

Navigating the digital shift

The essential move towards technology-centric solutions to meet the demands of the modern economy.

Leveraging cloud technology

Cloud technology has a key role in speeding up digital transformations, achieving operational excellence, and the creation of customer-centric services. Cloud solutions can help banks achieve their goals in a number of ways:



SCALABILITY:

Cloud and cloud-native technologies can provide the scalability and reliability that banks need to augment their services.



RESILIENCE:

Technology can quickly become out-of-date, and updating and maintaining in-house technology requires significant costs and effort. Leveraging cloud providers that can enable greater resilience and agility.



CYBER SECURITY:

Keeping ahead of sophisticated cyber criminals places a huge burden on banks, requiring the ability to change rapidly and close any points of failure that could be exploited by fraudsters.



SPEED OF CHANGE:

With legacy technology, adapting services in response to customer needs can take months to achieve. Cloud technology enables banks to rapidly test and deliver the new features customers are looking for, thereby remaining competitive while meeting their obligations to stakeholders.



ADAPTABILITY:

As well as providing scalability and reliability, cloud-native technologies can also be wrapped in API interfaces that allow banks to connect to new technologies in different ways, and use them in different environments.

Building resilience with cloud solutions

Cloud solutions can help banks to not only improve their customer propositions, but also increase their resilience, both by minimising the risk of any outages and by ensuring that issues can be resolved quickly with minimal service interruption. This is particularly important given banks' standing in society as a trusted manager of people's money and payments.

Benefits of a multi-cloud approach

As cloud adoption continues, banks are looking at how they can diversify their service providers to achieve a multi-cloud/cloud-agnostic position. Relying on a single cloud platform can mean that banks are locked into a specific provider – and it also leaves banks at risk of a service interruption if their vendor suffers an outage.

As well as supporting greater interoperability, a multicloud model provides greater resilience in the event of any issues, and can also help banks navigate regulatory challenges.

A research report published in 2023 by Finextra Research in association with Form3, From Cloud to Multicloud: a Pathway to Resilience [**Read here**], found that resilience was seen as the biggest benefit of a multicloud environment. Meanwhile, the drivers of implementing a multicloud infrastructure included regulatory demands and refining the customer offering through improved services.

The term "multicloud" has various interpretations, each offering different levels of resilience and reliability for bank payment platforms. Financial institutions may believe they have implemented a true multicloud model, but discrepancies in definitions can lead to confusion.

This summary compares four cloud approaches— Single Cloud, Multi-cloud (procurement), Multicloud - Active/Passive, and Multi-cloud - Active/ Active—to clarify the differences and determine the most resilient and reliable options for financial institutions in their journey to the cloud:



Single Cloud

A single cloud provider offers benefits over traditional data centres, such as running applications across multiple Availability Zones and regions. However, managing a single platform across regions is challenging due to data consistency and latency concerns. Sole reliance on one provider also poses a risk of vendor lock-in.



Multi-cloud (procurement)

This approach allows teams to select the best-priced or technically suited infrastructure from multiple cloud providers. However, interfacing services built in different clouds can be difficult, potentially leading to a complex architecture and reduced resilience if issues arise in any of the cloud providers.



Multi-cloud - Active/Passive

The Active/Passive model involves a standby platform in an alternative cloud, which can result in longer recovery times and increased downtime during failures. The idle nature of the passive environment can be inefficient and risky, as it may not function as expected during a disaster. Data consistency and application configuration across providers can also be challenging.



Multi-cloud - Active/Active

An Active/Active model deploys services in a single cluster across cloud providers, ensuring consistent operation. Customers can load balance requests at all times, eliminating uncertainty around infrastructure state. The platform can withstand the loss of a full cloud region or provider, with failed requests automatically re-sent to an alternative cloud. Real-time data consistency is maintained across providers, ensuring data state remains unaffected by cloud disruptions.

The Active/Active Multi-cloud approach is the most resilient option for financial institutions, offering robust data consistency and the ability to withstand cloud provider or region loss.

USING DATA EFFECTIVELY

It's important to remember that the cloud is not, in itself, enough to help banks create truly customercentric services. Banks also need to think carefully about how they can use data whether that means working with cloud native and SaaS providers, or building their own capabilities. "

What we're seeing in the market is that organisations who are setting themselves up to extract, connect and assess consumer data are gaining an advantage in terms of being able to offer new propositions.

Eimear O'Connor, Chief Product Officer, Form3