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Blackboard Inc, a technology company specializing in education products, faced significant challenges with their Learn product in 2011. The codebase was a legacy J2EE from 1997, and the complexity and lengthy lead times for build, integration, and testing processes were hampering productivity. Figure 13.2 shows a decline in code commits despite an increase in lines of code. Chief Architect David Ashman recognized the impending problems and implemented a code re-architecting project using the strangler fig pattern in 2012. This involved creating "Building Blocks," which decoupled modules accessed through fixed APIs. Developers gained more autonomy, reducing the monolithic codebase. This shift resulted in improved productivity, code modularity, and quality, with faster feedback and more efficient development processes as seen in Figure 13.3.

Takeaways:

* Maintaining and evolving a legacy J2EE codebase from 1997 is not sustainable long-term.
* Code commits decreased due to increasing complexity and lead times.
* The Strangler Fig Pattern of Building Blocks helps decouple modules from the monolithic codebase.
* Developers perform better in a modular codebase, enhancing productivity and code quality.
* Modular architecture leads to faster feedback and more efficient development processes.

Reference: The DevOps Handbook: How to Create World-Class Agility, Reliability, & Security in Technology Organizations Second Edition; Gene Kim, Jez Humble, Patrick Debois, John Willis, & John Allspaw; IT Revolution Press; 2016