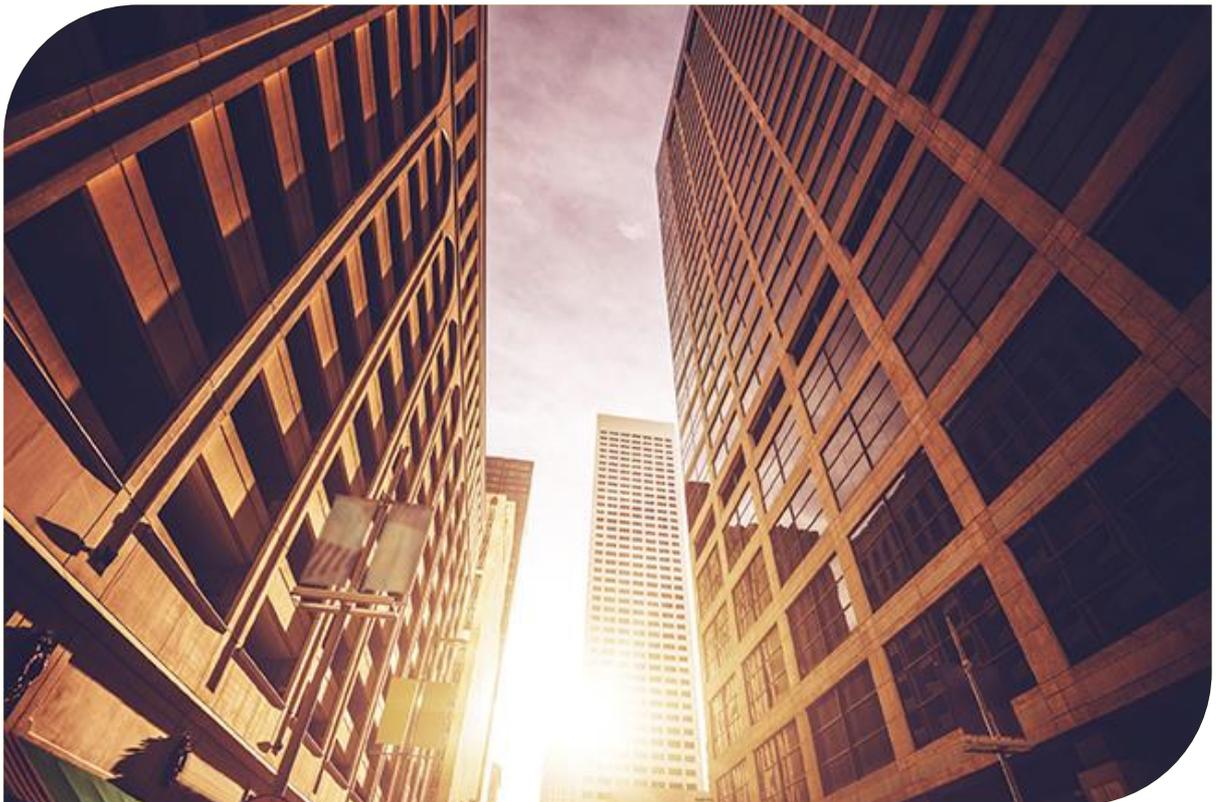


Employer Attitudes and Motivations regarding Learning and Training, Wave 19

Prepared for **CITB NI**

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Contents

Management Summary	4
Introduction	4
Methodology	4
Key Business Challenges	4
Apprentices	5
Use and planned use of new technologies	5
1 Methodology and Respondent Profile	7
Introduction	7
Methodology	7
Caution in interpretation	8
Size and use of Labour only sub-contracting	8
Client base	8
Project Types	8
Federation Membership	9
Age of business	9
2 Key Business Challenges	10
Introduction	10
Overall trends	10
The impact of Brexit	12
Recruiting suitably skilled staff	12
3 Apprenticeships	14
Introduction	14
Current patterns of employment of apprentices	14
Reasons for not offering apprenticeships	14
Future plans	15
4 New technologies	16
Introduction	16
Use and planned use of new technologies	16
Reasons why do not expect to start using any of the new technologies	18
New or enhanced skill needs arising as a result of new technologies	18
How many staff / which occupations need training in new technologies	20
The impact of new technologies on employment levels	20

Introduction

This report outlines the findings of the 19th wave of employer consultation for CITB and CITB Northern Ireland, the first of which took place in 2005. In addition to providing headline indicators UK-wide, the survey was designed to allow sub-group analysis of employers (e.g. by size and sub-sector), with the results for Northern Ireland (based on 108 responses) the focus of this report.

As well as providing an overview of the main challenges facing companies in the sector, their current economic situation and use of apprenticeships and training, the research also explores a number of topical issues, in this case including new technologies.

Management Summary

Introduction

This document reports on the 19th wave of employer consultation carried out for CITB and CITB Northern Ireland (CITB NI), the latest in a series dating back to 2005. This report aims to help CITB NI understand the challenges faced by businesses in the sector in Northern Ireland.

Methodology

Wave 19 comprised 25 qualitative depth telephone interviews with employers, which were used to prepare the ground for 1,500 structured quantitative telephone interviews with employers and the self-employed, covering Construction Contractors and the Professional Services sector. Businesses in Northern Ireland accounted for 108 of these responses and the results detail in this report are based on this subgroup. This quantitative survey is the focus of this report; the qualitative interviews were reported on in prior reports. All statistics given in this report are specific to employers Northern Ireland, and are weighted to be representative of the sector, unless otherwise stated.

Key Business Challenges

The main business challenges facing employers were finding suitably skilled staff (mentioned by 20% of employers in Northern Ireland spontaneously), the need to increase sales and the economic downturn (both 13%). The two other issues which were mentioned by more than one in ten employers were Brexit, and the need to increase profitability (both 11%). Compared with the last wave in 2018, finding suitably skilled staff decreased significantly (from 39% to 2017 levels (23%). Overall over one in ten (13%) did not feel they faced any particular challenges.

When all demand side challenges (i.e. connected to demand for their services) and supply side challenges (i.e. connected to the supply of skills and employees) are considered together, demand side challenges were much more likely to be mentioned as an issue (38%) than supply side (24%). Compare with 2018, the results suggest a decrease in supply side challenges (down from 39% in 2018). One fifth (20%) reported challenges which could be described as concerning the costs of operation (e.g. profitability, regulation or costs of materials), in line with the 21% who reported this in 2018.

Skills challenges were particularly likely to be mentioned by those with 10 to 99 employees (26%) and those with 100 or more employees (31%). Conversely, the need to increase sales was relatively unlikely to be mentioned by large employers with 100 or more employees (9%). Brexit was much more often spontaneously cited as a challenge by Professional Services firms (31%) than Construction Contractors (10%).

The general picture of business challenges has remained relatively unchanged since 2014, when the economic downturn ended. The main change in 2019 compared with last year was fewer employers saying finding suitably skilled staff was a challenge (20% vs. 38%). However, this figure represents a return to the level found for most waves since the end of the recession.

Brexit

Overall, 11% of businesses spontaneously mentioned Brexit as a challenge that they were facing. This was a similar level to the UK as a whole (12%). Neither have there been any substantial changes from the 2018 survey in Northern Ireland, when 7% reported Brexit as a key challenge.

However, the number of businesses mentioning Brexit as the single challenge having the most impact on their business was significantly higher; no businesses considered it to be their main challenge in 2018, but 8% mentioned it as the challenge having the most impact in 2019.

Apprentices

Two-fifths (40%) of firms in Northern Ireland say that they offer apprenticeships, and 23% were employing apprentices at the time of the survey. These figures are similar to the proportions found across the UK, at 43% and 19% respectively). The likelihood of employing apprentices at the time of the survey increases with the size of the firm (from 15% among those with 2-9 direct employees, to 47% where 10-99 staff are employed and to 53% among those with 100 or more staff), and is higher among Construction firms (27%) than those operating in Professional Services (4%).

The proportion of Construction firms employing apprentices (27%) has increased slightly this year (20% in 2016, 13% in 2017, and 18% in 2018).

Amongst firms which do not offer apprenticeships, the most commonly cited reason were that that they have not been recruiting at any level (32%), that apprenticeships are not available in the business's line of work (11%), and that they take up too much time (11%).

A quarter (28%) of firms in Northern Ireland were at least quite likely to take on an apprentice in the next 12 months, under a third of whom (8%) felt this was definite or very likely. The proportion of employers expecting to take on any apprentices in the next 12 months is in line with last year when 26% of firms were at least quite likely to take on an apprentice.

Use and planned use of new technologies

Employers were asked about their current use of 14 specific technologies. Overall, nine in ten employers used at least one of the technologies (90%). A quarter used only one technology (27%); a lower proportion used two (5%) and a higher proportion used three or four (36%). Over a fifth (22%) used five or more of the 14 technologies.

In terms of the specific technologies, around seven out of ten (69%) use smartphones in a construction site context (other than for just making calls) and three-fifths (60%) use computing on construction sites, including laptops and tablets, while half also use Wi-fi on construction sites (49%). None of these are particularly 'cutting edge', but instead involve making use of quite common technologies but on a construction site when in the recent past they might have been used only in an office. Of some of the more specific technologies, a third are using productivity or planning apps or software (33%), a quarter are using Lidar (24%) and one fifth are using the Internet of Things and Drones (19% and 18%).

The proportion of employers planning to start using each of the technologies within the next three years was relatively limited, ranging from 1% for robotics and 3D printing to 12% for productivity or planning apps and software. This suggests incremental growth for most technologies rather than a sea change in this three-year time frame; however, it should be noted that not all new technologies have a long lead-in time.

By far the most common reason given by employers that did not plan to start using any of the new technologies over the next three years was their seeing no need for any of these technologies in their line of work (89%), rather than any lack of skills or training.

Almost all employers, however (95%), already use at least one of the 14 new technologies or plan to start using some of them in the next three years. A third of these (34%, equivalent to 32% of all employers) expected their business to need new or enhanced skills as a result of this existing or increasing engagement with new technologies. This may underestimate the need for new or enhanced skills in that a further 8% of these employers (equivalent to 7% of all employers) were unsure if skills or training would be needed.

A range of skills are anticipated to need development in the coming three years as a result of new technologies. Most commonly mentioned was handling data, information and content, and team working (26% in each case), although similar proportions (19%-24%) mentioned such issues as leadership skills, basic IT, adaptability, communication, creativity, interpersonal and problem solving.

1 Methodology and Respondent Profile

Introduction

- 1.1 This document reports on the 19th wave of employer consultation carried out for CITB and CITB Northern Ireland (CITB NI), the latest in a series dating back to 2005. Wave 19 in Northern Ireland consisted of 108 structured quantitative telephone interviews with employers (104) and the self-employed (4) across Northern Ireland operating in the Construction trades sector (83) and the Professional Services sector (25). This was undertaken as part of a wider UK-wide telephone survey with 1,500 respondents.
- 1.2 The sample for the first wave of the survey was drawn from a number of sources: CITB NI's databases of levy and non-levy payers, supplemented by commercially available employer databases, especially for the Professional Services sector and to extend coverage of the self-employed. Much of the sample for Wave 19 came from those agreeing at previous waves to take part in further research, supplemented this year with fresh sample from Market Location.

Methodology

- 1.3 For the quantitative phase, at a UK-wide level, quotas for telephone interviews were set by sector and employer size (based on the number of staff employed directly within the UK). Results for this element were then weighted to ensure that on these variables survey results were representative, using ONS 2017 Business Population Estimate data.
- 1.4 Where comparable data exists, results in this report are compared with results from earlier waves. These adopted almost the same methodologies, other than the fact two waves were Construction sector only and therefore excluded Professional Services firms (waves 9 and 13). The list below shows the main month of quantitative fieldwork for each wave – for Wave 19, quantitative fieldwork took place in June to August 2019; qualitative fieldwork took place in May 2019. A separate report was delivered for these qualitative interviews in June 2019.
 - Wave 1: February 2005
 - Wave 2: September 2005
 - Wave 3: June 2006
 - Wave 4: December 2006
 - Wave 5: August 2007
 - Wave 6: March 2008
 - Wave 7: July 2008
 - Wave 8: March 2009
 - Wave 9: November 2009 (Construction sector only)
 - Wave 10: August 2010
 - Wave 11: August 2011
 - Wave 12: May 2012
 - Wave 13: September 2013 (Construction sector only)
 - Wave 14: September 2014
 - Wave 15: August 2015
 - Wave 16: July 2016
 - Wave 17: May 2017
 - Wave 18: May 2018
 - Wave 19: July 2019

Caution in interpretation

- 1.5 Results presented in this report are based on a relatively small number of interviews within Northern Ireland (108) and should be treated as indicative. On a base of 108 interviews, sampling error, in the worst-case scenario from a statistical reliability angle of a survey result of 50%, is approximately $\pm 9.5\%$, which means that statistically we are 95% confident that the true result lies within the range 40.5% - 59.5% range. In the case of a survey result of 25% or 75% the sampling error falls to $\pm 8.2\%$.
- 1.6 Furthermore, results were not weighted to be representative of each geography individually, hence there is no guarantee that the results presented are fully representative of the sector in Northern Ireland. Hence again some caution is needed with the interpretation of the results.

Size and use of Labour only sub-contracting

- 1.7 Reflecting the distribution of the sector shown in official statistics, most firms employed fewer than 10 staff directly (73%), indeed three-fifths (58%) employed fewer than 5 staff. Construction firms were asked if they currently employed any staff on a labour-only sub-contract (LOSC) basis, such as the self-employed or those taken on via an agency. Seven in ten (70%) were doing so (a figure which varied little by size of firm) – this is the same as the last wave.

Client base

- 1.8 In line with last year, two-thirds of firms worked for the general public (67%), while around two-fifths worked as sub-contractors for other firms (42%), and half for government or public-sector clients (53%). This wave saw an increase in the percentage of businesses working for other commercial clients, increasing from near three-fifths in 2018 (57%) to around three quarters in 2019 (72%). This pattern is similar to that found across the UK as a whole, but with a greater proportion working for government clients in Northern Ireland and fewer working as sub-contractors.
- 1.9 The general public was the most frequently given *main* client type, by two in five businesses (39%). This was followed by working as a sub-contractor or for other commercial clients (both 22%), and for the government or public sector by one in seven (14%). Firms in Northern Ireland were more likely to say their main client type was working for the general public (39%) than those in Great Britain (29%).

Project Types

- 1.10 Companies were asked about the project types they work on (those accounting for more than about 10% of their turnover). Seven in ten (69%) carried out more than 10% of their work on housing projects, with many working on new build housing (45%) and on housing maintenance, repair and extensions (47%). Many more work on new build housing than said they did so in Great Britain (31%).
- 1.11 More than half work on offices or commercial property projects (57%), and around a third working on industrial construction (48%) or retail or leisure (37%). Fewer work on infrastructure projects (17%), and only 15% carry out a significant level of work on historic (pre-1919) buildings.

Federation Membership

- 1.12 Over two-fifths of companies (42%) of companies are members of trade federations, industry bodies or professional institutions. The overall figure was similar for Great Britain (46%).
- 1.13 Membership was more likely among larger companies; two-thirds (66%) of companies with 10 to 99 employees were members of an organisation, while under a third (32%) of businesses with 2 to 9 employees were members. The most commonly mentioned organisation was the Construction Employers Federation of Northern Ireland (CEFNI).

Age of business

- 1.14 Most firms were very long established. More than four-fifths (85%) had been operating for more than 10 years, and indeed almost two-thirds (66%) had been operating more than 20 years.

2 Key Business Challenges

Introduction

2.1 Examining the challenges faced by construction businesses in Northern Ireland is essential in delivering effective policy for the sector. The following section explores what businesses consider to be the key challenges they face.

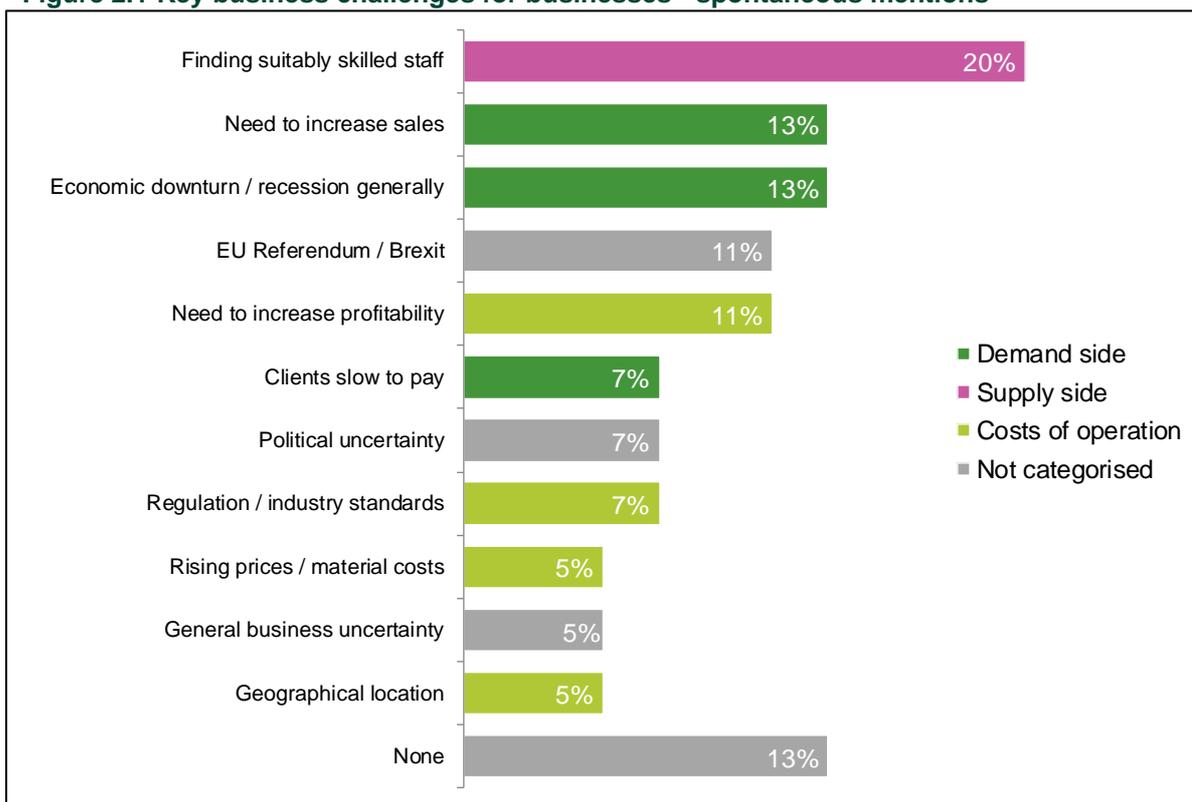
Overall trends

2.2 Respondents were asked what key challenges their businesses were currently facing. The various challenges identified by employers can be classified into:

- Supply side issues relating to supply of staff or skills;
- Demand side issues relating to a lack of demand for work;
- Costs of operation issues relating to the profitability of their work.

Results for Northern Ireland are presented in Figure 2.1.

Figure 2.1 Key business challenges for businesses - spontaneous mentions



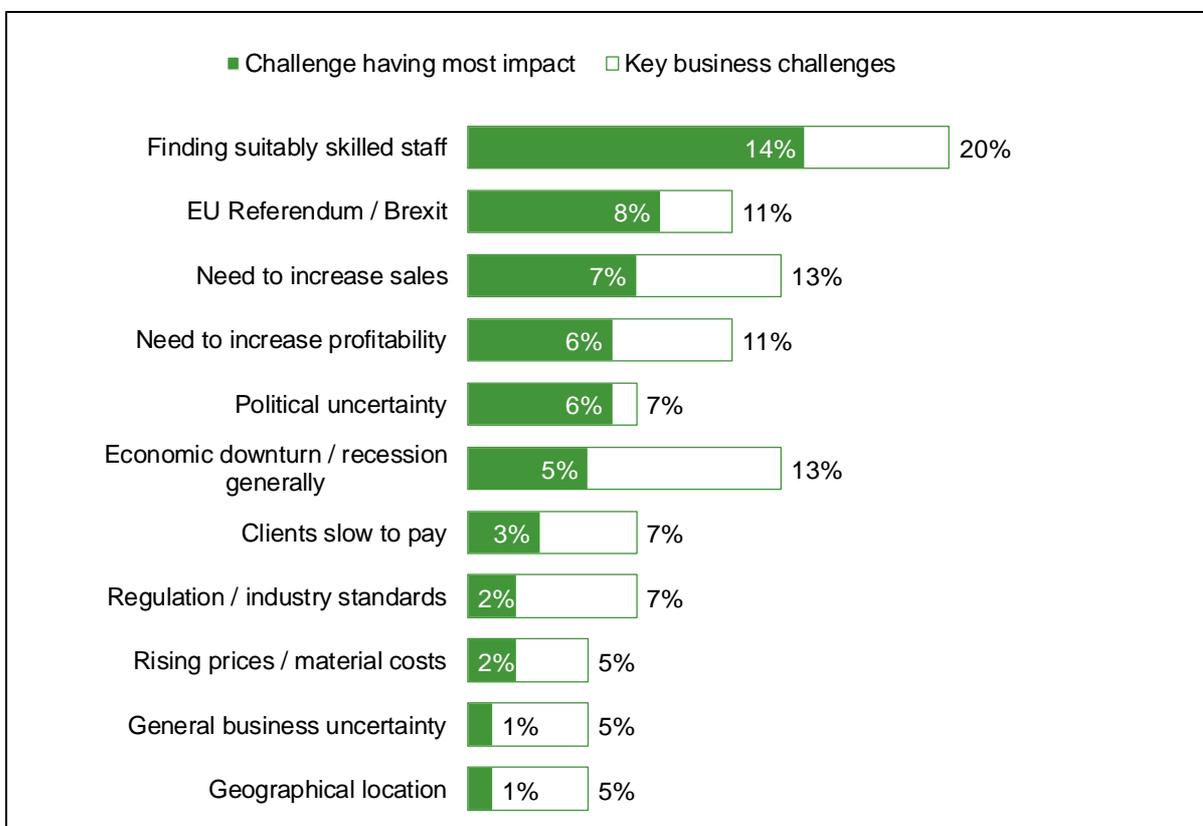
Base: All businesses (108)

2.3 Issues relating to costs of operation were the most mentioned of the three groups outlined above, with nearly two-fifths of organisations in Northern Ireland (38%) mentioning a specific challenge within this area. This was a significant rise from last year when less than a fifth (18%) mentioned these challenges. A similar number of businesses mentioned a demand-side issue (33%), while issues relating to the supply of staff and skills were less likely to be mentioned,

with just under a quarter mentioning a challenge in this area (24%), which is significantly less than in 2018 when these were the most likely type of challenge to be mentioned (39%).

- 2.4 Finding suitably skilled staff (a supply-side challenge) was the single most mentioned specific challenge faced by businesses; a fifth of businesses faced this issue (20%), in line with the situation in Great Britain (19%). This is a substantial reduction from 2018 (38%), but brings the result back into line with the long-term trend. The next four most mentioned issues were each mentioned by a similar percentage of businesses. These were the need to increase sales (13%), an economic downturn (13%), Brexit (11%) and the need to increase profitability (11%). A similar proportion of businesses said when asked that they faced no challenges (13%).
- 2.5 A perceived economic downturn was an issue that businesses were more likely to mention compared to the last wave. While more than a tenth of businesses mentioned this in 2019 (13%), very few businesses mentioned this in 2018 (2%). This does, however, represent a return to a similar proportion found in 2017 (20%). In comparison to Great Britain, businesses in Northern Ireland were more likely to mention economic downturn or recession (13% vs. 2%), the need to increase profitability (11% vs. 4%) and political uncertainty (7% vs. less than 0.5%).
- 2.6 Businesses were also asked which challenge was having the most impact on their operations, as shown in Figure 2.2. The hollow bars represent the percentage that said the issue was a challenge for their business; the solid bars represent the percentage that said the issue was the main challenge for the business. Therefore, issues where a large proportion of the bar is hollow are widely mentioned but less commonly the key challenge. The challenge that businesses thought had the most impact was finding suitably skilled staff (14%).

Figure 2.2 Which challenge (of those spontaneously mentioned) is having the most impact



Base: All businesses (108)

- 2.7 A perceived economic downturn and political uncertainty were also more likely to be chosen as the main challenge facing businesses in Northern Ireland (5% and 6% respectively) than in Great Britain (1% and none).
- 2.8 While a perceived economic downturn was a common challenge mentioned by businesses, this was less likely to be considered the challenge having the most impact on the business. In comparison, businesses that spontaneously mentioned political uncertainty and Brexit were also likely to mention it as the challenge with the most impact.

The impact of Brexit

- 2.9 Fieldwork for 2019 took place three years after the vote to leave the European Union. Northern Ireland clearly has a unique position within the UK in sharing a border with the EU, and businesses were asked about how the process of leaving the EU would affect them.
- 2.10 Overall, 11% of businesses spontaneously mentioned Brexit as a challenge that they were facing. This was a similar level to that found in Great Britain (13%). Neither has there been any substantial changes from the 2018 survey in Northern Ireland, when 7% reported Brexit as a key challenge.
- 2.11 However, the number of businesses mentioning Brexit as the main impact was significantly higher with less than 0.5% of businesses considering it their main challenge in 2018, but 8% mentioning it as the challenge having the most impact in 2019.
- 2.12 It is also worth noting that 'political uncertainty' and 'general business uncertainty' were mentioned by 7% and 5% of employers respectively, and these responses may in some cases include some underlying concern about Brexit, although they may also refer to the political or economic situation in Northern Ireland more generally. Nevertheless, clearly issues relating to skills, sales and payment are much more top of mind than Brexit.

Recruiting suitably skilled staff

- 2.13 In comparison to the previous wave, businesses were much less likely to spontaneously mention that finding skilled staff was a challenge. In 2018, nearly two-fifths of businesses (38%) mentioned this issue, compared to the fifth mentioning in 2019 (20%). The 2019 level is, however, similar to the level of businesses that mentioned this as an issue in 2017 (23%).
- 2.14 All employers who did not spontaneously mention recruiting skilled staff as a challenge were asked whether they find it difficult to find suitably skilled staff. Combined with spontaneous mentions, less than half (47%) of employers in Northern Ireland said that they found it difficult to find suitably skilled staff. This is also a significant decrease from 2018 where two thirds of employers mentioned this was an issue (67%), and more in line with those who considered this a challenge in 2017 (36%).
- 2.15 Firms having difficulties finding suitably skilled staff were asked which occupations these shortages were occurring in. Construction employers in Northern Ireland were most likely to mention a shortage of bricklayers (32%), carpenters / joiners (28%) or plasterers (22%). This was followed by plumbers, electricians and labourers (each mentioned by just over a tenth of those experiencing skill shortages).

2.16 Nearly all businesses experiencing difficulties finding suitably skilled staff felt this was having a negative impact on their business (91%). The most common specific impacts for businesses in NI were:

- Projects over-running (31%);
- Wage inflation or paying a premium (18%);
- Not being able to grow or expand (17%).

2.17 These results suggest that skill shortages are much more than an inconvenience, and instead often have serious implications for productivity, profitability and business growth.

3 Apprenticeships

Introduction

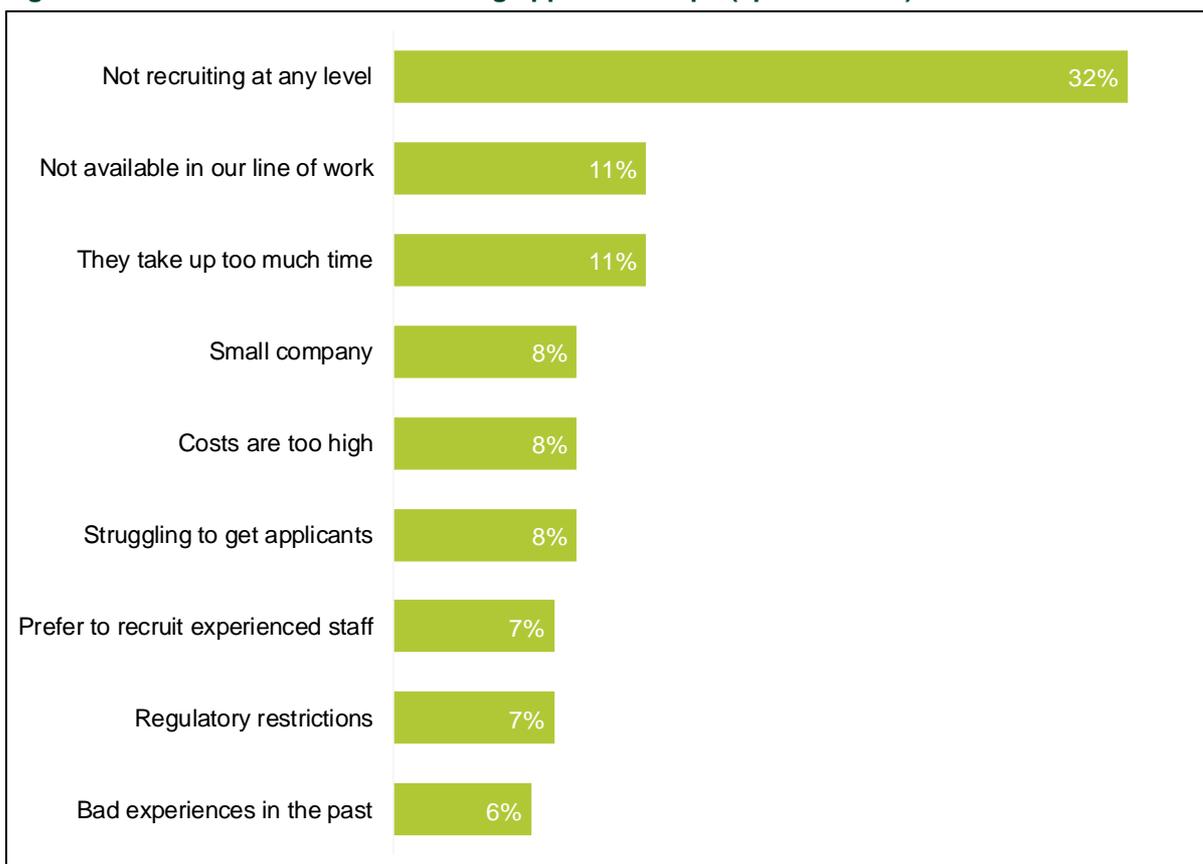
- 3.1 This chapter explores issues surrounding the current and future recruitment of apprentices. Comparisons are made with the previous recent waves of the employer panel research where possible.

Current patterns of employment of apprentices

- 3.2 Two-fifths (40%) of firms in Northern Ireland offer apprenticeships, and just less than a quarter (23%) said they employed an apprentice at the time of the survey. This was similar to the proportion of firms offering apprenticeships and employing apprentices in Great Britain (43% and 19% respectively).
- 3.3 The likelihood of employing apprentices was greater among larger sized firms; almost a half of businesses (47%) with 10 to 99 employees were likely to employ apprentices compared to under a sixth (15%) of businesses with 2 to 9 employees.
- 3.4 Larger businesses were also more likely to offer apprenticeships. Over two thirds (69%) of businesses with 10 to 99 employees, while less than a third (29%) of businesses with 2 to 9 employees offered apprenticeships.
- 3.5 Business that expected increasing turnover in future were also more likely to employ apprentices. The business surveyed that expected turnover to increase were much more likely to employ apprentices (45%) and to offer apprenticeships (56%), than those who expected no change in turnover (8% and 27% respectively).

Reasons for not offering apprenticeships

- 3.6 Among firms not offering apprenticeships, the most commonly cited reason was that the business was not recruiting at any level or there was not enough to work on (32%). Beyond this, companies mentioned that apprenticeships were not available in their line for work, or that apprenticeships take up too much time for existing staff (both 11%).

Figure 3.1 Main reasons for not offering apprenticeships (spontaneous)

Base: Businesses that do not offer apprenticeships (47)

Future plans

- 3.7 Just over a quarter (28%) of firms in Northern Ireland reported that they were at least quite likely to take on an apprentice in the next 12 months, a similar level to 2018 (26%). Results in Northern Ireland in 2019 were also very similar to Great Britain (26%).
- 3.8 However, less than a third of this group (8% of all employers) felt that this was definite or very likely. Reflecting the pattern of recent engagement with apprenticeships described above, the likelihood of anticipating starting any people on an apprenticeship in the next 12 months was higher among larger firms. Among firms with 10 to 99 employees, 57% were likely to start someone on an apprenticeship in the next 12 months while among firms with 2 to 9 employees, a fifth (18%) surveyed were likely to do this.
- 3.9 A fifth of firms (20%) said that they think there are more people wanting to become apprentices in Northern Ireland than there are positions available. While this is a similar position to 2018, (25%) this view has decreased substantially in prevalence among employers since 2017 (46%).

4 New technologies

Introduction

- 4.1 The Farmer Review of the UK Construction Labour Model highlighted the issue of low productivity in the sector. A number of factors were discussed as contributory factors, including limited uptake of new technologies.

“One of the critical features of the industry is its extremely poor level of productivity. When assessed against other industries, especially manufacturing led ones, the differential is stark, not only in current absolute terms but also in how the gap has widened over time. Other industries have harnessed wholesale process improvement by embracing and commercialising the role of technology and have effectively reinvented themselves by driving a paradigm shift in their end-to-end delivery.”

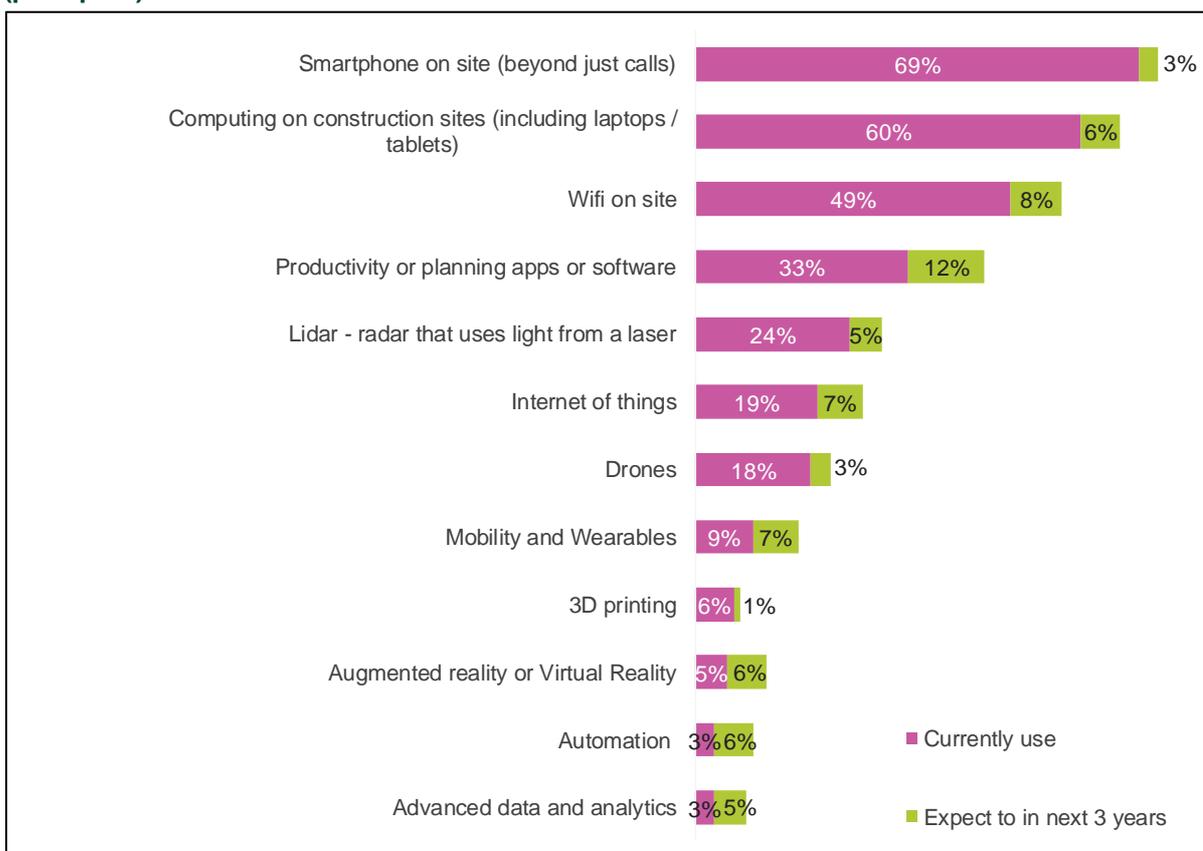
- 4.2 In a CITB context, the report noted:

“It is important to note that the mandate CITB works to focuses on skills and training and does not necessarily apply equal importance to innovation and technology.”

- 4.3 To explore this issue, a new section of the employer panel survey this wave explored use of new technologies. It was explained to respondents that for the purposes of this survey ‘new technologies’ covered a range of technologies that automate, augment or replace human effort, but in this context excluded BIM (Building Information Modelling) and off-site construction.
- 4.4 The questions explored whether each of a number of specific technologies were currently being used or if employers expected to use them in the next three years, and then reasons for not expecting to begin using any new technologies. The questions also asked about the skills and training implications, if any, of use or planned use of these technologies; and their potential impacts on the total number of staff employed at the organisation.

Use and planned use of new technologies

- 4.5 Employers were asked about their current use of 14 specific technologies and whether they planned to start using any of these over the next three years. The most commonly used technologies among employers are listed in the following chart. Two technologies are not shown, each infrequently used: Artificial Intelligence (used by 3% of employers) and Robotics (3%). There was little indication that many employers expect to start using these over the next 3 years (5% and 1% respectively).
- 4.6 Overall, nine in ten employers used at least one of the technologies (90%). A quarter used only one technology (27%), with fewer using two (5%). A larger proportion used 3 to 4 technologies (36%), and over a fifth (22%) used five or more of the 14 they were asked about.

Figure 4.1 Current use and planned use in the next three years of specific new technologies (prompted)

Base: All employers (108). The proportion answering 'don't know' is not shown – this ranged from 0% to 4%.

- 4.7 As shown in the chart, use of each technology asked about varies widely. Seven out of ten (69%) use smartphones in a construction site context other than for just making calls, and three-fifths (60%) use computing on construction sites, including laptops and tablets (e.g. iPad, Surface, Galaxy, Fire). Half also use Wi-fi on construction sites (49%). None of these are construction specific, nor particularly 'cutting edge', and instead are making use of quite common technologies but in a construction site context.
- 4.8 Of some of the more construction-specific technologies, a third are using productivity or planning apps or software (33%), about a quarter are using Lidar (24%), and around one fifth are using the Internet of Things (19%) (e.g. sensors that take real-time readings of location, temperature, pressure etc.) and Drones (18%) respectively. All the other technologies listed were used by fewer than one in ten employers.
- 4.9 The proportion of employers planning to start using each of the technologies in the next three years was relatively limited, ranging from 1% for robotics and 3D printing to 12% for productivity or planning apps and software. This suggests incremental growth, in most cases, rather than a sea change in this three-year time frame.

Table 4.1 Use of new technologies: by sub-sector and size

	Construction	Professional Services	2 to 9	10 to 99
<i>Base: all employers</i>	83	25	40	51
	%	%	%	%
Smartphones on site	68	74	68	67
Computing on site	59	68	58	59
Wi-Fi on site	44	74	47	51
Productivity apps or software	33	30	28	45
Lidar	20	45	27	17
Internet of Things	18	21	14	31
Drones or unmanned aerial vehicles (UAVs)	13	39	18	14
3D printing	7	3	5	9
Advanced data and analytics	3	4	0	12
Mobility and wearables	7	18	8	13
Automation	3	5	1	10
Augmented or Virtual Reality	2	22	5	6
Artificial Intelligence	3	1	0	11
Robotics	1	12	2	4

Please note responses for 100 or more employees are not shown due to the small base size (13)

4.10 Overall, just under a third of firms (31%) expect to start using one or more of the technologies which they do not already use over the next three years. However, more than half of those who were expecting to introduce new technologies (15% of all employers) were expecting to introduce only one.

Reasons why do not expect to start using any of the new technologies

4.11 About seven in ten (69%) employers do not plan to introduce any of the new technologies; these employers were asked why this was the case (this covers both those who do currently use some of the 14 technologies discussed during the interview and those that use none).

4.12 By far the most common reason given to this prompted question (where response options were read out to respondents), was that they saw no need for any of these additional technologies in their line of work (89%). In comparison very few put it down to the expense (8%) and needing more information about the technologies (2%). Less than 0.5% mentioned issues regarding skills and training.

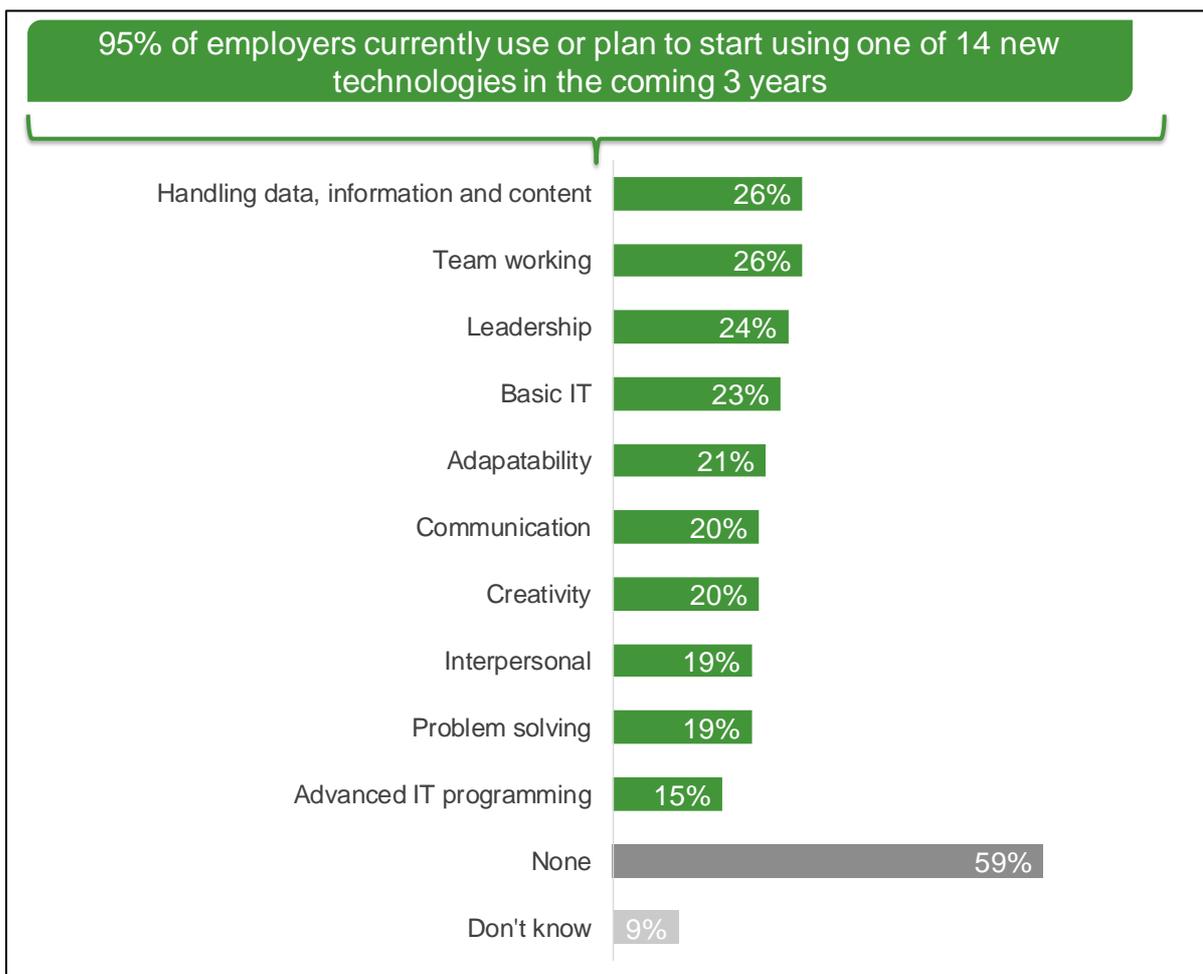
New or enhanced skill needs arising as a result of new technologies

4.13 Almost all employers (95%) either currently use any of the new technologies or plan to start using some in the next three years. Around a third of these (34%, equivalent to 32% of all employers) expected their business to need new or enhanced skills as a result of this

engagement with new technologies. This may underestimate the need for new or enhanced skills in that a further 8% of these employers (equivalent to 7% of all employers) were unsure if it would have this effect.

- 4.14 The following chart shows the skills which employers expect to need either new or enhanced skills over the next three years, based on those that use or plan to use any of these new technologies (i.e. not based solely on those saying they would need new or enhanced skills in the business). The list of potential skill needs were read out to respondents.

Figure 4.2 Areas where expect new or enhanced skill needs in the next 3 years as a result of involvement in new technologies (prompted)



Base: All firms currently using new technologies or who expect to over the next 3 years (103).

- 4.15 Employers anticipate that a range of skills might need development in the coming three years as a result of new technologies. Most commonly mentioned was handling data, information and content, and team working (both 26%), though similar proportions (19% to 24%) mentioned such issues as leadership, basic IT, adaptability, communication, creativity, interpersonal and problem solving. Least likely to be mentioned was the need for improved advanced IT programming skills (15%).
- 4.16 A third of employers (30%) anticipate skill needs in the next three years as a result of new technology and were able to specify what skills they were likely to need. Employers were asked how they would expect to meet these skills needs.

- 4.17 Employers generally anticipate meeting these needs by a combination of training and recruitment, mostly expecting to train existing staff (79%), with some suggesting they will use trained sub-contract or agency workers (71%), or recruit people with the relevant knowledge and experience (66%). Fewer say they would recruit untrained employees and train them in these skills (54%). Overall, more would use training (93%) than recruitment (80%), although there is clearly considerable overlap; only 5% would seek to meet the skills need without using training services.
- 4.18 Those mentioning training expected to obtain this training from a mix of types of training organisation. Most commonly mentioned were suppliers of technology (92%) and private training providers (83%), with FE colleges (55%) and universities (58%) less widely mentioned. In-house expertise was mentioned by two fifths (40%), and around a quarter would turn to main contractors they work for (26%). Overall, just under a fifth (17%) hoped to meet the need for training without turning to training providers other than the suppliers of the technology or their main contractor.

How many staff / which occupations need training in new technologies

- 4.19 Overall, 28% of all employers expect to train staff in the next three years to meet skill needs arising from new technology. These employers were asked what proportion of their (directly employed) staff they expect to need this training. Employers usually proposed to take one of two strategies: they sought to train either less than a quarter of their staff (50%), or all of their staff (37%). Few planned to take any route between these.
- 4.20 The staff roles that employers feel would be trained vary; managers were most commonly mentioned (72%), but not substantially more so than supervisors (65%) or technical staff (64%). Operatives (56%), administrative staff (52%), and chartered professionals (48%) were each mentioned by around half.

The impact of new technologies on employment levels

- 4.21 As explained above, almost all employers either currently use or plan to start using some of the new technologies in the next three years, and so the expected impact on overall employment levels as a result of efficiency savings is small.
- 4.22 Very few (only 4%) of these employers expected to reduce the number of staff they directly employed in the next three years partly or wholly because of these new technologies; an additional 2% said they were unsure.

“IFF Research illuminates the world for organisations businesses and individuals helping them to make better-informed decisions.”

Our Values:

1. Impartiality and independence:

IFF is a research-led organisation which believes in letting the evidence do the talking. We don't undertake projects with a preconception of what “the answer” is, and we don't hide from the truths that research reveals. We are independent, in the research we conduct, of political flavour or dogma. We are open-minded, imaginative and intellectually rigorous.

2. Being human first:

Whether employer or employee, client or collaborator, we are all humans first and foremost. Recognising this essential humanity is central to how we conduct our business, and how we lead our lives. We respect and accommodate each individual's way of thinking, working and communicating, mindful of the fact that each has their own story and means of telling it.

3. Making a difference:

At IFF, we want to make a difference to the clients we work with, and we work with clients who share our ambition for positive change. We expect all IFF staff to take personal responsibility for everything they do at work, which should always be the best they can deliver.



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