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Assignment 1.3

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The History of DevOps

Before we understand the history of DevOps, it is vital to understand what DevOps even means. The term “DevOps” refers to the practice and philosophy of development lifecycle that allows for a more improved and quick development process. Keeping this in mind, it would be wrong to label DevOps as just one thing when it is a combination of different ideals and tools that all support one another to achieve the goal of DevOps, which again is a streamlined development lifecycle.

DevOps was first mentioned by an individual named Patrick Debois around 2009 who combined the terms “development” and “operations” together. Although DevOps is more of an umbrella term, it majorly conceals around the philosophical ideal, or the mindset of progressing a more optimized development life cycle. Before DevOps was introduced the Waterfall methodology was highly utilized. Although this development method is still maintained in certain organizations, it was found to be very time-consuming and even costly. Another part to consider is the lack of communication that may persist during the waterfall method. However, Debois had a different idea of having a more efficient way for the gap to be bridged between development and operations. Therefore in 2009 Debois held an event called DevOpsDays that allowed administrators and developers to discuss how they can bring the two fields together.

While there are many things to mention when considering DevOps, highlighting the Lean movement is a great way to understand prior ideals that were held. The Lean movement has had its roots embedded in the ground since the 1980’s and carries a significant amount of weight when considering the agile software development. But what exactly is lean software development? There are about seven principles that follow the lean movement which help emphasis their goal that waste can become eliminated during all process of he software development cycle and that a more efficient process can prevail as well. Understanding the seven principles can better allow one to understand the philosophy of the lean movement better, which is as follows:

1. Reduce and eradicate development waste
2. Create Quality
3. Encourage learning
4. Support experimentation over commitments
5. Fast delivery
6. Respect one another
7. Optimize the process

Although the principles may sound rudimentary they held a very strong point in shaping the culture of developers and team surrounding them. However when considering the lean movement there also becomes the queen of agile. Agile and lean have very similar commonalities but there's still many points that separate the two. However, deciphering through the differences isn't quite necessary as the lean and agile are consecutively working with one another as they share a common goal with agile, and that is highly identifiable in the last three points mentioned (fast delivery, respect one another, optimize the process). Have you heard of the agile manifesto? If not there is a true manifesto for Agile software development and it essentially encompasses a goal or truth to uncover more efficient ways to develop software and to promote these tools or these ideals found to others around. Through this all there must be value supported with their goal and that value comes from the respect of individuals as opposed to the favor over the tools, the collaboration as opposed to negotiation, and the responsiveness as opposed to more dogmatic planning. These values allow agile to shine among the developing culture and it is with these values and goals that we see a bit of the lean movement be introduced within agile.

In a way this similarly reflects to Debois’s story and where he gained inspiration from watching a video of developments and operations back in 2009 which prompted him to make that event happen period inspiration is gathered from all parts, and this is just a glimpse of how that lean movement plays into the agile manifesto. There's quite a lengthy history that plays into this manifesto, but it begins in 2001 when 17 individuals gathered and discussed different ideals and tools such as scrum, DSDM, pragmatic programming, and more. At the end of their conversation there was a mutual decision, or one could say philosophy which became the Agile software development. To understand the hearts of these individuals it lies in the principles behind this philosophy which highlights the importance of providing valuable efficient and adaptive software to satisfy the needs of the consumer. If anything, this could be an homage to the lean movement and how it contributed to the average speeding pace of businesses and the lack of technological advancements; the disconnect between the two created a break in deliverance and this is where we could find agile stepping in to fulfill that initial goal. Therefore, within this agile manifesto it is stressed that the most efficient method for development and understanding information is to have conversations with individuals, which once again highlights the hearts that lie with the agile manifesto. But again, what does this have to do necessarily with DevOps? It lies all within the principles. DevOps Embraces collaboration, responsiveness, and streamlined delivery, all of this is like the priorities that are established with the agile philosophy therefore DevOps, which was created years after the agile manifesto, was able to pull inspiration from such a monumental culture and implements it to its own philosophy. At the end of the day both philosophies work simultaneously where agile needs to use DevOps practices to function accordingly.

Continuously carrying thy ideals of prior cultures and philosophies is embraced time and time again and this can be shined more on the continuous delivery movement. The movement mentioned encompasses a practice within the software development cycle which aims to help automatize the overall process in development frequently, thus ensuring the reliability consumers kind of fun rely on when utilizing such products. To simplify this it shares once again the same common goal that has been mentioned throughout this paper the continuous delivery movement embraces the ideal of just having streamlined and efficient process through automation for software delivery. Utilizing this movements philosophy means incorporating several principles or goals within an operation and this includes reducing time of deployments scaling the project and automatically deploying code. This in itself has many benefits towards an organization as it can make changes easier and more frequent ensuring the security, it can make delivery more successful and consistence, and other benefits proceed as well. These benefits is where DevOps plays a more vital part in; the utilizing an integrated DevOps toolbox allows for deployment and managements to become more streamlined and together. Bye creating a collaborative environment between the developers and the operation teams, automation is thus enabled For the software delivery pipeline. When the manual process is taken out DevOps allows further reduction of cost with deliveries and upgrades, which grants developers more time to focus on other task necessary within the program.

DevOps can be referred as a philosophical culture however it would be wrong to denotes the tools that it grants when combining it with these monumental movements and ideals. In considering the lean movements and the agile manifesto DevOps carries the goals and hearts of each ideal and when it is combined with the continuous delivery movements one can truly see DevOps shine and grants its benefits towards the software development process.

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