Automotive manufacturer achieves DevOps transformation

DevOps transformation is more than just adopting tools and automation, although these are critical parts. One of the foundational pieces of a successful DevOps transformation is creating a healthy, generative culture that encourages learning, collaboration, and continuous improvement.

Another critical piece for enabling DevOps transformation is having a comprehensive understanding of the value stream across the entire application lifecycle. Value stream mapping plots the multitude of workstreams, including handoffs, wait times, and critical steps. Value stream mapping enables organizations to uncover opportunities for optimization, automation, and continuous feedback loops that ultimately empower developers to deliver quality, reliable products faster.

Below, I'll share how we helped one of our customers, a major automotive manufacturer, build a generative culture, empower applications and operations teams, and create long-term, sustainable change and value through DevOps transformation.

Automotive manufacturer embraces DevOps

Our customer needed to shift to a DevOps culture and engage application vendors in a new way of development. The previous development lifecycle processes created a wall between app teams and the operations vendors, resulting in a communications void that led to longer lead times to remediate issues and deliver innovation to the customer.

Our charter was to streamline the development lifecycle, help the customer's teams become DevOps practitioners, and onboard them onto a DevOps platform.

Value stream mapping

As part of our engagement, we embedded ourselves into the culture and worked within each of the teams to perform value stream mapping. Value stream mapping is all about plotting out the entire delivery lifecycle: every workflow, every vendor, every handoff. And with around 20 vendors, more than 60 microservices, multiple tools, and multiple environments, there were plenty of moving parts.

Once we completed the value stream mapping, we began scouting out opportunities to automate, consolidate, and remove friction. We found plenty.

For example, we learned that while some developers were producing code quickly, it took an average of three days for operations to set up a test environment—or even longer if they were contending with a production issue. Here we found an opportunity for deployment automation, including the necessary handoffs. This not only saved time, it created an accelerated feedback loop.

By uncovering opportunities such as this and building in automation, we streamlined processes and set up teams to be innovate faster and deliver more stable products.

DevOps Dojo training program

A key part of culture transformation is connecting people, breaking down silos, and helping key players understand the importance of DevOps. One way to do this is through a custom DevOps Dojo training program. DevOps Dojo training creates a safe environment to onboard teams to help them understand and buy into the DevOps vision.

In fact, hosting a DevOps Dojo training session with all the teams and vendors in one room was one of the first things we did. We walked the teams through the underpinning principles of DevOps transformation, including the three ways of DevOps. By helping them envision and align with what needed to be accomplished and how it would help them, we laid the foundation for greater cooperation and collaboration. The Dojo training helped each team understand the bigger picture and how their workflows impact other teams.

These kinds of sessions can be a real eye opener. We found that a lot of the vendors weren't thinking holistically. They were just focused on their areas. They realized that even if they're churning out code quickly, if their code isn't passing quality gates or if it isn't flowing into an optimized process, they're not generating value. This kind of understanding helps breaks down walls and makes it easier to collaborate.

DevOps platform onboarding

Once we finished the value stream mapping and identified opportunities for optimization and automation, we established an onboarding strategy for the application teams. We set up the DevOps tools and technology and automated access levels and role-based access controls. We got the teams up and running on a scalable new DevOps platform with a standard set of reliable, resilient, self-healing tools. And we conducted DevOps Dojo training sessions to help them fully onboard.

Today our customer has transformed into a true DevOps organization. They've accelerated their development lifecycle and are running an optimized CI/CD pipeline that is injected with quality gates, giving them and their customers greater confidence in overall product reliability.

Get in touch with us to learn more about how Beyondsoft can help your organization acceleration innovation through DevOps.