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# **Module 6.2 Assignment: Case Study**

As we all know, Blackboard Learn is a popular web-based learning management system that enables instructors to set up learning environments where students can access and interact with (Putka, 2022). In chapter 13 of the textbook “The DevOps Handbook”, there is a case study titled “Strangler Pattern at Blackboard Learn (2011)” (Kim et al., n.d.) which

examines how Blackboard Learn handled a situation where their codebase grew to be so big and complex, forcing them to implement a design called the strangler fig pattern. This pattern was a “way to manage risk when modernizing or rewriting large, monolithic systems” (*The Strangler Fig Pattern - AWS Prescriptive Guidance*, n.d.). It went on to explain how they created and used a modular method they called “building blocks” to improve code quality, developer productivity, and minimize the risk of breaking the system.

Some of the main points of this case study were:

1. The codebase became so big and overly-complicated, forcing the whole development process to slow down.
2. Ashman noticed the number of commits decrease while the number of lines of code kept rising.
3. To implement the Strangler Fig pattern, they created "Building Blocks".
4. Building Blocks are separate modules disconnected from the main codebase.
5. Developers had more freedom to migrate their code into Building Blocks, which shrank the codebase.
6. Development became safer because mistakes were made smaller.

I learned from this case study:

1. That “monolithic” codebase can cause code to become too complex which can cause delays in development.
2. Code quality and developer productivity can both be improved by modularization.
3. The Strangler Fig pattern is a good way to re-design older systems.
4. Modularization gives teams greater freedom and flexibility while speeding up development and lowering risk.

Kim, Gene et al. *The DevOps Handbook, Second Edition: How to Create World-Class Agility, Reliability, & Security in Technology Organizations*. Second Edition. Place of publication not identified: IT Revolution Press, 2021. Print.

*The strangler fig pattern - AWS Prescriptive Guidance*. (n.d.). <https://docs.aws.amazon.com/prescriptive-guidance/latest/modernization-aspnet-web-services/fig-pattern.html>

Putka, S. (2022, August 23). *What is Blackboard? Everything you need to know about the online learning platform*. Business Insider. <https://www.businessinsider.com/guides/tech/what-is-blackboard>