The move to cloud is gaining momentum

The benefits of cloud computing are compelling in numerous sectors of the economy and banking is no exception. Cloud services come in various models and they eliminate not only the requirement for capital investment in physical data centers, but they also slash IT overheads in the long run.

Storage and processing power are effectively outsourced, leading to on-demand scalability coupled with stability and resilience. The benefits cascade all the way down to the customer; cloud computing is a key enabler in advancing open banking, a key innovation that will allow also Saudi Arabia's banking industry to deliver best-in-class services to its customer base.

That said, banks in the Kingdom still face two main challenges; the first is the availability of domestic cloud supply that complies with SAMA's data sovereignty regulations and the second is the quality of that supply. Local cloud providers have so far fallen short of meeting the expected demand of reliable, scalable and economical supply.

But is that soon to change? Most evidently, yes. The vigor we have witnessed in the cloud market during and following LEAP 2023 was quite exciting. A number of hyperscalers announced their plans to set up shop in the Kingdom and that is likely to be a game changer.

Hyperscalers step in, step up

We are seeing the fruits of that decision with the announcements by Microsoft, Google, IBM, Bios Middle East, in addition to Oracle's expansion, among others, to develop cloud regions throughout Saudi Arabia. These large service providers, offer computing and storage services at a massive scale, coupled with expertise, innovation, and a wide range of industry-focused solutions. What is more, they provide scalability, security, innovation, and customer-centricity along with services like fraud detection, payment services, financial data services, and hosted core banking systems.

Saudi Arabia is currently significantly more expensive in terms of cloud offerings, compared to global peers, due to a lack of competition in the market. The arrival of the hyperscalers will lead to greater competition and, eventually, downward pressure on cost. However, a cloud region typically requires a 12 to 18-month runway to full cloud accessibility and integration.

What does all this mean?

Well, there are significant implications for the entire banking and financial sector, from large to small commercial banks, capital companies and the insurance sub-sector. The increased ability to connect services between large and small players will present an opportunity for collaboration and streamlining of processes, leading to greater efficiencies.

There will be immediate and ongoing cost savings in IT infrastructure; capital investment in physical datacenters and capacity upgrades will be consigned to history. However, in the short-term there may be some costs associated with legacy infrastructure adaptation and repurposing.

A wider pool of cloud-native applications will become available, enabling innovation in services and enhanced customer experience.

Regulatory preparations for Saudi's cloud integration

Various laws and frameworks exist to ensure regulatory oversight of cloud computing as well as data hosted and stored on the cloud. These include:

- The requirement for service providers to register with the Communications, Space & Technology Commission (CST – formerly CITC) if they control data centers or other critical cloud system infrastructure hosted in Saudi Arabia.
- Banking Rules and Regulations issued by SAMA, which cover aspects such as governance, disclosure, risk management, and consumer protection.
- The Cloud Computing Regulatory Framework which sets out rules for cloud service providers and customers.
- The Open Banking Framework, which allows third-party developers to access customer data from banks with their permission.

Additionally, financial sector regulations are being tightened to accommodate migration to cloud computing (personal data protection, data handling, cybercrime etc.) For example, cloud customers will need to classify their data according to its sensitivity and comply with relevant laws and regulations regarding data protection and transfer. Data integrity will need to be protected using encryption, authentication, backup, audit, and monitoring techniques; and data will be prevented from moving to other jurisdictions through the use of contractual clauses, technical measures, and legal safeguards.

Regulatory compliance built into the cloud

While the prospect of more regulation may be daunting for some, there is a silver lining to every cloud. Enforcing Saudi Arabia's regulatory framework on cloud providers could help to reduce the regulatory burden on banks and financial institutions. Creating banking-specific landing zones or "banking hardened" installations are prime examples. The collaboration, for instance, between IBM and Bank of America has resulted in a fit-for-purpose cloud that has security, privacy and bank-specific regulatory compliance built in. The partnering resulted in a policy framework with numerous public cloud controls, architecture patterns and guidance for implementation and evidence.

Cloud hyperscalers will bring improvements in scalability, choice, and access to reliable open platforms, as well as cost efficiencies right across the financial sector.

Legacy infrastructure and ROI

The business case for migrating to cloud computing is so compelling that many banks are planning or have already embarked on their migration plans. This does, however, present a sector-wide issue of how to realize return on investment of legacy infrastructure such as datacenters and systems, especially when considering that, in most cases, a typical five-year write down will extend far beyond the migration window.

There are different approaches available to banks and financial institutions for integrating legacy systems and infrastructure with cloud computing:

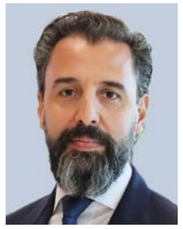
Integration Legacy systems can be restructured, optimized, and connected to a cloud native environment through APIs, middleware, or adapters. Legacy applications can be modified or enhanced to leverage cloud capabilities.

Migration Legacy systems can be moved to cloud platforms with minimal changes or re-engineering. Often legacy applications can be rehosted to a cloud environment without changing their code.

Hybrid Legacy systems remain on-premises while some components or data are transferred to cloud services.

Investment in data centers will continue in the short to medium term, although the general trend will be for datacenters to shrink and cloud-based systems to expand. The expectation is that many banks and financial institutions will adopt a phased hybrid migration model to maximize and repurpose existing investments in data center infrastructure, initially migrating lower risk functions to the cloud while maintaining core, critical and higher risk business to an existing data center.

The arrival of hyperscalers, ongoing investment in cloud infrastructure, and a robust regulatory framework are all factors supporting the sector in its cloud adoption. The journey has just begun, but the sky is the limit, as they say.



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