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Module 1 Assignment 3

[Github Repo](#)

Many sources will indicate that the movement known as DevOps began to build momentum around 2007 and 2008. This typically coincided with growing concerns of IT departments and operational departments being too distinct from one another- often considered in competition as opposed to working together toward the same goal. Initially many organizations used the development team to write the code and handed the progress over to the operations team who oversaw deploying it. This left both teams with competing goals: development teams worked to add features, push fixes, and maintain quality of life changes. Operations teams were focused on the longevity and stability of an application- limiting the number of releases and updates. To top this off there were often no distinct automatic systems for ensuring the hand off was seamless, often creating ambiguity of where the ownership of the development team ended, and the operations team started.

In a summary of the timeline of the history of DevOps it all began in 2007 when Patrick Debois began to contemplate how to address these issues and after meeting with Andrew Shafer in 2008 established an online forum for posting ideas to bridge the gap between development and operations teams. As with most things there was little momentum in the early days, but further inspired by a lecture in 2009 from Paul Hammond and John Allspaw, Debois began to get system administrators and developers to sit together to discuss the divide. This was termed DevOpsDays during the final week of October 2009. Slowly gaining more momentum through 2010 and 2011 DevOps frameworks began to roll out into the workspace and is similar to Agile as it is slowly being incorporated into the day-to-day. By 2016 DevOps became the new norm of most high-performing companies. In the current day of the mid 2020's organizations are beginning to look less for specialized developers and more all-rounded employees that can work both in development and operations, allowing them to see both halves of the map and setting the organization and application up for success.

DevOps did not just sprout from the ground overnight. It was a long road, building off previous philosophies and movements. Coming from the Toyota factories ideology in the 1980s comes the lean movement. The lean movement itself kicked off in the 1940s to make manufacturing more effective, the goal was to eliminate waste and delays in the manufacturing process. Developed overtime by Taiichi Ohno and Eiji Toyoda and originally known as the Toyota Way it was rebranded as "lean" by John Krafcik's article "Triumph of the Lean Production System" in 1988. In 2003 Lean was adopted as a software development process in the book written by Mary and Tom Poppendieck *Lean Software Development: An Agile Toolkit*. So how does Lean stack up to Agile?

To discuss DevOps and not discuss Agile Software Development would be remiss. In February 2001 a group of developers met at the Snowbird Ski Resort in Utah. During this time they discussed a variety of options which they eventually penned and published into the *Manifesto for Agile Software Development*. Similarly, to lean its goal is to not eliminate methodology but to ensure that every piece of the methodology exists for a reason; like Lean its goal is to trim the fat, ensuring there is no bloat or unnecessary information. Over the course of time agile has been adapted, modified, and can often be thought interpreted to each person's personal vision. Today there are Agile variants such as SAFe or LeSS, or even frameworks that are often similar to agile but are "faux agile" or "dark agile." The Manifesto itself had core tenets: Individuals and interactions over processes and tools, working software over comprehensive documentation, customer collaboration over contract negotiation, and responding to change over following a plan. As its name implies the Agile Manifesto calls for flexibility, lightness, and adaptability. To do this organizations must ensure that they are not saddled with too much technical debt and a culture of adaptability and flexibility. Today Agile is still referenced and incorporated with many organizations and development organizations.

The history of DevOps was built upon the two pillars of Lean and Agile philosophies. With the common integration of development and operational teams organizations are seeing the benefits leading to The Continuous Delivery Movement. Continuous Delivery, sometimes known as Continuous Integration, lets teams cycle through the Software Development Life Cycle (SDLC) in a more streamlined manner. Where possible, organizations can automate processes such as the testing of components, but most importantly assists in automating the delivery and deployment processes. Partnered with Continuous integration DevOps teams are able to focus on new features, bug fixes, and quality improvements as they can be automatically delivered and deployed, freeing developers to focus on what they should: the product and the customer.

DevOps has come a long way over the past approximately twenty years. Over that time it, similar to Agile and Lean movements have focused on making the development process streamlined, and focusing on making a better product and customer experience.

## Citations

- Drumond, Claire. “Is the Agile Manifesto Still a Thing? | Atlassian.” *Atlassian*, 2019, [www.atlassian.com/agile/manifesto](http://www.atlassian.com/agile/manifesto).
- Gillis, Alexander S. “The History of DevOps: A Visual Timeline.” *WhatIs.com*, July 2020, [www.techtarget.com/whatis/reference/The-history-of-DevOps-A-visual-timeline](http://www.techtarget.com/whatis/reference/The-history-of-DevOps-A-visual-timeline). Accessed 18 Aug. 2024.
- Highsmith, Jim. “History: The Agile Manifesto.” *Agilemanifesto.org*, 2001, [agilemanifesto.org/history.html](http://agilemanifesto.org/history.html). Accessed 18 Aug. 2024.
- Kim, Gene, et al. *The Devops Handbook How to Create World-Class Agility, Reliability, and Security in Technology Organizations*. It Revolution Pr, 2015.
- Modi, Mayank. “A Brief History of Devops [with Infographic].” *Www.knowledgehut.com*, 7 Sept. 2023, [www.knowledgehut.com/blog/devops/history-of-devops](http://www.knowledgehut.com/blog/devops/history-of-devops). Accessed 18 Aug. 2024.
- Redhat. “What Is CI/CD?” *Redhat.com*, 12 Dec. 2023, [www.redhat.com/en/topics/devops/what-is-ci-cd](http://www.redhat.com/en/topics/devops/what-is-ci-cd). Accessed 18 Aug. 2024.
- “What Is Continuous Delivery? | IBM.” *Www.ibm.com*, [www.ibm.com/topics/continuous-delivery](http://www.ibm.com/topics/continuous-delivery).