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CSD 380

DevOps has a history that comes from changes in how software is made and how IT works, influenced by three main ideas: Lean, Agile, and Continuous Delivery. These ideas all helped shape DevOps, which is all about teamwork, cutting out waste, and delivering high quality software.

The Lean Movement started in manufacturing with Toyota and is all about getting rid of waste. It teaches us to focus on what truly adds value, work on fewer things at a time, and getting feedback sooner. When these ideas are applied to making software and IT, they help teams focus on what customers really need and reduce any unnecessary delays by trimming the fat essentially.

The Agile Manifesto came out in 2001 and changed the philosophy for software development by highlighting the importance of people working together, delivering working software, collaborating with more customers/clients, and being open to changes. Agile methods like Scrum and Kanban promoted working in small steps and encourage teamwork between different groups. While Agile focused mainly on developing software, it also helped create a culture of collaboration needed for DevOps by removing barriers between teams.

The Continuous Delivery Movement, which started in the early 2010s, took things a step further by focusing on automating how software gets released. This movement aimed to make sure that

software could be released at any time without any issues. It emphasized building automated processes for integrating code, testing it, and deploying it, which reduces mistakes. By helping teams release software faster and more reliably, Continuous Delivery became a key part of DevOps, allowing for quicker delivery and better quality.

All of these ideas came together to form the basis of DevOps, a term officially coined in 2009 during a conference in Ghent, Belgium. DevOps aims to bring developers and operations teams together to create a culture of collaboration, shared responsibility, and continuous improvement. It incorporates principles from Lean, Agile, and Continuous Delivery for a complete approach to delivering software.

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