Havan adopts adaptable, container-based development with Red Hat OpenShift

Havan, a Brazilian department store chain, needed to enhance its existing application development environment to support continuing business growth. By adopting a modern, container-based infrastructure using Red Hat OpenShift, the retailer has reduced delivery times from weeks to days, improved its code quality, and gained an advantage in recruiting and retaining skilled IT talent.

Software and services
Red Hat® OpenShift®
Red Hat Technical Account Management (TAM)
Red Hat Learning Subscription

Partner
Service IT

Retail
20,000 employees
148 stores

Benefits
• Cut application delivery time from 6 weeks to less than 3 days
• Reduced development time and costs with better code quality and hardware use
• Improved IT talent recruitment by adopting modern architecture and technology

“Previously, it took about six weeks for an application to go live. Now, we can push them live in less than 3 days.”

Eder Varela
Development Coordinator, Havan Labs
Modernizing infrastructure to support retail business growth

In business for 34 years, Havan is a Brazilian department store brand with 123 locations across 17 of the country’s states. The retailer achieved revenue of R$10 billion in 2019 and is currently focusing investment on expanding to 200 locations by 2022.

Havan supported its growing operations with a traditional Microsoft Windows and SQL Server architecture running in its datacenter. Development of all applications—from purchasing and logistics to online and in-store sales—was completed by an internal team of 200 people, called Havan Labs. However, manual processes meant publishing a new version was time-consuming and prone to failures.

While the retailer had adopted some modern approaches, such as DevOps and continuous integration and delivery (CI/CD), incomplete integration between platforms delayed delivery of bug fixes and new features to enhance Havan’s customer experience.

“Our development process had many steps, and it took a lot of time,” said Eder Varela, Development Coordinator at Havan Labs. “First, code needed approval to go into a certification environment and have someone in that environment run tests, and then we’d send it to production.”

To speed the development process and keep pace with growth, Havan’s IT department began to search for newer technology that could offer greater agility. As a result of this search, the retailer sought a Kubernetes container platform that could run on-premise with its datacenter hardware and software.

Supporting a DevOps approach with enterprise container technology from Red Hat

After working with local Red Hat partner Service IT on a successful proof of concept (POC), Havan decided to adopt Red Hat OpenShift as the new foundation of its development environment.

“Our development process was based on an old methodology,” said Varela. “We found that Red Hat OpenShift would assist us in adopting modern development best practices, including DevOps.”

Deployed and run by Service IT, Red Hat OpenShift is a Kubernetes-based platform that offers a complete application container environment to support the architecture, processes, and services Havan needs to support its development and operations teams.

In addition to ongoing assistance from Service IT, Havan works with a Red Hat Technical Account Manager (TAM), a highly skilled technical expert with extensive industry and Red Hat product knowledge, to support its new Red Hat OpenShift environment.

“The close relationship between Red Hat and Service IT, with dedicated staff working exclusively on this project, made it easier to get things done,” said Varela.
**Speeding IT and services enhancements with flexible containers and efficient processes**

**Decreased application delivery time from weeks to days**

Previously, creating an environment to publish an application required Havan’s developers to submit a request to the infrastructure team. The infrastructure team would then build a Windows environment, allocate servers, set up the production environment, and configure the development and certification environment—a process that took a week or longer.

Now, Havan’s IT teams can create and launch new applications and service updates faster with its new container-based development environment built with Red Hat OpenShift. The retailer’s developers can use self-service provisioning to create standardized yet customizable environments for their projects.

In addition, working with containers has created new possibilities to innovate with emerging technology. The isolated nature of containerized applications support a variety of operating systems, framework versions, or other environment conditions. As a result, the retailer’s teams can find ways to work more efficiently in the environment of their choice.

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**Improved code quality and resource use to save time and money**

Changes to its infrastructure design has helped Havan reduce the number of bugs and errors in its production environment. The retailer has used Red Hat OpenShift to standardize development workflows for creating specific test, certification, and production environment configurations. Containers also help the company adapt to new market technology by isolating applications for greater stability across operating systems and framework versions. As a result, Havan’s teams can focus less on maintenance and bug fixes and more on valuable, end-user-facing work.

"With fewer bugs, we save time and generate higher-quality solutions. This environment gives our developers and technicians confidence and autonomy, and we save time and money," said Varela.

Additionally, switching to container technology and adopting new monitoring and telemetry capabilities has helped the retailer cost-effectively adapt its hardware footprint and resource use as it grows. With Red Hat OpenShift, Havan can more easily view application and cluster resource use, as well as application logs.

"If our headcount and number of locations doubles, we will not be able to double our hardware infrastructure. With the previous model, creating the same virtual machines and uploading the same servers would have required expanding our machine stock and our datacenter," said Varela. "Red Hat’s solution makes those processes easier and less resource-intensive, an advantage that is fundamental to our growth."

**Enhanced talent recruitment and retention**

Havan’s IT team purchased Red Hat Learning Subscription, an all-access subscription pass to all of Red Hat’s online learning courses, video classroom courses, and course materials, as well as lab time and short courses taught by field experts. With this training access, Havan’s teams could build their
expertise and skills on Red Hat OpenShift, containers, and other related technology to confidently operate and manage the new development environment, improving talent retention by investing in professional development.

In addition, to optimize compatibility with Red Hat OpenShift and leading container technology, Havan’s developers have shifted their work from Microsoft’s .NET Framework to .NET Core, an open source, cross-platform version that works across Windows and Linux operating systems. This transition to a more flexible, agile framework and modern container technology is an example of a shift that will help the retailer recruit qualified developer talent.

“We have difficulty finding IT talent in our region, but now that Havan has started using leading emerging technologies within our IT departments, more people are interested in working with us,” said Varela. “Finding skilled talent is key to supporting our plans to expand to more stores.”

Continuing technology innovation with Red Hat and Microsoft technology

After establishing its new container-based development environment, Havan plans to continue working with Red Hat to transition more applications from its Windows .NET Framework environment to Red Hat OpenShift and .NET Core and quickly adopt new features from Microsoft’s ongoing enhancements of the framework.

“Having more, higher-quality applications supporting our stores and customers will have an impact,” said Varela. “If we can count on fast operations and standardized solutions, our customers are going to be more satisfied.”

About Havan

Havan started in 1986 in Brusque, Santa Catarina, with a space of 45 square meters, one employee, and only one counter. It now has 148 stores and is the most comprehensive department store in Brazil. Havan plans to expand to 200 stores by 2022.

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 integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organizations prepare for the digital future.