

# Bank of India delights customers with modern digital services



## Headquarters

Mumbai, India

## Industry

Financial services

## Size

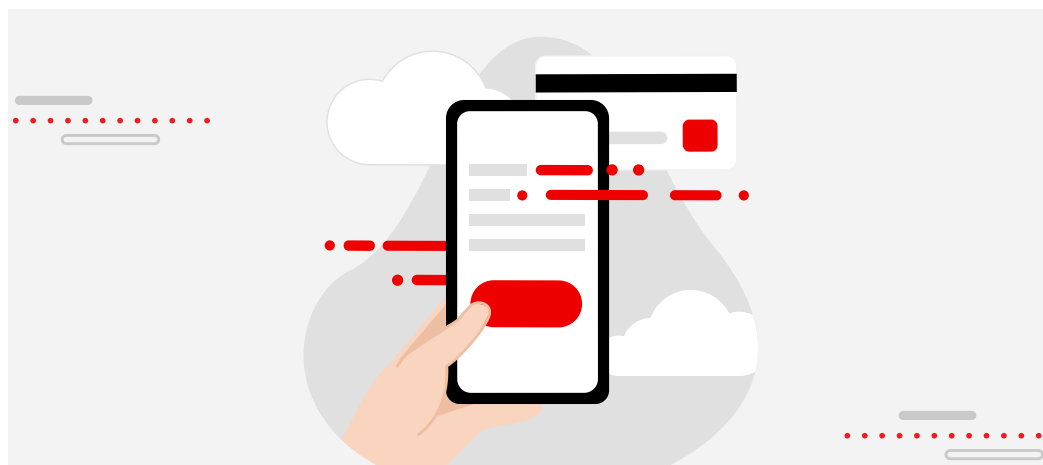
50,000+ employees

*"Since adopting Red Hat OpenShift, we've seen a 95% rise in customer satisfaction scores and a significant increase in user adoption rates."*

## Mr. Ashutosh Mishra

General Manager,  
Bank of India

Faced with increasing customer demands and growing competition, Bank of India needed to revamp its mobile and internet banking services. BOI Omni Neo App—a new customer-facing digital application for mobile and internet banking services—was conceived to provide modern and consistent services for internet and mobile customers using an approach based on microservices and APIs. Red Hat OpenShift now provides a modern, robust, and secure foundation augmented by Red Hat Ansible Automation Platform and Red Hat Application Foundations and backed by a team of product experts. The bank can launch new services faster, while customer satisfaction has increased by 95%. The Bank of India is now expanding its use of Red Hat OpenShift across its business.



## Software and services

Red Hat® OpenShift® Platform Plus  
Red Hat Ansible® Automation Platform  
Red Hat Application Foundations  
Red Hat Consulting  
Red Hat Learning Subscription

## Benefits

- ▶ Reduced time to market for new services, features, and updates
- ▶ Improved customer satisfaction by 95%
- ▶ Accelerated the onboarding of third-party services
- ▶ Fostered a culture of innovation .

## Partners

IBM Consulting

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## About Red Hat Innovators in the Open

Innovation is the core of open source. Red Hat customers use open source technologies to change not only their own organizations, but also entire industries and markets. Red Hat Innovators in the Open proudly showcases how our customers use enterprise open source solutions to solve their toughest business challenges. Want to share your story? [Learn more.](#)

*"Red Hat OpenShift is critical to our future as a robust and secure platform that can support our business as it evolves."*

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**Mr. Ashutosh Mishra**  
General Manager,  
Bank of India

### Facing rapidly growing competition from digital banks and fintechs

Customer expectations and behaviors are changing rapidly across industries and banking is no exception. Faced with rapidly increasing competition from digital banks and fintechs, Bank of India realized that it needed to overhaul aging mobile and internet banking services that often left its customers frustrated.

"Our customers needed a more intuitive and consistent experience from our mobile and internet banking," said Mr. Ashutosh Mishra, General Manager, Bank of India. "The services looked very different from each other and navigation in both was complex."

Founded in 1906 and owned by the Indian government since 1969, Bank of India offers a wide range of financial products and services—including deposits, loans, credit cards, insurance, and investment products—to retail, small business, and large corporate customers.

The bank's mobile and internet banking services were originally built using monolithic architecture. Launching new products, features, and services on its mobile and internet banking channels took time as changes had to be made manually. Responding to evolving regulatory requirements was also challenging, while a lack of modern application programming interfaces (APIs) meant integration with third-party services, fintech products, and payment gateways was difficult. Moreover, IT operations could only respond to ever-increasing user loads and surges in traffic by adding virtual machines (VMs) manually.

"We needed to revamp our mobile and internet banking services to compete and grow our business," said Mr. Mishra. The bank's IT department therefore initiated a project to modernize its digital presence and provide consistent internet and mobile services under a single umbrella. The proposed solutions, the customer-facing BOI Omni Neo App would be built using a distributed architecture that could stitch loosely coupled components into an orchestrated system.

### Adopting a robust foundation for modern digital banking services

The bank deciding on an approach based on microservices and APIs in a cloud-native architecture using open source technology, and invited a select number of technology partners to demonstrate their products. The deep technical evaluation that followed lasted more than 6 months.

"We selected M/s IBM after a rigorous technical evaluation process, and they proposed Red Hat OpenShift as the containerization platform," said Mr. Mishra.

With the support and expertise of Red Hat's global system integration partner, IBM Consulting, Bank of India implemented the BOI Omni Neo App on Red Hat OpenShift, it went into production within 1 year.

Red Hat also provided support services, training and certification for the bank's infrastructure team through a Red Hat Learning Subscription.

"Red Hat's certification is important to us because it means we know we will have the knowledge we need to run our Red Hat environment moving forward," said Mr. Mishra.

The value of Bank of India's OpenShift implementation is extended by Red Hat Advanced Cluster Management for Kubernetes and Red Hat Advanced Security Management for Kubernetes, both of which are included with Red Hat OpenShift Platform Plus. The bank uses Red Hat Advanced Cluster Management to manage clusters and applications from a single console, safeguarding consistency when deploying apps and managing multiple clusters. Red Hat Advanced Security Management then enforces compliance and governance policies by codifying security checks, quality gates, and regulatory requirements directly into continuous integration and continuous delivery (CI/CD) pipelines.

Additionally, Red Hat Ansible Automation Platform provides infrastructure automation capabilities, while Red Hat Application Foundations offers an API-first approach that allows the bank to create, deploy, monitor, and control the APIs used by third-party services.

Today, the BOI Omni Neo App provides a one-stop platform that unifies banking needs with unified mobile-internet integration for enhanced experience and operational efficiency. Red Hat OpenShift provides a robust foundation for more than 450 customer journeys, including banking services as well as payment, insurance, investment, government products, and other connected financial and non-financial services—all built from the ground up by Bank of India.

Customer services are also highly personalized. “Customers in rural areas can access products and services securely by connecting in ‘lite mode’,” said Mr. Mishra. “And all customers can personalize the look and feel of their interaction with our bank.”

### **Launching new services faster while delighting customers**

#### **Reduced time to market for new services, features, and updates multi-fold**

The new environment built on Red Hat OpenShift has accelerated the creation and launch of new services by multi-fold for Bank of India. Red Hat OpenShift Tekton Pipelines—a CI/CD approach—and ArgoCD shorten delivery cycles, allowing the bank to release new features and updates to customers more frequently.

“To date, we have launched 450 new customer journeys in 2 years—and we’re now building between 10 and 20 new journeys each month,” said Mr. Mishra. “On our previous platform, it took us 5 years to build 90 to 100 journeys.” For Bank of India, a customer journey is a single service, such as a payment or loan application journey. Journeys available on the BOI Omni Neo App now also include both financial and non-financial journeys, such as health, life and general insurance, mutual funds, and pensions, etc.

#### **Improved customer satisfaction by 95% with enhanced customer experience**

Launched 2 years ago, the BOI Omni Neo App has operated successfully with no downtime. Red Hat OpenShift’s auto-scalability features, help to address surges in incoming requests, while its self-healing functionality mitigates the need for manual interventions from IT operations, ensuring operational efficiency.

The platform also automatically moves workloads to new hosts in the event of an outage to provide service continuity.

Customers also appreciate the simplified navigation and adaptive user interface, which provides a unified experience across various devices, from desktops to mobile phones. Customers have so far downloaded the Omni Neo App 10 million times, and up to 20,000 are registering each month.

“The project’s impact has been profound,” said Mr. Mishra. “Since adopting Red Hat OpenShift, we’ve seen a 95% rise in customer satisfaction scores and a significant increase in user adoption rates.

#### **Accelerated the onboarding of third-party services**

The new environment, built on Red Hat OpenShift, allows Bank of India to onboard new partners quickly. RESTful APIs—APIs that follows the principles of Representational State Transfer (REST)—expose banking functionalities to various third-party partners, fintech applications, and payment gateways. The APIs are then managed and secured using Red Hat Application Foundations (formerly Red Hat Integration).

Fostered a culture of innovation

Red Hat OpenShift has facilitated Agile development at Bank of India thanks to features such as simplified application deployment, CI/CD tools, and enterprise-ready features. In turn, this has fostered a culture of innovation at the bank.

“Moving away from traditional application development practices to Agile practices has fostered a culture of innovation,” said Mr. Mishra. “Employees are encouraged to think creatively, adapt to change, and continuously improve processes and services.”

Growing the value of investments in modernization

Bank of India sees a bright future with Red Hat OpenShift, especially with the BOI Omni Neo App. “We’re planning many more customer journeys,” said Mr. Mishra. “Our focus to date has mainly been on journeys for our retail customers, including—most recently—analytical tools where they can view their spending. We’re now working on new journeys for our sole proprietors, small business and large corporate customers.”

Those journeys include an e-marketplace where small business customers can sell products and services, and integrate with their payroll systems.

The success of the BOI Omni Neo App project has led to increased Red Hat OpenShift adoption at Bank of India. The bank recently launched several new payment applications on Red Hat OpenShift along with its digital currency application, as well as the SAS Viya end-to-end data and artificial intelligence (AI) platform on the data warehousing side.

“By moving from a monolithic architecture to microservices with Red Hat, we have achieved our goals of providing our customers a unified and consistent modern experience and delivering a highly available service,” said Mr. Mishra. “We plan to expand the services customers can access through the BOI Omni Neo App and have many more applications in progress, as well as a widening adoption of Red Hat OpenShift across our business. Red Hat OpenShift is critical to our future, providing us with a robust platform that can support our business as it evolves at pace to meet ever-evolving market conditions.”

About Bank of India

Bank of India was founded in 1906 by a group of eminent business professionals from Mumbai. Nationalized along with 13 other banks in 1969, the bank has grown rapidly over the years. Today it has over 5,100 branches in India along with 23 foreign branches, 4 foreign subsidiaries, 1 representative office, and 1 joint venture abroad.



About Red Hat

Red Hat is the world’s leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers develop cloud-native applications, integrate existing and new IT applications, and automate and manage complex environments. A trusted adviser to the Fortune 500, Red Hat provides award-winning support, training, and consulting services that bring the benefits of open innovation to any industry. Red Hat is a connective hub in a global network of enterprises, partners, and communities, helping organizations grow, transform, and prepare for the digital future.

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