

Flipzen's Seamless Workload Migration & Production Readiness on AWS

Executive Summary

As the company matured, Flipzen made the strategic decision to migrate core workloads to Amazon Web Services (AWS). To lead this transition and prepare the infrastructure for production-grade workloads, they partnered with binbash, a cloud consulting firm specializing in AWS-native, Infrastructure-as-Code solutions. This engagement focused on enabling a smooth migration from their legacy environment to AWS, while ensuring security, scalability, and operational excellence.

Customer Challenge

Flipzen's growth had outpaced the capabilities of its existing infrastructure. Key challenges included:

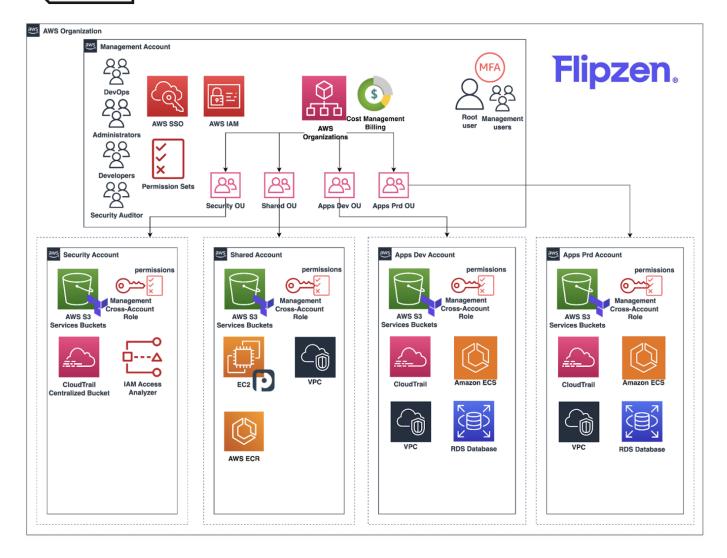
- Fragmented DevOps workflows across services
- A need for unified, production-ready AWS environments for multiple application services.
- Secure and scalable migration of workloads, databases, and file storage
- Deployment and automation gaps that hindered efficient development and delivery cycles
- The need for minimal service disruption during the migration process

They needed expert guidance to design and implement a migration-ready AWS environment and ensure seamless service continuity throughout the process.

Flipzen

Flipzen is a technology company providing real-time market intelligence for brands and retailers across Latin America. Their platform enables businesses to monitor pricing, availability, and trends across e-commerce marketplaces using automation, machine learning, and custom workflows.





Solution

binbash deployed a comprehensive, production-ready infrastructure using its open-source Leverage™ framework and AWS Well-Architected principles. The engagement included setting up secure AWS resources for Flipzen's backend, internal tools, and serverless workloads across development and production environments.

The solution featured the provisioning of Amazon ECS on Fargate, AWS Lambda, Amazon SQS, and Amazon RDS, with automated pipelines built in GitHub Actions and image management via Amazon ECR. Binbash also configured a secure data migration from PostgreSQL and blob storage to AWS using AWS DMS and AWS DataSync.

To support a smooth transition, Binbash worked alongside Flipzen's engineering team to define and validate a detailed migration plan, including fallback strategies. The entire environment was delivered using Terraform Infrastructure-as-Code, with ongoing demos, documentation, and support to ensure Flipzen's team could take full ownership post-deployment.



Key Components of the Solution

- ECS Fargate Services: Containerized deployment of backend and backoffice workloads in both Dev and Prod environments
- AWS Lambda Orchestration: Serverless deployment of custom UWO workflows using Dockerized functions
- Amazon SQS & Worker Functions: Asynchronous messaging pipelines and Lambda-powered processors
- Amazon RDS Migration: Full migration of PostgreSQL databases using AWS DMS with change data capture (CDC)
- Amazon S3 Storage: Blob migration and storage using AWS DataSync
- GitHub Actions Pipelines: CI/CD automation for ECS and Lambda deployments
- Cloudflare Integration: Creation and validation of new service URLs during testing and production cutover
- Infrastructure as Code: Modular Terraform codebase using Binbash's Leverage™ framework
- Migration Strategy & Support: Full consulting and technical support for step-by-step migration, cutover, and validation
- VPN setup and configuration: to provide secure access for managing instances, databases, and ECS tasks.

Results

- Successfully prepare and deploy production-ready workloads across multiple AWS services
- Execute a seamless migration of databases and assets with minimal disruption
- Automate DevOps workflows for faster, more reliable deployments
- Reduce operational risk with clearly defined fallback and rollback plans
- Strengthen team autonomy through documentation, demos, and Infrastructure-as-Code best practices



Key Milestones

- Environment Preparation: Provisioned AWS infrastructure for development and production workloads
- Workload Deployment: Deployed ECS, Lambda, and database components across services
- Data Migration Execution: Migrated PostgreSQL databases and blob storage to AWS with validation and sync strategies
- **Production Readiness:** Finalized DNS configurations, verified application endpoints, and supported cutover execution
- Documentation & Knowledge Transfer: Delivered IaC repos, Confluence-based documentation, and demo sessions

Metrics

1. Migration Success Rate

- 100% of workloads (ECS Fargate, Lambda, RDS, S3, SQS) migrated to AWS production environments.
- 100% of PostgreSQL databases migrated via AWS DMS with CDC.
- 100% of blob storage migrated with AWS DataSync.

2. Service Continuity

Migration executed with ~0% downtime (minimal disruption noted).

3. Automation & Efficiency

• Expected >70% reduction in manual deployment effort (since ECS and Lambda deployments are fully automated).

Conclusion

binbash empowered Flipzen to migrate and scale its core services confidently on AWS by delivering a secure, automated, and production-ready infrastructure. The solution, aligned with the AWS Well-Architected Framework, not only accelerated Flipzen's cloud transformation but also enhanced developer velocity and operational maturity. With strong collaboration and a fully codified infrastructure, Flipzen is now positioned for continued innovation with a cloud-native foundation that supports growth, flexibility, and long-term success.foundation that supports long-term innovation and resilience.