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Module 1.3 Assignment

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Agile methods and lean manufacturing began to gain popularity in the early 2000’s. Agile emphasized collaborative deployment, while lean manufacturing focused on eliminating waste and maximizing efficiency. Throughout the years, technology has made great advancements, making it more complex and difficult to manage. With this, the need for systems and processes that can create a more efficient environment has grown (Gupta).

The oldest form of management is lean manufacturing, being traced back to the 1980’s when the term was coined, though the methods were used way before that. As stated previously, the entire concept of the lean movement is to eliminate waste and maximize efficiency. The whole process is to identify value, map the value stream, create flow, establish pull, and seek perfection. These five steps support continuous flow and ensure focus is set on customer requests (A Brief History of Lean).

By 2001, the Agile Manifesto was created. The Agile Manifesto consists of twelve principles that are based on four values that describe how developers should be making decisions. These four ideals include individuals and interactions, working software, customer collaboration, and responding to change. These ideas are a combination of other existing methodologies and support collaboration (Sharma).

With the development of the technological world, the need for even better methodologies grew, and out came DevOps. DevOps stands for the collaboration between the development and operations teams. DevOps combines the collaborative aspect of Agile and the efficiency aspect of Lean Manufacturing to merge into one methodology. Improving collaboration between the Development and Operations teams helped eliminate a lot of the errors that were occurring from the two working separately most of the time. DevOps supports creativity, collaboration, functionality, efficiency, and reducing complexity.

Operational costs are lowered by combining teams together to optimize workflows. DevOps eliminates some of the strict guidelines that other methodologies have, allowing more room for innovation and creativity. The development lifecycle is shortened by integrating continuous delivery to automate releases and increase communication for faster feedback wait periods. Overall, DevOps focused more on the collaboration and flow rather than the more technical aspects that other methodologies focus on. This helps improve work and increase customer satisfaction in the end (Gupta).

Sources

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