Module 6.2

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Blackboard is one of the main providers of technology to different educational institutions. They had put a focus on how complex the system was becoming along with the increasing lead times that were associated with the old system. Blackboard was realizing that the larger their product was getting, the longer the lead times and more complex the system was becoming. The realization showed that the more lines of code were being made, the fewer code commits were happening, which ultimately can create issues and be more difficult to change code. In 2012, David Ashman (Chief Architect) built and implemented a re-architecture project called Building Blocks. This concept would allow developers to work on separate modules without interrupting other teams. This new codebase allowed developers to be more productive and made the work safer because if an issue arose, it would only affect a small portion of the code versus before, where it could be very detrimental or impact multiple teams. The build process ended up being quicker along with more independence between developers and there was better feedback on the work overall, which was an improvement.(Kim et al., 2021, Case Study: Strangler Fig Pattern at Blackboard Learn (2011) section)

One of the lessons learned was that the Strangler Fig Pattern showed how important small changes were when trying to upgrade an outdated system. Another lesson learned was that the quality of the user experience was crucial. Before the change, user feedback could take up to over a day which is impactful. With the updates, feedback is a lot quicker, which makes sure issues can be resolved with minimal user impact. One final lesson learned was that the changes needed to be broken down into small batches. By doing this, the team can focus on one aspect of the system at a time which is overall more efficient.

References

Kim, G., Humble, J., Debois, P., Willis, J., & Forsgren, N. (2021). *The devops handbook: How to create world-class agility, reliability, & security in technology organizations* (Second ed.). IT Revolution Press.