



Case Study on
One Of India's Largest
**Small
Finance
Bank**

About The Bank

One of India's largest Small Finance Banks (SFB), powered by technology, aiming at elevating the banking experience for their rural and urban customers alike. The SFB intends to leverage new age technologies to accelerate their decision making and transaction procedures to an instantaneous degree.

Being one of India's largest and most recognized SFB, the organization currently caters to lakhs of customers countrywide, including the last mile individuals, mass retail and micro & small enterprise segments.

Business Challenges

The bank faced numerous challenges with the availability of the services, due to incompatibility of the technology with their earlier service provider. For a new age institution that truly intends to deliver robust responses to the changing needs of their stakeholders and fast evolving environment, connectivity issues and frequent downtimes of their environment were nothing short of nightmares.

At the same time, the bank had plans to start UPI services and were in lookout for a trustworthy Cloud Service Provider who can provide:

Business Challenges

- Network Connectivity Issues
- Frequent Outages of the platform
- Performance issues with the platform
- More time to market new services
- Losing Competitive Edge in The Market

Solution Offered

- Scalable Cloud Infrastructure
- All digital platforms and UPI services hosted at Pi Amaravati And DR at Pi Kochi
- Deep Security stack including Multi-Factor Authentication, Proxy & Web Filtering, Antivirus, Physical & Virtual Firewall, and IPS/IDS,
- DDoS, Web Application firewall, Encryption at rest and transit
Dedicated Security Zone for Hosting UPI Services as Per RBI Guidelines
- Secure DMZ zone for web and private zones for App and DB services.

Benefits Delivered

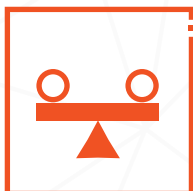
- PCI DSS Certified World Class Infrastructure with Optimal TCO
- Guaranteed Uptime Of 99.995% At DC Infra Level
- Seamless Set-Up and Continuous Service Availability
- Stable Platform to Launch Multiple Citizen Services in Quick Succession
- Zero scope for any possible threats and/or breaches in the customer's security policy



Guaranteed Uptime
(Highest Availability)



Highest Security for
Severely Important and
Confidential Data



Stable Network
& Environment



Infrastructure & Services
at Lower TCO



End to End Infrastructure
Management Services

Solution from Pi

Pi hosted 100+ workloads across primary & DR environments for the customer's Core Banking System (CBS) and Unified Payment Interface (UPI) services. The solution proposed had certain salient arrowhead features.

- ◆ Scalable cloud infrastructure with Autoscaling and cloud native elastic Load balancing features
- ◆ Secure DMZ zone for Web services in Cloud VPC and private Zones for App and DB services
- ◆ Custom 2FA for all legacy and home-grown applications for additional layer of security
- ◆ PCI-DSS certified Platform for UPI and other banking applications.
- ◆ 24*7*365 Dedicated team of expert managed services to keep mission critical bank applications running all the time.

The migration of multiple Terabytes of data from the previous service provider to Harbour1® - the enterprise cloud platform @Pi® was accelerated using a mesh of multi-tier, high capacity MPLS and Point to Point (P2P) network fabric. The migration was completed well within the stipulated period to ensure the customer does not miss its Go-Live date. The entire process was driven by a tightly stitched governance model.

This ensured continuous communication amongst stakeholders at all levels, all through the migration process leading to the Go-Live. While the bank had plans for offering UPI services to its customers as a part of its GTM strategy, it could not kick off the services due to non-readiness, lack of continuous service availability and limitation to scale with their earlier service provider.

Pi opened avenues for the customer to leverage the TCO optimal world class infrastructure that complimented the bank's plans and was compliant with all required regulations for the bank. Pi's security framework and strict domain relevant certifications viz. PCI DSS, SOC2, ISMS (ISO 27001) and BCMS (ISO 22301) made the customer gain their trust in Pi and eventually host their UPI services @Pi®.

Pi allocated a dedicated security zone, as per RBI's guidelines, for hosting multiple VMs designated by the customer for offering UPI services.

Cybersecurity Solutions Offered

- ◆ DDoS has been configured to protect from Volumetric, TCP State-Exhaustion and Application Layer DDoS Attacks, thereby ensuring 100% availability of the SFB's website and other online services
- ◆ Firewalls, with UTM features enabled, including IPS, Web Filtering, DNS Filtering & Anti-Virus have been configured to control and monitor both incoming and outgoing network traffic
- ◆ Cloud security features like virtual firewall & security groups have been enabled to ensure only legitimate traffic can reach the bank systems
- ◆ Web Application Firewall (WAF) has been configured for internet serving applications to filter, monitor and block HTTP/S traffic to and from a web application to protect against malicious attempts to compromise the system or exfiltrate data
- ◆ Multi-Factor Authentication (MFA) has been put into place to protect the bank's systems from being compromised for any un-authorized access or data theft
- ◆ Anti-malware agents have been deployed on the bank's servers to protect from different types of malwares
- ◆ Privilege Identity Management (PIM) has been put into place to protect and monitor the use of superuser accounts as these accounts are more vulnerable to loss or theft of sensitive corporate information
- ◆ Database Activity Monitoring (DAM) continuously monitors and collects consolidated records of all logins/logouts, updates, privileged activities and more to create granular audit trails that pinpoint the "who, what, when, where and how" for each database(s)
- ◆ To adhere to compliance regulations such as RBI guidelines & PCI DSS, the bank has opted to avail both Encryption-at-rest and Encryption-in-transit for all data that travel in & out of Harbour1®



Set-Up and Initiation of UPI Services

The customer could seamlessly set up and run the UPI services @Pi® on a robust cloud platform that can scale at will

Uptime & Connectivity

Pi, being an Uptime Institute TIER IV Certified data center, was just in line to the expectations of the customer. Pi ensured 99.995% availability of their mission-critical infrastructure on Harbour1®

Quicker Go-To-Market

Pi has helped the customer in transforming into a new age bank, with minimal hassle by enabling them to make decisions and transactions instantaneous for their end customers

Lower TCO

The customer now enjoys state-of-the-art infrastructure and world class support at a relatively lower TCO

Enhanced Security

The customer is assured of no possible scopes for threats and/or breaches in their security policies, thereby guaranteeing maximum security of their customer's financial records