Case Study: Operation InVersion at LinkedIn (2011)

The case study in Chapter 6 of the DevOps Handbook talks about an initiative at LinkedIn called Operation InVersion. Operation InVersion's main goal was to decrease the technical debt accumulated during LinkedIn's unprecedented growth. LinkedIn's initial setup included a Java application called Leo that struggled to keep up with the expansion and would frequently go down in production. The decision was made to "break it up into many small functional and stateless services." While carrying out Operation InVersion, all new feature developments were paused for two months while engineers worked to fix the site's core infrastructure. During this time, new tools and systems were developed that allowed for safer and faster deployments, allowing site upgrades three times a day and reducing late-night troubleshooting sessions.

Several lessons could be learned from this case study. First is the importance of maintaining technical debt. When we leave issues to be solved sometime in the future, we are causing problems for future development. Addressing technical debt as a part of our daily work is essential. Another lesson is that sometimes it is beneficial to pause feature development to focus on infrastructure. LinkedIn stopped developing new features for a time so that they could implement fixes that would allow them to improve and grow in the future. One final lesson is the importance of being agile. When LinkedIn relied on Leo, they could not grow as needed. Being flexible and resilient helps organizations adapt and scale efficiently.