

Kalbe Farma introduces innovative new services at speed



Software and services

Red Hat® OpenShift®

Red Hat 3scale API Management

Partner

Mitra Integrasi Informatika (MII)

Southeast Asia's largest publicly listed pharma company, Kalbe Farma, has unrivaled marketing, branding, distribution, financial strength, and research and development expertise. The company wanted to accelerate its digitization and increase agility. With legacy applications developed as monoliths, making changes was difficult and time-consuming. Adopting Red Hat OpenShift and Red Hat 3scale API Management has allowed the pharma to move to a microservices-based and API-centric IT architecture to enhance speed, agility, and efficiency. The pharma can respond faster to business needs, accelerating the development and rollout of new applications.



Pharmaceuticals

16,000+ employees

Benefits

- ▶ Reduced time to market
- ▶ Enhanced reliability and visibility
- ▶ Streamlined data exchange
- ▶ Simplified scaling

"As soon as we started to develop microservices using Red Hat OpenShift, we could see the benefits. Delivery sped up. Open source is cost-effective and fast because it has a large community supporting it."

Widianty Oey

Head of Business Solutions, Kalbe Farma

“We are pushing our subsidiaries to use Red Hat technologies because they are stable and easy to use.”

Widianty Oey

Head of Business Solutions, Kalbe Farma

Leading pharma innovation for digital-savvy customers

Founded in Jakarta, Indonesia in 1966, PT Kalbe Farma Tbk (Kalbe) is Southeast Asia’s largest publicly listed pharma company. Over the years, Kalbe has expanded its business interests to become a provider of integrated healthcare solutions; its business operations span more than 40 countries. Beyond Indonesia, the company has an established footprint in ASEAN and Africa.

Kalbe is also an important player in the digital market through its active involvement in various e-commerce ventures aimed at digital-savvy consumers, whose numbers are growing rapidly. It needed to continue introducing new, innovative products and services to these consumers ahead of its competitors. And while Kalbe had a lot of consumer applications, most of them were developed as monoliths. Making changes was difficult and time-consuming.

“Our IT team couldn’t react fast enough to requests for new functionality and services coming from the business,” said Widianty Oey, Head of Business Solutions at Kalbe Farma. “We only managed to respond to 40% or 50% of them.”

Unable to meet business needs, Kalbe realized it needed another way of working. Seeing how building reusable services could reduce time to market by up to 50%, the company opted for an approach based on reusable containerized microservices. “Reusable services are very important, and we needed a container platform to support these reusable services,” said Widianty Oey. She explained that the company chose an open source solution because “open source is cost-effective and fast because it has a large community supporting it.”

Kalbe began building reusable containerized microservices and ran them on an open source Kubernetes platform. The pharma company quickly realized it needed a reliable, complete application platform for running its business-critical services. It began searching the market for an open source platform with enterprise-level support.

Adopting a robust and highly scalable foundation

After searching the market for a robust, reliable, and well-supported application platform, Kalbe adopted Red Hat OpenShift. “We chose Red Hat OpenShift because Red Hat offers the enterprise levels of support that we need for our business-critical services,” said Widianty Oey. “And Red Hat as a company is robust and will be around for a long time.”

Indonesia-based Red Hat partner Mitra Integrasi Informatika (MII) helped Kalbe design its microservices architecture and implement its Red Hat technologies. Together, they deployed Red Hat OpenShift on-premise, primarily on bare metal, along with Red Hat 3scale API Management.

MII also helped Kalbe’s IT teams develop new skill sets for their new environment. “MII was very helpful explaining what the right architecture would look like,” said Widianty Oey, “then helped us to enhance team capabilities, both from an infrastructure and technical skill perspective.” The infrastructure team has transitioned from specializing in virtual machines (VMs) to specializing in infrastructures supporting containerization and Red Hat OpenShift. Developers have adapted their skills and mindset to a more modern way of working. Moreover, collaboration between development and infrastructure teams is now stronger than ever.

After mapping out its monolithic services, Kalbe was ready to migrate them to Red Hat OpenShift. A chat feature used for group collaborations around innovation was one of the first workloads to move to the Red Hat application platform.

Adopting Red Hat 3scale API Management, in addition to Red Hat OpenShift, has allowed Kalbe to move to not only a microservices-based but also an API-centric IT architecture. Its APIs (application programming interfaces) support intergroup collaboration, including data exchanges between Kalbe and its subsidiaries.

Accelerating the launch of new functionality with ensured reliability

Reduced time to market

“As soon as we started to develop microservices using Red Hat OpenShift, we could see the benefits,” said Widianty Oey. “Delivery sped up.”

Previously, Kalbe’s developers would need to finish an entire application before testing and launching it. With the new environment and reusable services, developers can launch new functionality one module at a time, so users can see and use the applications much sooner.

Enhanced reliability for critical applications

Red Hat OpenShift has delivered a reliable environment for the company’s applications to run in without any delays or slowdowns. “If the chat application we have deployed in Red Hat OpenShift is down, it does not affect the other applications,” said Widianty Oey.

The preconfigured, preinstalled, and self-updating monitoring stack included with Red Hat OpenShift provides monitoring for core platform components. “If an application is slow, we can check that Red Hat OpenShift is running effectively, that the container is working according to its function,” said Widianty Oey. “That visibility will ultimately reduce downtime.” With virtual machines, IT had no idea what was causing an application to run slowly.

Streamlined data exchange

Ensuring consistent, effective management of APIs is critical for successful deployment and use, and Red Hat 3Scale API Management makes it easy for Kalbe to manage its APIs. “There are data exchanges between Kalbe and other companies. They just need to click on an API to consume our applications,” said Widianty Oey, sharing how easy the console is to use.

Simplified scaling

One of the subsidiaries has also welcomed Red Hat OpenShift’s advanced scalability capabilities. “When applications need additional capacity, Red Hat OpenShift allows us to adjust the capacity of the container itself,” said Widianty Oey. “With virtual machines, we would have needed to scale up.”

Moreover, the tight integration between Red Hat OpenShift and Red Hat 3scale API Management means Kalbe can scale data exchange in an automated way.

Expanding success out to subsidiaries

With Red Hat OpenShift accelerating the development and rollout of new applications, Kalbe has begun exploring the benefits of a hybrid cloud. For Red Hat 3scale API Management, the company is looking to build an ecosystem where Red Hat technology acts as a hub for data exchange. That ecosystem might include other companies within the Kalbe Farma Group and SatuSehat, a national integrated health data exchange platform developed by the Indonesian Ministry of Communication and Information Technology in partnership with the Ministry of Health, among others.



MITRA INTEGRASI INFORMATIKA

About Mitra Integrasi Informatika (MII)

MII has teams of young and dynamic professionals with regularly refreshed knowledge and skill sets. It has also built strategic alliances with a number of national, regional, and global partners and technology partners that have a Digital Transformation vision.

Kalbe is also driving the adoption of Red Hat technology to its subsidiaries, raising awareness about Red Hat OpenShift and 3scale API Management. “We are pushing our subsidiaries to use Red Hat technologies because they are stable and easy to use,” said Widianty Oey.

Beyond expanding the container platform to subsidiaries, the pharma company plans to migrate all its services from its monolithic architecture to containerized microservices running on Red Hat technology. Kalbe’s plans with Red Hat technologies also include migrating its Management Information Systems (MIS) into Red Hat Enterprise Linux® with help from MII. “Digitization is a key strategy for growing business,” said Widianty Oey. “Red Hat is an essential part of our strategic vision.”

About Kalbe Farma

PT Kalbe Farma Tbk (Kalbe) is an Indonesian pharmaceutical, healthcare, and nutrition company. Established in 1966, the pharma has since expanded to become an integrated consumer health and nutrition enterprise by strategic acquisitions of pharmaceutical companies.



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.](#)



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.

f facebook.com/redhatinc
t @RedHat
in linkedin.com/company/red-hat

North America
1-888-REDHAT1
www.redhat.com

**Europe, Middle East,
and Africa**
00800 7334 2835
europe@redhat.com

Asia Pacific
+65 6490 4200
apac@redhat.com

Latin America
+54 11 4329 7300
info-latam@redhat.com