

Driving Innovation Through Continuous Delivery

What

Continuous delivery is a way for Cisco IT to deliver services to and drive critical business outcomes for our customers with more speed, quality, and security. Our journey to “Fast IT” began in 2014 when we decided to move away from the traditional, phased “waterfall” approach to software development and expand our use of agile techniques and DevOps models that enable rapid and continuous delivery of features. This dramatic shift in how we operate, which is still underway, requires an evolution in our:

- **People:** To realize the full benefits of continuous delivery, our employees must change their mindset about how to approach their work. We provide training and other education through our Continuous Delivery Agile Center of Excellence (CoE) to help employees learn agile concepts and processes and connect with a global network of agile coaches and practitioners. Employees can also access advanced courses and earn certifications through the CoE.
- **Process:** Small, nimble teams actively engage with our business partners to ensure we can focus on the most critical requirements, deliver more iterative releases faster, and showcase the value of each release. Feature requirements are now defined in partnership with the business through a series of “scrum sprints” (short work cycles)—not through cumbersome Business Requirements Documents (BRDs).
- **Platform:** We built an integrated technology foundation—the DevOps toolchain—to provide a centralized set of standard tools for application teams to use throughout the software development lifecycle. Teams use the secure platform, which simplifies the development process, to plan, test, and execute their work and deliver higher-quality applications.

Results

The Continuous Delivery service, which was operationalized at Cisco in 2016, is already delivering measurable results. From 2014 to 2016, over 50 percent of IT services adopted the service. More than 70 percent of our projects are now on a continuous delivery cycle. Instead of taking a year or longer to develop an application or new feature, we can now deliver releases in months or even weeks, in some cases. We have also seen a 97 percent increase in delivered capabilities and a 92 percent increase in quality.

Next Steps

By working closely with business partners, and course-correcting throughout the development process, Cisco IT is developing a much deeper understanding of our customers’ needs. “The data and insight we receive through the continuous delivery process is helping us to deliver better outcomes,” says Alice Saiki, Senior Manager, IT, at Cisco. “We are using analytics and intelligence to validate our strategies and adapt quickly if adjustments need to be made.”

Cisco IT has developed agile maturity assessments to help teams gauge their progress toward agile transformation. In addition, the Continuous Delivery service has incorporated the Scaled Agile Framework (SAFe) within its advanced training and coaching curriculum to help drive maturity in a key area: scaling teams of agile teams to deliver large, complex initiatives. However, changing the culture across Cisco operations remains the core purpose of continuous delivery, says Saiki: “It is helping us to drive more connectedness and agility across our operations. Everyone works alongside each other, as a team.”

For More Information

[DevOps Toolchain for Continuous Application Delivery](#)

[How Cisco IT Uses Agile Development with Distributed Teams and Complex Projects](#)