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Assignment 2.2

The case study Operation InVersion at LinkedIn (2011) emphasizes the critical need to manage technical debt in rapidly expanding technology companies. LinkedIn grew quickly after its founding in 2003 and, by 2011, was processing millions of backend queries every second. Despite rapid growth, the core infrastructure struggled to meet the increasing demands. The platform heavily depended on a monolithic Java application known as Leo, which had grown increasingly challenging to scale, update, and diagnose when issues arose. New features were released once every two weeks, and frequent production problems often resulted in long, stressful nights for the engineering team. Despite attempts to vertically scale the application, the problems persisted.

To resolve these issues, LinkedIn introduced Operation InVersion, a decisive initiative that suspended all new feature development for two months, enabling the engineering team to focus entirely on improving their infrastructure, development tools, and deployment processes. This decision, made shortly after their IPO, was risky, but it proved transformational. The initiative resulted in faster, safer deployments, new internal tools, and a cultural shift emphasizing long-term stability over short-term delivery. Engineers could deploy new services multiple times daily, improving productivity and reducing stress. The company grew from managing 150 services in 2010 to over 750, laying the foundation for sustained innovation.

The key takeaways from Operation InVersion are evident. Technical debt must be managed regularly instead of allowing it to build up until it becomes a serious issue. Maintaining a stable and scalable infrastructure empowers teams to innovate more efficiently and confidently. Changing the culture to focus on foundational tasks is essential for ensuring long-term success. Even in the face of public and investor pressure, strong leadership can lead to better outcomes when decisions are made with the company’s future in mind. Finally, dedicating resources to enhance developer tools and internal workflows significantly boosts engineering productivity and team morale. LinkedIn’s experience demonstrates that investing in a strong foundation can lead to sustained growth and long-term stability.

**References:**

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