

Cloudwick Professional Services migrates the **leading UK mobile virtual network operator (MVNO)** to the AWS Cloud

Executive Summary

Lycamobile, one of the leading mobile virtual network operators (MVNO) in the UK with a presence in over 23 countries, sought to undertake a business transformation project. They were looking to migrate their traditional onpremises infrastructure to a cloud-native architecture to gain the benefits of scalability, flexibility, and improved cost models. Lycamobile specifically wanted to adopt a cloud-based data warehouse, which would enable them to deliver use cases much more quickly and allow their MIS teams to deliver consistent and frequent reporting.

Customer Challenge

Lycamobile's traditional data systems operation created many technical challenges. Because of their dependency on legacy on-premises systems such as SQL server, there were limitations when handling petabyte scale data. Data from multiple disparate sources posed a difficulty to maintaining optimum data quality and a single source of truth. This led to an improper implementation of data governance and GDPR rules. Additionally, having data from multiple sources challenged them with a limited time window for processing. It was also hard to maintain the Data Catalog and Metadata management across more than fifteen global source systems.

Why did the customer choose AWS and Cloudwick?

The client chose AWS as its preferred cloud provider because of AWS's singular capabilities supporting scalability, agility, speed of business transformation, serverless architecture, and data warehousing. Further, AWS's extensive partner ecosystem offered a large selection of providers of managed services. Once AWS was chosen as cloud provider, Cloudwick Professional Services consulting teams engaged with Lycamobile leadership to vet the project. Cloudwick Solution Architect teams engaged with business stakeholders to scope the project and Cloudwick Engineering conducted discovery workshops for every phase of the project. Cloudwick's competency in building AWS data analytics platforms and subject-matter expertise were critical to winning the project.

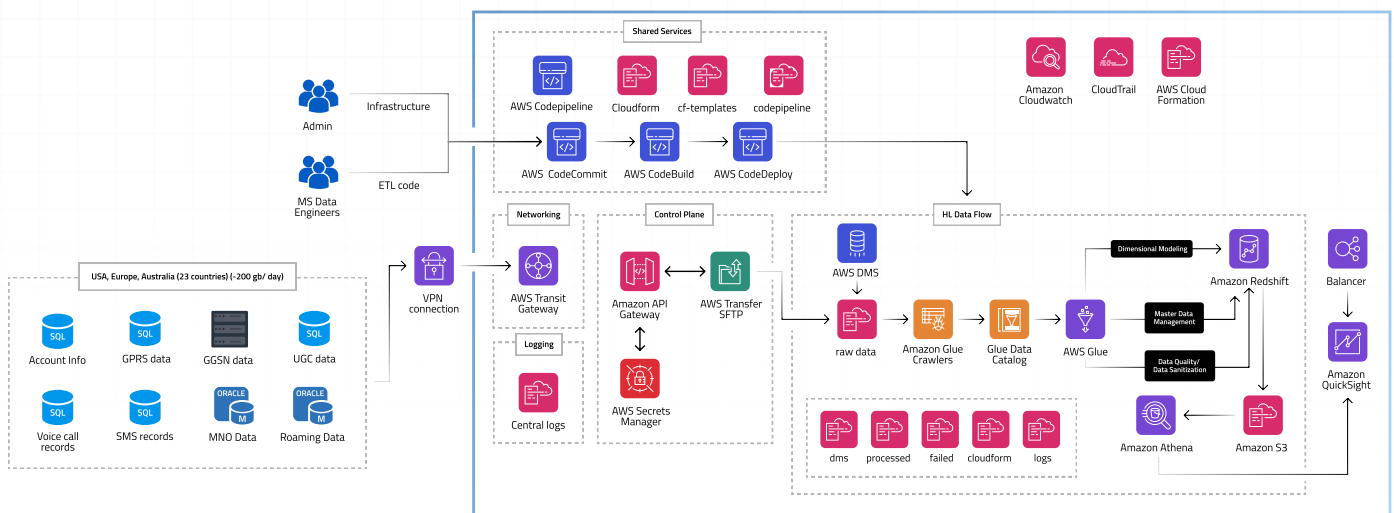
The Cloudwick Data Lake/Data Mart Solution on AWS

Cloudwick Professional Services implemented a fully operational centralized data lake and data mart solution in the AWS cloud. Cloudwick provided an endto-end cloud data solution comprising Data Ingestion, Data Modelling, Data Governance, Master Data Management, Data Security, Dashboarding, and the enablement of AWS services for predictive analysis. The solution enhanced the speed and quality of business decision-making capabilities for Lycamobile with state-of-art cloud technology.

Data governance & data security implementation was a crucial part of the whole implementation scheme. The Cloudwick team maintained industry best practices and standards to ensure data security on the AWS cloud platform. A very detailed regime of Master Data Management was a highly desired and key part of the solution to elevate ongoing business capabilities.

Cloudwick implemented the data model for the integration and aggregation layer for multiple domains to facilitate quick on-demand reporting, query, and data analysis structure. For reporting and data visualization, the customer chose to use Amazon QuickSight to build business partner reports. Cross functional reporting and data visualization with access controls on Amazon QuickSight has been a very effective tool for Lycamobile business partners from across the globe.

Lycamobile Data Architecture



AWS Services Used

The Amorphic solution is deeply integrated with the AWS ecosystem, leveraging over 60 native AWS services. Some of the key AWS services used include:

Amazon S3, AWS Glue, Amazon Athena, Amazon QuickSight and AWS Bedrock. In addition to these, the Amorphic platform utilizes a wide range of AWS services across categories like compute (Lambda, Step Functions), analytics (Redshift, Kinesis), security (IAM, KMS, CloudTrail), and monitoring (CloudWatch, X-Ray), ensuring a robust and enterprise-grade architecture.

Results and Benefits

Enhanced Business Capabilities:



Cost and Revenue Analysis:

Lycamobile gained very detailed insight into their costs and revenue, while simultaneously enhancing their analytical capability.



Churn Analysis:

By migrating Lycamobile to the AWS cloud, Cloudwick Technologies Professional Services helped the customer gain clear and detailed insight into its churn statistics, enabling issue tracking and spurring the adoption of subsequent corrective business strategy



Average Revenue Per User (ARPU) Analysis:

The resulting cloud environment allowed the customer to develop a detailed ARPU analysis based on multiple matrices across different domains.

Advanced Technical Capabilities:



Reduced Average Query time:

The average query time was reduced from 4.5 hours to 5 minutes. (The average query time comprises the time required to accumulate data, to query data, and to produce data on dashboards).



Single Source of Truth / Master Data Management:

Cloudwick Professional Services implemented fine-grained data modeling to maintain 'Single Source of Truth' in Lycamobile's data from multiple domains. An effective Master Data Management strategy helped in achieving this.



Enhanced Data Quality & Governance:

Cloudwick enhanced Lycamobile's data quality and governance with a fine controlled, transparent, and well-monitored data flow program managed through a centralized framework. A detailed framework of data lineage & governance worked as the key to ensure a rich data quality in the source of truth.

About **Lycamobile**

Launched in 2006, Lycamobile is a British mobile virtual network operator (MVNO) now operating in 23 countries with 16 million customers worldwide. The brand is active in Australia, Austria, Belgium, Denmark, France, Germany, Ireland, Italy, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Russia, South Africa, Spain, Sweden, Switzerland, Tunisia, Uganda, Ukraine, the United Kingdom and the United States.

About **Cloudwick**

Cloudwick powers more agile, innovative, and cost-effective cloud data and analytics solutions. Cloudwick's Amorphic Data Cloud simplifies data access by making all data on AWS searchable, shareable, and analyzable, so organizations can gain deeper insights from their data. Cloudwick's Professional Services provides organizations with trusted, high impact data and analytic migration and modernization outcomes.

Founded in 2010 in Newark, CA, Cloudwick serves customers throughout the US, EMEA, and APAC.

Next Steps

Start small, achieve quick wins, and build a scalable foundation for public health data management. Contact Cloudwick at sales@cloudwick.com for a consultation or demo.