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Case Study: Strangler Pattern at Blackboard Learn (2011) analysis

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Case Study Summary

The case study talks about how Blackboard Inc. ran into problems with their old system. Their main project was called Blackboard Learn and it had a codebase that went all the way back to 1997. By 2011 the code had become a huge mess, it was full of old programming languages like Perl and everything was meshed together, which made it really hard to make changes or fix problems. David Ashman noticed that builds and testing were taking up to 24 to 36 hours, and developers were getting less productive.

To fix this in 2012 Ashman and his team useed something called the Strangler Fig Pattern. This method lets developers slowly replace an old system by building new parts around it. Blackboard did this by creating Building Blocks which were smaller separate modules that connected to the main system through APIs. This made it easier for developers to work on their own parts without messing up other areas of the code.

Lessons Learned

The Blackboard case study shows why system design is really important in software development. When a system is made flexible and broken into smaller parts, teams can work on their own and make updates without waiting for others. This case shows that the Strangler Fig Pattern is a smart way to update old systems bit by bit instead of redoing everything at once.

Why Blackboard’s Approach Works

Blackboard’s experience is similar to what DORA research says about team structure and system design. In thehe DORA article “Loosely Coupled Teams” explains that the best DevOps teams succeed when both their system architecture and team setup let them work independently. Teams can make changes and deploy without waiting on others which makes development faster and more reliable. This is similar to how Blackboard’s Building Blocks allowed developers more freedom and fewer dependencies.

In the Medium article they explains how the pattern works by slowly replacing old code with new modules or microservices through a facade, instead of rewriting everything at once. This makes changes safer and easier to test, which is what Blackboard did when they moved features into smaller modules over time. Both sources show that the Strangler Fig Pattern helps not just the technical system but also DevOps practices by giving teams more independence, reducing risks, and making development faster.

**References**

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