Hunter Dale

CSD-380

23 March 2025

A Brief History of DevOps

DevOps and its practices represent a togetherness of plenty of different management and moral movements. A lot of different things came together to create what we know today as DevOps. “DevOps is the outcome of applying the most trusted principles from the domain of physical manufacturing and leadership to the IT value stream.” (Kim et al p. 41, 2016)

The Lean Movement created the techniques that we know as Value Stream Mapping, Kanban Boards, and Total Productive Maintenance were codified for the Toyota Production System in the 80’s. In ‘97 the Lean Enterprise Institute, hence the name the Lean Movement, started pushing applications of Lean to other value systems like healthcare. Two of Lean’s major tenets include the belief that “... manufacturing lead time required to convert raw materials into finished goods was the best predictor of quality, customer satisfaction, and employee happiness, and that one of the best predictors of short lead times was small batch sizes of work.” (Kim et al p. 42, 2016) The idea here is that basically no idea is a bad idea and treating every idea the same will push consistency and evolve efficiency.

In 2001, 17 of the leading thinkers in software development created the Agile Manifesto. “They wanted to create a lightweight set of values and principles against heavyweight software development processes such as waterfall development, and methodologies such as the Rational Unified Process.” (Kim et al p. 2016) A big point of the Manifesto was to deliver working software frequently. They also wanted the time to continue to get shorter and shorter. They wanted incremental releases instead of releasing everything all at once, aka a waterfall release. Agile is credited for increasing the productivity of plenty of development organizations. If you want a little fun fact about how the term DevOps was created, read below!

“Patrick Debois was not there (Velocity Conference), but was so excited by Allspaw and Hammond’s idea that he created the first DevOpsDays in Ghent, Belgium, (where he lived) in 2009. There the term “DevOps” was coined.” (Kim et al p. 43, 2016)

First presented at the 2006 Agile conference, The Continuous Delivery Movement built upon the discipline of continuous building, testing, and intergrating. It was mostly to ensure “that code and infrastructure are always in a deployable state, and that all code checked in to trunk can be safely deployed into production.” (Kim et al p. 43, 2016)

In conclusion, DevOps is not a new idea, but new ideas join DevOps all the time. They are usually derived from most of the movements and manifesto talked about above. The history of DevOps is important to know to help understand what we will continue to learn!

Works Cited

Kim, Gene, et al. *The Devops Handbook How to Create World-Class Agility, Reliability, and Security in Technology Organizations.* It Revolution Pr, 2015.