



SWAPNIL BIRKHEDE

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Summary

Results-driven Engineering Manager with 14 years of experience in fintech and payments, currently leading engineering teams in Netbanking, Wallet, and Smart Collect. Expanded team from 2 to 14 engineers while delivering critical payment infrastructure projects. Expertise in card payments, dispute resolution, and RBI-compliant systems, leveraging strong technical skills in system design and API architecture to enhance team performance and productivity. Proven hands-on experience with LangChain, LLaMA, RAG pipelines, and Agentic AI systems, applied to automate engineering and support workflows at scale.

Skills

- Payment Integration
- Payment Processing
- Card Management
- Regulatory Compliance Management
- Agile/Scrum
- Stakeholder Management
- People Management
- Project Planning
- Effective Negotiators
- Event-Driven Architecture
- High-Availability Systems
- Incident Management
- Sprint Management
- Performance Management
- Claude Code, Codex (Agents/Skill/MCP)
- Java, Spring Boot, GoLang
- JPOS, ISO-8583
- PostgreSQL, MySQL, Oracle
- Kafka
- Redis
- AWS
- Kubernetes
- CI/CD
- Terraform
- Datadog, Grafana
- GitHub
- Jira/DevRev
- SLO frameworks
- Productivity Tooling
- LangChain, RAG Pipelines
- LLaMA, Agentic AI Systems (Agentic SDLC)

Experience

Razorpay Pvt. Ltd. | Pune, India
Engineering Manager – Payments
10/2020 - Current

- Currently responsible for four major products: Netbanking, Wallets, TokenHQ, and MandateHQ.
- Architected and delivered the NB+ platform — a next-generation Netbanking stack with intelligent routing, retry logic, and issuer-level optimizations that improved payment success rates.
- Integrated wallets with multiple banking partners and SDK providers, enhancing Razorpay's payment method coverage for over 10M merchants.
- Owned the Smart Collect product roadmap and delivery, enabling automated reconciliation for enterprise clients and reducing manual effort by 60%.

- Owned incident response for payment failures across Netbanking and Wallet flows, driving RCA to resolution within SLA for 95%+ of P1/P2 incidents.
- Reduced recurring payment failures by 40% through proactive monitoring dashboards (Grafana) and automated alerting pipelines.
- Unblocked critical cross-team dependencies with Platform, Risk, and Compliance teams, ensuring timely delivery of RBI-mandated tokenization and e-mandate features.
- Built the payments methods engineering squad from scratch (2 → 14 engineers), owning hiring, onboarding, and mentoring across all levels.
- Established clear engineering career tracks and ran performance calibration cycles; promoted 3 engineers within 2 review cycles.
- Decomposed legacy Netbanking monolith into modular, independently deployable services, reducing deployment lead-time by 3x.
- Introduced AI-driven debugging pipelines that reduced mean time to identify root cause by 50% for production incidents.
- Built AI agents that auto-generate and publish the pod's weekly OpEx (operational excellence) matrix, aggregating incident, SLO, deployment, and code-quality signals from Jira/DevRev, Grafana, and GitHub into a single scorecard and removing manual reporting effort each week.
- Drove adoption of an Agentic SDLC harness across the pod — LLM agents embedded into the development lifecycle for planning, requirement breakdown, techspect, implementation, code review, test generation, and release readiness (checklist) — built on LangChain agents and MCP-based tooling.
- Implemented RAG pipelines over internal runbooks, API specifications, and historical incident data so agent output stays grounded in team-owned documentation; evaluated open-source LLaMA models alongside hosted LLMs on accuracy, latency, cost, and data-residency trade-offs.

Interlace India Pvt. Ltd. | Mumbai, India
Lead Software Engineer
 05/2018 - 09/2020

- (On-site: Reserve Bank of India)
- Led a team of 6 engineers delivering banking applications for the Reserve Bank of India, managing end-to-end SDLC from requirements to production.
- Delivered 3 major releases on schedule with zero critical production defects, earning client commendation for quality and reliability.
- Drafted technical architecture documents and project plans; introduced Agile ceremonies, enhancing team delivery predictability.
- Served as primary client interface for RBI stakeholders, capturing requirements and translating regulatory needs into technical specifications.

Yalamanchili Software Exports Ltd. | Nagpur, India
Technical Leader
 08/2017 - 03/2018

- Led a cross-functional engineering team delivering card management and payment processing solutions for banking clients across India and Southeast Asia.
- Managed full project lifecycle for 2 card-issuing platforms, ensuring successful installation, implementation, UAT, and go-live.
- Introduced structured sprint planning and release management processes, achieving a 25% reduction in delivery overruns.

Yalamanchili Software Exports Ltd. |
Nagpur, India
Software Engineer
02/2016 - 08/2017

- Led R&D on real-time card authorization and dispute resolution modules for 3 banking clients, enhancing client service capabilities.
- Built reusable components for multi-threaded transaction processing, improving throughput by 2x on existing infrastructure.
- Developed card payment and transaction processing systems with Java, Spring MVC, Socket Programming, and PostgreSQL, enabling secure and efficient transactions.

Hexaware Technologies | Nagpur, India
Executive – Healthcare BPS
09/2012 - 10/2015

- Provided healthcare claims adjudication services for US client Trustmark Insurance, processing over 500 claims daily with 99.2% accuracy, ensuring client satisfaction and operational efficiency.
- Led Six Sigma Yellow Belt projects in Risk Management and Performance Improvement, achieving 15% reduction in process cycle time, enhancing workflow efficiency.
- Developed internal tools — a Benefit Research Site (HTML, Angular JS) and a Time Tracker (Java, MySQL) — that improved resource tracking and were adopted across the BPS unit.

Education

G.H. Raison Institute of Information Technology | Nagpur
Master of Computer Applications (MCA)
01/2016

Key Projects Achievements

- NB+ Platform (Razorpay), Designed next-gen Netbanking orchestration layer with NPCI routing and retry mechanisms, directly contributing to improvement in payment success rates.
- API Decomposition (Razorpay), Led the decomposition of a legacy monolith into microservices — 100% complete — enabling independent deployability and reducing release cycles from weeks to days.
- Wallet Integrations (Razorpay), Drove end-to-end integration of wallet payment methods with banking partners and SDK providers, expanding payment coverage across Razorpay's merchant base.
- Architected and deployed a robust **ISO-8583** based switching engine leveraging **jPOS** framework and **Java**-implemented core **CMS** functionalities to handle card issuance, authorization, and real-time transaction routing
- RBI Banking (Interlace), Delivered mission-critical banking applications for the Reserve Bank of India with zero critical defects across 3 major releases.
- Card Issuing Platform (Yalamanchili), Managed go-live for 2 card-issuing systems, serving banking clients in India and Southeast Asia.
- Agentic OpEx and SDLC Automation (Razorpay), Built agents that publish the pod's weekly OpEx matrix from Jira/DevRev, Grafana, and GitHub signals, plus an Agentic SDLC harness with LangChain, MCP tooling, and RAG over runbooks and API docs — adopted across the payments engineering team.

Certifications Training

- Six Sigma Yellow Belt, Hexaware Technologies
- Java Professional Training, SVN Solution Pvt. Ltd.
- English Communication & Corporate Etiquette, Tata Consultancy Services

Personal Information

- Specialization: Payments & Fintech
- Title: Engineering Manager