

Women in IT Survey

Contents

 Key findings Background Diversity Women in the IT profession A career in IT Profile of participants 	3 4 5 10 13
List of figures	
Figure 1 - Does your organisation / company have a diversity policy? Figure 2 - Does your organisation / company offer unconscious bias or diversity training? Figure 3 - Do you think the IT profession would benefit from having more women working in IT roles? Figure 4 - How easy or difficult do you think it is for women to return to a job in IT following a career break? Figure 5 - Do you think the IT profession offers the same career advancement opportunities for men & women? Figure 6 - Do you think remuneration for IT roles is the same for men and women? Figure 7 - What, if anything, do you believe should be done to encourage more women to work in IT? Figure 8 - What career advice would you give a young person who wanted to join the IT profession? Figure 9 - Which of the following do you think is necessary for a career in IT? Figure 10 - What is the most exciting aspect of your current IT role? Figure 11 - Which of the following most closely matches your position? Figure 12 - How many people are currently employed in your company in the UK? Figure 13 - Approx. how many people in your company are employed in IT roles within the UK? Figure 14 - And approximately how many of these (organisation's IT staff) are female?	4 5 6 6 7 8 9 10 12 12 13 14 14 15

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1. Key findings

1.1 Nearly eight out of ten participants (79%) feel that the IT profession would benefit from having more women working in IT roles. Only 5% said that it would not benefit.

- 1.2 Just over half of those questioned (53%) think it is difficult for women to return to a job in IT following a career break.
- 1.3 Nearly four out of ten of those questioned (37%) think the IT profession offers the same career advancement opportunities for men and women. A slightly higher proportion (43%) believes the opportunities are better for men. Only 2% stated that the opportunities are better for women.
- 1.4 Just over one-third of participants (35%) think remuneration for IT roles is the same for men and women. 40% believe that remuneration is better for men. Less than 1% is of the opinion that remuneration is better for women.
- 1.5 More encouragement in schools and universities was the top answer to the open question: What, if anything, do you believe should be done to encourage more women to work in IT?
- 1.6 The factors that participants feel are most necessary for a career in IT is an *interest in technology* (86%), a *logical mind* (84%), *common sense* (74%), and *general computer skills and literacy* (74%).

2. Background

2.1 Context and objectives

In May 2014 BCS, The Chartered Institute for IT is conducting a month long campaign to encourage more women to join the IT profession. This survey was commissioned to provide substance for press releases and debate.

2.2 Research method

- 2.2.1 The survey was conducted online by BCS. Personalised email invites were sent out to a random sample of about 5,000 BCS members based in the UK as well as to BCSWomen (BCS Specialist Group) based in the UK.
- 2.2.2 A total of 771 responses were received during the period 15 January to 2 February 2014. This represents a response rate of 12%.
- 2.2.3 Where responses do not sum to 100% for single response questions, this may be because the 'no replies' to individual questions are included in the calculations, but not displayed. Alternatively it may be due to rounding errors.
- 2.2.4 Unless otherwise stated percentages are based on the total number of respondents.

3. Diversity

3.1 Whether organisation has a diversity policy

Sixty three per cent of participants indicated that their organisation has a diversity policy. This figure rises to 80% for larger organisations (over 250 employees) and drops to 37% for SMEs (250 employees or less).

90% 80% 80% 70% 63% 60% 50% 43% ■ All participants (n=771) 37% 40% ■ Up to 250 (n=278) Over 250 (n=471) 27% 30% 20% 20% 16% 10% 10% 3% 0% Not sure / Not Yes No applicable

Figure 1 – Does your organisation / company have a diversity policy?

3.2 Whether organisation offers diversity training

Nearly four in ten organisations represented offer unconscious bias or diversity training. Once again this figure rises to 55% for larger organisations (over 250 employees) and drops to 14% for SMEs.

A relatively high proportion of participants are unsure whether their company offers this type of training or they felt the question is not applicable (34%).

These results are shown in Figure 2 on the next page.

60% 55% 50% 46% 40% 39% 40% 34% 30% ■ All participants (n=771) 30% 27% ■ Up to 250 (n=278) Over 250 (n=471) 20% 16% 14% 10% 0% Not sure / Not Yes No applicable

Figure 2 – Does your organisation / company offer unconscious bias or diversity training?

4. Women in the IT profession

4.1 Whether the IT profession would benefit from having more women working in IT

Nearly eight out of ten participants feel that the IT profession would benefit from having more women working in IT roles. Only 5% said that it would not benefit.

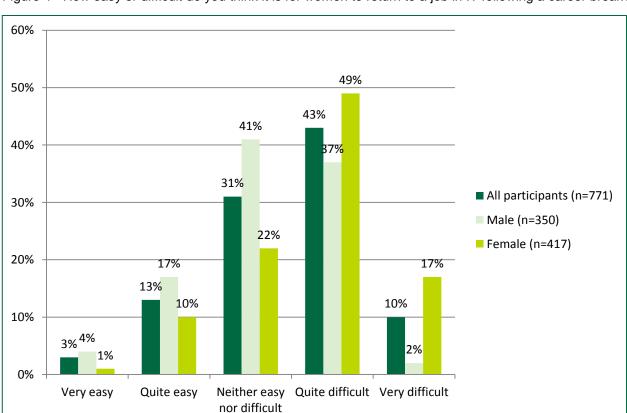
A higher proportion of females (89%) answered yes to this question compared with males (67%). Figure 3 shows these results.

100% 89% 90% 79% 80% 67% 70% 60% ■ All participants (n=771) 50% ■ Male (n=350) Female (n=417) 40% 30% 24% 20% 16% 10% 9% 10% 5% 0% 0% Yes No Not sure

Figure 3 - Do you think the IT profession would benefit from having more women working in IT roles?

4.2 Returning to IT role after career break

Just over half of those questioned (53%) think it is difficult for women to return to a job in IT following a career break.



April 2014

Figure 4 - How easy or difficult do you think it is for women to return to a job in IT following a career break?

65% of female participants feel it is difficult for women to return to a job in IT following a career break compared with 38% of males who think this.

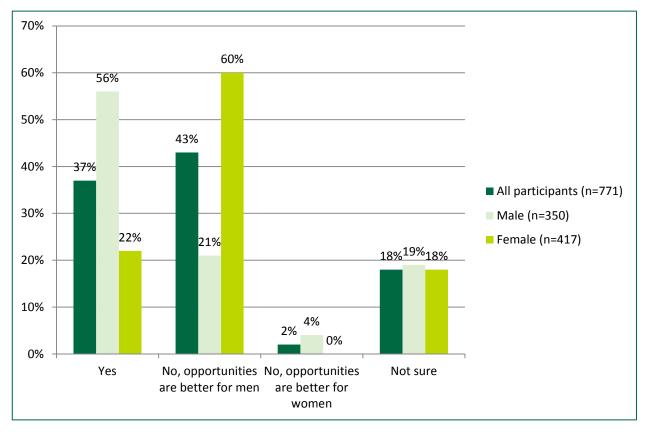
Only 3% of all participants think it is 'very easy' for women to return to a job in IT following a career break.

4.3 Career advancement opportunities

Nearly four out of ten of those questioned (37%) think the IT profession offers the same career advancement opportunities for men and women. A slightly higher proportion (43%) believes the opportunities are better for men. Only 2% stated that the opportunities are better for women.

Not surprisingly there are large gender differences in the way this question was answered. 56% of males think the IT profession offers the same career advancement opportunities for men and women, compared with only 22% of female participants.

Figure 5 - Do you think the IT profession offers the same career advancement opportunities for men & women?



4.4 Remuneration

Just over one-third of participants (35%) think remuneration for IT roles is the same for men and women. 40% believe that remuneration is better for men. Less than 1% is of the opinion that remuneration is better for women.

Once again there are large gender differences with 57% of male participants saying that remuneration for IT roles is the same for men and women, compared with only 17% of females who share this view.

70% 58% 60% 57% 50% 40% 40% 35% ■ All participants (n=771) ■ Male (n=350) 30% 25%25%25% Female (n=417) 20% 17% 17% 10% 0% 1% 0% 0% Yes No, it is better for No, it is better for Not sure women men

Figure 6 - Do you think remuneration for IT roles is the same for men and women?

4.5 Encouraging more women to work in IT

Participants were asked to indicate what they thought can be done to encourage more women to work in IT. This was an open-ended question; responses have been analysed and grouped into similar categories.

These groups of answers are shown in Figure 7 on the next page along with the number of mentions.

The top three groups of answers can be summarised as follows:

- 1. More encouragement at school to study computing related subjects and making a career in IT more attractive to girls when they are choosing their career.
- 2. Promoting the diversity of IT roles, with particular emphasis on soft skills.
- 3. An increase in flexible working to make it easier for women with family responsibilities to work.

Figure 7 - What, if anything, do you believe should be done to encourage more women to work in IT?

	Number of
	responses
Encourage study of computing / technology / science subjects at early age, school / More girls taking A levels and degrees in technology subjects / Make it more attractive to young women when they are choosing their career or still in full-time education / Better careers advisors / Talks, speakers in schools / Better schools programmes	177
Promote diversity of roles within IT / IT industry rebrand / Better marketing / Show that IT is more than just technical issues / Emphasize use of soft skills which are female friendly / people skills / business skills	122
Flexible working / Flexible working to allow more time with family / Job share / Friendly environment / Part-time opportunities / Homeworking	92
More women at executive level / More management support / Employers need to get over idea that technology is male profession / Male dominated / Cultural issue / Change of culture, attitudes / Behaviour change	77
Female role models / coaches / mentors / more role models	75
Promote it as being less 'geeky' / Losing the geeky image would help / Emphasize that it is not all nerdy coding / Difficult because of geeky image / Remove the geeky image	64
Offer relevant training for returners / Better training / Training for advancement / Better support for returners / Shorter training	44
Equal opportunities / Positive discrimination / Need more women to work in IT to encourage others	40
Nothing / I don't think it is a problem / Not necessary to artificially inflate numbers because of gender / Don't emphasize gender differences / The job should be given to the best person	37
Higher pay / Better salaries / Equal pay / Pay them what you pay men	23
More career progression / Better recognition of achievements	14
Encouragement from parents / society / encourage women to work in IT	13
Work experience schemes / internships / apprenticeships / graduate training schemes	11
BCS campaign / BCS should go into schools	9
Female support groups / Opportunities for women in IT to come together	6
Emphasize technical side / problem solving / analytical skills	5
Help with childcare / Help towards childcare costs to encourage returners	5
Emphasize fairly high salaries	2
Other	7
Don't know / Not sure	2

<u>Note</u>: figures are numbers of responses and not percentages. Using percentages to report on open-ended questions can be very misleading.

A selection of responses is given below:

'IT careers should be promoted in schools from a young age to attract more females to the profession. Work placements would also benefit young people as it would give them an insight to the diversity of job opportunities available in IT.'

'Engage in promotion of IT at an early stage in schools. Ensure opportunities are equal and employment based on skills.'

'Encouraging more girls to study sciences at school. Encouraging employers towards more flexible working - part-time, remote working etc.'

'This needs to start in schools. Pupils should be made aware of the variety of work and opportunities in IT - it does not have to be nerdy.'

'Promote the soft skills needed for IT roles so that IT appears more rounded and less geeky.'

'Female role models and support networks.'

'Better marketing of what is involved, you don't have to be a geek or code, there are many other roles within IT but equally as relevant as being a coder for example. Train and invest in women who do want to be technical.'

'Speak in schools; demonstrate to girls what flexibility can be implemented and how a career in IT can be fitted in around childcare, and how valuable the flexibility of a female point of view can be in the design of IT applications.'

'Schools need to learn that there are a variety of jobs in IT. People think that it's all technical stuff which seems to be a preference for men but there are some jobs that are in IT for which women are better suited.'

'There should be better opportunities for home / flexible working for all IT staff.'

'Very male dominated culture so there needs to be more flexible working and a more customer oriented approach.'

'I don't see a gender issue in employing women in IT. I see a gender issue in women not being interested in working in IT... Look at Primary Teaching & Nursing - both have the opposite problem, and no amount of 'encouraging' men to join has made much difference really. I really think we should move away from this idea that 'action must be taken' when a particular group is 'under represented'...'

5. A career in IT

5.1 Career advice for a young person who wants to join the IT profession

Participants were asked to tell us what career advice they would give to a young person who wants to join the IT profession.

Figure 8 - What career advice would you give a young person who wanted to join the IT profession?

Gain experience / Decide which area of IT you would like to work in / suits your skills / Be flexible / Wide variety of roles in IT / Take up a summer apprenticeship, work experience Get a degree / qualifications / certifications / training If you enjoy it go for it / Make sure you enjoy it / Aim high / Do it / Work hard / Don't give up / Have a passion Keep developing yourself / Obtain the relevant skills / Be prepared to keep up to speed with changes in technology / Keep learning Develop soft skills / project management / Promote business and communication skills / Understand the business / finance Join networking / support communities / Get a mentor / BCS membership / Talk to a careers advisor / Pick peoples brains every chance you get Excellent opportunities / Technology is exciting / Developing the future / Very rewarding / worthwhile / A profession you should really consider Find the right company / Find a job that offers flexible working / Find a role in a small organisation / Join a large organisation Do your own projects and show them to employers / Set up your own website / Build strong technical skills / Learn how a computer works, how to programme / Build a network with 2 or more PCs / Get hold of old, cheap PCs and build network Tackle sexism / Fight hard to get recognition / be strong / Be prepared to prove yourself against males / Have a thick skin Don't bother / Very male dominated / Dull / Take roles where it's easier to have career break / Become an Engineer, Lawyer, Doctor, Accountant, Bio-chemist, Economist instead There is a lot more to IT than programming / coding		Number of responses
Set a degree / qualifications / certifications / training 123		•
Have a passion Keep developing yourself / Obtain the relevant skills / Be prepared to keep up to speed with changes in technology / Keep learning Develop soft skills / project management / Promote business and communication skills / Understand the business / finance Join networking / support communities / Get a mentor / BCS membership / Talk to a careers advisor / Pick peoples brains every chance you get Excellent opportunities / Technology is exciting / Developing the future / Very rewarding / worthwhile / A profession you should really consider Find the right company / Find a job that offers flexible working / Find a role in a small organisation / Join a large organisation Do your own projects and show them to employers / Set up your own website / Build strong technical skills / Learn how a computer works, how to programme / Build a network with 2 or more PCs / Get hold of old, cheap PCs and build network Tackle sexism / Fight hard to get recognition / be strong / Be prepared to prove yourself against males / Have a thick skin Don't bother / Very male dominated / Dull / Take roles where it's easier to have career break / Become an Engineer, Lawyer, Doctor, Accountant, Bio-chemist, Economist instead		123
changes in technology / Keep learning Develop soft skills / project management / Promote business and communication skills / Understand the business / finance Join networking / support communities / Get a mentor / BCS membership / Talk to a careers advisor / Pick peoples brains every chance you get Excellent opportunities / Technology is exciting / Developing the future / Very rewarding / worthwhile / A profession you should really consider Find the right company / Find a job that offers flexible working / Find a role in a small organisation / Join a large organisation Do your own projects and show them to employers / Set up your own website / Build strong technical skills / Learn how a computer works, how to programme / Build a network with 2 or more PCs / Get hold of old, cheap PCs and build network Tackle sexism / Fight hard to get recognition / be strong / Be prepared to prove yourself against males / Have a thick skin Don't bother / Very male dominated / Dull / Take roles where it's easier to have career break / Become an Engineer, Lawyer, Doctor, Accountant, Bio-chemist, Economist instead		114
Understand the business / finance Join networking / support communities / Get a mentor / BCS membership / Talk to a careers advisor / Pick peoples brains every chance you get Excellent opportunities / Technology is exciting / Developing the future / Very rewarding / worthwhile / A profession you should really consider Find the right company / Find a job that offers flexible working / Find a role in a small organisation / Join a large organisation Do your own projects and show them to employers / Set up your own website / Build strong technical skills / Learn how a computer works, how to programme / Build a network with 2 or more PCs / Get hold of old, cheap PCs and build network Tackle sexism / Fight hard to get recognition / be strong / Be prepared to prove yourself against males / Have a thick skin Don't bother / Very male dominated / Dull / Take roles where it's easier to have career break / Become an Engineer, Lawyer, Doctor, Accountant, Bio-chemist, Economist instead		85
advisor / Pick peoples brains every chance you get Excellent opportunities / Technology is exciting / Developing the future / Very rewarding / worthwhile / A profession you should really consider Find the right company / Find a job that offers flexible working / Find a role in a small organisation / Join a large organisation Do your own projects and show them to employers / Set up your own website / Build strong technical skills / Learn how a computer works, how to programme / Build a network with 2 or more PCs / Get hold of old, cheap PCs and build network Tackle sexism / Fight hard to get recognition / be strong / Be prepared to prove yourself against males / Have a thick skin Don't bother / Very male dominated / Dull / Take roles where it's easier to have career break / Become an Engineer, Lawyer, Doctor, Accountant, Bio-chemist, Economist instead		76
worthwhile / A profession you should really consider Find the right company / Find a job that offers flexible working / Find a role in a small organisation / Join a large organisation Do your own projects and show them to employers / Set up your own website / Build strong technical skills / Learn how a computer works, how to programme / Build a network with 2 or more PCs / Get hold of old, cheap PCs and build network Tackle sexism / Fight hard to get recognition / be strong / Be prepared to prove yourself against males / Have a thick skin Don't bother / Very male dominated / Dull / Take roles where it's easier to have career break / Become an Engineer, Lawyer, Doctor, Accountant, Bio-chemist, Economist instead		64
organisation / Join a large organisation Do your own projects and show them to employers / Set up your own website / Build strong technical skills / Learn how a computer works, how to programme / Build a network with 2 or more PCs / Get hold of old, cheap PCs and build network Tackle sexism / Fight hard to get recognition / be strong / Be prepared to prove yourself against males / Have a thick skin Don't bother / Very male dominated / Dull / Take roles where it's easier to have career break / Become an Engineer, Lawyer, Doctor, Accountant, Bio-chemist, Economist instead		55
technical skills / Learn how a computer works, how to programme / Build a network with 2 or more PCs / Get hold of old, cheap PCs and build network Tackle sexism / Fight hard to get recognition / be strong / Be prepared to prove yourself against males / Have a thick skin Don't bother / Very male dominated / Dull / Take roles where it's easier to have career break / Become an Engineer, Lawyer, Doctor, Accountant, Bio-chemist, Economist instead		29
Tackle sexism / Fight hard to get recognition / be strong / Be prepared to prove yourself against males / Have a thick skin Don't bother / Very male dominated / Dull / Take roles where it's easier to have career break / Become an Engineer, Lawyer, Doctor, Accountant, Bio-chemist, Economist instead 23	technical skills / Learn how a computer works, how to programme / Build a network with 2 or	26
Don't bother / Very male dominated / Dull / Take roles where it's easier to have career break / Become an Engineer, Lawyer, Doctor, Accountant, Bio-chemist, Economist instead	Tackle sexism / Fight hard to get recognition / be strong / Be prepared to prove yourself	23
	Don't bother / Very male dominated / Dull / Take roles where it's easier to have career break /	21
		9
Work abroad / overseas 4		4

<u>Note</u>: figures are numbers of responses and not percentages. Using percentages to report on open-ended questions can be very misleading.

A selection of responses is given below:

'Go ahead - its a great industry to be part of - but try and get some work experience in different companies before you make a decision so that you have some idea of the multitude of different roles that are available and can choose your educational path appropriately.'

'I am an IT apprentice and would definitely recommend going down the apprenticeship route. My company has a fantastic attitude regarding training and I have completed courses which will help me for years to come. Gaining hands on experience is also better when applying for new roles - many companies want the experience...'

'There are a wide range of options so it is a good career for any one. Make sure you get some underpinning qualifications.'

'IT is a very diverse career and there are roles for every type of person and temperament. It's not all coding, but if you're good at foreign languages, give it a go, it's just another way of talking. It's nothing like playing computer games in your bedroom, unless you want to get into that side of things. A lot of the work in IT is about listening to and communicating with other people.'

'Get professional qualifications and balance your IT skills with some people focused and business skills so that you have a well rounded set of skills.'

'Do it! And join as many networking and support communities as you can, and find some mentors and advisors early on.'

'Do it. I can be a very rewarding career. Especially if you like to solve problems.'

'Go for it, IT needs a balance of male/females as thought processes etc differ between genders.'

'It's potentially the best move you will ever make. Everyone and everything requires some form of IT and it is constantly evolving...'

'Don't focus on the technology, focus upon the difference technology can make to the business. To do this you have to have an understanding of the business, so don't worry about investing time in non technical, business topics.'

'Decide on what excites you or that you feel passionate about and look to gain exposure to that technology at every opportunity.'

'Women bring different skills and approaches to problem resolution, etc. than men so I would encourage them to be themselves and bring their own personality into the IT role they take. Don't try and become a man or take on the attitudes and approach of a man.'

'Don't think your education stops when you enter the job market, the IT profession is one of those industries where we have to continually review and renew our skills. It's great!'

'Be prepared for continuous learning and development to keep up with the new technology.'

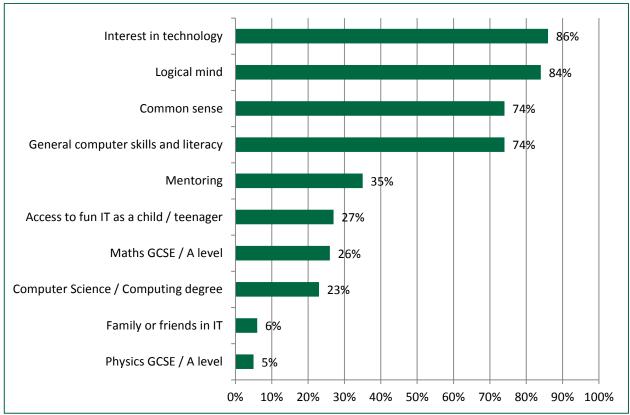
'The IT profession is vibrant, glamorous, dynamic and can be rewarding if the right company is found. Therefore, it should be a profession that you should really consider.'

'There is a very bright future in this area, and it is accessible by everyone - gender is irrelevant.'

5.2 Factors needed for a career in IT

The factors that participants feel are most necessary for a career in IT is an *interest in technology* (86%), a *logical mind* (84%), *common sense* (74%), and *general computer skills and literacy* (74%). These results are shown in Figure 9.

Figure 9 - Which of the following do you think is necessary for a career in IT?



5.3 Exciting aspects of IT role

Participants were asked to tell us the most exciting aspect of their current IT role. Figure 10 gives a visual representation of the responses.

Figure 10 - What is the most exciting aspect of your current IT role?



A selection of responses is given below:

'The challenge and the impact I make.'

'The fact that technology changes daily. New technologies and tools are created that have the potential to change all of our lives - if we want them to. It's an amazing time to be in IT right now.'

'Learning new skills and technology, building respect and reputation. Working in teams and having a sense of pride when software is released.'

'Opportunity to learn new skills and develop my career whilst being supported by a team and manager who accept women in IT.'

'The power to create things.'

'Variety in the projects I work on.'

'Variety. Everyday technology is advancing and I get to ride that wave!'

'Every day is different - the problem solving - the customer service - the change of technology and how it is helping our business. We are not cutting edge - but we are getting things right.'

'Seeing exciting new business opportunities opened by IT.'

'Talking to users/customers and finding solutions to complex problems.'

6. Profile of participants

6.1 Job role

A large variety of IT roles was represented as can be seen from Figure 11.

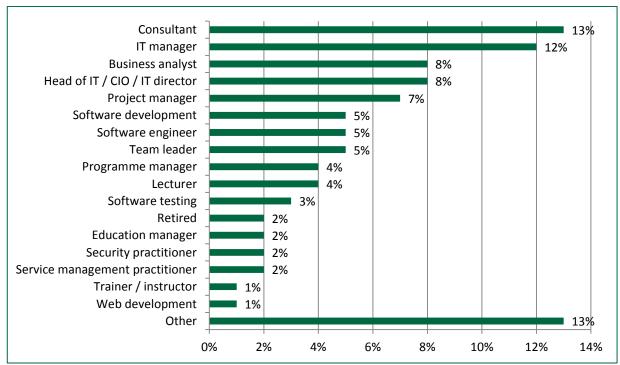
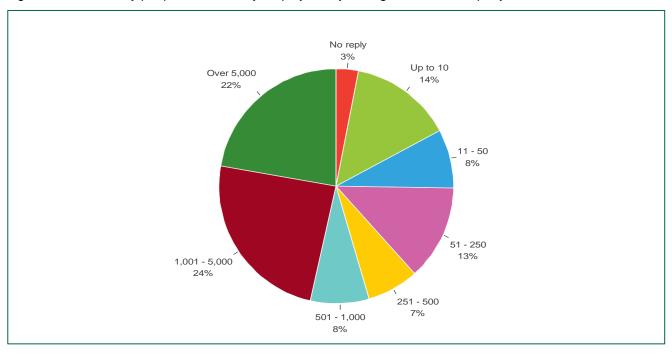


Figure 11 - Which of the following most closely matches your position?

6.2 Size of organisation

Forty six per cent of participants work in companies with over 1,000 employees. Just over one-third (36%) work for SME's.

Figure 12 - How many people are currently employed in your organisation / company in the UK?

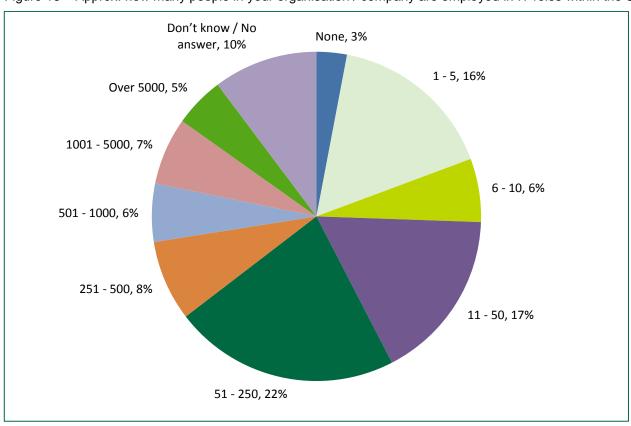


6.3 Number of IT staff

Nearly half of the participants (48%) represent organisations that employ over 50 IT staff and 22% employ between 1-10 IT staff. The mean average number is 1,728 which reflects the fact that some of the organisations surveyed have very large IT teams or are large IT companies. The median number is 66.

Figure 13 shows the distribution of these results.

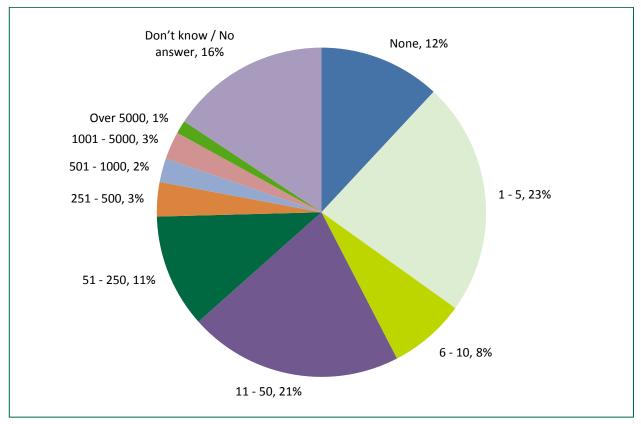
Figure 13 – Approx. how many people in your organisation / company are employed in IT roles within the UK?



6.4 Number of female IT staff

Just over one-third of organisations represented (35%) employ fewer than 6 female IT workers. 21% employ more than 50 female IT staff.

Figure 14 – And approximately how many of these (organisation's IT staff) are female?



The mean average number of female IT workers is 416. Again this has been influenced by the presence of some very large IT teams or large IT companies. The median number is 10.

6.5 Gender

Fifty four per cent of participants are female and 45% are male (1% undisclosed).

6.6 Age

The mean average age of participants is 45. The distribution is shown in Figure 15.

Figure 15 – Age of participants

