

Cloud Adoption

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Cloud is seen as a foundational technology that can dramatically increase innovation, reduce costs, and mitigate data's environmental impact. There are, however, major barriers to the adoption of cloud, including data localization requirements and the availability of talent. This note provides a summary of the key themes from the discussion, respecting that the conversation was conducted under the Chatham House Rule and comments are unattributed.

Cloud as an enabler. Cloud plays an increasingly vital role in enabling digital transformation for financial institutions (FIs). The technology enables FIs to modernize their core systems, to meet dramatically increasing customer expectations, and to better compete in the evolving digital economy. Cloud's ability to run myriad projects concurrently allows for easier and more cost-efficient testing and greater agility. It also amplifies other technologies' potential, such as artificial intelligence and machine learning, providing a better landscape for innovation. The true benefit of cloud, however, comes when all areas within the FI get involved, and not just the IT and technology divisions of the firm. Ensuring that cloud migration is viewed as a structural and organizational change, and incorporating all aspects of the business in the adoption, promotes innovation and allows businesses to leverage new tools across all avenues of their work.

Positive environmental impact. As FIs become increasingly reliant on data, ensuring that the handling of such data is done sustainably is paramount. Currently, 1% of global electricity usage originates from data centers. On average, one single company data center operates at roughly 18% of utilization, leaving 82% of that server's power unused and held in reserve in case of excessive demand, creating considerable waste. In contrast, cloud computing is far more energy efficient. A major bank indicated that this provides additional motivation to migrate to the cloud and further encourages them to meet their goal of moving 75% of their workload to public cloud by 2025. Moving traditionally owned and managed data centers used by FIs to the cloud can provide substantial opportunities around energy and carbon emission reduction and reduce costs.

Data localization is a major regulatory challenge. Jurisdictions with stringent data localization requirements can create a more costly operating environment for multi-national companies and limit the potential and value of cloud technology. Such requirements limit the economies of scale that would otherwise be reaped from cloud solutions; increase cyber risk by increasing the attack surface for cyber-attacks; and reduce or eliminate the scope for data aggregation, and therefore limit the ability to accurately model global risk and the effectiveness of anti-fraud or AML systems. Authorities should be clear on the regulatory objective of their data localization rules, demonstrate that the rules imposed are the least restrictive means of achieving those objectives, and remain open to new alternative solutions. Means such as encryption and other privacy-enhancing technologies should be explored, wherever practicable, as alternatives to rules that balkanize the global data economy and prevent the full value of data from being realized, to the ultimate benefit of clients and end users.

Talent gaps. Strong understanding of cloud is needed to harness its full potential, mitigate potential risks, and ensure cohesive adoption, regardless of industry. This leaves major skill gaps and talent challenges, as cloud is a fast moving and emerging technology, and seeking out sector specific expertise can be difficult. This requires the upskilling of existing staff, in addition to sourcing new talent. One monetary authority is working with local universities to ensure that relevant courses (i.e., computer science, programming, etc.) are current and apprised to cloud and cloud-related technologies, mitigating the skills gap.

Systemic risk. Although regulators do not currently see the level of cloud adoption by FIs as a material systemic risk, they continue to monitor the space quite closely as the technology becomes more critical to the digital economy. Similarly, financial authorities do not feel there is a need to extend the regulatory perimeter to cover cloud service providers (CSPs) given that they extend to sectors outside of finance and are not usually based in one region.