USE CASE

CLOUD MIGRATION – CLOUD TO MULTICLOUD

OVERVIEW

In a dynamic marketplace, this platform stands out, offering a seamless, enriching shopping experience. As the sole comprehensive rewards system, it transforms every purchase into potential savings. Through its vast partner network, members accumulate points from myriad brands. Its distinct advantage lies in the unmatched flexibility in redeeming points across top brands, making shopping an enjoyable journey.

The platform's mobile app places the rewards system at members' fingertips, streamlining the earning and redeeming process. Membership opens doors to exclusive perks, special offers, and elite events, emphasizing the company's commitment to enhancing daily experiences.

Powered by passion, innovation, and with esteemed partners like Brightgrove, the platform champions a tailored, user-friendly service, crafting a rewards ecosystem that resonates with today's consumers.

MIGRATION OBJECTIVE

The company would like to improve the stability, reliability, and resiliency of its production systems. They aim to implement a cloud migration strategy that enables faster feedback to users, eliminates production issues, and allows for seamless deployment of software changes.

Additionally, they want to incorporate DevOps practices, CI/CD (Continuous Integration and Continuous Deployment), automated testing, vault, Terraform, and Ansible into their migration plan.

MIGRATION STRATEGY AND RESULTS

To achieve its objectives, we decided to adopt a multi-cloud approach. We choose to run an active-active architecture across multiple cloud providers, such as AWS and Microsoft Azure, to improve system resiliency and avoid potential service disruptions caused by a single cloud provider's failure.

Incorporating DevOps practices, we integrate CI/CD pipelines into their software development lifecycle. We leverage various tools like Jenkins or GitLab CI/CD to automate the build, testing, and deployment processes. By automating these steps, our partner can achieve faster feedback to users and ensure that software changes are deployed consistently and reliably.

To enhance security and manage secrets, we implemented a vaultsystem from HashiCorp. This ensures that sensitive information such as API keys, passwords, and other credentials are securely stored and accessed by authorized users and services only.

To manage infrastructure as code, we adopted Terraform, an open-source tool that allows us to define their cloud infrastructure in declarative configuration files. This ensures consistent and reproducible deployments across different cloud platforms.

Moreover, we utilized Ansible for configuration management, enabling them to automate the setup and maintenance of their servers, services, and applications. This reduces manual errors and ensures consistency in their deployment environment.

TAKEAWAYS

Multi-cloud approach

The company acknowledges that a multi-cloud strategy improved system resilience and prevents downtime caused by a single cloud provider's failure.

DevOps and CI/CD

By implementing DevOps practices and CI/CD pipelines, the company empowers its developers to focus on development rather than cloud expertise. This approach accelerates time-to-market, enhances software quality, and reduces risk and costs.

Automation and infrastructure as code

Utilizing tools like Terraform and Ansible, the company ensures consistent and automated deployment and management of its infrastructure, making its migration and ongoing operations more efficient and reliable.

Security and secrets management

The adoption of a vault system, such as HashiCorp Vault, ensures secure management of sensitive data, protecting valuable credentials and reducing the risk of data breaches.

CONCLUSION

By incorporating these strategies and tools, the company can streamline its cloud migration and operations, achieve faster feedback to users, maintain high system reliability, and enhance its overall deployment process.

EXECUTIVE SUMMARY

Industry	Rewards and Loyalty Services
Partnership Duration	6 months
Architecture	Multi-cloud architecture, active-active approach across AWS and Microsoft Azure
Platforms	iOS, Android, Web, Windows, Mac
Team Structure	Cloud Architect, DevOps engineer, Client and Backend Developers, Full Stack, AQA engineers, BA, Data Engineer, Security Engineer, Network Engineer, Analytics Specialist, Cloud Cost Analyst, Release Manager
Tech Stack	**Cloud Provider:** Amazon Web Services (AWS) and Microsoft Azure (Multi-cloud approach)
	Development Languages (for microservices): JavaScript (Node.js), Python, ReactJS, Golang, Redis, MongoDB, TypeScript, C# (.Net Core), Azure Cosmos DB
	DevOps: CI/CD pipelines, Jenkins/GitLab CI, automated testing
	Infrastructure as Code: Terraform
	Configuration Management: Ansible
	Security and Secrets Management: HashiCorp Vault

Ready to take the next step?
Reach us today at info@brightgrove.com