Cloud – the next generation: Enterprise
Digital transformation in the Enterprise

We are entering a period of fundamental change where every business, and every person, is using technology to change how they get things done, lowering the barriers to entry to new markets and enabling the development of new business models and services. The net result is unprecedented levels of disruption and competition.

Staying competitive in this context calls on enterprises to be adaptable and open to change, but for many organisations, this change does not come easy, and it is large, asset-heavy businesses that are especially vulnerable to digital disruption. Many have invested heavily, over many years, in their company’s technology assets, often making change or even integration, difficult, slow and expensive. New market entrants can easily be more agile, innovative and rapidly scalable, and the certainties of legacy and market share no longer exist.

The Cloud Industry Forum commissioned this research, in association with BT, to understand how well-prepared UK-based enterprises (with over 1,000 employees) are to withstand this disruption and it is clear that many are laying the foundations for a smarter future.

Enterprises are using more cloud-based services than ever before – and they are doing so in pursuit of a wide range of benefits, chief among them the flexibility and agility it provides. This shift towards procuring IT-as-a-service and a greater reliance on trusted third parties is freeing up IT teams to focus on activities that can help deliver wide-reaching business change, while exploring new app development methodologies.

While enterprises still spend a greater proportion of their IT budgets on on-premise and legacy technologies, this won’t remain the case for long and within three years, respondents expect that cloud infrastructure will consume almost twice the budget of legacy implementations. And with this shift, enterprises are starting to look further up the stack, away from the infrastructure to the applications that sit on it, not least Artificial Intelligence (AI), blockchain, and the Internet of Things (IoT).

While it is still relatively early days for these emerging technologies, enterprises are starting to incorporate AI, blockchain and IoT into their technology roadmaps, which many see as critical to helping them meet the needs of their customers and thrive in the future.

**To what extent do you think that your organisation’s sector and business model will be disrupted by digital transformation in the next two years?**
1 Digital transformation climbing up the Enterprise agenda

74% of enterprises either have a digital transformation strategy, or are currently implementing one, and almost all expect to have a digital transformation strategy in place within the next two years, as they seek to counter rising levels of disruption.

However, there are doubts about how effective these strategies will be, with seven in ten reporting that their strategy could be clearer, and over half (54%) stating that they lack the skills they need for successful transformation.

Does your organisation have a digital transformation strategy?

- **YES**
  - YES, WE ARE CURRENTLY IMPLEMENTING ONE
  - NO, BUT WE INTEND TO HAVE ONE IN THE NEXT 12 MONTHS
  - NO, BUT WE INTEND TO HAVE ONE IN THE NEXT 24 MONTHS
  - NO, WE DO NOT INTEND TO HAVE ONE IN THE NEAR FUTURE
  - I DON’T KNOW

2 Cloud adoption accelerating

Nine in ten (89%) currently use cloud-based services and the vast majority (85%) expect to increase their usage over the next 12 months. Significantly, while adoption remains relatively shallow today, within three years, the amount spent on cloud infrastructure (20%) is set to far surpass that spent on on-premise (12%) as enterprises decommission legacy technologies and embrace new more innovative ways of working.

Why is your organisation utilising cloud-based, or cloud sourced services?

- **BUSINESS AGILITY** 49%
- **FLEXIBLE IT** 38%
- **CLOUD SCALABILITY** 36%
- **COST SAVING** 28%
- **OUTSOURCE IT** 21%
- **UPGRADE IT NEEDED** 25%
3 Cloud fuelling uptake of next generation technologies

Respondents were clear in their belief that cloud is essential for next generation technologies to function, and while only a small minority currently have blockchain, AI and IoT-based solutions, many are building them into their technology roadmaps.

Around three in ten large enterprises believe that IoT (27%) and blockchain (29%) will be critical or very important for their organisations in the next five years, and 39% think the same of AI, and spend on these technologies is set to increase accordingly.

Are you already utilising any of these next generation technologies?

![Bar chart showing responses to the question about the use of AI, Blockchain, and IoT](chart)

4 Barriers to adoption

Despite clear enthusiasm for digital transformation and next generation technologies, four in five enterprise respondents identified barriers to their adoption of some sort. A number of respondents cited concerns about security and skills, though the most commonly-cited barriers drew back to the newness on the technologies and a lack of clarity around ROI.

It is clear that while there is willing, enterprises will require greater assistance from the vendor and channel community to realise the art of the possible and safely embrace these technologies.

What is preventing your organisation from utilising the following next generation technologies?

<table>
<thead>
<tr>
<th></th>
<th>AI</th>
<th>Blockchain</th>
<th>IoT</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ROI is unknown</td>
<td>25%</td>
<td>32%</td>
<td>19%</td>
</tr>
<tr>
<td>The use cases aren’t clear enough for us</td>
<td>24%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>The technology is too new</td>
<td>25%</td>
<td>17%</td>
<td>23%</td>
</tr>
<tr>
<td>Security concerns</td>
<td>23%</td>
<td>19%</td>
<td>16%</td>
</tr>
<tr>
<td>We don’t have the skills</td>
<td>22%</td>
<td>17%</td>
<td>18%</td>
</tr>
</tbody>
</table>

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Conclusion

With data traffic exploding, customer expectations rising, disruptive competitors emerging and cost pressures intensifying, the move to cloud is critical for achieving the agility and pace of innovation required to be successful in today's changing market.

This report bears out what we hear from our customers every day. Most enterprises have well developed strategies aimed at minimising digital disruption and enhancing competitiveness in their existing and new markets. Cloud is clearly an enabler, but organisations are finding challenges in achieving the agility and flexibility they seek.

Many enterprises rush in with an all in the cloud strategy which is difficult to achieve. Alternatively, they let their business units take a lead, with a wish to be fleet of foot and entrepreneurial. But either way, it's likely to lead to all kinds of problems.

Most commonly the challenges that need to be overcome are:

- Leveraging legacy infrastructure that wasn't built for and doesn't support a cloud experience.
- The need for new skills, expertise and tools to scale and manage a hybrid mix of public and private cloud workloads.
- How best to secure the cloud, to detect threats earlier and respond faster.

As the cloud market expands and matures, we see enterprises, more than anything, are keen to retain speed, choice and control over cloud deployments and their application landscape.

We want to put you in control of the cloud and turn your uncertainties into confidence, giving you the benefits no matter what your current IT looks like.

Wherever you are in your journey, we have the network, infrastructure and know-how to help you balance the risk and reward of the cloud.

David Simpkins
General Manager - Managed Services and Public Cloud, BT
About

The Cloud Industry Forum (CIF) was established in direct response to the evolving supply models for the delivery of software and IT services. Our aim is to provide clarity and advice for end users when assessing and selecting Cloud Service Providers based upon the clear, consistent and relevant provision of key information about the organisation/s, their capabilities and operational commitments.

BT is a leading business communications provider with customers in 180 countries, serving global multinational organisations with security, cloud and networking services.