Cloud in Financial Services – the next generation

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aryaka
Digital disruption in the UK financial services sector

The evolution of the global financial services marketplace, in combination with Open Banking initiatives and Payment Services Directive 2 (PSDII), is gradually changing society’s relationship with money and reshaping the role that financial institutions have traditionally held. Now, almost every business operating in the financial services sector has to interconnect and converge with the competition by sharing customer data and offering a new range of personalised products and services to consumers.

The new Open Banking regulations are intended to increase protection for consumers making online and mobile payments by ensuring cross-border financial transactions are safer, quicker and easier. However, to achieve this, financial organisations need to proactively invest in the latest technological innovations and build a powerful, versatile and highly secure digital architecture that can support these nascent processes.

Those organisations who rise to this challenge and adapt their infrastructure accordingly will survive and thrive, but those who hesitate to innovate will struggle and lose market share. This is especially important for those traditionally risk-averse institutions hoping to compete with the agile fintech start-ups and challenger banks disrupting the market.

Against this backdrop, the Cloud Industry Forum (CIF) and Aryaka commissioned a research project to understand the technology investments and digital maturity of financial services organisations across the UK. The study focused on IT and business decision makers at companies with over 50 employees and average IT procurement budgets of £8 million per year.

Encouragingly, the research confirms that the majority of respondents are currently laying the foundations for a smarter, safer and hyperconnected financial future. The growing maturity of cloud, improvements to security, and an increasingly favourable outlook on cloud from the Financial Conduct Authority have seen cloud adoption rates rocket in the sector. Almost all (96%) respondents report that they are using at least one cloud-based service, driven in large part by the cloud’s agility and scalability, helping to create operational efficiencies and deliver cost savings.

These systems can also be integrated with the latest Artificial Intelligence (AI) and Machine Learning (ML) components to automate and expedite the digital identity verification process, reducing the risk of fraud or money laundering. This will be vital for complying with the upcoming changes to the Regulatory Technical Standards (RTS) by the European Banking Authority’s Regulatory Technical Standards (RTS), which will come into force in September 2019.

However, financial services firms must ensure that their moves towards cloud are underpinned by strong security, and the data suggests that there is room for improvement here. Over half agreed that their cloud security could be improved (58%), and a similar proportion were not confident in their ability to meet their regulatory obligations (52%). Skills shortages also emerged as an area in need of greater attention, with 64% reporting that they lacked the security skills they needed to support their businesses.
The network is another area that will need attention as the financial services sector transitions to more distributed IT environments. Financial services organisations need to prioritise their back-end WAN architectures and infrastructure to improve network performance and ensure all their products and services can fully leverage the benefits of their cloud deployments.

The industry is clearly undergoing a great transformation, though many financial services firms will require greater assistance from the vendor and channel communities before they can realise their ambitions for change. Assuming they can find this support and select their partners carefully, the future looks bright for the financial services sector.

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?

Many financial services firms will require greater assistance from the vendor and channel communities before they can realise their ambitions for change.
1 Digital transformation taking hold in financial services

78% of financial services businesses 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 six in ten (61%) reporting that their digital transformation strategy could be clearer, and a similar proportion (64%) stating that they lack the skills they need for successful transformation.

Does your organisation have a digital transformation strategy?

![Diagram showing distribution of responses]

- **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**

2 Cloud adoption accelerating

Almost all (96%) currently use cloud-based services and the vast majority (87%) expect to increase their usage over the next 12 months. Within three years, the amount spent on cloud infrastructure (18%) is set to surpass that spent on on-premise (11%) as financial services businesses decommission legacy technologies and embrace new more innovative ways of working.

Cost savings and the scalability and agility of cloud are the biggest drivers of cloud adoption in financial services.

The reasons for this growing uptake of cloud are many, though the most-commonly-cited are the potential it holds for delivering cost savings, and the scalability and agility of the delivery model.

Why is your organisation utilising cloud-based services?

- **COST SAVING**: 38%
- **CLOUD SCALABILITY**: 38%
- **BUSINESS AGILITY**: 35%
- **ABILITY TO TEST NEW TECHNOLOGY**: 35%
- **FLEXIBLE IT SPEND**: 31%
- **WE HAVE TRUSTED IT PARTNER**: 27%
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 half of financial services businesses believe that IoT (46%) blockchain (48%) and AI (50%) will be critical or very important for their organisations in the next five years, and spend on these technologies is set to increase accordingly.

Are you already utilising any of these next generation technologies within your organisation?

![Bar Chart](image)

4 Barriers to adoption

Despite clear enthusiasm for digital transformation and next generation technologies, all financial services respondents identified barriers to their adoption of some sort. A number of respondents cited concerns about skills and security, though other barriers drew back to the newness of the technologies and a lack of clarity around ROI.

While there is clear intention, many organisations 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>22%</td>
<td>28%</td>
<td>22%</td>
</tr>
<tr>
<td>The use cases aren’t clear enough for us</td>
<td>26%</td>
<td>28%</td>
<td>22%</td>
</tr>
<tr>
<td>The technology is too new</td>
<td>30%</td>
<td>12%</td>
<td>24%</td>
</tr>
<tr>
<td>Security concerns</td>
<td>26%</td>
<td>24%</td>
<td>36%</td>
</tr>
<tr>
<td>We don’t have the skills</td>
<td>28%</td>
<td>24%</td>
<td>14%</td>
</tr>
</tbody>
</table>
Conclusion

As the UK’s financial services sector adjusts to regulations like PSDII, technology can help organisations to not only adapt, but thrive. As a result, it is hardly surprising to see big banks and other financial services institutions explore new technologies to keep up with increasingly agile fintech competitors.

This research demonstrates that now is a crucial time for the UK’s financial services sector to move to the cloud. With cloud spend set to surpass that of on-premise infrastructure in the next three years, and the vast majority of UK financial services organisations planning to increase their cloud usage over the next 12 months, how they achieve this is more relevant than ever.

The reasons for doing this are crucial and clear. Formerly encumbered by legacy technology the UK’s financial services sector now sees the cloud as providing the scalability it needs, agility without compromising reliability, significant cost-savings and the ability to test new and innovative technologies. However, it is critical that the move to the cloud does not compromise security, regulatory and compliance requirements.

As businesses the world over carry out digital transformation, today’s digital-first minded enterprises, must:

- Be able to deliver global connectivity over a software-defined private network.
- Access cloud and datacentre applications fast, from anywhere in the world.
- Deploy anywhere in the world in hours.
- Protect data, applications, and users across edge, core, and cloud.

The technology choices and partnerships UK financial services organisations make now will build the foundation for a secure future as they digitally transform and move legacy infrastructure to the cloud.

Keeping up with the speed of business, as well as plucky fintechs, has never been more important for traditional banks. This research demonstrates there is more work for the UK financial services space to do when it comes to fully utilising the cloud for emerging technologies such as IoT or blockchain. However, traditional financial services institutions have their work cut out for them as they need to fundamentally focus on upgrading core banking systems and partnering with tech-native fintechs to provide customers with the service they demand.

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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.

Aryaka is transforming how global enterprises connect sites and users worldwide, and use mission-critical applications to support modern business execution demands. Aryaka’s Global SD-WAN combines a purpose-built private network, SD-WAN, optimization and acceleration techniques, connectivity to cloud platforms, and network visibility in a single solution that is delivered as a service.