PUBLIC, CLOUD-BASED, MASS WORKLOAD TRANSFORMATION AND CLOUD-MANAGED SERVICES FOR ONE OF AUSTRALIA’S LEADING WEALTH MANAGEMENT COMPANIES
Regulations are very tight in the financial industry in general. While the client was looking to use public cloud to extract the next level of efficiencies and improve agility across all enterprise IT systems, the margin of error to get the cloud strategy and implementation was non-existent. At the same time, the client was in the middle of a digital transformation journey to maintain and extend its edge over the competition. The wealth management company needed a solution that could accommodate terabytes of data, scale on demand, and stay within the defined boundaries of regulations without exceeding the budget for cloud transformation. The management team became interested in taking an enterprise-centric approach, where the AWS Cloud migration and assurance of cloud operations were an integral part of the solution.

The Infosys team, working closely with the client’s core team, developed a hybrid architecture solution, where several enterprise applications will be hosted on the AWS Cloud secure zone and integrated with on-premises applications and processes. A detailed TCO analysis was completed for the cost of transforming, migrating and operating on the AWS Cloud, with hybrid deployment to supplement cloud strategy and business case.

In alignment with the AWS Cloud adoption framework, Infosys developed an execution roadmap for the following:

- Outlining the AWS Cloud architecture and security controls to meet diverse technical and fiduciary requirements for enterprise workloads
- Utilising a number of controls for providing appropriate isolations and protection of workloads of varying risk postures
- Creating a hybrid architecture deployment (the AWS Cloud and on-premises) plan that allows scalability, agility, and security, based on the specific needs of the data being handled and accessed by each application
- Developing and integrating cloud ecosystem management platform, automated deployment, and operations in the cloud
- Detailed workload migration, including refactoring and transformation involving diverse platforms, and various technology stacks build on multi-vendor products with multiple complex interfaces and close inter-dependencies
- Developing an exit plan for third party-hosted data center
- Operating model and organization change management plan to adopt managed services for the AWS Cloud as well as on-premises IT

Understanding the big picture

For a cloud transformation program which touched every part of the client’s IT systems, processes, as well as organization, the key to success was to have a focused approach and one clear goal to migrate and operate on the AWS Cloud by a specific date. The business case and the tailored communication for each stakeholder ensured that the big picture was crystal clear to everyone, involved directly or remotely. With a program of this scale, several adjustments were made during the flight of the program to remain on course for a multi-zone, enterprise-secure cloud across the AWS Cloud and on premise, within the principals of Cloud First for all enterprise workload.

A hybrid architecture ecosystem, that meets the complexity requirement of a financial services company and conforms to regulation requirements, was always going to be a balancing act. Infosys played a significant role in ensuring that the target platform met Cloud Security Alliance guidelines, among other regulations.
**Accelerated migration**

Infosys’ Cloud Migration Solution suite was tailored to deliver migration as scale, that is, mass migration of workloads with minimum changes required to meet the maximum standards while deploying / on-boarding in the cloud ecosystem platform.

Starting with application analysis and migration planning, the whole process was based on a scientific and proven approach for cloud deployment. It included the method by which Infosys codified its many past migrations. That meant using ‘decision logic’ to ascertain cloud suitability using more than 20 formulas and algorithms based on the Analytical Hierarchical Process model. Infosys also rolled out its Analytical Wave Planning Workbench to identify and remediate potential incompatibilities in migrating the applications.

Diversity of workload involved IBM technology stacks, including WAS, WPS, DB2, Tivoli, etc.; Oracle technology stacks, including Exadata, Oracle DB, and various components; and Microsoft technology stacks, including highly-customized SharePoint platform, .NET, SQL, etc., to name a few. Today, the company also uses Amazon Virtual Private Cloud (Amazon VPC), 500+ Amazon Elastic Compute Cloud (Amazon EC2) Instance, 300+TB of Amazon Elastic Block Store (Amazon EBS), and Amazon Simple Storage Service (Amazon S3), including Redshift, SQL, RDS, SNS, SES, and Cloud Watch, to list a few of the AWS Cloud services in use.

Besides the above, Infosys has implemented a range of security controls for software-based workload isolation, hypervisor isolation, network isolation, logical security access groups, network access controls, host-based protection (like malware protection, intrusion prevention, data loss prevention, file integrity monitoring, encryption and customer key management), and security information and event management capabilities to store, correlate, and detect security-related events.

In one of the unique migrations, the client’s application ecosystem – catering to customer on-demand business platform with 40+TB of data volume involving 250 million documents – was migrated as a single platform to the AWS Cloud. The client’s digital platform on the AWS Cloud supports 4 million users, with potential concurrency of 16,000 customers and 3,000 planners.

**Seamless set-up for managed services**

Given the complexity of the program, it was vital that Infosys became the service integrator that defined the processes, procedures, and operational responsibilities in managing a multi-vendor scenario.

The hybrid architecture solution was based on the AWS Cloud and has the potential to expand to other cloud providers in the future. Infosys played a major role in the steering committees that defined the future state of the enterprise and technology architecture for the company.
The benefits

The client has estimated the achievement of significant savings in software, hardware, and maintenance over the next 5 years, just by using Infosys’ approach to accelerated migration of enterprise workload on the AWS Cloud.

By using the AWS Cloud, the company is also able to be more agile – increasing the speed of document retrieval by a factor of 2, and improving on-demand delivery of secure enterprise platform by 40%. By using Infosys’ cloud ecosystem approach to operate and manage the cloud seamlessly, the client has seen a significant shift in engineering and approach from the traditional application-centric view of development and operations. Cloud automation allows the team to quickly provision instances, and to avoid repeated installation and configuration of software.