Jacob Ambrose

DevOps

Module 2.2

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<div align="center">Operation InVersion Review</div>

       Operation InVersion was an internal operation at the company LinkedIn. LinkedIn was created and developed in 2003. Initially it was built upon a monolithic Java application known as Leo. Maintaining exponential growth of users they tried to vertically scale the Leo application as much as possible by adding memory and CPUs for processing. As they neared their IPO (initial purchase offering) in 2011 many new features they had added over the years often broke or had issues. This created a culture of engineers staying late into the night to resolve issues. After their IPO to avoid continuing a fix-it-as-we-go approach. At this time LinkedIn initiated Operation InVersion- no new features would be added until the site's core infrastructure could be overhauled. During an approximate two month stretch time they would work to remove almost a decade's worth of technical debt.

       Many lessons can be learned from this. Initially as Linkedin continued to add features, even if not built on the Leo application, the program became more unstable. Technical Debt is not spontaneously created, it is like dishes in a sink that aren't being washed. At the start one or two dishes aren't in the way, but as more and more are piled in the sink it becomes more difficult to use. While in the case of LinkedIn dishes were added to the sink for 8 years, it only takes a fraction of the time to clean it up. Clearing up technical debt can make applications faster and more efficient, but most importantly they will be more reliable. By working and resolving to clean up the Technical debt it can create a better work environment and more secure applications.