



Case Study: AWS technologies

OSSO's Platform Transformation

Phase Two: Enhancements,
Optimizations, and Future Roadmap

Prepared by



Executive Summary

This case study explores the OSSO Energy Portal project, a transformative initiative aimed at modernizing the operations of OSSO, a UK-based natural gas supplier.

For better understanding, we have divided the project into **two key phases**: the preparation and initial development phase, and the subsequent enhancement and optimization phase.

This phase centers on the continued development of the OSSO Energy Portal, focusing on enhancements, optimizations, and strategic planning. Building on the solid foundation established in the first phase, these efforts refined usability, boosted performance, and prepared OSSO for long-term goals such as market expansion and AI-driven features.

Overview

Following the successful launch of the OSSO Energy Portal, the project shifted focus to enhancing usability, optimizing performance, and preparing for future expansions. These phases introduced advanced features, improved user workflows, and set the stage for OSSO's long-term strategic goals.

Team & Timeline

The OSSO Energy Portal project began in **mid-2022** and is an ongoing effort. A dedicated team of **five developers, one QA engineer, one product manager, and one designer** collaborate using **agile methodologies** to ensure rapid delivery and alignment with business goals

Communication with OSSO Team

We prioritized effective communication and adaptability to client needs throughout the project. Key tools and strategies included:

- **Collaboration Tools:** Used Slack and Jira for team communication, incorporating the client and their business team into Slack as external connections.
- **Launch Coordination:** Established a WhatsApp group/channel for real-time communication during the launch process, enabling rapid hotfixes or updates.
- **Design Collaboration:** Leveraged Figma for design collaboration, allowing both teams to take notes and exchange messages directly via the Figma App.
- **Client Access:** Provided the client with limited access to the Jira Project Board to track progress and align priorities.

Solution

The enhancement and optimization phases leveraged AWS to refine and expand the OSSO Energy Portal's capabilities:

01 Enhancements & Optimizations

- Improved the UI/UX design for greater usability and efficiency.
 - Added automation features, including AWS Lambda for asynchronous job processing and EventBridge for event scheduling.
 - Introduced advanced reporting and analytics to provide actionable insights for staff and brokers.
-

02 Database and Performance Optimizations

- Optimized database operations using Amazon Aurora Serverless v2 for dynamic scalability.
 - Integrated Amazon ElastiCache (Redis) for caching session tokens and reducing database load.
 - Implemented API performance improvements to support real-time updates.
-

03 Security and Scalability

- Enhanced data security with automatic encryption key rotation through AWS KMS.
 - Used Application Load Balancer (ALB) to efficiently manage traffic between frontend and backend services.
-

04 Future Roadmap

- Developed the Broker Portal to empower brokers with tools to manage contracts and customer accounts.
 - Planned the Shipper Portal to enhance logistics and supply chain management.
 - Expanded the platform's capabilities to support OSSO's market entry in Germany.
 - Prepared for future integrations with AI-driven features like predictive pricing.
-

Outcome

The enhancements and optimizations significantly improved the platform's usability, automation, and performance. Brokers and customers experienced smoother workflows, and OSSO's staff benefited from actionable insights and reduced manual effort. The roadmap's focus on scalability and innovation positioned OSSO for future growth and leadership in the energy market.

AWS Services Used

⁰¹ AWS Lambda & EventBridge

Automating scheduled tasks and real-time event handling.

⁰² Amazon ElastiCache (Redis)

Providing in-memory caching for improved performance.

⁰³ Amazon RDS Aurora Serverless v2

Scaling the database to meet dynamic workloads

⁰⁴ Application Load Balancer (ALB)

Managing network traffic effectively.

⁰⁵ AWS CloudTrail & CloudWatch

Enhancing monitoring and logging.

Thank you!

Thank you for taking the time to read this case study. If you have any questions or would like to discuss our findings further, please don't hesitate to reach out to us.

✉ marketing@flatiron.software

🌐 flatiron.software

📍 Miami, US