LTIMindtree

# Well-Architected Review of AWS Environment for a Leading American Electric Company

# Client

The client is a Fortune 1000 public utility based in Portland, Oregon, and distributes electricity to customers in parts of Multnomah, Clackamas, Marion, Yamhill, Washington, and Polk counties - 44% of the inhabitants of Oregon.

# Challenges

Client needed architectural and cloud governance guidance and help in achieving and leveraging true cloud benefits.

They wanted help running and maintaining the existing workloads in AWS while ensuring the highest level of cloud security and performance and regular cost optimization exercises.

The client used a multi-account structure to host its data engineering workloads in AWS and was looking for a trusted AWS partner to help them through their cloud journey.

Client wanted to perform a well-architected review of the complete AWS environment and suggest recommendations for cost optimization along with security, performance, reliability, and operations improvements.
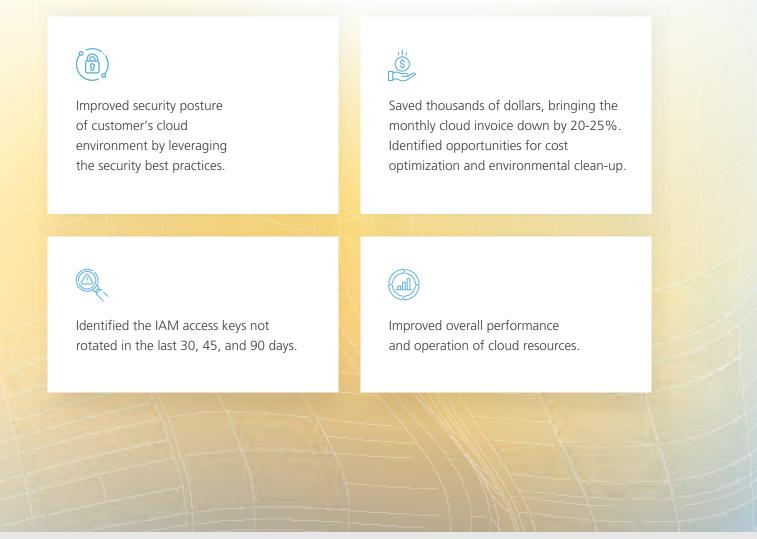
# LTIMindtree Solution

- LTIMindtree partnered with the customer and took control of their AWS environment with very minimum documentation and knowledge transfer.

- Performed a well-architected review of the customer's AWS environment with our proprietary tools Infinity and Ensure.

- Review generated  1,08,000 findings including the best-practices recommendations and actual issues identified.

- Implemented preventive and detective guardrails to automate the prevention and identification of security violations.

- Recommended findings for overall security, performance, reliability, and operations improvements along with cost optimization opportunities including but not limited to unused and idle resources, the auto shutdown of non-production instances, storage lifecycle rules, right-sizing EC2, RDS, and SageMaker instances, OS and DB re-platforming opportunities, DynamoDB table capacity sizing, etc.

# Business Benefits

Improved security posture of customer's cloud environment by leveraging the security best practices.

Saved thousands of dollars, bringing the monthly cloud invoice down by 20-25%. Identified opportunities for cost optimization and environmental clean-up.

Identified the IAM access keys not rotated in the last 30, 45, and 90 days.

Improved overall performance and operation of cloud resources.