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PUBLIC CLOUD IN FINANCIAL SERVICES

RETAIL BANKING EXECUTIVE SUMMARY

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PROLOGUE: PUBLIC CLOUD IN RETAIL BANKING

The public cloud has made a steady and significant impact on retail banking as financial institutions look to innovate and keep up with new market entrants setting the standard for digital engagement. Different financial institutions (FIs)—depending on their size, market conditions or business direction—are at different stages along their journey to cloud adoption.

For many years risk-aversion slowed the pace of migration, but the business case is becoming clearer as advancements in technology capabilities have enabled banks to address some of the initial challenges for adopting public cloud. With some new cloud offerings including enhanced security and encryption protocols and methods to address ever changing compliance regulations, banks can now be more confident in moving workloads to public cloud.

The global financial industry has also changed with the COVID-19 pandemic and banks now are realizing an accelerated need to modify process as more employees work from home. This is causing banks to examine their operations to find new efficiencies in this environment. The public cloud is an option to address new operational models.

Some financial institutions still struggle with where to begin a public cloud journey and what the best use cases are. This Public Cloud in Financial Services: Retail Banking Prologue provides a brief overview of the newer, growing uses cases of public cloud for retail financial institutions to consider.

PUBLIC CLOUD USE CASES IN RETAIL BANKING

While FIs have relied on cloud for ancillary applications such as email, CRM, or application development/testing, they haven't previously felt comfortable to migrate their mission critical processes and applications to a public cloud. Today, however, they are increasingly enabling sophisticated ways of migrating specific workloads into a cloud environment, and this includes, more advanced and mission-critical use cases. This section analyzes these use cases.

Digital Contact Centers

The COVID-19 pandemic has pushed workers from centralized offices to working from home (WFH). Moreover, an increased share of contact center and corporate home office work done remotely is likely to be permanent as FIs realize operational conveniences and lower real estate costs with WFM. However, decentralized remote work has increased other operational costs and created new, expensive IT security requirements. Cloud computing is ideally suited to centrally managing costs and IT security from decentralized work.

Contact center operations and technology needs to shift from in-person and on-premises to remote work enabled by cloud infrastructure. Pandemic-driven loan forbearance and delinquencies are rising, so contact center support work for collections and other customer inquiries will need to scale over time. Moreover, contact centers are evolving into multi-channel contact centers focused on providing a personalised service and resolving complex user issues. Cloud deployment is therefore an attractive approach for these systems, many of which have added the same digital customer engagement capabilities that retail bank digital channel technologies possess.

A Tier 1 (over USD \$500 billion in total assets) financial institution used the cloud to transition more than 100,000 employees very quickly to working from home. They were able to operate their contact centers fully from home and contact center employees are supporting one million video client calls every day. Their cloud-based solution can support eight times the normal daily employee login volume.

Payments Hubs

Real-time, instantaneous, payments processing has become table stakes in a digital, mobile world. Payments is the lifeblood of business in general and financial services in particular. Although many on-premises, legacy payments systems have web-enabled their systems to be near-real-time, overnight batch processing or intraday batch memo post processing is still prevalent and doesn't always provide accurate, real-time balances and transaction information.

A \$2.1 billion bank for many of the cryptocurrency exchanges in the US was experiencing an explosion in wire volumes. It had 542 customers with 232 more in the pipeline. Their existing solution could not fully support real-time, straight-through processing (STP) and operating costs were increasing. The bank chose a cloud-based payment service to add more functionality and automation to implement the year after. They realized a 30% reduction in cost per wire, a 70% increase in STP, and expected to reduce total cost of ownership by \$3.2 million over five years.

Digital Retail Lending

Loan origination systems (LOS) are following digital point-of-sale (POS) solutions into the public cloud. In prior years, some loan origination technology vendors built private cloud SaaS solutions ahead of market demand for public cloud solutions, which are now coming into vogue. Mid-sized and small financial institutions that have simpler technology operations have led the way in acquiring these solutions. In contrast, core lending system migration is more complex for large FIs, and these systems are often highly complex, customized, and difficult to rip out and replace or migrate to the public cloud. Moreover, larger lenders have multiple, specialized systems for different types of retail and corporate loans, and for loan origination and loan servicing.

Non-traditional fintech, nonbank, and bank competition have shifted the view of financial institutions regarding public cloud deployment. For example, a top ten nonbank financial (NBF) institution in India (based on market capitalization) outsourced its entire lending platform (including loan origination, servicing and collections), to the public cloud to focus on their core competencies of product distribution, capital allocation, and risk management. They realized benefits across the board, from customer satisfaction, to processing speed and efficiency, and company financial results: a 90% reduction in total cost of ownership (TCO) of their lending systems, a 75% reduction in resource count, faster system update deployment speed, and a 99% reduction in time to create and implement third party integrations.

Digital Customer Engagement

Most customer engagement and digital channel solutions are moving from an on premises environment to a cloud environment, and from the private cloud to the public cloud. Digital banking is about creating a superior customer experience, and continuously improving it. The cloud's continuous development/deployment environment improves speed to market and the ability to make changes or enhancements without a long development timeline, which is optimized in a cloud environment. Public cloud also offers an ecosystem of services and third-parties which enhance development capabilities through a wider array of tools. Financial institutions can move more developers from maintaining software or just "keeping the lights on" to higher value development/product enhancement projects that further improve customer engagement.

A traditional regional incumbent bank in North America moved their entire business process management layer into the cloud. This allowed them to expose core services across the entire suite of channel applications. Abstracting functionality away from legacy platforms and into the cloud has allowed them to more easily develop data-driven digital channels and customer engagement capabilities, as they are no longer tied to a longer and more complex development cycle.

Digital Mortgage Origination

Mortgage loan origination is more difficult to move completely into public cloud environments because it requires many complex internal systems and external system integrates to obtain and manage virtually every piece of confidential information a customer possesses. A solution to this challenge is to create a separate cloud-based platform on an FI's IT stack to integrate and manage internal and external systems from the point of sale to loan closing and servicing system onboarding. An option when a lender can't move everything to the public cloud at the same time. The LOS stays on premises, but the digital POS, the real-time customer engagement, data-driven loan decisioning, mortgage eClosing, and external partner management is in the public cloud. The FI realizes the majority of the public cloud benefits while managing internal technology and risk management requirements.

For example, a Tier 2 (over USD \$100 billion) US bank deployed a SaaS-based digital mortgage origination and eClosing platform. Their ability to sign mortgage loan documents remotely and digitally is enabling them to continue lending uninterrupted by new social distancing requirements mandated by the COVID-19 pandemic. They realized other operational benefits including reduction in notary errors, higher employee productivity, and faster legal recording of mortgage deeds.

Core Banking Systems

Deployment specifics will vary, but a move to core banking in the cloud can dramatically increase an institution's agility, offloading some of the expensive and non-differentiating aspects of maintenance and direct resources towards innovation and front-end pursuits. This can dramatically improve the efficiency of a financial institutions operating model. Financial institutions similarly benefit from the dynamic scalability of a public cloud implementation, provisioning resources in a fraction of the time.

A small Canadian digital-only challenger bank chose to move their entire infrastructure into the public cloud. They've realized concurrent user capacity increases of 150%, improved incident investigation of 75%, and have a new development pipeline of more than 3,000 builds per month.

CONCLUSION

While there are many paths a bank can take in the move towards public cloud, what's clear is that most institutions are putting cloud migration front and center. It's a common thread across all of the most modern digital financial institutions globally. Investments are being made, and those in the vanguard are well on their way to cloud maturity. They will likely end up in a multi-cloud environment with a combination of onpremises, public and hybrid operating seamlessly together. While each approach will depend on a bank's strategy, an institution should be making moves today to increase its public cloud footprint and migration strategy.

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