



# AWS Cloud Migration Maximized The Business Value For A Global Real Estate Rental Company

## Client Overview

A global accommodation rental company, facing performance and scalability issues with its on-premises IT infrastructure, required to migrate its workloads to a cloud. With annual revenue of over \$500K, the client manages a platform that connects landlords, tenants, trade services, and homeowners together. As a cloud innovation partner, we accelerated the AWS cloud migration with no downtime and made its business agile, cost-effective, and secure.

## Business Needs

With a huge increase in the number of users, the client wanted to help with making move-ins quicker, repairs faster, and communication and payments easier. With the client's existing infrastructure landscape and applications in place, this process was taking hours or longer to complete. The investment in the company-owned hardware was not the preferred choice as it would require an investment of hundreds of thousands of dollars because of the capex and would be difficult to scale with the numbers of users growing every day. Given the fact that Customer Support has to process around 5,000 support tickets monthly, it had to include multiple corporate applications and IT systems. The client found the on-premise infrastructure supporting the Customer Support application couldn't deliver the performance, scalability, and availability it required. On top of that, the client was regularly having unexpected infrastructure requirements in short time frames. Besides, the client wanted to begin its journey to the public cloud as well. Here is a snapshot of all the challenges that the client was facing.



**Enabling end users-especially those with single or more properties-to reliably complete the complex process of paying suppliers, creditors, and traders within minutes**



**Requiring an infrastructure that would enable the client to control costs while scaling to support growth in its customer base**



**Maintaining a lean IT team that could focus more on the growth engine compared to infrastructural management tasks**



**Requiring an IT ecosystem that could support huge expansion into new geographic markets, primarily in the UK as a geography**



**Integrating disparate systems, improving data management, and providing a better customer experience following a series of new features to the functionality of the portal**



**Requiring a stable platform that could support product development while enabling the business to build customer loyalty by adding new features and services.**



**Accelerating the pace of Innovation that was throttled due to high opex and the budget for new capex**



**Optimizing the ROI for the IT ecosystem by checking the benefits realized by deploying the current infrastructure on a virtual, rapidly deployable, elastic, and incrementally measurable platform**

## Strategy & Solution

Migrating to the cloud comes with huge benefits including cost savings, resilience, and agility, a new feature development rather than environment maintenance. Yet, the cloud transformation is no small feat as it requires a deliberate change in mindset, skill sets, and toolsets. Each organization's journey to the cloud is different based on the client's unique business needs and strategy. The client was looking for an approach that will support cloud migration quickly and efficiently with minimal disruption. In order to support large-scale cloud migrations, we jointly worked with the client to come out with three critical success factors:

- ✓ Bring the business along the cloud journey and enable enterprise-wide cloud adoption
- ✓ Develop a repeatable approach that outlines goals and planning which completely focuses on quantitative and qualitative analyses
- ✓ Integrate teams across the IT ecosystem consisting of network and infrastructure engineers along with application and cloud architects

### Front-End

The targeted migration applications were having an incredibly easy-to-use interface, which streamlined migration. Cloud Digital's team of front-end developers leveraged a suite of technologies including Angular, Typescript, JavaScript, and WordPress to make sure the assets were migrated to the cloud without modifying their functionality and ease-of-use.

- ✓ Maintaining and even enhancing app intuitiveness
- ✓ Making sure the learning curve to embrace cloud was low
- ✓ Ensuring that the post-migration UI was easy to navigate

### Backend

Cloud Digital's developers used different technologies to make sure that the backend of the project remained robust even after the migration had taken place. Besides, the team heavily relied on AWS cloud components for making sure the backend of the migrated apps remained intact. Here are some highlights of the project's backend.

- ✓ Ensuring that the enterprise database was migration-ready
- ✓ Prioritizing data security during and after the migration
- ✓ Factoring in different AWS-centric backend architectures



## Development Process

Cloud Digital's approach to the cloud movement with an 8-weeks sprint was based on three milestones.

- 1** Applications and supporting infrastructure was checked using discovery tools to identify metrics and dependencies. This exercise provided a quantitative approach to define target migration application patterns and migration grouping. For more than 10 applications, code was analyzed to assess cloud suitability and cloud service compatibility while identifying refactoring and optimization needs. Based on this exercise, initial cloud-migration timelines were developed showing the application migration timeline and dependencies.
- 2** In this second milestone, the cloud data center was created, including account structure. Network design was implemented taking into consideration both the virtual private cloud (VPC), a virtual private network (VPN), and multi-region designs, and the identity and access management strategy were discussed and finalized. An overall migration plan was shared including project plans, communication plans, and change management plans. The client's IT team was trained to build cloud experience across IT, security, and business key roles and was updated to support cloud operations including developing operational run books for monitoring, logging, provisioning, asset management, and configuration management. IT team was given advanced knowledge sessions and workshops on main concepts of cloud concepts like business continuity planning and disaster recovery to support the client. Once the IT team was well equipped with cloud operations, it was further trained and enabled on governance, risk, and compliance models. Preventative measures were implemented to protect and mitigate threats.
- 3** In this final step and milestone, cloud formation scripts were used to build the landing zone along with the verification team reviewing the environment buildout to confirm requirements have been met. Complete migration plan and schedule were covered taking into consideration AWS-specific reference architectures. Once applications were migrated, automated testing tools and scripts were used to support application testing and performance testing. As the migrations were completed, the environment was stabilized with a month-long maintenance period. Walk-throughs and hands-on consulting exercises were conducted to make sure that the cloud operations team became expert enough in handling the cloud environment.

## Business Outcomes

Once the engagement was successfully completed along with the migration support period, the client was able to shift to the cloud ecosystem seamlessly. Here are some of the key benefits that the client reaped once the engagement came to a close.

- ✔ The client now runs its entire property-management software business on AWS, and the client doubled the size of the business year on year using the AWS platform. Within 8 months after launching with AWS, the client had processed approximately 80,000 transactions through its portal. Five months later, that had increased by nearly 50%.
- ✔ Because the client could pay for AWS cloud services on a monthly basis, the client was able to grow its infrastructure costs in line with the user's growth and revenue rather than allocating hundreds of thousands of dollars in capex.
- ✔ Cloud infra enabled end-users to reliably access features such as photo and document uploads, key documents, and real-time dashboards on rent arrears, reconciliations, and disbursements. Some features such as photo uploads were highly appreciated by end-users with the cloud supporting a 100% percent increase in uploads in the span of 9 months.
- ✔ In concrete teams, the engagement enabled the client to:
  - ✔ Reduce the Total Cost of Ownership (TCO)
  - ✔ Shorten the time to release new features
  - ✔ Build an innovative property portfolio with savings



## Client's Speak



***Cloud Digital brought a new level of speed and optimization to our cloud migration journey. The team did everything required to not only speed up the adoption journey but also minimize risks and maximize cost-takeout initiatives.***

