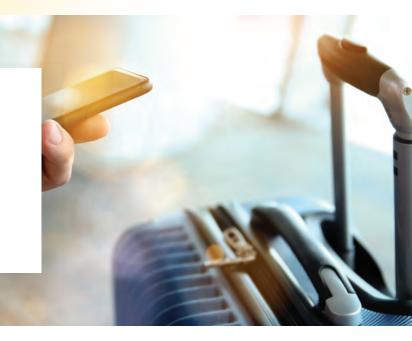**CASE STUDY**

End-to-End AWS Services for a Travel Technology Company Delivers Extensive Business Benefits

Client

A travel technology company headquartered in the US and is one of the largest global distribution systems providers for air bookings in North America.

Challenges

No control on
unused AMI images

No validation of
committed code

Need for cost
optimization

Lack of visibility on Amazon
Machine Image (AMI)
image expiry

Manual AWS account setup
takes longer time (2-3
weeks) and is error prone

No monitoring system for
legacy accounts and AWS
service outages

IP address availability
management is not tracked

Difficulty in releasing
new infra changes

LTIMindtree Solution

LTIMindtree team collaborated with the customer's operational and engineering teams and proposed the Migration with Managed Services solution as below:

- Designed the AMI expiry solution using AWS core services (Lambda, DynamoDB, etc.) to identify the expired images.

- Designed and developed the product to identify unused AMIs and formalized the deletion process.

- Developed one-click deployment product for building multiple accounts using AWS core services like Cloud Formation Template (CFT), Identity and Access Management (IAM), code build, and shell scripts.

- Designed and developed the new product for AWS Subnet IP monitoring.

- Integrated the Jenkins file for all AWS repositories for Continuous Integration (CI) build for every code commit.

- Built CI/Continuous Deployment (CD) pipeline and automated updation process of CFT stacks and stack set for infra.

- Developed the code to integrate AppDynamics and Trend Micro agents on all legacy instances.

- Wrote the code to delete unused snapshots for legacy instances using shell scripts.

- Implemented Amazon Health Aware (AHA) and integrated with MS Teams channel to send notifications to cloud team.

Business Benefits

$2766/month saved by removing unused images

$30k cost savings per month to remove unused snapshots

Reduced account build activities to 2-3 days from 2-3 weeks

Achieved **90% AWS** account setup automation

Reduced manual stack deployment from 90 mins to 15 mins to minimize turnaround time

Real-time infrastructure monitoring and alerting for application teams

Ensured **100% monitoring** of AWS service outages using AHA

Reduced 90% of technical debts through 45+ SOP documentation