

About the Customer

GCSEPod provides subject knowledge and learning through audio-visual Pods, which can be streamed and downloaded onto your computer or mobile device as you need them.

With multi-platform access and seamless integration, GCSEPod provides an essential role impacting rates of progress within any school. Over 4,000 audio-visual Pods are forensically mapped over 21 subjects, content written by expert teachers, to provide students with all the tools necessary for success. This ever-evolving resource benefits all achievement levels.

GCSEPod is proven to engage students, consolidate subject knowledge and accelerate progress. Using data collected during periods of terminal examinations, GCSEPod has been proven to have a direct impact in achieving a higher Progress 8 scoring compared with students not using GCSEPod and this impact increases the longer a user is subscribed to the service.

The Challenge

During the 2020 Covid-19 Pandemic, GCSEPod saw a huge surge in demand for their resources from students wishing to continue learning remotely. Whilst GCSEPod's current AWS infrastructure was able to cope with these unexpected usage peaks, as the leading supplier of premium content to schools across the United Kingdom, GCSEPod soon realised they needed to expand their programmes and continue supplying a cost effective, reliable service.

To achieve this, GCSEPod are on a journey to replatform their existing IT estate from a traditional virtual machine architecture to a containerised platform.







By re-architecting their AWS estate to a containerised architecture and adopting containers as their application delivery mechanism, GCSEPod aim to

- Consolidate infrastructure savings costs and simplifying operational support,
- Become Cloud Native to take advantage of cloud services and practices,
- Strengthen Security Posture by reducing the attack surface of their estate.

The Solution

As an AWS Well Architected Partner and Kubernetes Certified Service Provider, Mobilise worked with GCSEPod to develop an AWS Well Architected Design for a Kubernetes platform built on AWS' EKS (Elastic Kubernetes Service). The aim was to provide a platform that was cost effective, utilised next generation monitoring and championed automation to simplify operational challenges.

Spot Instance Technology

GCSEPod cloud native, stateless workloads have been designed for failure, providing the perfect opportunity to use AWS Spot Instance technology to save GCSEPod upto 80% on their EC2 costs.

CICD Pipelines

Mobilise engineers created a series of automated CICD pipelines that automatically provisioned infrastructure and deployed applications using Terraform and HELM. This automation enabled GCSEPod to perform rolling deployments with zero downtime and easily extend the platform in the future.

Monitoring

In order for GCSEPod to gain insights into how their platform was performing, Mobilise engineers used AWS Container Insights to highlight workload performance, service maps, operational readiness and application logging providing a holistic view of the AWS estate.

The Results

Previously, GCSEPod were constrained in their ability to rapidly innovate due to expensive architecture and limited governance of AWS environments. With a Kubernetes platform, GCSEPod have increased their agility to allow developers to trial more features and innovate in a secure and production like environment.

This has seen GCSEPod rapidly increase the amount of concurrent services being delivered in their product pipeline. Increased automation combined with spot instance technology means GCSEPod are now delivering more services at a cheaper cost - paving the way for a greater customer experience.

Furthermore, Kubernetes has allowed developers to take control of their deployments, enabled production like environments at a local level and reduced the strain placed on GCSEPod's central cloud capability. This self-service approach to DevOps using CICD means GCSEPod can focus on service delivery instead of operational headaches.







About Mobilise Cloud

Mobilise helps government and commercial organisations to ensure their migration to Cloud is a success from strategy through to design, delivery and organisational and operational change.

Mobilise has a wealth of experience in gaining best value from IT infrastructure provision, and has partnered with the leading Cloud providers including Amazon Web Services and Microsoft Azure to ensure a range of industry leading options are available to replace IT infrastructure with the 'right cloud' service, and to deliver ongoing IT transformation through cloud native services at pace.

People are key to the transition to Cloud, and Mobilise is expe-rienced in communicating the change and gaining buy-in at all levels of an organisation to create excitement and active partici-pation, and enabling customer teams to ensure they can partici-pate fully in the technology change required.





