**DevOps**

**Assignment 6.2**

**Puna Poudel**

**Case Study - Strangler Pattern at Blackboard Learn (2011)**

The case study in Chapter 13 of *The DevOps Handbook* discusses how Blackboard Learn used the Strangler Pattern in 2011 to modernize their legacy system. Blackboard Learn was dealing with an outdated monolithic application that slowed down feature delivery and made maintenance difficult. To address this, the team used the Strangler Pattern, a method that allows for incremental modernization of software systems. Inspired by the way strangler fig trees replace their hosts, this approach involved gradually replacing parts of the legacy system with modern microservices while keeping the system functional.

This process involved identifying components in the monolithic system that could be restructured as independent services. These services were then incrementally deployed, ensuring that they could run alongside the legacy system without disrupting users. The team used feature toggles, automated testing, and continuous delivery pipelines to support the migration process. This allowed them to test new services in production while minimizing risks and ensuring the stability of the platform.

Blackboard Learn successfully reduced the risks of a complete system overhaul and improved scalability and agility through this method. The combination of incremental migration, automation, and close collaboration among teams created a seamless transition that enhanced their ability to deliver value to users.

**References**Kim, G., Humble, J., Debois, P., Willis, J., & Allspaw, J. (2016). *The DevOps Handbook: How to Create World-Class Agility, Reliability, & Security in Technology Organizations* (2nd ed.). IT Revolution Press.