WORKMATES

Scalable Cloud Infra for
Rural Digital
Payments

CUSTOMER CHALLENGE

A **Bhubaneswar-based rural fintech company** bridges the digital gap by offering cashless payments through its field agents. To manage rising transactions and meet regulatory demands, it needed a secure, scalable, and cloud-native infrastructure for services like Aadhaar Pay and micro-ATMs.

APPROACH

Workmates designed and implemented a microservices driven, EKS-native infrastructure on AWS. The focus was on regulatory compliance (RBI, Aadhaar, PCI-DSS), security hardening, and performance at scale across rural networks. Key elements included containerization automated CI/CD, hardened data services, and proactive observability.

IMPLEMENTATION

1 EKS Microservices Migration:

Adopted AWS EKS for core financial services with strict pod security policies and network isolation.

2 Hardened Kafka & Redis on EC2:

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3 CI/CD Automation:

Deployed Jenkins pipelines with intelligent rollback (last 5 builds).

4 GitOps Infra Management:

Used Terraform GitOps workflows with blue-green deployment strategies.

5 Observability Stack:

Prometheus, Grafana, Loki, and Signoz enabled real-time monitoring, tracing, and alerting.

6 Secrets Management:

Integrated AWS Secrets Manager and runtime SDK-based secret injection aligned with compliance norms.

RESULTS

Benefit	Impact
99.98% Uptime	Ensured uninterrupted financial services even during high rural demand
Regulatory Compliance	Fully aligned with RBI, UIDAI (Aadhaar), and PCI-DSS standards
30-Minute Deployments	Reduced release time from 4 hours to under 30 minutes
Proactive Observability	Prevented transaction failures before reaching rural agents
18% Cloud Cost Savings	Achieved via efficient scaling and GitOps governance
Zero Data Loss	Kafka/Redis hardening ensured message integrity even during high loads

BUSINESS IMPACT

Through strategic infrastructure modernization, Workmates enabled the rising rural fintech to deliver secure, scalable, and always-on financial services across underserved regions of India. This transformation met urgent business demands and regulatory needs, positioning the company as a trusted driver of Digital Bharat at the grassroots.

Workmates is a leading cloud-managed services and IT solutions provider, recognized as an AWS Premier Tier Services Partner—placing us among the top AWS consulting firms globally. Since 2018, we've helped businesses drive innovation and digital transformation with our team of 150+ AWS Certified Professionals, delivering expert solutions and exceptional results.

Kolkata
Head Office

Hyderabad

Bhubaneswar

Delhi

Singapore

www.linkedin.com/company/30218985/   18008901233   cloudworkmates.com