Usiel Figueroa

May 31, 2025

CSD 380-A311 DevOps

Module 2.2 Assignment: Case Study - Operation InVersion at LinkenIn, (2011)

**Case Study Summary: Operation InVersion at LinkedIn (2011)**

**Overview**

LinkedIn, founded in 2003, aimed to help users "connect to your network for better job opportunities." It grew rapidly, reaching 2,700 users within its first week and surpassing one million members within a year. However, as the platform scaled, its original architecture struggled to meet demand (Kim, Humble, Debois, & Willis, 2021, pp. 91–93)

**Issue**

LinkedIn initially relied on a homegrown application framework known as Leo. This framework was built in Java and used servlets to serve every page, managing JDBC connections to various Oracle databases. Over time, this architecture accrued significant technical debt, hindering scalability and performance (Kim, Humble, Debois, & Willis, 2021, pp. 91–93).

**Addressing the Problem**

Recognizing the critical nature of these infrastructure issues, LinkedIn's engineering leadership including Kevin Scott, who had recently joined as Vice President of Engineering made a pivotal decision. They temporarily halted all new feature development and reallocated the entire engineering team to address the platform's foundational problems. This internal effort, Operation InVersion, focused entirely on rebuilding and stabilizing the core system to ensure future scalability and performance (Kim, Humble, Debois, & Willis, 2021, pp. 91–93).

**Lessons Learned**

One of the key takeaways from Operation InVersion was the importance of managing technical debt. LinkedIn's leadership learned that organizations should proactively allocate at least 20% of their engineering capacity to addressing technical debt. By doing so, they can avoid long-term instability and ensure a more sustainable pace of innovation. Once LinkedIn resolved the major architectural issues, the team could focus again on delivering new features and improving user experience (Kim, Humble, Debois, & Willis, 2021, pp. 91–93).

**Conclusion**

The case study emphasizes that engineers and engineering leadership help the company succeed by making strategic technical decisions. Leaders must understand their company's business goals and competitive landscape and align engineering efforts to support them. Operation InVersion is a strong example of how addressing foundational problems can restore momentum and lead to long-term success (Kim, Humble, Debois, & Willis, 2021, pp. 91–93).

**Reference**

Kim, G., Humble, J., Debois, P., & Willis, J. (2021). The DevOps handbook: How to create world-class agility, reliability, & security in technology organizations (2nd ed.). IT Revolution Press.