**Module 2.2 – Assignment: Operation InVersion at LinkedIn (2011)**

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**Operation InVersion at LinkedIn (2011)**

Operation InVersion at LinkedIn in 2011 shows the importance of paying down technical debts daily. It is a strategy that Kevin Scott, the VP of Engineering, initiated to freeze new feature development for two months, have the whole department fix the core infrastructure, and clear all the technical debts.

LinkedIn was founded in December 2002 and officially launched in 2023. It is a social platform that focuses on professional networking and job searching. There were 2700 members after launching to the public in one week. One year later, it had over one million members. By November 2015, LinkedIn had over 350 million members. The server gets thousands of requests every second. LinkedIn uses an application, Leo, to handle every page through a servlet and a JDBC connection. However, Leo cannot handle all the service requests. Therefore, two services were separated from Leo: the first is to handle queries in memory, and the other is member search, which is layered over the first one. However, because Leo only deploys every two weeks, new developments happen in a separate service. Therefore, Leo has become a problem and causes production outages frequently.

To solve the issue, LinkedIn engineers and Kevin Scoot, the VP of engineering, decided to freeze all development of new features for two months. They are working on fixing the infrastructure issues and addressing all the tech debts that the company has accumulated. After two months of the operation inversion, engineers could deploy new services faster and never had deployment issues that Leo had.

The case of Operation Inversion demonstrates the importance of paying tech debts daily. Tech debt is something that cannot be eliminated. Tech debt is like financial debt. You are not paying it now, but must repay the debts sooner or later. When you have the tech debts pay off sooner, it can help reduce the cost and improve the quality of the code. However, you don’t pay off later, it may have solved the issue quicker, but it will cause more problems later.

In conclusion, the case of LinkedIn's Operation Inversion is an excellent example of how tech debts can be handled. It also illustrates that handling tech debts daily can ensure the application's stability and improve its performance.

**Reference**

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