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# Achieving financial innovation through the cloud

Innovative banks who already understand cloud benefits are using this technology in a multitude of ways to understand risk, segment customers, track market movements, develop new instruments and ultimately gain a competitive advantage in an increasingly fierce market.

They are using the technology to process large volumes of information, reducing their time to market by rapidly creating and selling new and innovative financial solutions. Atom Bank is one example of an innovative bank turning to cloud to accelerate its digital transformation efforts. With cloud, the bank can provide more agility and scalability at a lower cost. The challenger bank operates in a very fast evolving environment and needs to take advantage of current innovation, whilst building for future speed by building more SaaS and creating an architecture that is resilient to future industry changes. Turning away from on-premise data centres towards the cloud has enabled Atom Bank to keep up with its tech savvy customer base by updating product app features or even creating entirely new services quickly and cost-effectively.

Other major players are also tapping the cloud to develop entirely new services. For example, Refinitiv recently launched its new Tick History database on Google Cloud Platform. The new offering allows Refinitiv's customers to access, query and analyse its extensive archive of pricing and trading data in much shorter timeframes, using Google Cloud's BigQuery.

Others leverage real-time market information streamed into large-scale, real-time databases and AI/ML models to quantify and cost risk. The time saved processing this information allows these banks to offer products at a much lower cost to their customers.

Traditional banks can also utilise the cloud to combat fraud and money laundering through AI and ML models, much like their challenger counterparts. Combining transactional and behavioural data can help more accurately detect fraud patterns and simultaneously avoid costly false positives. For example, using Google Cloud's BigQuery, Cloud Dataflow and Cloud Datastore to extract and store features for its model in real time, Monzo has already reduced its rate of fraud to an order of magnitude lower than the industry average.

Similarly, cloud-based technologies are being leveraged for banks' own risk-management to determine liquidity and exposure quicker, to carry out mark-to-market adjustments and for better accounting in general.

HSBC is an example of a global bank - which is over a hundred and fifty years old - that is helping to better serve its customers using cloud technology. Using Google Cloud, HSBC can analyse petabytes of data in minutes. This allows the bank to calculate their liquidity position for scores of countries in a fraction of the time of their previous system. And HSBC can run much more complex financial crime analytics in a shorter time, while ensuring their data security and privacy.

It's not just banks and financial services companies that benefit from cloud-first banking, customers stand to gain the most. Cloud is transforming the technology ecosystem, and it's set to revolutionise the banking sector well beyond the core infrastructure. Now is the time for banks and technology companies to work together to take innovation of financial services and products to new heights for the benefit of consumers. ●