Shayna Solomon

01/12/2024

Module 1.2

DevOps is a management process which combines software development (Dev) and IT operations (Ops) for a quick and reliable production and development of high quality software and services. The gap between development and operations teams resulted in the emergence of DevOps as a concept, from 2007 to 2008, when industry experts started realizing the need of connecting the two siloed teams. The term "DevOps" is attributed to Patrick Debois, the father of the DevOps movement. It spawned from the need to ensure better coordination between these siloed teams.

One of the main things that can be taken from Lean Movement that has a huge impact on DevOps is the elimination of waste and maximizing value. Lean also encourages automation, and "shifting left". By breaking down silos, DevOps adopts Lean principles to enable better collaboration between the developers and IT teams that develop a product, setting the stage for a smoother process along a product’s lifecycle.

The Agile Manifesto put together in 2001 emphasized working software, collaboration, and flexibility. By that, it means individuals and interactions over processes and tools, customer collaboration over contract negotiation, and responding to change over following a plan. This coincides with DevOps principles. However, DevOps expands upon these concepts to encompass the management, operation and running of systems and can be applied to Agile where one is an integral part of the other.

Continuous delivery (CD) is a part of DevOps, and it concentrates on making the complete build, test, and deploy process. CI and CD sets up automatic test and stage environments for a piece of software, ensuring it continues to develop to reach production, flawless and fast. This gives quick feedback to all the stakeholders, lowers the threshold for errors, and guarantees the deployment possibility of the software at all times.

From the Lean Movement, Agile Manifesto to Continuous Delivery processes, methods and ideas, DevOps has become the continuous, collaborative, high-performing practice of bringing software development and IT operations together to continuously develop and innovate.