



Case study

[CSA/OPS]



Visit our website
luvina.net/en

PROJECT OVERVIEW

CUSTOMER STORY ANALYTICS

Creating a workflow management system that allows users to automatically schedule the execution of any task and track those tasks. At the same time, it automatically retrieves data from specified locations, converts the data according to the end user's wishes, and uploads the file to any storage system such as AWS, Google, etc.

LOCATION: Japan

INDUSTRY: IT

DURATION: Developed as phrases

SIZE: 4.5 MM

SERVICE:

Support for building and operating the data analytics infrastructure.

It consists of three components:

- Data Uploader
- Job Management Console
- CS Analytics Desktop & Server

Key Technologies: [Python], [Golang], [AWS], [GCP], [Datawarehouse]



PROJECT OVERVIEW

CLIENT AND OBJECTIVES

Our client is the Data Integration department of an IT company based in Japan and a premier partner of AWS. They sought to develop a centralized, user-friendly big data management and analytics platform.

CHALLENGES

Strict security requirements from the client
High technical proficiency, demanding top-notch quality
Continuous need to adapt to new languages and technologies
Limited experience with cloud platforms like AWS and GCP



SOLUTIONS

Luvina implemented a comprehensive training plan on AWS, ensuring team members obtained necessary certifications according to client requirements within three months.

The team proactively created learning plans and documented relevant materials for other new technologies. During the initial stages, the client actively supported by reviewing source code to ensure quality. Basic training typically lasted 1-2 months.

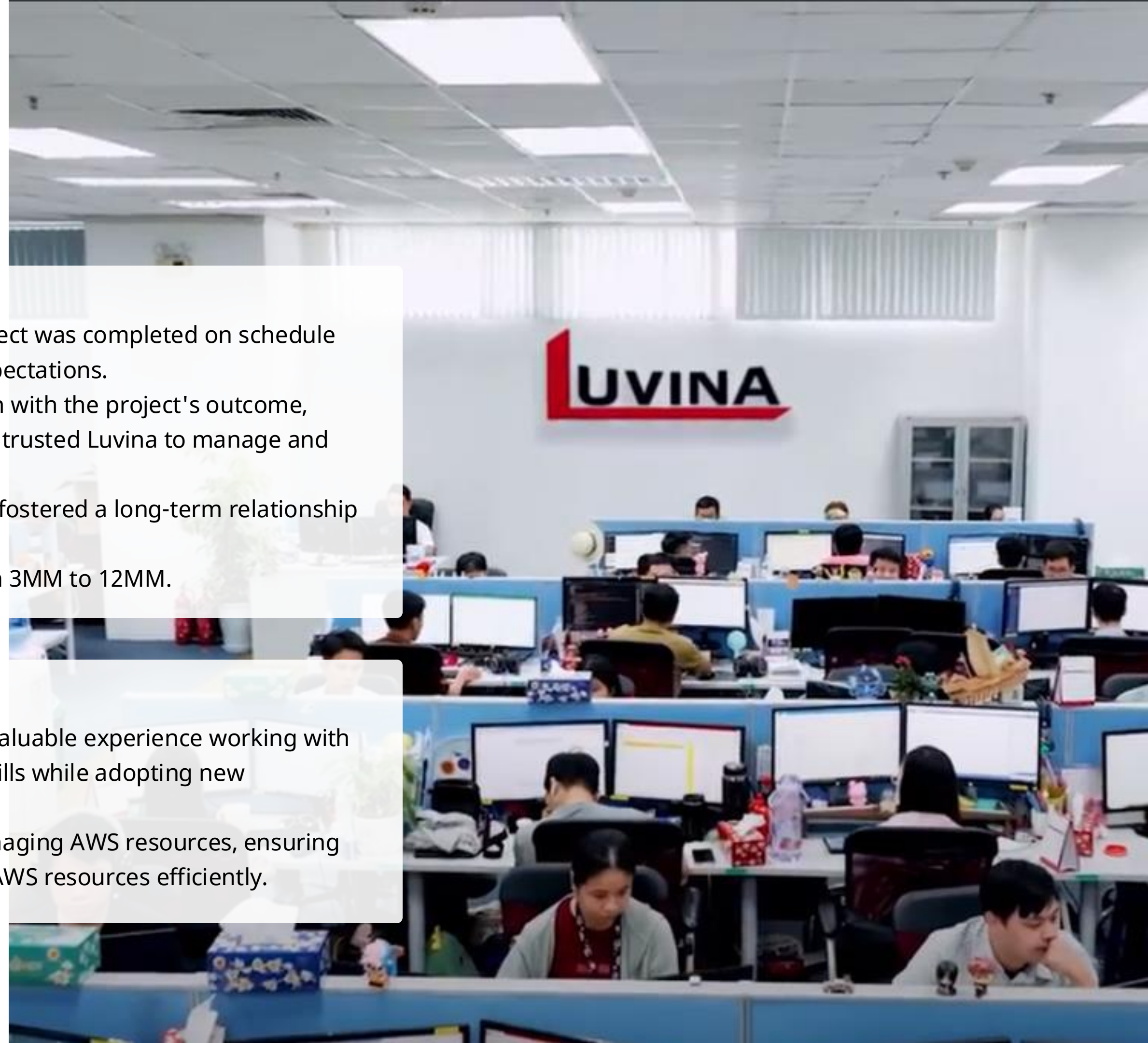
PROJECT OVERVIEW

CLIENT RESULTS:

- **On-time Delivery and Quality Assurance:** The project was completed on schedule and met high-quality standards, exceeding client expectations.
- **Client Satisfaction:** The client expressed satisfaction with the project's outcome, leading to continued collaboration with Luvina. They trusted Luvina to manage and maintain the system.
- **Ongoing Partnership:** The successful collaboration fostered a long-term relationship between Luvina and the client.
- **Team Growth:** The project team size expanded from 3MM to 12MM.

LUVINA'S ACHIEVEMENTS:

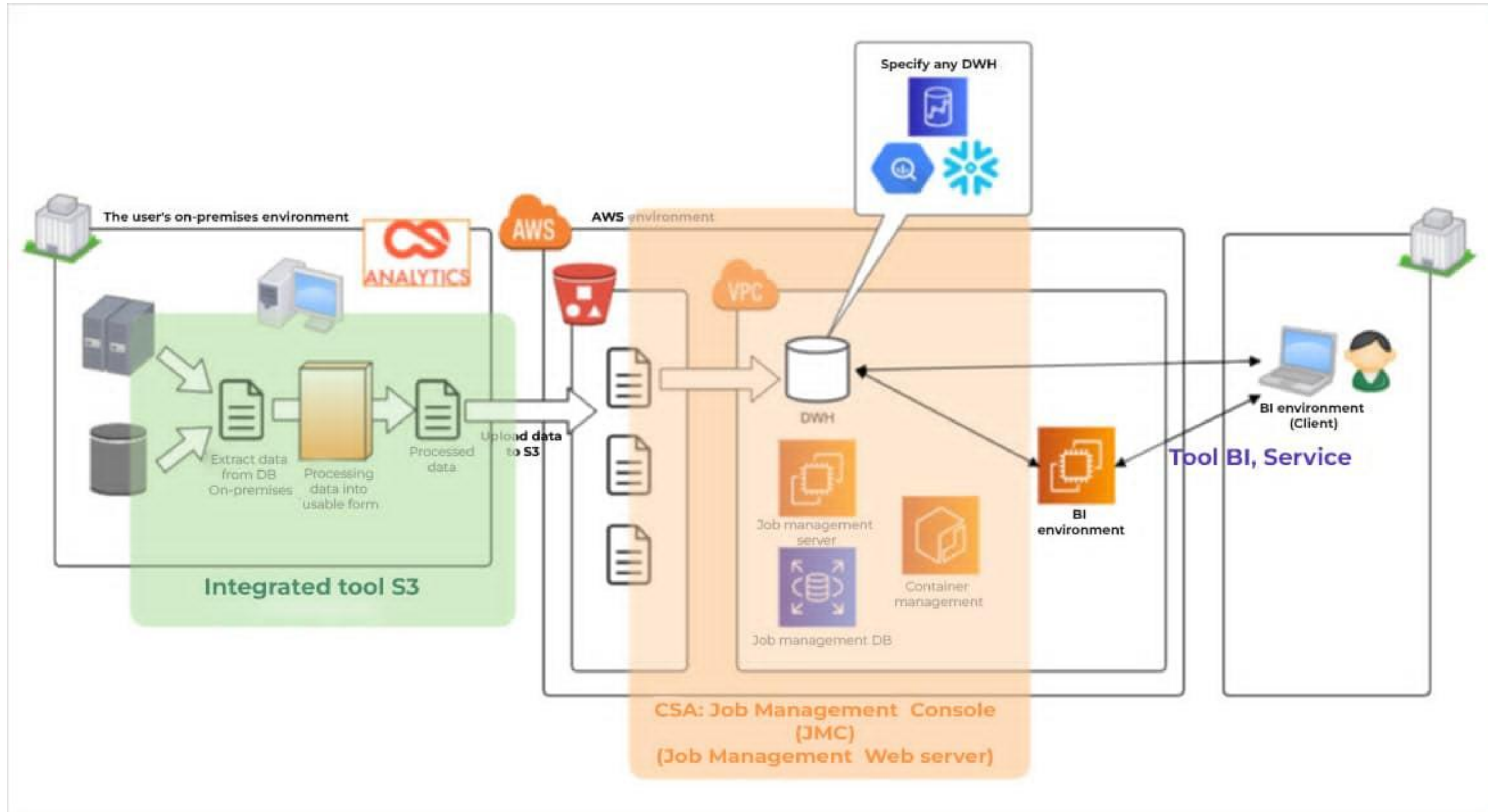
- **Skill Enhancement:** Luvina team members gained valuable experience working with tech-savvy clients, broadening their expertise and skills while adopting new technologies.
- **Tool Development:** Luvina developed a tool for managing AWS resources, ensuring that unnecessary costs were avoided while utilizing AWS resources efficiently.



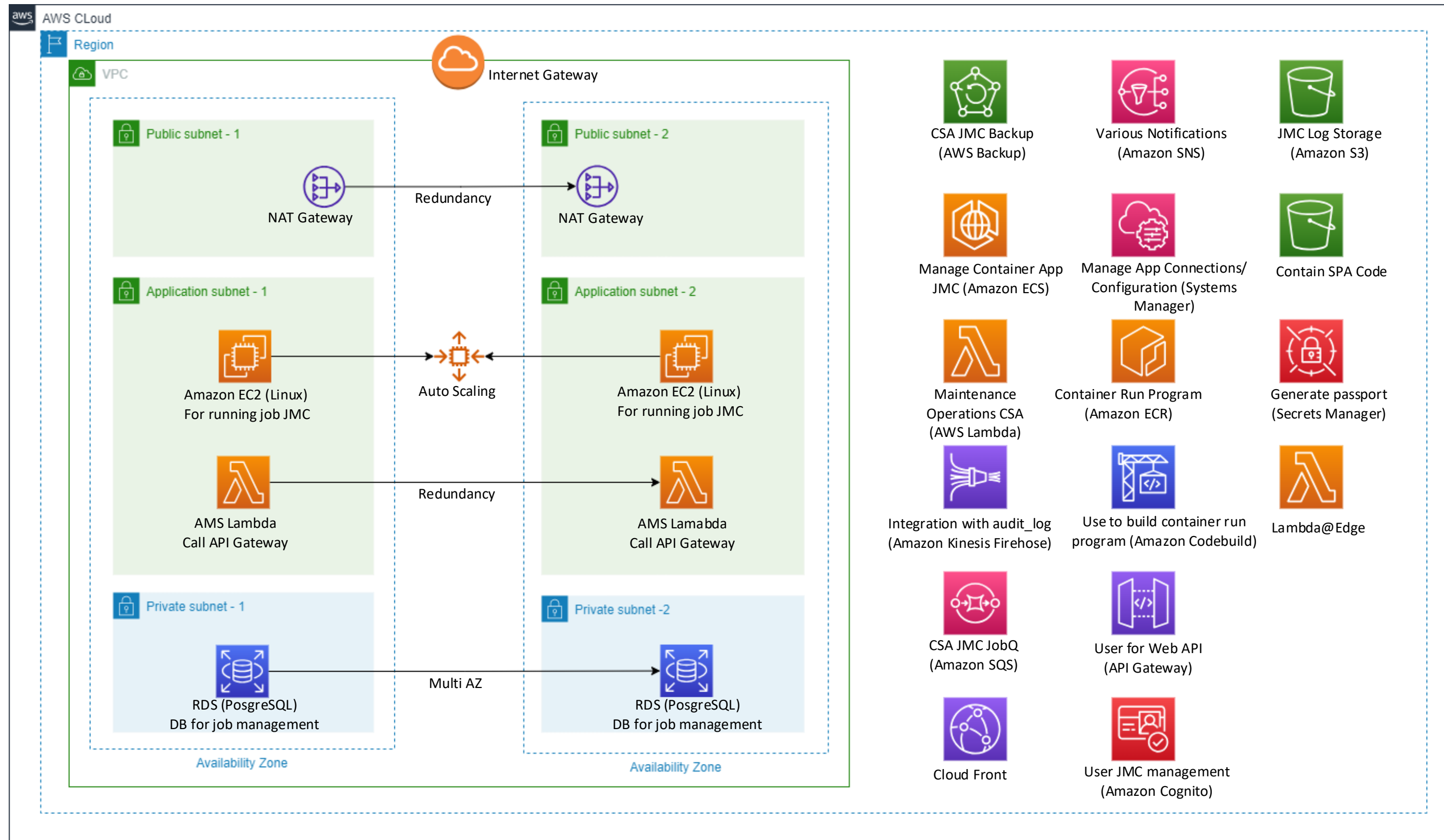
Implementation - PHASES

Project	What we do	Output	Duration	Resource
MVP Development (Since 2017)	Maintainace JMC V3	Data classification and analysis to ensure data consistency, error elimination, and deduplication. Data smoothing to maintain a uniform format ready for migration.	3/1/2017 4/30/2018	1 PM
	Maintainace DU	Data migration to MongoDB and MySQL. Testing and verifying the accuracy of the data post migration. DU	1/5/2017 30/62017	5 csa 3 ops
	Maintainace JMC V3 Maintainace JMC V4 Implement V4 Maintainace DU	Feature development including: Company Data Retrieval Data Retrieval and Regulation Citation Automatic update Testing and bug fixing.	01/07/2019~ 30/12/2019	3 T
	Maintainace JMC V5 Maintainace DU	-	01/07~ 31/12/2020	01/07~31/12/2021
	Maintainace JMC V5 Maintainace DU	Ongoing support and issue resolution after deployment to production environment.	01/01~ 30/06/2022	01/07~31/12/2021

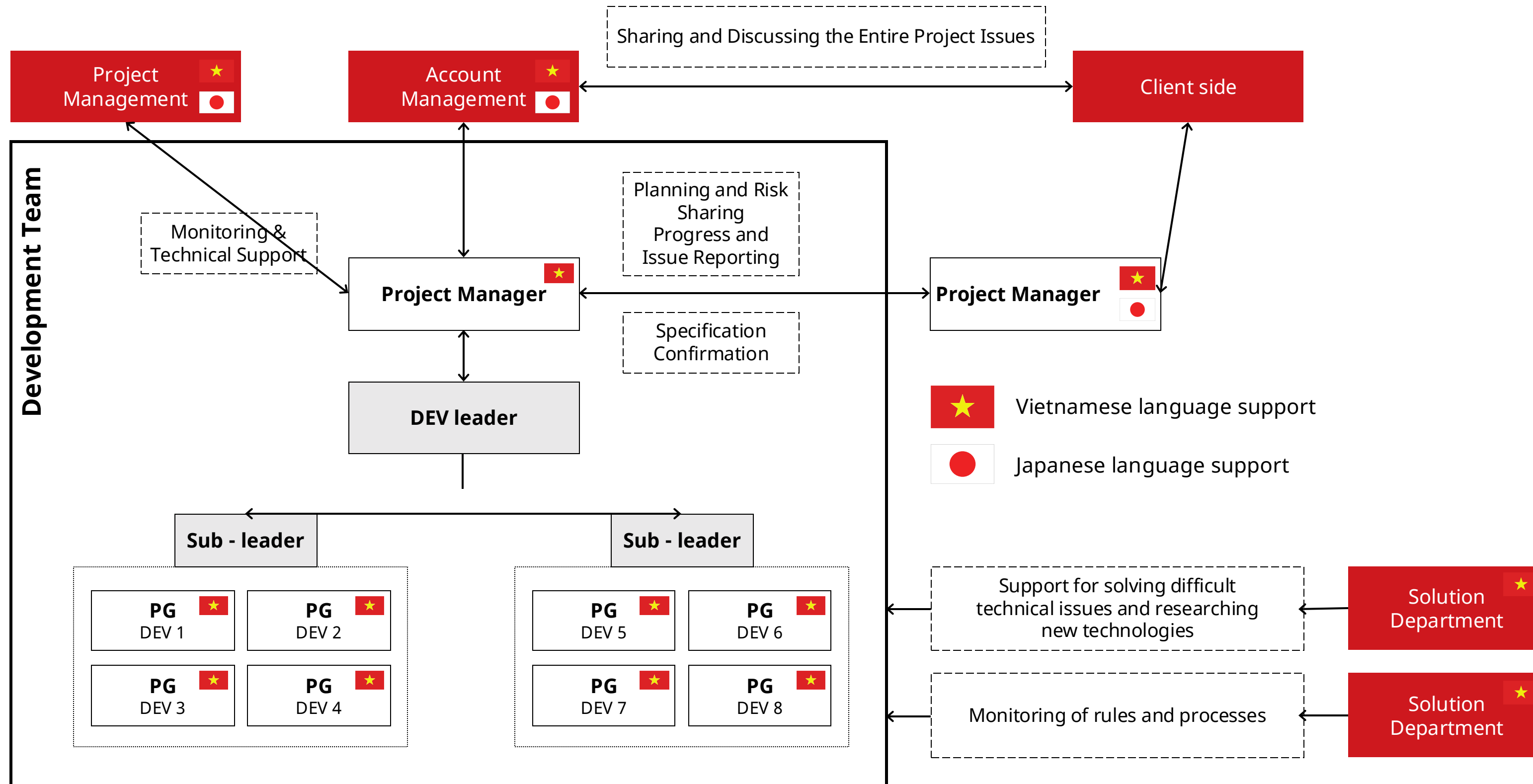
TECHNICAL DETAILS - OVERVIEW



TECHNICAL DETAILS – OVERVIEW



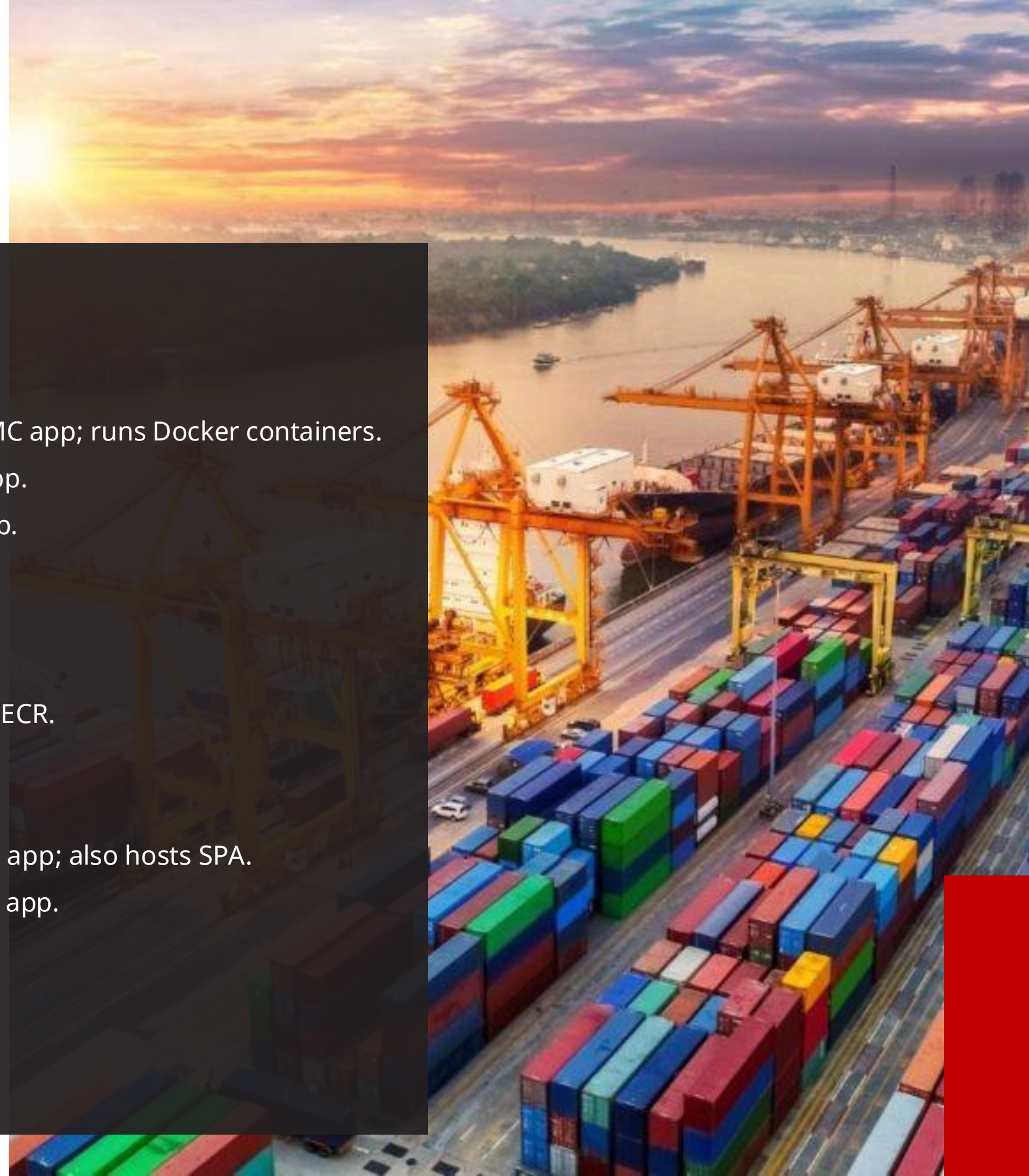
IMPLEMENTATION - TEAM STRUCTURE



TECHSTACKS

- **Utilization of Amazon Web Services:**

- **Lambda:** Function API creation.
- **RDS:** Database management for jobs.
- **EFS:** Storage for job settings and internal logs of the JMC app; runs Docker containers.
- **Backup:** Backup for EFS and RDS utilized by the JMC app.
- **SQS:** Queue service for running jobs within the JMC app.
- **CloudFront:** CDN service.
- **SNS:** Email notification service.
- **ECR:** Repository for managing Docker images.
- **CodeBuild:** Builds Docker images and pushes them to ECR.
- **API Gateway:** Web API management.
- **Cognito:** Password authentication service.
- **S3:** Stores job run logs and temporary data for the JMC app; also hosts SPA.
- **EC2:** Runs ECS services and task containers for the JMC app.
- **Redshift:** Data warehouse service.
- **Additional Services:**
 - **Google Cloud Platform:** BigQuery, GCS.
 - **Snowflake**



TECHNICAL DETAILS - TECHSTACKS

Name	Description	Version
Python, Golang	Programming Languages	3
PostgreSQL, SQLite	SQL Databases	
Apache Airflow	Open-source tool for scheduling and monitoring batch-oriented workflows	1.8
Flask	Python framework for building and developing web applications	
Material UI	Web layout design framework	13.3.8
Angular JS, Vue JS	Frontend web application frameworks	13.3.10
AWS	Infrastructure for the system	

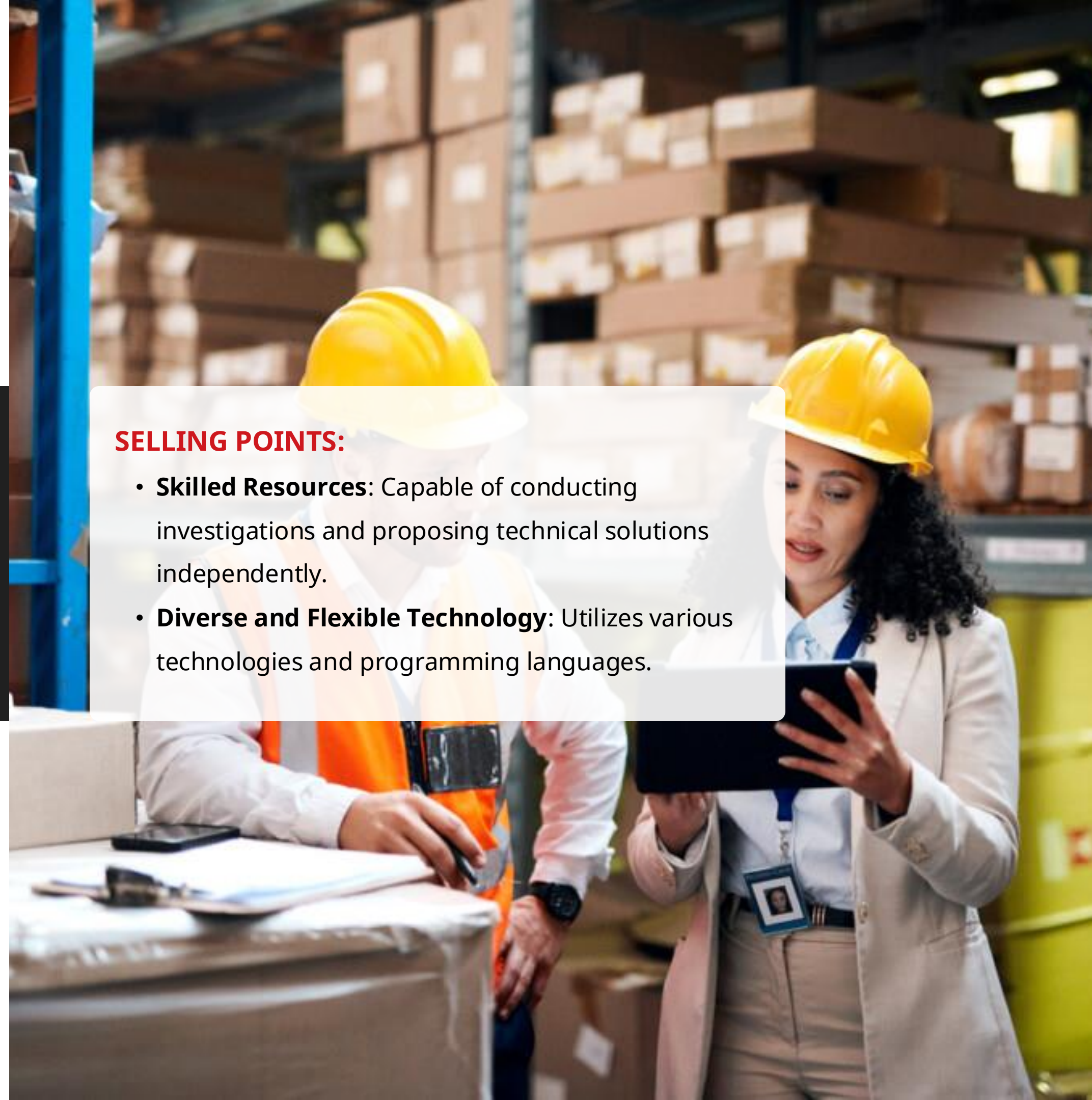
EXTRA POINTS

SCOPE OF PRODUCTION:

- **Development scope:** Full-cycle services from the investigation, proposing technical solutions, requirements analysis, and coding, to testing.
- **Enterprise scope:** Workflow management for scheduling and automating task execution.

SELLING POINTS:

- **Skilled Resources:** Capable of conducting investigations and proposing technical solutions independently.
- **Diverse and Flexible Technology:** Utilizes various technologies and programming languages.



Thank You

CONTACT US



<https://luvina.net/>



info@luvina.net



Tel: (84) (24) 3793 1103 (ext 0)

Fax: (84) (24) 3793 1106

OUR OFFICES

Headquarter in Hanoi, Vietnam: 4F, Hoa Binh Tower, 106 Hoang Quoc Viet Str., Nghia Do Ward, Hanoi City, Vietnam.

Branch in Da Nang, Vietnam: 18F, 2 Quang Trung Str., Hai Chau Ward, Da Nang City, Vietnam.

Branch in HCM City, Vietnam: 38/1 Nguyen Van Troi Str., Cau Kieu Ward, Ho Chi Minh City, Vietnam.

Branch in Japan: R612, Kanagawa Science Park (KSP), 3-2-1 Sakado, Takatsu-ku, Kawasaki-shi.

Representative office: 38N Almaden Blvd, Unit 125, San Jose, California 95110-2720, United States.

Representative office: 1464 E Whitestone Blvd, Cedar Park, TX 78613, United States.