

Scaling Secure Fintech Innovation: How InCred Finance achieved scale and operational efficiency with Docker

Automated manual CI/CD cycles, achieving 10x deployment frequency, and >80% spot instance utilization with Docker



Company	: InCred Finance
Industry	: Fintech (NBFC)
Size	: 2700+ employees
Location	: India
Tech Stack	: Javascript, Java, Python, Kotlin, React, Angular, GitHub, Kubernetes, AWS, Docker Desktop, Docker Hub, Docker Scout

About InCred Finance

InCred Finance Group is a diversified financial services firm headquartered in Mumbai, boasting a workforce of over 3500+ employees and 170+ branches across India. Founded in 2017, InCred Finance set out to deliver inclusive finance to underserved sectors in India. The group comprises three distinct businesses - 'InCred Finance' which is a new-age lending-focused NBFC; 'InCred Capital' which is an integrated institutional, wealth and asset management platform and 'InCred Money' the integrated B2C and B2B2C digital investment distribution platform targeting mass-affluent and retail segments. Given the complexity of its operations, the need for operational resilience and scalability was non-negotiable.

The tech team, headquartered in Bangalore, builds and maintains an infrastructure platform that enables multiple business products with widely varying workflows and actors. Despite its lean size, this team is responsible for building and deploying over 50+ microservices that serve hundreds of thousands of users across India every day.

The Challenge

Fragmented Systems, Audit Pressure, Developer Friction



Increased friction due to the complexity of managing 50+ services.



Increased expectations around security, compliance, and regulatory compliance.



Local environment mismatches, dependency conflicts, and ad hoc provisioning delayed delivery and eroded confidence.

Docker as the Engine for Secure Velocity

After briefly looking into alternatives, InCred Finance chose Docker to standardize and scale its development operations. Docker's extensive documentation, functionalities, and strong community support were key for the decision-making process. With Docker, InCred Finance achieved targeted benefits across three key pillars:

1. Developer Productivity

Docker Desktop became the local environment of choice, enabling fast, reproducible setups for all developers. Docker Compose allowed microservices to be orchestrated in development exactly as they run in production, eliminating environment drift.

Developers could now test services locally, validate ideas instantly, and ship code that mirrors production conditions, all without depending on centralized provisioning. GitHub was tightly integrated for CI/CD, allowing every commit to flow through a Docker-based pipeline and reach production within three minutes.

"The turnaround time from commit to deployment is just three minutes on average across our 50+ backend applications. It's a hard metric we track, and one we were able to achieve after adopting Docker."

Dheeraj Arani, Head of DevOps
InCred Finance

2. Stronger Software Supply Chain Security & Regulatory Compliance

With Docker Business, InCred Finance implemented centralized access controls - including SSO enforcement and auditable logs, ensuring that all image and registry interactions are permissioned and auditable. Docker Scout brought embedded vulnerability scanning into Docker Desktop, allowing developers to surface and remediate dependency risks early in the development process. Local enforcement was further strengthened by Kubernetes-level OPA policies, creating an end-to-end compliance and security framework.

Hardened Docker endpoints reduced attack surfaces on developer machines, while proactive governance tools transformed InCred Finance's supply chain from reactive to secure-by-design. As a result, InCred Finance has successfully passed multiple audits with zero infrastructure violations, crediting Docker's role in enabling a trustworthy, observable, and compliant DevSecOps pipeline.

"Docker gave us more than containers. It gave us control. Now, every developer has a consistent, secure environment, and we ship confidently every day."

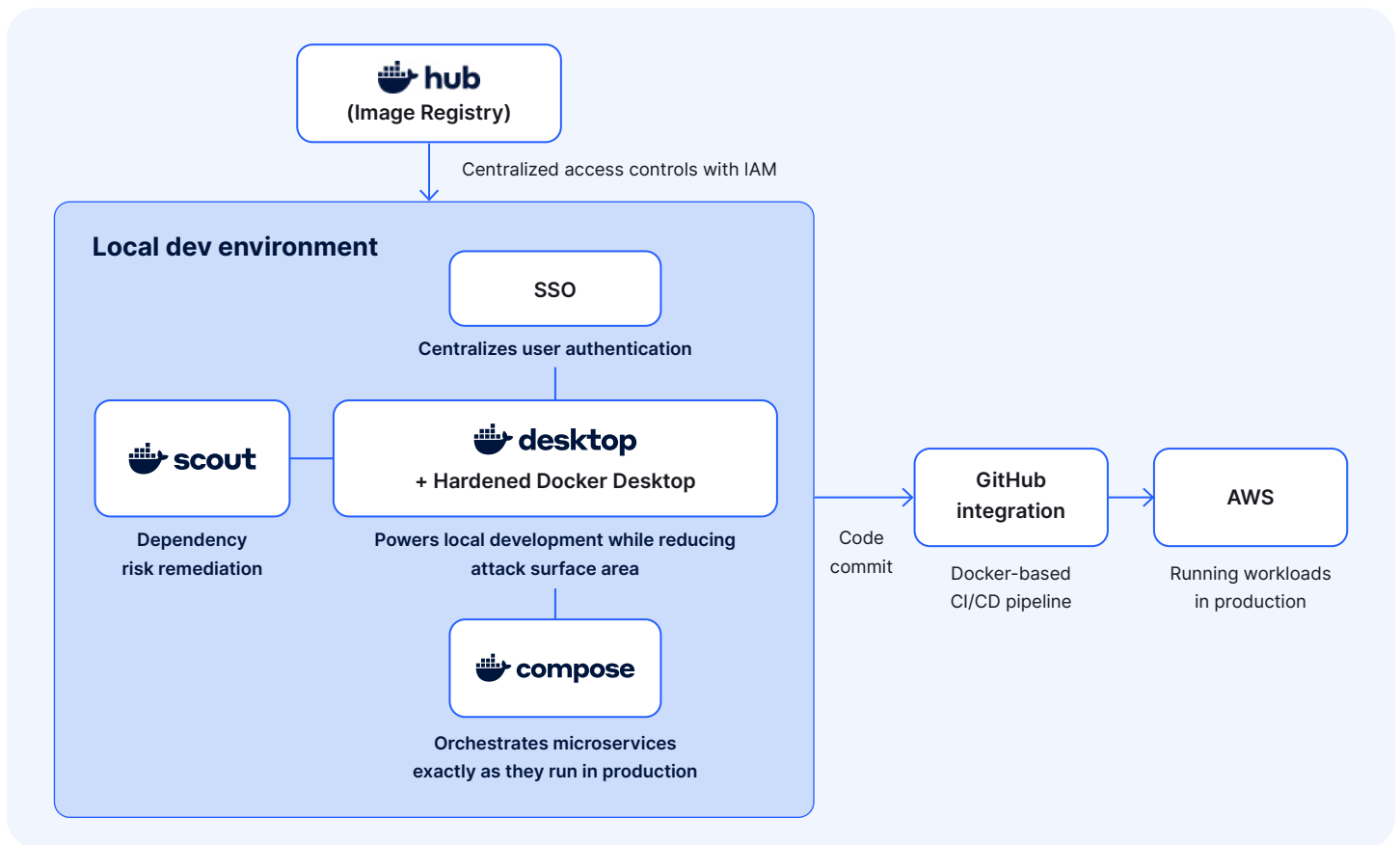
Dheeraj Arani, Head of DevOps
InCred Finance

3. Infrastructure Cost Efficiency Through Containerization

By adopting Docker and shifting to a container-native architecture on AWS, InCred Finance has dramatically improved infrastructure efficiency. The company now runs over 80% of its cloud workloads on spot instances, a level of cost optimization rarely achieved in the Indian fintech landscape. This was made possible by Docker's role in enabling stateless, resilient services that can seamlessly restart and scale across availability zones. With containers as the foundation, InCred Finance designed applications for fault tolerance and elasticity—unlocking massive savings without compromising reliability or performance.



InCred Finance architectural reference:



Measurable Impact



Accelerated Developer Velocity

- Automated manual environment setups, reducing CI/CD pipeline to an average of 3-minutes per build, test, and deploy cycle, across 50+ microservices
- Enabled developers to instantly validate ideas locally with Docker Compose
- Reduced provisioning delays with on-demand environments



10x Increase in Deployment Frequency

- Moved from 2 manual deployments/week to **10-15 automated deployments/day**
- Achieved over **1,200+ deployments/year**, up from ~100
- Leveraged standardized workflows to eliminate CI/CD issues across 50+ microservices





Stronger Security and Compliance

- Integrated Docker Scout into dev toolchain for real-time vulnerability detection
- Instituted image and registry access controls via Docker Business Image Access Management
- Hardened developer endpoints using Docker Desktop with SSO and container isolation



Infrastructure Optimization

- Achieved **82% spot instance utilization** on AWS, reducing infra costs
- Enabled multi-cloud flexibility across AWS, GCP, and Azure
- Migrated all local development to cloud-native environments

Docker as the Blueprint for Resilient Fintech

For InCred Finance, Docker became more than a development tool - it became the foundation for secure, scalable growth. From unlocking developer autonomy to meeting audit demands with confidence, Docker enables InCred Finance to deliver secure finance at the speed of digital expectation.

InCred Finance's journey also showcases a thoughtful evolution. Initially on Docker Teams, they quickly recognized the need for tighter control and user management, leading to an upgrade to Docker Business. Now with built-in SSO and access management, Docker usage is regulated and secure at scale. Developers rely on [Docker Scout](#) for real-time insights into security risks during local development, and new services can be deployed faster than ever.

The roadmap ahead is equally ambitious. InCred Finance is preparing to adopt [Docker Hardened Images](#) and [Docker Build Cloud](#), with expectations to further reduce build times and enhance image trustworthiness. Both initiatives align with their long-term vision: to scale securely, innovate continuously, and operate with confidence in a heavily regulated market.

With Docker, InCred Finance has created a replicable model of secure fintech modernization - one that others in the sector are now looking to emulate.

