**Module 1.3 – Assignment: The History of DevOps**

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**The History of DevOps**

DevOps is the combination of development and operations. DevOps aims to deliver software faster, more reliably, and of good quality. It ensures that software development and IT operators work well together to improve productivity and reduce mistakes to keep customers satisfied, reduce costs, and keep the system running smoothly. Over the years, Lean, Agile, and DevOps have been the three strategies. 3Pillar Global (2021) states, “All three strategies share a similar set of goals, including faster time-to-market, faster time-to-value, more efficiency, improved quality, increased customer satisfaction, cost savings, real-time user feedback, and constant improvement through continuous delivery.”

The Lean movement can be traced back to 1913. It started with Henry Ford's innovation of flow production, the first fully-integrated end-to-end manufacturing process. It allowed Ford to assemble Model Ts quickly, but with only one model and one color. In the 1930s, Kiichiro Toyoda and his team built on Ford's innovation to offer speed, efficiency, quality, and variety. In the 1950s, the company introduced the Toyota Production System, a manufacturing philosophy and a set of practices to produce cars quickly with less waste and high quality. It is the foundation of the Lean principles in software and DevOps. It is shortening the development time, reducing waste, and empowering teams.

In the 1990s, the personal computer became popular. However, it will take about three years to deliver new software. It is a great challenge for developers since businesses are moving quickly. In 2001, a group of professional developers who are Lean practitioners and advocates of different programming established the fundamental principles of the Agile Manifesto. It formed a non-profit organization known as Agile Alliance and wrote the “Manifesto for Agile Software Development,” which outlines the core principles of Agile.

In 2007, DevOps was started by Patrick Debois. He realized that development and operations teams are not working together well. It is frustrating, and I am looking for a different way to solve the problems. That is when DevOps started to gain traction and become popular because it makes the software development and related operations reliable, reduces the development time, updates software quickly and effectively, and creates a healthy work environment. In 2010, Jez Humble and David Farley published the book Continuous Delivery. Fahad (2023) points out that the book “sets out the principles and technical practices that enable rapid, incremental delivery of high-quality, valuable new functionality to users using a technique called Continuous Delivery” (para. 6). DevOps have been rising since early 2000s due to the need of faster IT service delivery and requiring development team and operation team works together by applying the concepts of Lean and Agile.

In conclusion, the Lean movement is the foundation of reducing waste, constant improvement, and emphasizing quality work. It shaped the Agile Manifesto. But Agile is more flexible and efficient. Building upon these concepts, continuous delivery ensures that automation and regular releases can reduce the deployment time, increase satisfaction, and ensure product quality.

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