



## Client Overview

- The client is a holding conglomerate headquartered in Singapore with a focus on Digital microfinance for individuals and small businesses.



## Application Overview

- Application enhancement to overcome performance and user experience issues, and process the loan within 30 minutes.



## Business Challenges

- The existing application was heavily Dockerized increasing the complexity and infra requirements
- Existing codebase was not supported in AWS
- Performance constraints created a system lag, while processing loans



## Our Solutions

- Migration of the data from Digital ocean to AWS.
- Code enhancement to use a maximum of the existing code, with minor modifications, in the new platform.
- Efficient Dockerization using AWS components, which reduced number of servers minimizing the TCO.
- Tuning of the application for high availability, with Queue and Task manager.
- Integration with third-party APIs for a faster loan approval



## Tools

- Python (Django framework) – codebase
- Elasticsearch – data indexing
- PostgreSQL (AWS RDS) – database
- Digital Ocean, AWS – cloud provider
- Celery - Distributed Task Queue



## Business Impact

- Highly available System:** Application enhanced with high-durability system that elevated the performance by nearly 89%.
- Performance:** 93% reduction in time taken to generate financial reports and process loans. Loan processing within 30 mins was achieved.
- Process Automation:** 80%+ drop in transaction issues while integrating with banks for the automated loan repayment processes. Improved the existing system with new features, like automated email triggers to customers etc.



### INDIA

Chennai | Bengaluru | Mumbai  
Toll-free: 1800-123-1191

### USA

Cupertino | Princeton  
Toll-free: +1-888-207-5969

### UK

London

### SINGAPORE

+65 9630 7959