

INCLUSIVE IT: AGE

A definitive series of evidence reports from BCS exploring equality and diversity within the IT workforce

A report by BCS, The Chartered Institute for IT

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Making IT good for society

Established in 1957, the British Computer Society (BCS) is the leading body for those working in IT. With a worldwide membership now of more than 68,000 members in over 100 countries, BCS is the qualifying body for Chartered IT Professionals (CITP).

BCS was incorporated by Royal Charter in 1984. Its objectives are to promote the study and practice of computing and to advance knowledge of, and education in, IT for the benefit of the public. BCS is also a registered charity.

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1 SUMMARY OF KEY FINDINGS

- Individuals aged 50 and above accounted for 30% of the working age population in 2018 (those aged 16-64), 29% of those in work and 20% of the unemployed.
- Representation of these 'older workers' was much lower amongst IT specialists and of the 1.4m people working in such roles in 2018, only 22% (312,000) were aged 50 and above.
- If representation was the same as within the workforce as a whole (i.e. 29%), there would be 95,000 additional IT specialists in the UK aged 50 and above.
- Across the UK, representation of older people in IT positions was lowest in London where just 16% were aged 50 and above over the 2014-18 period.
- Only around one in eight web designers/developers are aged 50 and above (13%) but amongst IT Directors, over one third are of this age (35%).
- In 2018 there were estimated to be 8,000 unemployed IT specialists in the UK aged 50 and over – equating to an unemployment rate of 2.4%.
- Older IT specialist were more likely to be working on a self-employed basis than their younger counterparts (15% versus 10%) and were also more likely to be working part-time (8% versus 4%).
- The median hourly earnings for older IT specialists in 2018 was £22 per hour - 11% more than that for IT specialists as a whole.
- Older IT specialists are notably more likely to hold 'responsible positions' – more than half (52%) having managerial/supervisory status in their job (compared with 42% of younger IT specialists).
- Older IT specialists are less likely to have an HE qualification and in 2018 only 59% of those aged 50 and had a qualification at this level compared with 70% of those aged 16-49.
- Younger IT specialists are also more likely to hold an IT degree than those aged 50 and above.
- Older IT specialists are notably less likely to obtain employment through direct applications or recruitment agencies than others but more likely to gain employment through contacts within the employer organisation.

2 BACKGROUND

Over the past three years, the British Computer Society, as part of its aim to make IT good for society, has been tracking and reporting upon levels of female representation within the IT labour market, highlighting areas of particular concern for the industry and supporting infrastructure and providing supporting evidence for those seeking to improve the gender balance within our industry.

In 2017, we expanded the reach of our analysis to cover other ‘minority groups’ – namely, the disabled, ethnic minorities and older workers, and following positive feedback/comment from the IT community, this year have elected to continue with this broader analysis of diversity in IT.

This input allows us for the first time to not only identify the key issues in question, but also potential/preferred resolution mechanisms as suggested by our membership base. In summary then, these reports aim to:

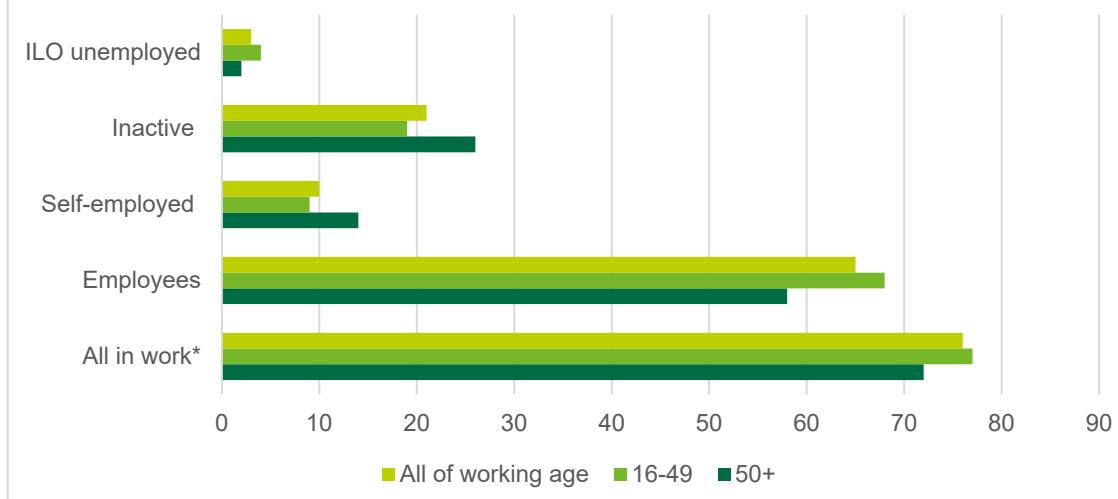
1. Provide a definitive source of information concerning the levels of ‘minority’ representation amongst the IT professions.
2. Identify and explore the extent to which the market is failing those from minority groups, as demonstrated by below-average levels of representation and compensation amongst these groups.

3 AGE IN CONTEXT, LABOUR MARKET OVERVIEW

There were 12.6m people aged 50 and above in the UK in 2018, representing just under one third (30%) of the total working age population at that time. Of these, 72% were in work, 26% were classed as 'inactive' and 2% were unemployed (compared with figures of 77%, 19% and 4% respectively for individuals of working age that were aged 16-49).

"THERE WERE 12.6M PEOPLE AGED 50 AND ABOVE IN THE UK DURING 2018"

Figure 1: Economic activity of the working aged population, 2018 - as a percentage



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

* INCLUDES A SMALL NUMBER OF INDIVIDUALS IN WORK BUT NOT AS EMPLOYEES/SELF-EMPLOYED (I.E. <1% OF THE TOTAL)

The level of representation for individuals aged 50 within the workforce was marginally lower during 2018 (29%) whilst 'older workers' accounted for a much lower proportion of the unemployed – 20% in this case.

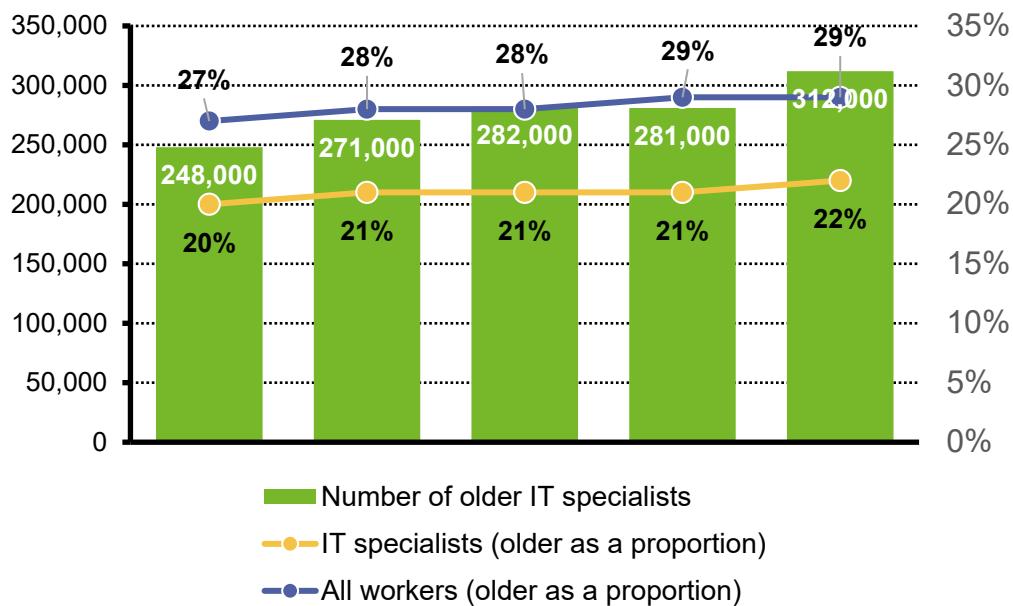
When considering individuals that were inactive however, those aged 50 and above accounted for more than one third (38%) of the inactive population during 2018 – this high level of representation due largely to the above average proportion that were retired from work.

4 AGE AND IT EMPLOYMENT

4.1 Overview

There were 312,000 IT specialists in the UK aged 50 and above during 2018, and at 22%, the level of representation for this group was much lower than that recorded amongst the wider workforce (i.e. 29%). The level of representation for older workers in IT roles, has increased over the past five years (up two percentage points between 2014 and 2018) though the increase matched that recorded for older workers more generally in the workforce (i.e. increasing by two percentage point over this period).

Figure 1: Trends in workforce representation, 2014-18



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

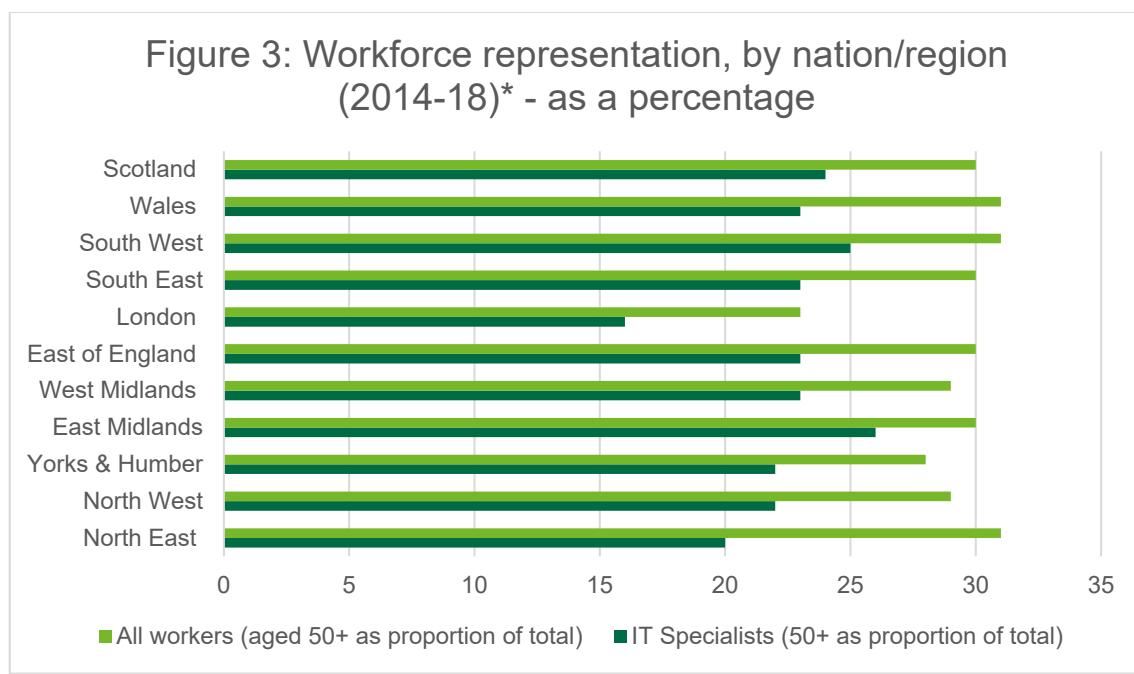
If the level of representation for older workers in IT specialist positions was equal to that amongst the working age population as a whole, there would have been 407,000 'older' IT specialists in the UK during 2018 i.e. approximately 95,000 more than the number recorded.

4.2 Representation across the UK

The proportion of IT specialists aged 50+ lies been 20% and 26% for all the UK nations/regions bar London where this age group is much more poorly represented - just 16% of IT specialists being of this age group during the 2014-18 period.

"LESS THAN ONE IN SIX IT SPECIALISTS IN LONDON ARE AGED 50 OR ABOVE"

London is however, noted for a relatively young work force more generally – hence at seven percentage points, the difference in the level of representation for older workers in IT positions and workers as a whole, is around the norm. By contrast in the North East of England representation of older workers in IT jobs is 11 percentage points below that recorded for the workforce as a whole.



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

* FIGURES FOR NORTHERN IRELAND SUPRESSED

5 NATURE OF EMPLOYMENT

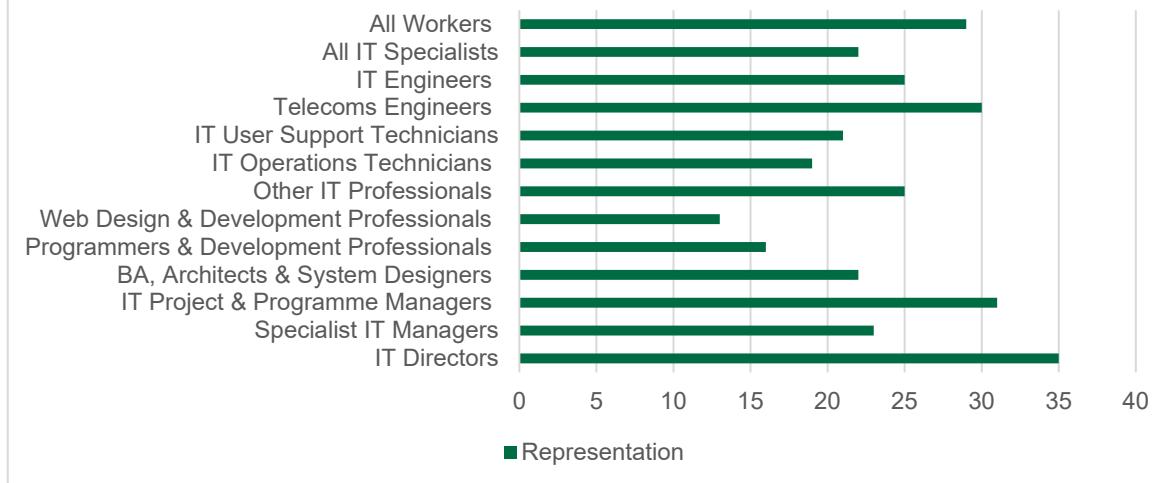
5.1 Occupation

Representation of older workers amongst the IT professions varies substantially and during 2018, whilst only around one in eight web developers/designers (13%) were aged 50+, more than one third of those working as IT Directors (35%) were from this age bracket.

**“ONLY AROUND ONE IN EIGHT
WEB DESIGNERS/DEVELOPERS
ARE AGED 50+”**

Indeed - in general, it would appear that older workers are most poorly represented amongst IT development (web/other) and best represented amongst senior/managerial positions.

Figure 4: Representation of older workers, by IT occupation, 2018



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

5.2 Permanency of employment

At 3%, the proportion of IT specialists aged 50 and above that were working on a non-permanent basis during 2018 was the same as for all IT specialists, but marginally lower than the proportion recorded amongst individuals as a whole with this age (4%).

By comparison, the incidence of non-permanent employment amongst all workers during 2018, was almost twice this level at 6%.

Though a detailed analysis of the reasons why IT specialists (older/otherwise) were in non-permanent employment during 2018 is not possible (due to limitations of the data source), it can be said that older IT specialists appear more likely to be in temporary positions as they do not want a full-time job (33% of those aged 50 or above stating this to be the case during the 2014-18 period compared with 17% of those aged 16-49) and this was also the case for workers of this age as a whole (with a comparison figures of 31% and 22% respectively).

5.3 Age and unemployment

There were approximately 8,000 unemployed IT specialists aged 50 and above in the UK during 2018 – 30% of all unemployed IT specialists in the UK at that time.

**“THE UNEMPLOYMENT RATE OF
OLDER IT SPECIALISTS IN 2018
WAS 2.4%”**

At 2.4% the associated unemployment rateⁱ for IT specialists aged 50 and above notably higher than that for younger age groups (1.6%) though well below the overall unemployment rate in the UK (4.2%).

6 EMPLOYMENT CHARACTERISTICS

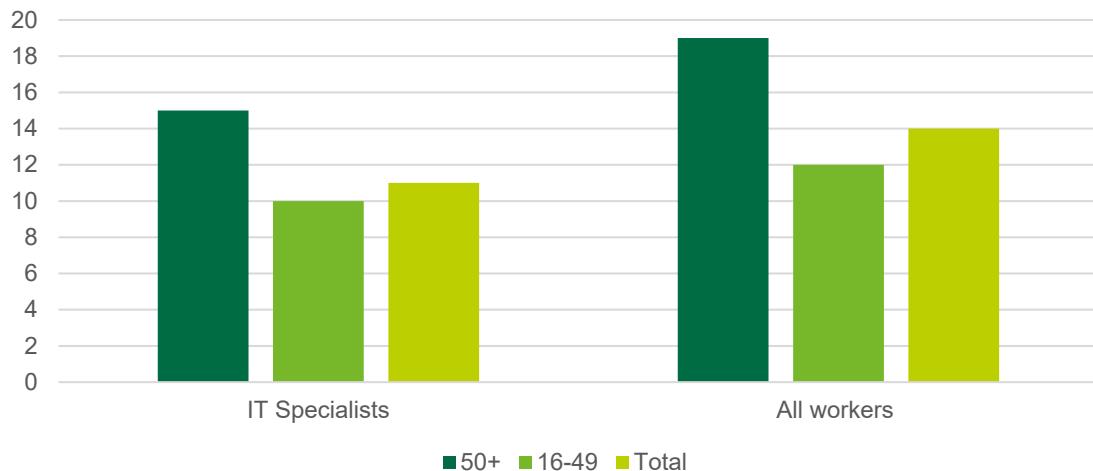
6.1 Self-employment

The incidence of self-employment has risen dramatically over the past five years -for both IT specialists and workers more generally- and in 2018 it is estimated that 14% of all UK workers and 11% of IT specialists (155,000) were working on a self-employed basis.

**“OLDER IT SPECIALISTS MORE
LIKELY TO BE SELF-EMPLOYED
THAN THEIR YOUNGER
COUNTERPARTS”**

For both groups of workers, the incidence of self-employment was found to be higher amongst individuals that were from older age groups and amongst IT specialists a difference of 5 percentage points was observed between those aged 50+ and under 50 years of aged.

Figure 5: Age and the incidence of self-employment,
2018 - as percentages



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

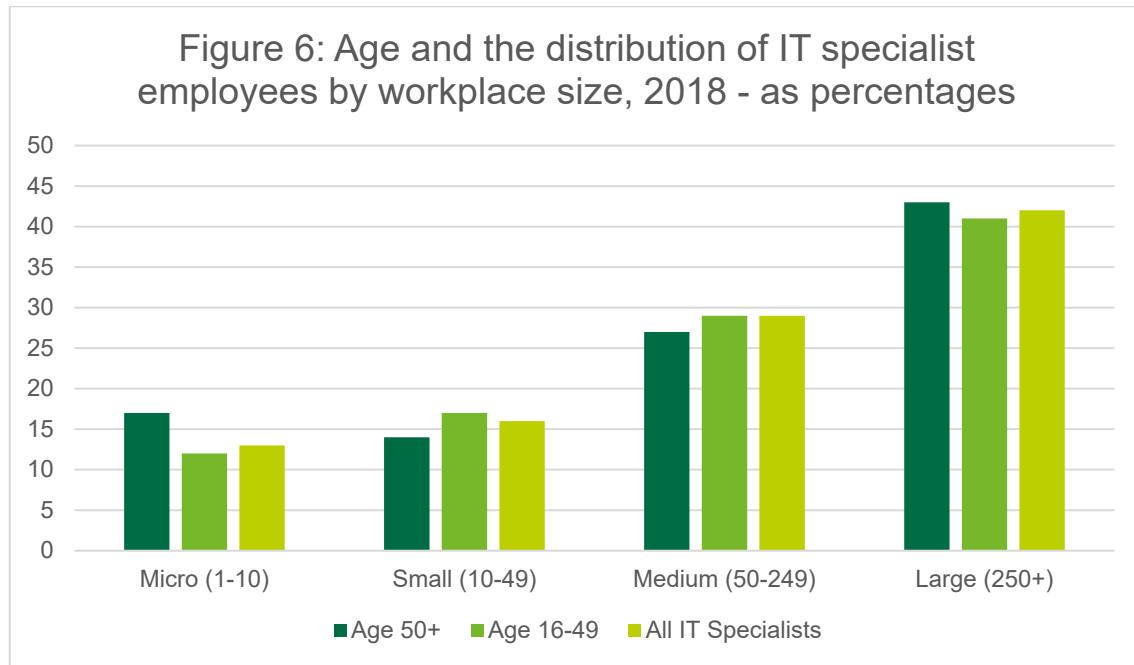
6.2 Employees and size of workplace

IT specialists working as employees are, perhaps understandably, more likely than others to be employed within larger workplacesⁱⁱ (i.e. as micro/small sites are less likely to have an in-house

function) and whilst just 28% of UK employees as a whole were working in larger sites during 2018 (those with 250 or more staff), a figure of 42% was recorded for IT specialist employees.

“OLDER IT SPECIALISTS MORE LIKELY TO WORK IN LARGER WORKPLACES”

This observation was marginally more pronounced for older IT specialists – 43% of which were working in larger workplaces during 2018.



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

As illustrated in the chart above, IT specialists aged 50+ were also more likely than others to be working in micro business sites with comparison figure in this case of 17% and 12% respectively (for employees aged 50+/under 50).

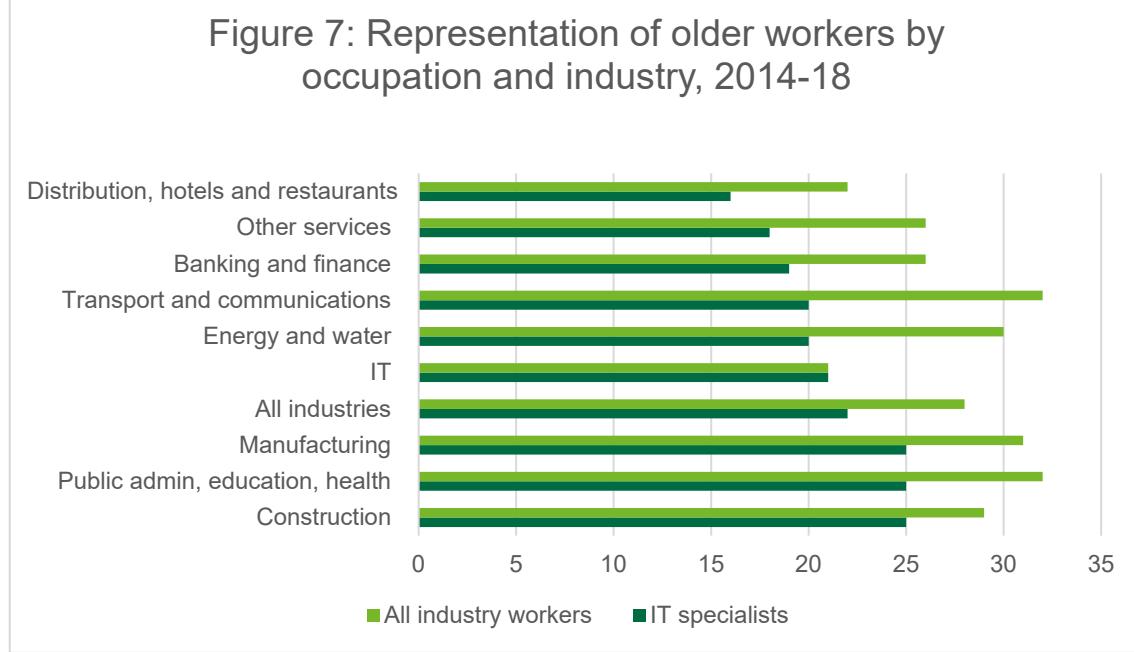
6.3 Industry of employment

Over four in ten IT specialists (44%) were working in IT businesses in 2018 and this was true also for those aged 16-49 and 50 and above. After IT, the next largest employment sector for IT specialists (aged 50+/otherwise) in 2018 was banking/finance (21% in each case) and then the public sector (15% and 13% respectively).

“MORE THAN FOUR IN TEN OLDER IT SPECIALISTS WORK WITHIN THE IT SECTOR ITSELF”

Looking in more detail at the levels of representation for older IT specialists in different industries, (over the 2014-2018 period inclusive) it can be seen that representation was highest in construction, the public sector and manufacturing businesses (25% in each case) and lowest in: distribution, hotels and restaurants in particular (16%) as illustrated in the chart below.

Figure 7: Representation of older workers by occupation and industry, 2014-18



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

“CONSTRUCTION, THE PUBLIC SECTOR AND MANUFACTURING HAVE THE HIGHEST LEVELS OF REPRESENTATION FOR OLDER IT SPECIALISTS”

7 WORKING HOURS AND BENEFITS

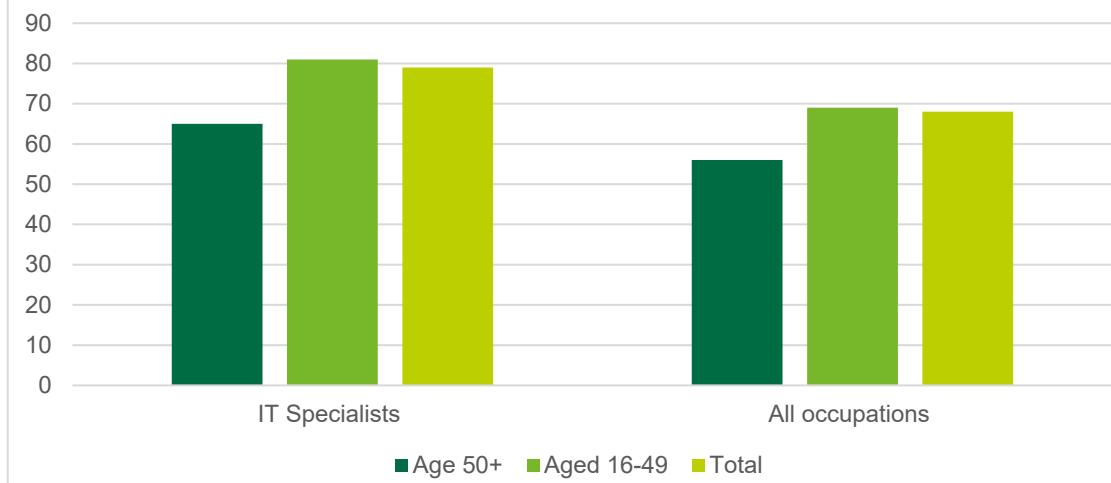
7.1 Full-time and part-time working

IT specialists in the UK are much less likely to work part-time than other workers, and in 2018, just 5% were working part-time hours compared with 25% of workers as a whole. Older IT specialists were however, much more likely to be working part-time – 8% of those aged 50 and above stating this to be the case.

“JUST UNDER ONE IN TEN OLDER IT SPECIALISTS WORK PART- TIME”

As with other IT specialists/workers more generally, when asked why they were working part-time, the majority of older IT specialists working part-time stated that they were working reduced hours as they did not want a full-time job (65% stating this to be the case on average over the 2014-18 period).

Figure 8: Proportion of part-time workers that did not want a full-time job, 2014-18, as percentages



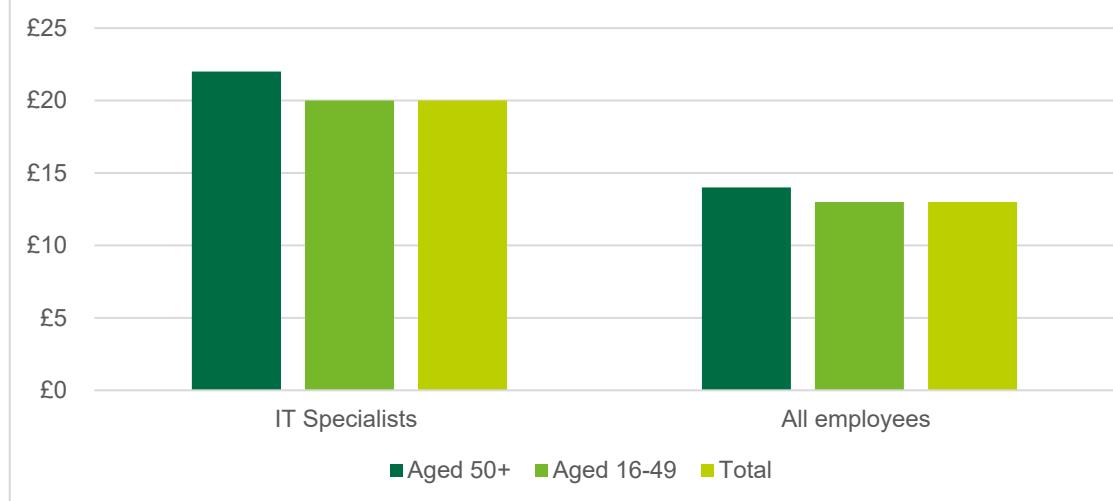
Source: Analysis of ONS Quarterly Labour Force Survey by BCS

7.2 Remuneration

In 2018, the median hourly earnings recorded for older IT specialists working as employees and on a full-time basis was £22 per hour – an amount 11% higher than that recorded for IT

specialists as a whole (£20 per hour) and 66% greater than that for all older employees in the UK at that time (for which a comparison figure of £14 per hour was recorded)ⁱⁱⁱ.

Figure 9: Median hourly earnings of full-time employees, 2018, in Pounds Sterling



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

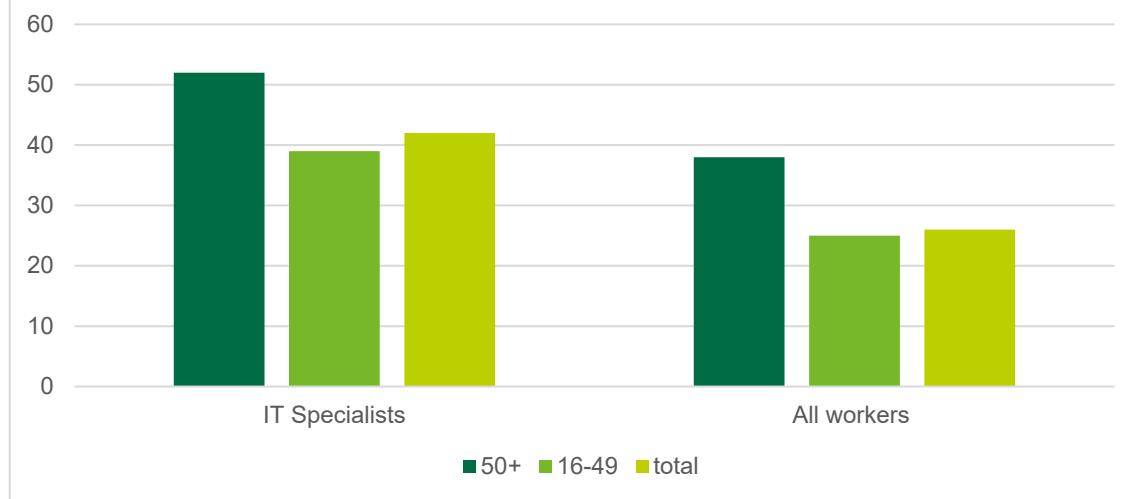
7.3 Responsibility

Using managerial/supervisory status as a proxy for the likelihood that individuals are given responsibility within their work, it is clear that during 2018, older IT specialists (that were employees) were much more likely to be in 'positions of responsibility' than individuals of other ages working in IT roles (comparison figures of 50% and 39% respectively).

“OLDER IT SPECIALISTS MORE LIKELY TO BE MANAGERS/FOREMEN/TEAM LEADERS”

This was also the case within the wider workforce, though in this case the difference was less pronounced (three percentage points).

Figure 10: Employees in ‘responsible positions’,
2018, in Pounds Sterling



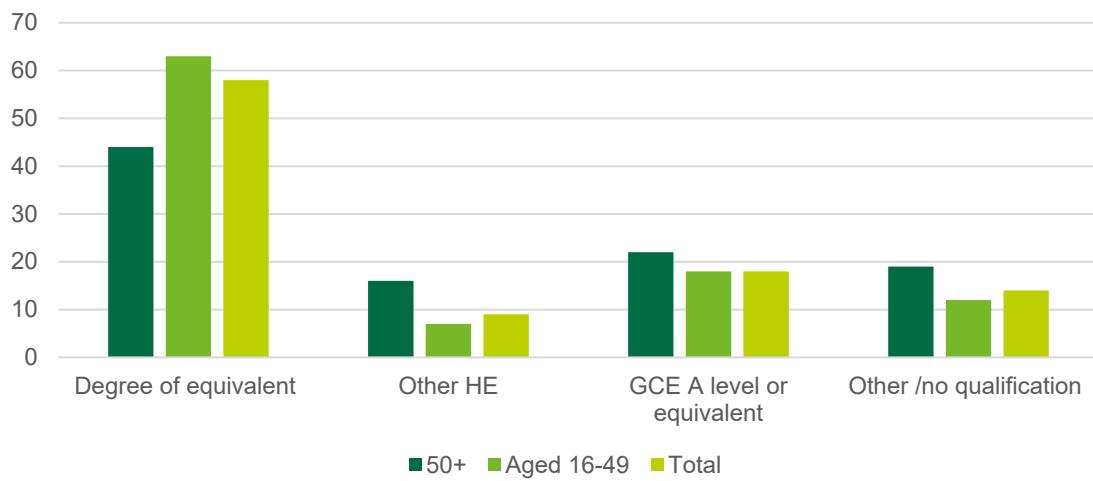
8 SKILLS

8.1 Qualifications held

Older IT specialists are notably less qualified than others working in IT positions and in 2018 whilst 59% of those aged 50+ working in IT jobs were thought to hold some form of HE qualification, the figure for those under 50 was more than ten percentage points higher (70%). Within the wider workforce too, younger workers were found more likely to hold some form of HE qualification though in this case the difference was much smaller - six percentage points in this case (with comparison figures of 39% and 45% respectively for those holding HE qualifications).

“OLDER IT SPECIALISTS MUCH LESS HIGHLY QUALIFIED THAN OTHERS”

Figure 11: Level of educational attainment amongst IT specialists, 2018, as percentages

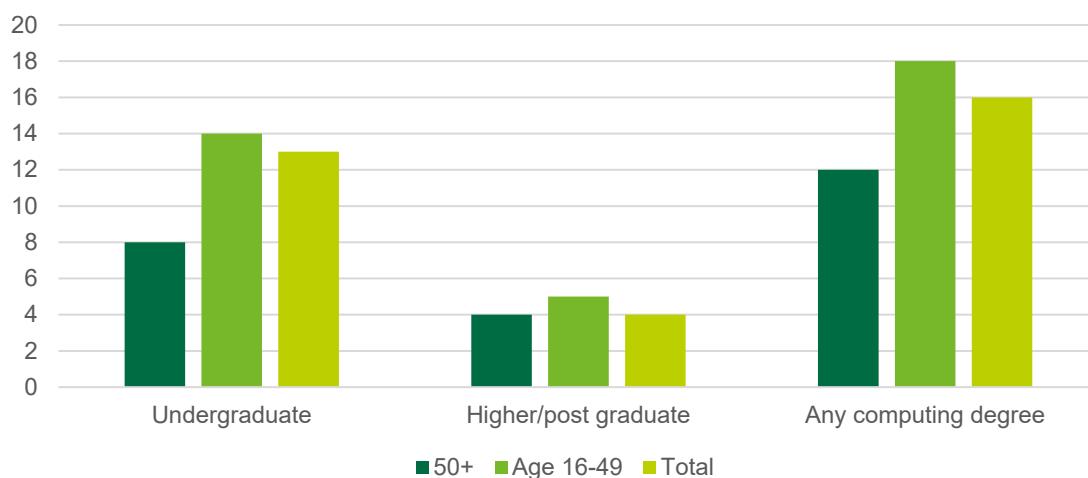


Source: Analysis of ONS Quarterly Labour Force Survey by BCS

IT specialists aged 50+ are also much less likely to hold a degree in an IT related discipline than those of a younger age working in such occupations, and in 2018, just 12% were thought to have either a higher or undergraduate computing degree compared with 18% of IT specialists aged 16-49.

OLDER IT SPECIALISTS MORE LIKELY TO HAVE AN IT DEGREE

Figure 12: Incidence of IT specialists holding computing degrees, 2018, as a percentage



Source: BCS analysis of ONS Quarterly Labour Force Survey data

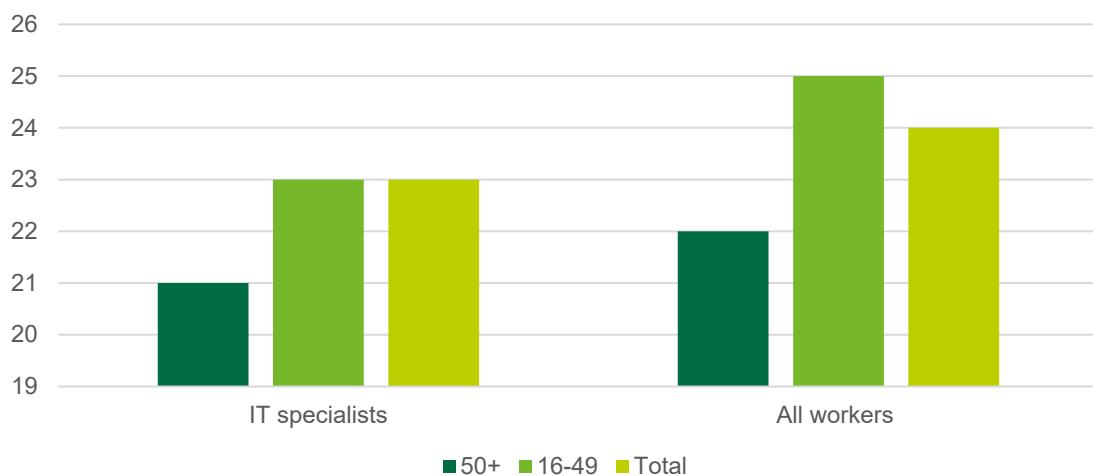
8.2 Skills development

Despite the arguably high skill/knowledge requirements associated with their work, IT specialists as a whole in the UK appear marginally less likely than other workers to receive job-related education/training and, throughout 2018, on average 23% of IT specialists stated that they had received some form of job-related education/training in the previous 13 weeks, compared with 24% of all workers.

“OLDER IT SPECIALISTS LESS LIKELY TO RECEIVE JOB-RELATED EDUCATION/ TRAINING”

The incidence of job-related education/training was marginally lower amongst older workers – 22% of which received education/training during the previous 13 weeks compared with 25% of ‘younger’ workers as a whole and this was also the case for older/younger workers in IT positions (comparison figures of 21% and 23% respectively).

Figure 13: Job-related education/training in the past 13 weeks, 2018, as percentages



Source: BCS analysis of ONS Quarterly Labour Force Survey data

8.3 Skills sourcing

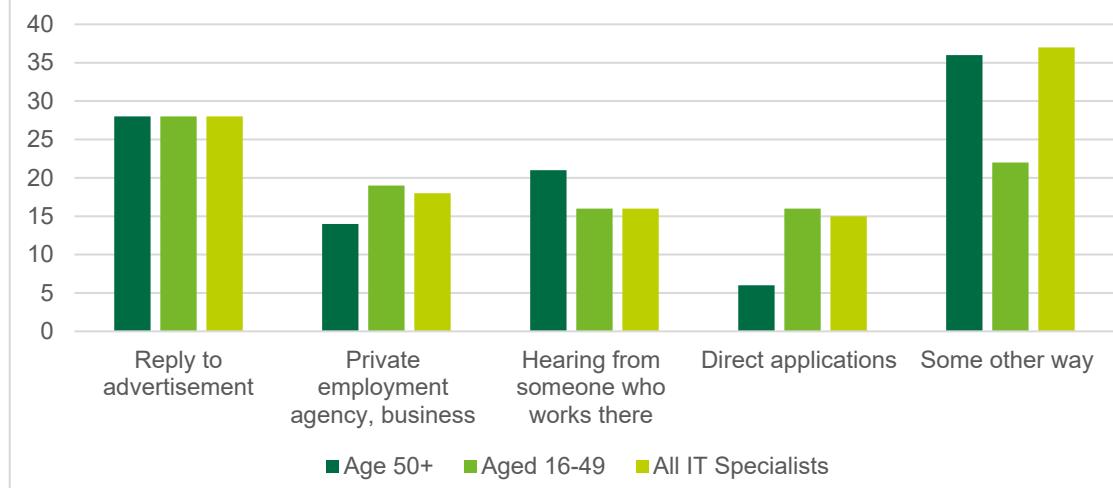
As with other UK employees, the most common identifiable means of IT specialists^{iv} securing a job (where stated) during the 2014-18 period was by 'replying to an advertisement' (28% of those that had been with their employer for less than one year stating they had secured work in this manner), and this was true for both older and younger IT specialists (28% in each case).

“OLDER IT SPECIALISTS NOTABLY LESS LIKELY TO OBTAIN EMPLOYMENT THROUGH DIRECT APPLICATIONS”

The next most common means of older IT specialists securing a job was via contacts already working with the employer (21%), followed by recruitment agencies (14%), and then direct applications (6%).

The proportion of older IT specialists gaining work via direct application was notably lower than that recorded by younger workers in IT positions (i.e. 16%) and though this was also true for older workers more generally, the difference in behaviour was less pronounced (i.e. 16% of older workers finding work in this way compared with 20% of those from younger age groups during the 2014-18 period).

Figure 14: Means of finding work amongst IT specialists, 2014-2018, as percentages



Source: BCS analysis of ONS Quarterly Labour Force Survey data

DATA NOTES

ⁱ This report contains statistical data from ONS which is Crown Copyright. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data, and research datasets employed may not exactly reproduce National Statistics aggregates.

Annual figures presented are derived from the ONS Labour Force Survey (LFS) and have been produced by averaging results for the four quarters of any given year/years. Further details of the LFS can be obtained direct from the ONS website:

<https://www.ons.gov.uk/surveys/informationforhouseholdsandindividuals/householdandindividualsurveys/labourforcesurveylfs>

ⁱⁱ For this report a generic age filter has been applied (16-64 inclusive) for all analysis presented unless specifically stated otherwise.

ⁱⁱⁱ In cases where estimates span multiple years, this amalgamation has been undertaken to overcome issues of small sample sizes which otherwise render estimates unreliable and/or potentially disclosive.

^{iv} Numerical estimates are rounded to the nearest 1,000, percentages (normally) to the nearest whole number, and rates of pay to the nearest £1 (hourly), as such totals given may not equal the sum of related subsidiary figures.