



BANKING ON THE CLOUD

CHALLENGES AND OPPORTUNITIES

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Banking on the cloud – Challenges and opportunities

This article was written by Roger Camrass, Director of Research for CIONET International, and is based on the conversations held during an event on 29th June sponsored by Infosys and entitled 'banking on the cloud'

Banks and other financial institutions have been relatively slow to migrate to public cloud despite their recent pronouncements. As a sector they face several unique challenges as well as opportunities. Firstly, they are subject to regulatory constraints that vary between countries. Secondly, they have large investments in core applications and infrastructures that have lengthy depreciation cycles. Thirdly, they face intense competition for talent needed to affect cloud migration.

During the event, leading organisations drawn from the UK and global financial services sector shared their views on how the move to cloud might trigger a fundamental rethink of both business and IT architectures. Here is a summary of the discussion.

Public cloud offers a new choice of eco-system

Delegates described a growing choice of cloud service providers (CSP) that suit their different needs:

- AWS is recognised as providing the best customer experience and innovation potential for financial service organisations. This reflects its retail heritage within the parent company, Amazon.
- AZURE has taken poll position as a platform that delivers operational efficiencies to its clients and boasts an impressive set of Dev Op tools. Given its support for Microsoft Office, AZURE has benefited from remote working during the pandemic.
- Google Cloud is seen as offering improved ways of managing and transferring data across the broader cloud eco-system, with specific prominence in edge computing. Again, this reflects its heritage as a search engine platform.

IBM is making moves to create a financial cloud platform that would offer specific services to the financial services community. Given its own dominance in banking applications over decades, this looks like a promising approach.

How might banks exploit the emerging cloud eco-system?

The principal components of any major bank are savings and loans, payments and cards. Underpinning these three commercial activities are unifying core systems that were designed many decades ago and offer little flexibility for product or service innovation. In the words of one delegate, his core system is purely a ledger, or system of record, that operates purely in batch mode.

Delegates discussed the main options relating to their own digital transformation journeys:

- Modernise the existing 'factory' by decomposing ageing core systems into a set of cloud-native applications that can run on different cloud platforms. There are some commercial developments to support this approach such as 10X Banking that offers a 'super-core', and Temenos that provides modern enterprise software.
- Create a new digital bank as per Marcus and Goldman Sachs. This avoids the need to re-platform ageing core systems. The challenge for such digital banks is the cost of acquiring customers. Marcus has used interest rate incentives to attract its first batch of retail clients.

So far, most large banks have been reluctant to move their core systems into the cloud. Recent surveys suggest that only 15-20% of compute power now resides in public clouds. The rest is a mix of on-premise and private cloud. Reluctance to migrate includes tight regulatory pressures combined with sunk investments in proprietary systems.

One interesting variation was mentioned by a Swiss bank that has transferred its data centres to Microsoft. This enabled the bank to preserve data sovereignty for its Swiss clients whilst shifting day to day management to a third party.

Back to basics for financial service companies

The advent of cloud has opened a business-centric debate amongst bankers and other financial service companies about where their future value lies. These organisations must accel in two areas to maintain their franchise against newcomers such as Revolut and Monza bank:

- **Customer engagement** – the rapid growth of mobile banking has enabled newcomers to attract customers away from traditional banking channels such as branches, especially in areas such as cards and payments. Companies such as Google and Apple have a natural advantage in the payment area.
- **Product innovation** – Banks have relied heavily on their scale and trust worthiness to retain customers. It was often said that bank relationships enduring longer than most marriages. But the younger generation is more transient and will swop providers in weeks or months rather than years or decades.

The one enduring quality of large banks was brought to head during the 2008 financial crisis where governments were prepared to use public funds to stave off bankruptcy under the banner of 'too big to fail'. We can assume that such institutions will survive as 'safe' deposit platforms well into the future, focusing on savings and loans. Inherent here are operating efficiencies and scale advantage, especially as they relate to capital adequacy. It would be difficult to image that any of the public cloud players would wish to enter core banking where risk management is so fundamental for survival.

A hybrid model emerges

As financial companies seek to define their strategic end goals, public cloud could provide new and exciting options for longer term collaboration in new eco-systems. As mentioned, it is unlikely that CSPs will compete directly with banks and insurance companies due to an inherent aversion for financial risk. However, they are likely to take on the bulk of the processing and storage within the sector, enabling CSPs to become massive utility platforms. This raises serious issues with regulators such as where client data is stored, and how such utilities can preserve business resilience between competing banks.

But perhaps the most promising scenario is that specialist cloud operators (or what we call Software as a Service providers) will begin to offer individual micro-processes such as credit validation, loan approvals, payments. This will enable established institutions to disassemble monolithic operating processes into their component parts and select best-in-class cloud-based software providers to fulfil each micro-segment.

A dichotomy for CIOs and business leaders

The evening concluded with some specific challenges to be resolved:

- Within the IT organisation, CIOs need to review which applications could be migrated to the public cloud, and which cloud operators provides the most suitable platforms and tool sets for future developments.
- At Board level, executives need to consider how the move to cloud might present opportunities to break-up monolithic systems and processes and thus increase speed and agility. Cloud could be the centre piece of digital transformation.
- How active collaboration with leading cloud service partners may offer new organisational and business models capable of competing with small and aggressive newcomers.

As mentioned, delegates remain at the early stages of their move to public cloud platforms. However, all recognise that migration will accelerate in the next five years with the potential of reaching 80-90% penetration by mid-decade. Finding partners to assist with this transformation will be a prerequisite for success.



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