

DEVOPS GLOSSARY FOR EXECUTIVES

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DevOps continues to proliferate among organizations looking to add speed and flexibility to their software development process. You'll need to be able to discuss it with both technical and non-technical audiences.

That means cutting through the hype and occasional confusion around DevOps concepts. Here's a primer on key terms for IT and business leaders.

1. DEVOPS

Think of DevOps as a way of working that literally breaks down organizational walls between software developers and IT operations teams. Why? The goals include speeding up development and time to market, adding flexibility to experiment, adding agility to respond faster to market changes, and baking security into the process earlier.

Jayne Groll, CEO at [DevOps Institute](#), shared a great cooking analogy for DevOps: “DevOps is a recipe that relies on ingredients from three major categories – people, process, and automation,” she says. “The secret behind DevOps is how these ingredients are blended and in the right proportions (like any good recipe) in order to increase flow and value to the customer.”

2. AGILE

Agile is a set of four value statements and 12 principles that originally described a better way of developing software, and outlined in [The Agile Manifesto](#), notes Alan Zucker, founding principal, [Project Management Essentials](#). “Agile is not a methodology but a mindset,” Zucker says. “It represents a way of working that incorporates the principles of collaboration, systems thinking, and empowerment.”

3. DEVOPS VS. AGILE

While the terms DevOps and agile have a shared past, there are [fundamental differences between the two](#). Think of them in racing terms, suggests Eran Kinsbruner, chief evangelist for [Perfecto](#). “Agile can be the racing car driver aiming to drive as fast as possible, while DevOps is the entire team that supports the driver to reach his goal, including the mechanic guys, operations, coach, etc.,” says Kinsbruner. “Agile is about releasing fast while getting customer feedback, DevOps is about getting internal feedback while delivering fast through cross-team collaboration, best practices, and alignment toward meeting business goals.”

4. CONTINUOUS DELIVERY/CONTINUOUS DEPLOYMENT (CD)

Continuous delivery refers to continuous delivery of value; it is a foundational agile and DevOps principle. Continuous deployment is using automation tools to allow organizations to quickly deploy software into production.

5. CONTINUOUS INTEGRATION (CI)

This technique continuously merges source code updates into one mainline to prevent merge conflicts by integrating code from different developers as soon as it's available. It creates a real-time window into the current state of the software system and quality measurements, and a chance to improve security earlier.

6. AUTOMATED BUILDS

Automated builds let DevOps teams compile source files, package compiled files into compressed formats, and produce installers. Teams create repeatable build steps that can then be automated.

7. DEVSECOPS AND SHIFT LEFT

DevSecOps refers to making security a part of software development from the start. Some people call this “shifting security left.” That means earlier in the software development lifecycle. Organizations adopting a DevSecOps mindset must enable strong collaboration between developers, operations teams, and security pros.

8. SOFTWARE DEVELOPMENT LIFECYCLE (SDLC)

This is an organization’s sequenced process that defines how any application is designed, developed, tested, and deployed. At each stage in the sequence, an app must hit certain milestones to progress.

9. USER ACCEPTANCE TESTING

User acceptance testing makes the end-user community part of the testing process. Typically this means a pilot release where certain users have access to the new features. “They will operate the software in the production environment to identify any problems or potential improvements before the features are released to the broader community,” says Mark Runyon, principal consultant, [Improving](#). This is also known as a “canary rollout,” referring to coal miners who used to bring canaries into mines to detect danger.

10. VALUE STREAM MAP

DevOps teams are focused on delivering value to customers. A value stream map diagrams the organization’s steps that create a finished product. Using the map, teams can examine each step in a process to identify which steps actually provide value – and streamline or eliminate steps that don’t.