Key findings

- When asked to identify their organisation’s top five priorities for 2019, the top answers were continuous innovation (54%), operational efficiencies (52%), and business transformation and organisational change (45%).

- When asked to single out their number one priority, 22% chose business transformation and organisational change.

- The technologies that organisations are prioritising for 2019 are cloud (53%), cyber security (52%), automation (36%), IT governance (34%), and agile methods (also 34%).

- When asked to identify their top priority, cyber security and cloud could not be separated, with both on 15%.

- Only 12% of participants feel their organisation has enough resources to achieve success in 2019.

Which of the following are your organisation’s priorities for 2019? (Please select up to five)

- Continuous innovation: 54%
- Operational efficiencies: 52%
- Business transformation and organisational change: 45%
- Maintaining your competitive advantage: 40%
- Dealing with the pace of change: 33%
- Regulatory compliance: 33%
- Staff engagement: 32%
- Understanding your organisation’s overall digital capability: 30%
- Business relationship management: 17%
- Recruitment: 17%
- Brexit: 16%
- Diversity: 11%
- Ethical practice: 11%
- Other: 4%
- None of the above: 2%
When asked to select their organisation's top five priorities for 2019 the top answers were *continuous innovation* (54%), *operational efficiencies* (52%) and *business transformation and organisational change* (45%).

When asked to prioritise their top five, the top answer for SMEs is *continuous innovation* (59%). For larger organisations (>250 employees), the top answers are "*operational efficiencies*" and "*business transformation and organisational change*" (both 55%).

Business transformation and organisational change is less likely to be a priority for SMEs with only 25% picking it among their top five.

Understanding your organisation's overall digital capability is more likely to be a priority for larger organisations with 37% of corporates selecting this compared with only 18% of SMEs.

The top answer for respondents working in the IT industry are *continuous innovation* (67%) and *maintaining your competitive advantage* (62%). For those working in other sectors the top answer is *operational efficiencies* (55%).

The research suggests that a number of areas are less of an issue for the IT industry compared with other industries and these include *business transformation and organisational change* (33% versus 50%), *regulatory compliance* (16% versus 41%), and *understanding your organisation's overall digital capability* (18% versus 36%).

### Of these, which is your number one priority for 2019?

- **Business transformation and organisational change**: 22%
- **Continuous innovation**: 16%
- **Maintaining your competitive advantage**: 14%
- **Operational efficiencies**: 10%
- **Understanding your organisation's overall digital capability**: 7%
- **Regulatory compliance**: 6%
- **Dealing with the pace of change**: 5%
- **Brexit**: 5%
- **Staff engagement**: 4%
- **Recruitment**: 2%
- **Business relationship management**: 2%
- **Ethical practice**: 2%
- **Other**: 3%
When asked to select their organisation’s top priority for 2019 the top answer was *business transformation and organisational change* (22%). This was followed by *continuous innovation* (16%) and *maintaining your competitive advantage* (14%).

Among SMEs (organisations with 250 employees or fewer) the top answers were *continuous innovation* (19%) and *maintaining your competitive advantage* (18%). Only 7% identified *business transformation and organisational change* as their top priority.

Among larger organisations, *business transformation and organisational change* is clearly the top pick (30%).

Among those working within the IT industry, *continuous innovation* (21%) and *maintaining your competitive advantage* (19%) are the top two answers.

For other industries *business transformation and organisational change* (26%) is the top answer by far.

**Which of the following technologies or approaches is your organisation prioritising for 2019? (Please select up to five)**

The technologies that organisations are prioritising for 2019 are *cloud* (53%), *cyber security* (52%), *automation* (36%), *IT governance* (34%), and *agile methods* (also 34%).

The top answer for SMEs is *cyber security* (48%). For larger organisations (>250 employees) the top answer is *cloud* (57%). Agile methods and big data / insights are more likely to be prioritised by larger organisations compared with SMEs.

The top answer for the IT industry is *cloud* (54%). For all other industries combined the top answer is *cyber security* (58%). The IT industry is less likely to prioritise *IT governance* compared with other industries (23% versus 40%).

Cloud and cyber security are equally likely to be high priorities for both UK and non-UK companies. Organisations outside the UK are more likely to be prioritising big data / insight (33% versus 23%) and the Internet of Things (24% versus 15%).
Of these, which is your number one priority for 2019?

<table>
<thead>
<tr>
<th>Technology</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyber security</td>
<td>15%</td>
</tr>
<tr>
<td>Cloud</td>
<td>15%</td>
</tr>
<tr>
<td>Automation</td>
<td>12%</td>
</tr>
<tr>
<td>SaaS, PaaS, Iaas, x-aaS / as-a-service model / everything-as-a-service</td>
<td>10%</td>
</tr>
<tr>
<td>Agile methods</td>
<td>7%</td>
</tr>
<tr>
<td>IT governance (including legislative changes)</td>
<td>7%</td>
</tr>
<tr>
<td>Big data / Insight</td>
<td>6%</td>
</tr>
<tr>
<td>Mobile / Apps</td>
<td>6%</td>
</tr>
<tr>
<td>Artificial intelligence</td>
<td>5%</td>
</tr>
<tr>
<td>Data science</td>
<td>5%</td>
</tr>
<tr>
<td>Machine learning</td>
<td>3%</td>
</tr>
<tr>
<td>Internet of things</td>
<td>2%</td>
</tr>
<tr>
<td>Serverless architecture</td>
<td>2%</td>
</tr>
<tr>
<td>Blockchain</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
</tbody>
</table>

When asked to identify their top technology priority for 2019, **cyber security** and **cloud** both scored 15%. These were followed by **automation** (12%) and **SaaS, PaaS, Iaas, x-aaS / as-a-service model / everything-as-a-service** (10%).

The top answer for the IT industry is **cloud** (19%). For all other industries combined the top answer is **cyber security** (18%).

The IT industry is less likely to prioritise **IT governance** compared with other industries (2% versus 9%).

**To achieve success in 2019, what additional resources will your organisation need? (Please tick all that apply)**

<table>
<thead>
<tr>
<th>Resource</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced IT capability and skills in existing workforce</td>
<td>62%</td>
</tr>
<tr>
<td>Additional IT staff that are suitably qualified</td>
<td>45%</td>
</tr>
<tr>
<td>Increased budget</td>
<td>42%</td>
</tr>
<tr>
<td>Enhanced IT capability in leadership team</td>
<td>30%</td>
</tr>
<tr>
<td>None - we have enough resources</td>
<td>12%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
</tbody>
</table>
Only 12% of participants feel their organisation has enough resources to achieve success in 2019. 62% would like enhanced IT capability and skills in existing workforce.

93% of larger organisations indicated that they need more resources to achieve success in 2019, compared with 80% of SMEs. The top need for larger organisations is enhanced IT capability and skills in existing workforce (74%), whereas among SMEs the top answer is an increased budget (43%).

Those working outside the IT industry are more likely to need enhanced IT capability and skills in existing workforce (67% versus 52%), and an increased budget (48% versus 29%).

To achieve success in 2019, organisations outside the UK are more likely to need more resources compared with those in the UK (96% versus 85%). More specifically, those working outside the UK are more likely to need enhanced IT capability and skills in existing workforce (74% versus 57%).

Where do you see the biggest capability gaps within your organisation’s IT skill set?
How do you plan to address these issues? (Please tick all that apply)

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up-skilling / on-the-job training</td>
<td>74%</td>
</tr>
<tr>
<td>Career development planning</td>
<td>45%</td>
</tr>
<tr>
<td>Mentoring</td>
<td>36%</td>
</tr>
<tr>
<td>General recruitment</td>
<td>36%</td>
</tr>
<tr>
<td>Professional certifications</td>
<td>31%</td>
</tr>
<tr>
<td>Headhunting</td>
<td>18%</td>
</tr>
<tr>
<td>Suitable apprentices</td>
<td>17%</td>
</tr>
<tr>
<td>Relevant professional body membership</td>
<td>11%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>3%</td>
</tr>
</tbody>
</table>

When asked how they plan to address capability gaps within their organisation’s IT skill set, the top answer by far was up-skilling / on-the-job training (74%).

When considering upcoming changes and trends in the IT industry, what’s most likely to keep you awake at night?
How do you believe the public's trust in the IT profession has changed in the past five years?

<table>
<thead>
<tr>
<th>Trust level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust is much higher now</td>
<td>11%</td>
</tr>
<tr>
<td>Trust is somewhat higher now</td>
<td>23%</td>
</tr>
<tr>
<td>About the same</td>
<td>32%</td>
</tr>
<tr>
<td>Trust is somewhat lower now</td>
<td>23%</td>
</tr>
<tr>
<td>Trust is much lower now</td>
<td>10%</td>
</tr>
<tr>
<td>Not sure</td>
<td>2%</td>
</tr>
</tbody>
</table>

Mean average = 3.02 where 1 is low and 5 is high.

Respondents are equally divided on the issue of the public's trust in the IT profession over the past five years. 34% feel that trust is higher now (top two boxes), 33% think it is lower (bottom two boxes), and 32% feel it is about the same.

IT leaders who work within organisations outside the IT industry are more likely than those working within the IT industry to feel that the public's trust in the IT profession has increased in the past five years (37% versus 26% top 2 boxes).

Participants who work within organisations outside the UK are more likely than those working in the UK to feel that the public's trust in the IT profession has increased in the past five years (51% versus 26% top 2 boxes).

Over the past five years, how do you feel the following have impacted on the public’s trust in the IT industry? (UK respondents)

<table>
<thead>
<tr>
<th>Analysis</th>
<th>% Respondents</th>
<th>Base</th>
<th>Mean</th>
<th>Very negative impact 1</th>
<th>Very negative impact 2</th>
<th>Very negative impact 3</th>
<th>Very negative impact 4</th>
<th>Very negative impact 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artificial intelligence</td>
<td>366</td>
<td>3.07</td>
<td>3%</td>
<td>21%</td>
<td>45%</td>
<td>23%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Cyber security</td>
<td>366</td>
<td>2.58</td>
<td>22%</td>
<td>34%</td>
<td>17%</td>
<td>18%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Management of large scale projects</td>
<td>366</td>
<td>2.62</td>
<td>12%</td>
<td>35%</td>
<td>33%</td>
<td>15%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Use of personal data by organisations</td>
<td>366</td>
<td>1.94</td>
<td>47%</td>
<td>26%</td>
<td>13%</td>
<td>8%</td>
<td>4%</td>
<td></td>
</tr>
</tbody>
</table>

Use of personal data by organisations has had the most negative impact on the public's trust in the IT industry, out of the options presented. Several high profile data breaches in recent years is likely to be a factor here.

IT leaders based in the UK responded more negatively to all four topics questioned about compared with IT leaders outside the UK.

This was especially the case for the management of large scale projects and the use of personal data by organisations.
How important is it to your organisation that your IT professionals have the highest levels of ethical thinking and practice? (Please rate on a 1 to 5 scale where 1 is not at all important and 5 is very important)

1 - Not at all important | 1%
2                         | 2%
3                         | 10%
4                         | 24%
5 - Very important        | 63%

Mean average = 4.45 where 1 is not at all important and 5 is very important.

63% of participants feel it is very important to their organisation that their IT professionals have the highest levels of ethical thinking and practice. A further 24% think it is quite important. Only 3% said it was not important (bottom two boxes).

There is evidence that those working in the IT industry are more likely than those outside the IT industry to feel that it is very important for their organisation that their IT professionals have the the highest level of ethical thinking and practice (73% versus 59%).

How do you evidence your IT team’s professionalism externally (i.e. to clients / customers)? (Please tick all that apply)

- They have industry qualifications | 58%
- They are members of a professional body with a code of conduct | 47%
- They are trained by us           | 42%
- They have verifiable CPD         | 27%
- Other                            | 13%

When asked how they evidence their IT team's professionalism externally (i.e. to clients), 58% said by industry qualifications and 47% stated that they are members of a professional body with a code of conduct.

Industry qualifications are the most important factor when providing evidence of their IT team's professionalism externally for both UK and non-UK respondents.
What could be done to improve the public’s perception of the IT industry as trustworthy?

Better industry security

In which type of organisation do you work?

- IT / Telecoms: 31%
- Financial and insurance activities: 15%
- Public administration and defence; compulsory social security: 10%
- Professional, scientific and technical activities: 10%
- Education: 9%
- Manufacturing: 8%
- Human health and social work activities: 5%
- Transportation and storage: 4%
- Charity / Not for profit: 2%
- Publishing and media activities: 2%
- Wholesale and retail trade: 2%
- Electricity, gas, steam and air conditioning supply: 1%
- Agriculture, forestry and fishing: 1%
- Arts, entertainment and recreation: 1%
- Construction: 1%
- Administrative and support service activities: 1%
- Accommodation and food service activities: 1%
- Real estate activities: 1%
- Water supply; sewerage, waste management and remediation activities: 1%
- Other: 2%
How many people are employed worldwide by your organisation?

- Up to 10: 15%
- 11–50: 7%
- 51–250: 11%
- 251–500: 7%
- 501–1,000: 5%
- Over 5,000: 35%

Where are you based?

- UK: 69%
- Asia: 12%
- Europe: 9%
- Africa: 4%
- North America: 2%
- Australasia: 1%
- Middle East: 1%
- Other: 1%

Which of the following best describes your role within your organisation?

- IT manager: 29%
- CIO / IT director: 12%
- Head of IT / ICT: 12%
- CTO / Head of technology: 10%
- CEO / Managing director: 9%
- CDO / Head of Digital: 2%
- CISO / Head of security: 2%
- COO / Operations director: 2%
- Other: 22%
Technical notes

The survey was conducted online by BCS. A total of 366 respondents completed the survey during the period 7 December 2018 to 14 January 2019. Personalised email invites were sent to circa 13,000 BCS members of MBCS grade or above inviting them to take part in the research. There were one or two screening questions at the start of the survey to check that respondents met the criteria required for the survey, i.e. IT manager or above, or a role which contributes to setting their organisation's strategic objectives. Calculating a true response rate to the survey is difficult as it is unknown how many of the members contacted met the criteria required. The survey was also promoted via three editions of the weekly member newsletter.