Assignment 6.2

In the early 2000s, Amazon recognized growing challenges with their monolithic architecture known as “Obidos”, as the company scaled. Their tightly coupled systems made deployments complex, risky, and slow. These bottlenecks hurt innovation and made it difficult for teams to release new features without impacting others across the platform. The monolith became unable to develop further.

To address these issues, Amazon made the bold decision to shift to a service oriented architecture. They restructured away from a two-tier monolith to a decentralized server platform with many different applications (Kim et al, 2021). However, Amazon was one of the first to pull off such a feat and required many innovations by their engineering teams along the way (Kim et al, 2021). By 2015 Amazon was performing close to 136,000 deployments a day (Kim et al, 2021).

**Lessons Learned:**

* Breaking down monoliths into independently deployable services accelerates innovation and reduces risk.
* Empowering small teams with ownership and accountability leads to more resilient and higher-quality software.
* Stopping direct database access is important for scalability and reliability.

**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.