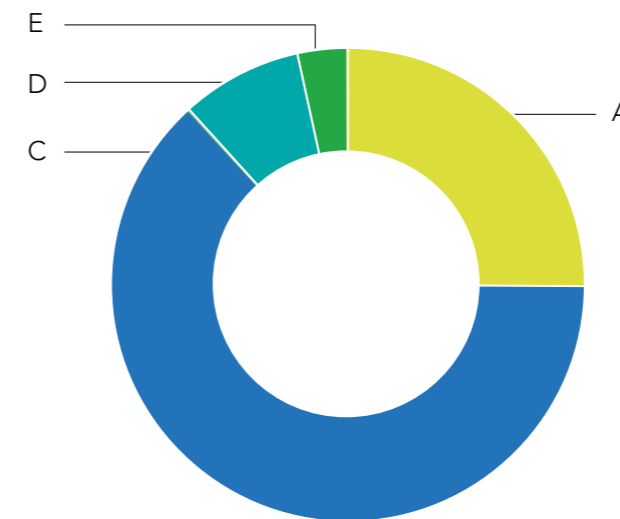
Employers in this sector experience higher operating costs due to skills gaps, perhaps as they increase salaries to attract and retain staff members. A third of employers also report that skills gaps mean that they have difficulty introducing new practices, or new technology, with wide-ranging implications for a sector that is new and technologically advanced.



### 10. How effective are the measures you have in place to address skills gaps in your business?

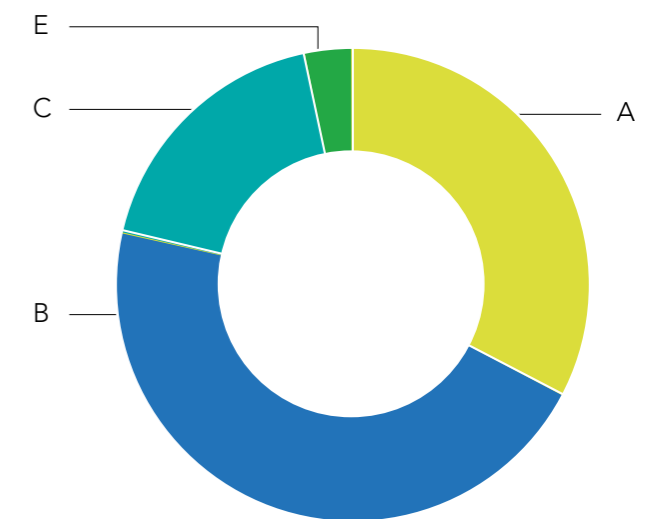
The most effective measure for addressing skills gaps, according to employers in this sector, is to have a structured talent management programme for staff. Just 4% of employers don't have this measure in place. Another popular tactic is to increase recruitment spend, presumably to ensure that they attract the best candidates, although the least effective measure is recruitment from overseas, which suggests that home-grown recruitment of talent is preferred.

#### We have a structured talent management programme

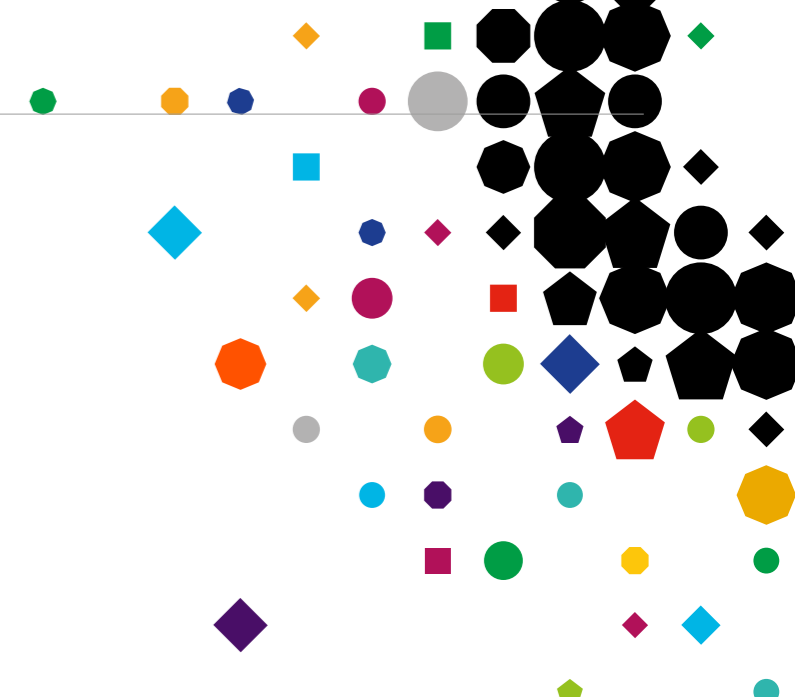


A. Very effective	25%
B. Somewhat effective	62%
C. Not very effective	9%
D. Not effective at all	–
E. We don't have this measure in place	4%

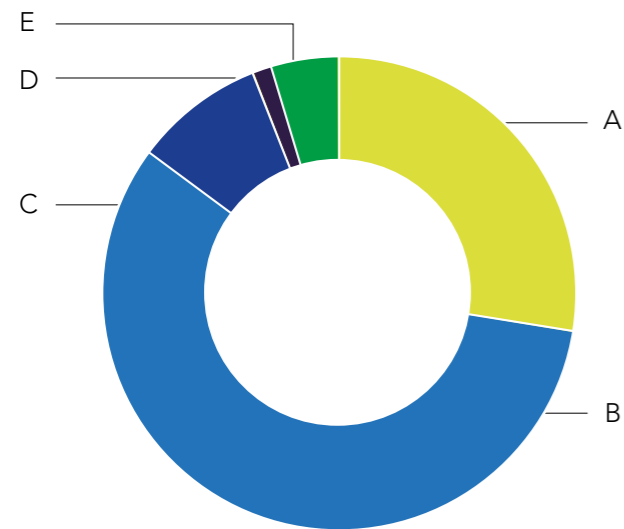
#### We invest in leadership and management training



A. Very effective	35%
B. Somewhat effective	44%
C. Not very effective	17%
D. Not effective at all	–
E. We don't have this measure in place	4%

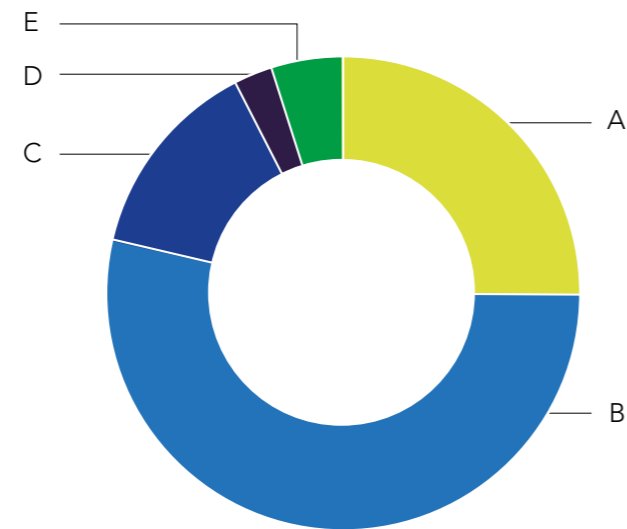


**We are increasing recruitment spend**



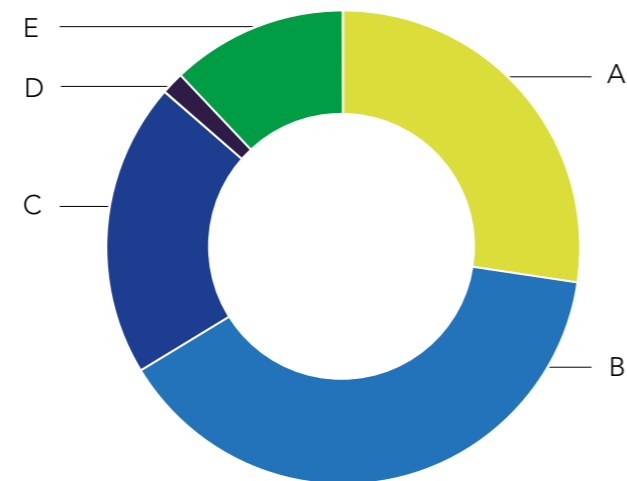
A. Very effective	<b>27%</b>
B. Somewhat effective	<b>56%</b>
C. Not very effective	<b>10%</b>
D. Not effective at all	<b>1%</b>
E. We don't have this measure in place	<b>6%</b>

**We are offering higher salaries**

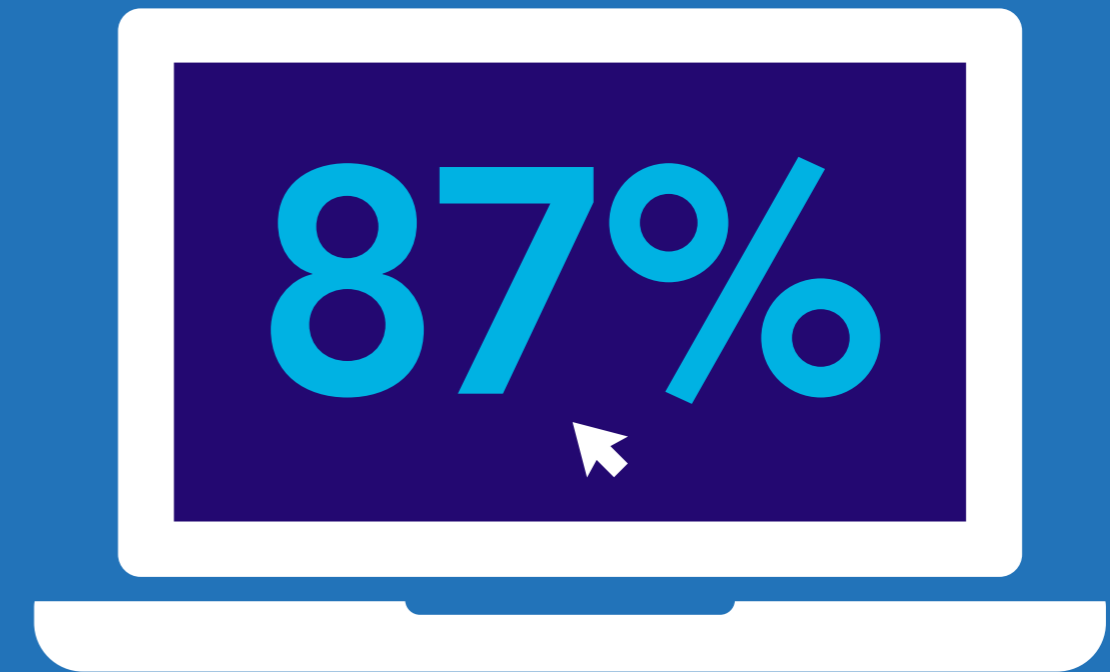


A. Very effective	<b>25%</b>
B. Somewhat effective	<b>53%</b>
C. Not very effective	<b>13%</b>
D. Not effective at all	<b>3%</b>
E. We don't have this measure in place	<b>6%</b>

**We recruit staff from overseas**



A. Very effective	<b>27%</b>
B. Somewhat effective	<b>39%</b>
C. Not very effective	<b>18%</b>
D. Not effective at all	<b>2%</b>
E. We don't have this measure in place	<b>14%</b>



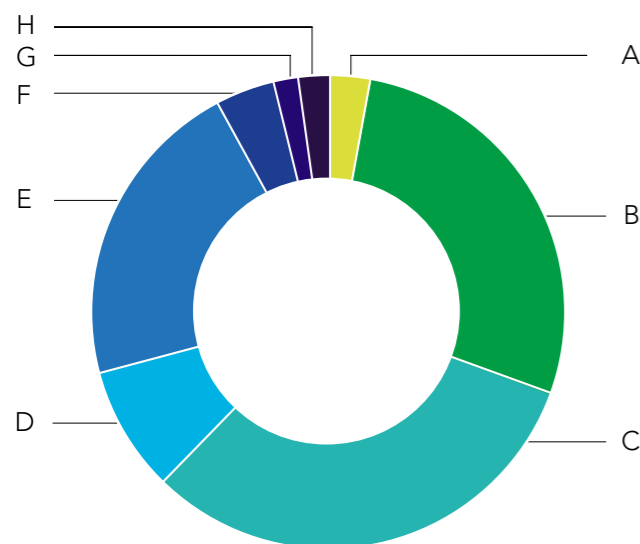
of employers believe a structured talent management programme is an effective tactic to address the skills gap in their business





### 11. If you anticipate having to increase salaries to get the skilled staff you need in the next one to three years, how much do you think you will have to increase salaries by?

Most employers in this sector anticipate increasing their salaries by 6%-20% in the next three years.



- A. 1% – 5% 4%
- B. 6% – 10% 28%
- C. 11% – 20% 30%
- D. 21% – 30% 15%
- E. 31% – 50% 10%
- F. 51% – 75% 7%
- G. 76% – 100% 3%
- H. I do not anticipate having to increase salaries to get the skilled staff I need in the next one to three years 3%

### 12. How do you encourage entrants to the workplace in your business?

Training programmes and direct recruitment are the most popular methods to encourage new entrants into the workplace. 39% of employers in this sector run a graduate programme, while more than a third opt for work placement and internships. Apprenticeships are also a popular option for sourcing new recruits, while employers also visit universities and encourage students to join the sector.



### 13. What kind of training do you offer your staff?

Employers in this sector favour on-the-job training through apprenticeships (49%), accredited training programmes (41%), and traineeships (39%). A third of employers also opt for creating the next generation of leaders and management through specialist training.

Apprenticeships	<b>49%</b>
In-house training programmes accredited by an awarding organisation (i.e City & Guilds)	<b>41%</b>
Traineeships	<b>39%</b>
Leadership and management	<b>34%</b>
Unaccredited in-house training programmes i.e. anti-bribery,	<b>28%</b>
Degree	<b>22%</b>
Masters / MBA	<b>18%</b>
License to practice i.e. construction, dentist	<b>11%</b>
We don't offer any training for our staff	<b>3%</b>
Other, please specify	<b>—</b>

# 49%

of employers favoured on-the-job training through apprenticeships





**47%**  
of employers said offering training has a direct positive impact on productivity



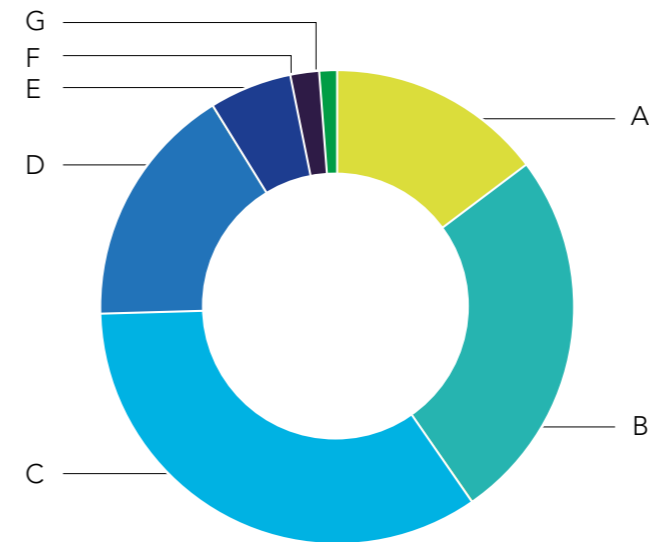
### 14. What value do your training programmes bring to the business?

Training has a direct positive impact on productivity, according to 51% of employers, and it leads to improvements or higher productivity, according to 46%. Another benefit is staff loyalty and retention, say 44% of employers. Customers benefit too, with 41% of employers reporting better customer service among staff when they introduce a training scheme.

Staff loyalty and retention	<b>44%</b>
Improved productivity	<b>51%</b>
Higher productivity	<b>46%</b>
Staff engagement	<b>30%</b>
Better customer service	<b>41%</b>
Increased staff well-being	<b>35%</b>
Reduced staff turnover	<b>23%</b>
Attraction of new talent	<b>27%</b>
Our training programme(s) bring no value to the business	—
Other, please specify	—

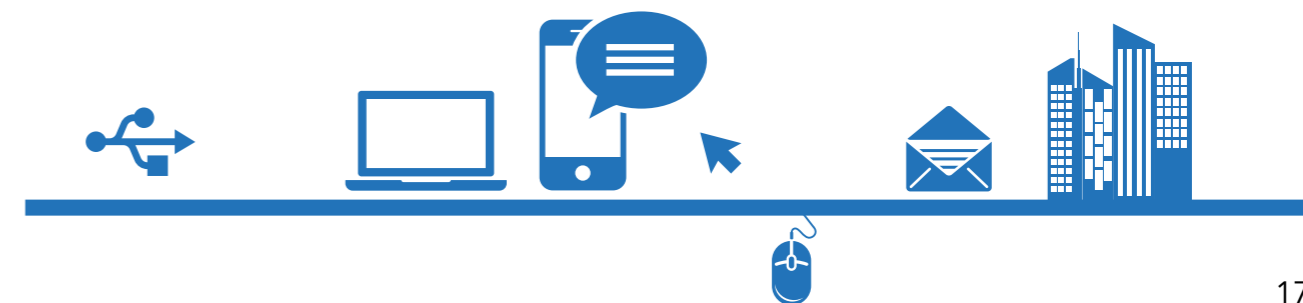
### 15. Currently what percentage of your staff come from the European Union?

85% of employers in this sector have staff from the European Union



A. None	<b>14%</b>
B. 1% - 10%	<b>25%</b>
C. 11% - 24%	<b>30%</b>
D. 25% - 49%	<b>18%</b>
E. 50% - 74%	<b>9%</b>
F. 75% - 100%	<b>3%</b>
G. I don't know	<b>1%</b>

**85%**  
of employers have staff from the European Union



### 16. What measures have you put in place, if any, to mitigate the negative impact of Brexit on your business's ability to recruit skilled people (tick all that apply)?

Employers in this sector are responding to Brexit by seeking out home grown talent. 31% are engaging with more schools to increase recruitment, while 28% are investing in upskilling their current workforce to fill in any gaps after Britain leaves the European Union. 27% of employers are taking direct measures – such as improving pay and offering better training opportunities – to make their business more attractive to UK workers.



We are going to upskill our current workforce	28%
We are taking steps to make our business more attractive to UK workers (e.g. improving pay and benefits, improving training and progression opportunities)	27%
We are increasing our apprenticeship numbers	22%
We are considering employing more international staff (from outside of the EU)	24%
We are taking steps to make our business more attractive to international workers (e.g. improving pay and benefits, improving training and progression opportunities)	20%
We are engaging more with schools to increase local recruitment	31%
We have not put any measures in place to mitigate the negative impact of Brexit on my business' ability to recruit skilled people	14%
We will have to outsource work	22%
I will redeploy staff from other parts of the business	17%
Greater automation	22%
We are considering relocating our business	18%
Other, please specify	1%

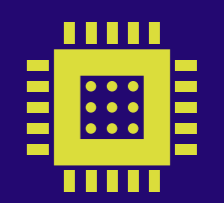
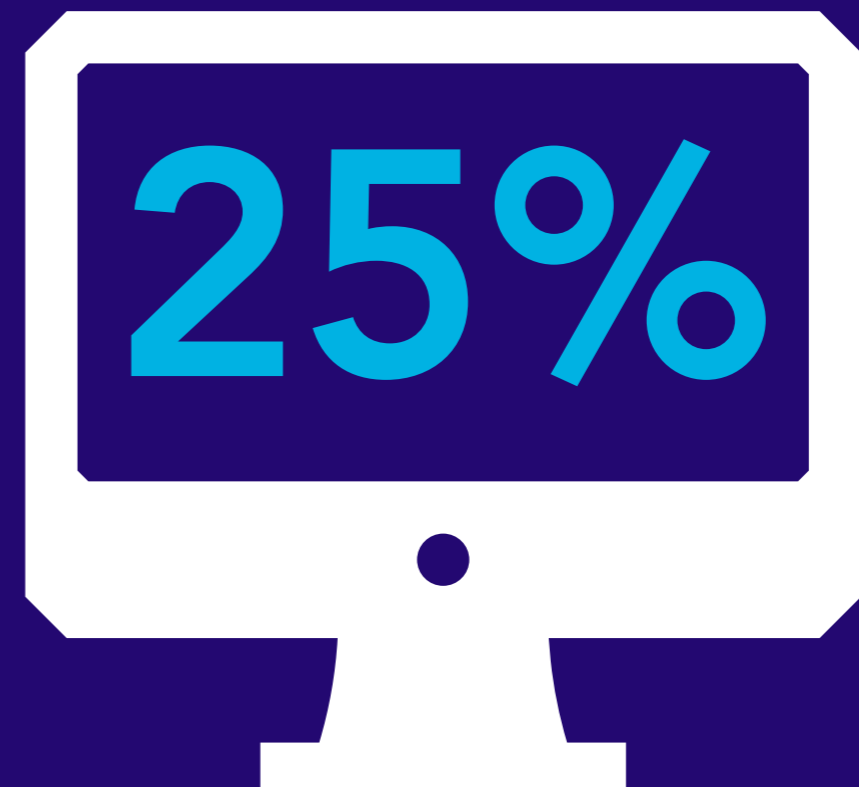
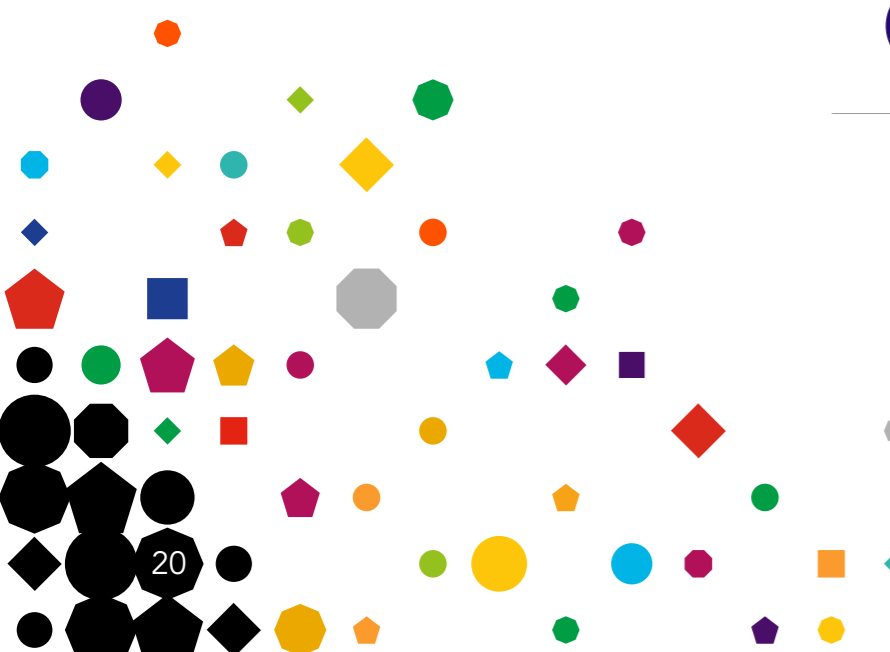
### 17. How do you believe that the skills gaps should be tackled in the UK?

The overwhelming majority of employers, around two-thirds, say that they key to tackling skills gaps is by companies investing more in training their staff. Around 40% think that business, the education sector and Government need to better collaborate, while just over a third (37%) put the onus on educational institutions to be better aligned with the needs of business.

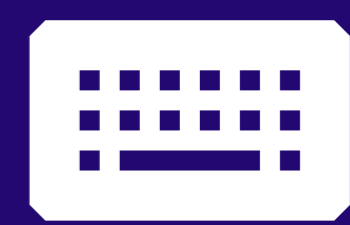
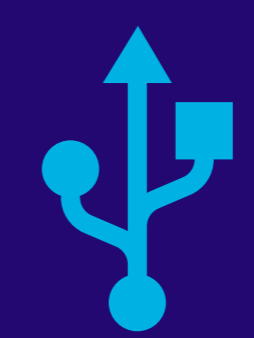


### 18. Which piece of Government policy do you think will be most effective at tackling skills gaps?

A quarter of employers in this sector look to devolution of skills to the regions as the most effective Government policy for tackling skills gaps. Just 15% favour the apprenticeship levy and 12% favour the National retraining scheme.



of employers look to devolution of skills to the regions as the most effective Government policy to tackle the skills gap.

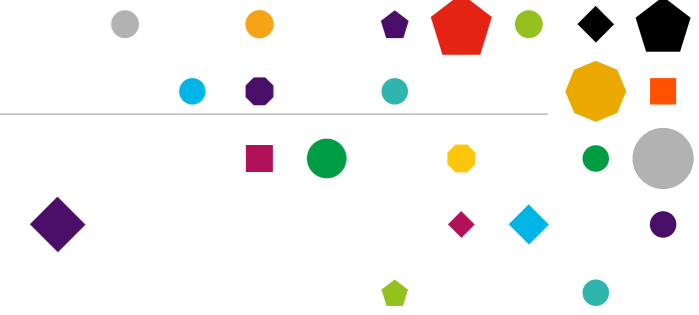
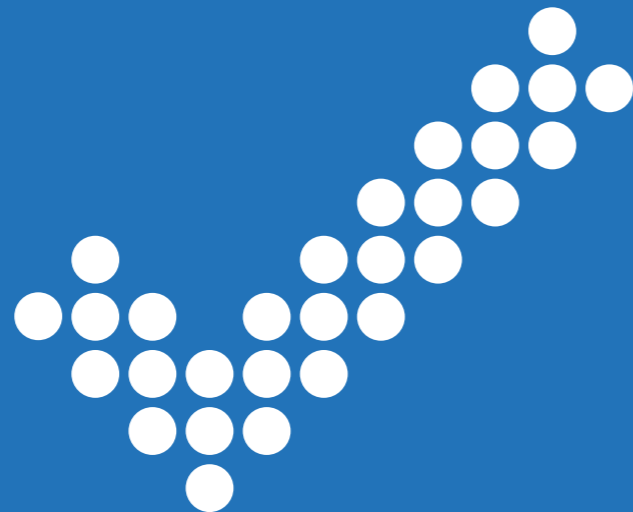


# Recommendations

Our research has shown that UK employers are facing significant challenges as a result of skills gaps and skills shortages. Brexit is on the horizon and remains a largely unknown quantity, productivity is lagging behind other developed nations and there is a very real threat that skills gaps could significantly impact the UK's ability to perform on a global scale. Added to this, increased digitalisation, AI and automation are also playing their roles in contributing to the current state of flux.

We have set out nine recommendations for Government, employers and the education sector which address the concerns raised in this report. We believe these will help to create a skills system that is fit-for-purpose and can support a thriving UK economy, both now and in the future.

The statistics given in our recommendations are from employers across all industries.



## 1. Careers education, information, advice and guidance (CEIAG) needs to be redesigned for the modern world

Despite just 19% of our respondents telling us that they believed the careers strategy was the most effective way to tackle skills gaps, there is clear evidence to show that a lack of co-ordinated careers advice and guidance is hampering young people's chances of securing a successful career. This in turn contributes to the skills shortages faced by 9/10 employers who responded to this research.

We need to rethink the way that CEIAG is delivered to young people today. Generation Z are digital natives who are adept at consuming data on smart phones and devices. Making greater use of digital channels will democratise access to information about careers, with young people from all areas of the country and all walks of life able to access the same information from the same sources whilst also making sharing of information more efficient for employers and Government alike

## 2. T Levels could help to reduce skills gaps and provide a good route into work for young people if they are better promoted and embedded

T Levels are, in theory, a positive policy intervention that, if implemented correctly, could support young people into meaningful careers with real progression whilst at the same time helping to reduce the skills shortages many industries are facing. However, Government must recognise that it's a real risk for young people to choose to study an untested qualification that is not widely understood by employers. We know from recent research with AELP that just 17% of employers have a good understanding of T Levels. Our research echoed these findings with just 8% of employers stating T Levels were an effective skills policy intervention.

The Government will need to invest heavily to promote T Levels to young people and their parents so that they achieve the desired take up. There is also more work to be done to distinguish them from apprenticeships and make it clear to employers why both routes into work are valid and needed. Finally, what distinguishes

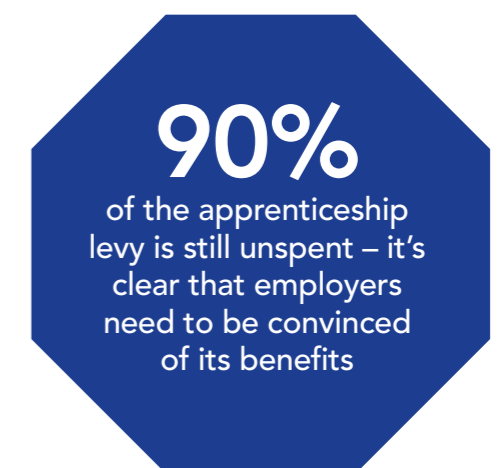
T Levels from other qualifications is the industry placement so it is essential Government provides enough financial support and guidance to ensure employers and providers can successfully deliver this essential element of the programme

## 3. Make the most of the apprenticeship levy to build a talented home-grown workforce and upskill employees at all levels

Brexit could create huge skills challenges particularly in sectors such as accommodation and food services, construction and retail.

The apprenticeship levy is an effective tool for developing home-grown talent and enabling people to progress through the workforce. However, with 90% of the levy still unspent it's clear that employers need to be convinced of its benefits. Employers should look at their talent development plans and see where the levy can be used to support reskilling and upskilling, as well as entry level recruitment.

Employers need greater support and advice from Government to help them recognise the benefits of apprenticeships and better understand how to access the system. Some thought should also be given to simplifying the current system, as employers have told us they find its complexity off-putting.





#### 4. Government should consider widening the apprenticeship levy to meet employer needs

Whilst the apprenticeship levy was the most popular of the current Government initiatives to tackle skills shortages, still only a fifth (21%) of our respondents stated that it was the most effective piece of policy.

There has been a significant amount of media coverage since the launch of the apprenticeship levy focusing on the fact that the new system does not fully meet the needs of employers.

Government must be willing to listen to employers to make sure that the new-system genuinely works for them. There is appetite from across industry to broaden the scope of the levy and Government must work with employers to understand how they want to use their levy to support skills development in their organisations. This may require employers to provide evidence of investment in apprenticeships to unlock some use of levy for other reskilling/upskilling programmes.

#### 5. Investing in training and development activity can have a significant impact on business performance

Our findings show that high-quality training programmes could help to tackle skills shortages by not only upskilling employees to do roles but also by encouraging current staff to stay with the business. Almost half (46%) of our respondents told us that their training programmes helped increase staff loyalty and retention.

Our findings also demonstrate that training helps to improve productivity within businesses (45% of employers agreed).

However, despite this proven business benefit, Britain has some of the lowest levels of employer investment in skills development in Europe with only Greece, Poland and Romania providing less employer-funded training. It is encouraging that almost half of respondents to the survey (45%) recognised that employers themselves need to invest more in training to help address skills gaps and Government and the education sector can play their part by demonstrating the value of skills investment through evidence-based case studies.



#### 6. Employers should consider investing in quality on-boarding and engagement programmes

As noted in the research 9/10 employers experienced problems with skills gaps, hanging onto the people that you have already managed to recruit will help to mitigate some of these issues.

It is estimated that on average one third of new employees leave within the first six months of taking up a new role<sup>1</sup>. Recruitment is expensive and laborious so having a comprehensive programme to pre-board, welcome and support new recruits into a business will mean that employers retain much more of the talent that they have invested so much time and effort in attracting.

Employers should consider allocating a buddy for new hires whilst they settle in, potentially elongating their on-boarding process to as long as a year and ensuring that staff have adequate access to any necessary training and advice needed to do their jobs effectively.

#### 7. Effective leaders and managers will be essential to help businesses navigate Brexit and in the post-Brexit world

Employers cited Brexit as the single most concerning external factor facing their business, with almost half (46%) of respondents stating it would impact their productivity in the coming years. This is coupled with other skilled labour immigration constraints, all of which require UK Plc to look inwards for recruitment and staff development.

Having effective leaders and managers in place during this tumultuous time will be critical in helping businesses navigate change and transition from a pre-Brexit to post-Brexit world. Yet employers told us that leader and manager posts were most difficult to fill with almost half (47%) stating that they struggled to recruit these roles.

Only a quarter of respondents (27%) told us that they were planning to upskill their current workforce to mitigate the impact of Brexit and just a third (34%) told us that they offered leadership and management training.

Employers who aren't already doing so, should consider putting in place a talent management programme to identify future managers and leaders within their own organisations. Through the use of diagnostics tools they can identify talent within organisations and begin to develop it. This in turn will help with staff retention and engagement.

#### 8. Training and development activity needs to be linked to business performance and its effectiveness constantly measured and evaluated

There was a clear mismatch between how effective employers believed their activity to develop skills was, with 77% stating that their talent management planning and management and leadership training activity was effective or very effective, with the incredibly high level of skills gaps and shortages that they were experiencing.

HR budgets and activity need to be seen as vital to business performance and HR departments must constantly measure their outcomes in terms of productivity and business performance



#### 9. An independent body is needed to have oversight of UK skills policy and make sure it meets current and future skills needs

Employers were less than enthusiastic about any existing policy interventions; our research showed that 10% of employers think no Government policy is effective at tackling skills gaps.

Even less (8%) felt T Levels would be effective and just 14% of respondents felt the National Retraining Schemes would be the most effective way of tackling skills gaps

Part of the issue is that skills policy is currently developed in different places and in silos, resulting in disjointed policy that is not as effective as it could be at meeting UK skills needs now and in the future. Government often also lacks the required level of buy-in from employers when implementing policy (as has been seen with the apprenticeship levy.)

We believe a Skills Policy Institute should be created with representatives from across policy makers, education/training and industry to take a holistic view of existing skills policy and look at how it can be most effectively implemented now and in the next 5 to 10 years.



# Methodology

We worked with economic modellers Emsi to map the UK jobs market and identify occupation changes over the next six years. All jobs and industries throughout this analysis use either 1-digit or 4-digit Standard Occupation Classification (SOC) and Standard Industry Classification (SIC) codes.

We also worked with researchers Censuswide and polled 1,000 employers to understand their first-hand experience of the labour market, get their thoughts about what they believe the future holds for their business over the next three to five years and how well equipped they feel they are to meet the challenges of today and tomorrow. Research was undertaken in March/ April 2018.

## Methodology for employer research carried out by Censuswide

The research was conducted via online survey by Censuswide, with 1,006 UK C-Suite level personnel in UK between 05/04/2018 – 30/04/2018. Censuswide abide by and employ members of the Market Research Society which is based on the ESOMAR principles.

Methodology for economic modelling carried out by Emsi

Emsi labour market data is created from a collection of nine Government sources, which they combine to provide multi-layered cross-checking. This includes:

Business Register Employment Survey (BRES); Workforce Jobs Series (WJS); Working Futures (WF); Annual Survey of Hours and Earnings (ASHE); Labour Force Survey (LFS); Annual Population Survey (APS); Mid-Year Population Estimates; Subnational Population Projections; Annual Business Inquiry (ABI).

