

Case Study: Using Lean Tools To Deliver A Loan Origination System



Clients demanded the company deliver a new small business loan origination system within one year at a fraction of the cost associated with similar products. This system had to be capable of operating internationally, operating platform agnostic, and compliant with US and international fair lending and regulatory policies.

The company had a history of developing market-leading solutions that required years to develop and often carried eight figure project budgets. The traditional approach to developing software would not be capable of meeting their customers' time to market and price requirements.

After researching several alternate development methods, the company decided to employ Lean Software Development tools. To further reduce cost, the development team also supplemented its US based workforce with offshore resources. Small empowered sub-teams, a prime tenant of Lean Software Development, delivered working code in monthly iterations.

Iteration 0 addressed several key aspects of software development. System Architects laid out the technical backbone of the system while Functional Architects worked directly with clients to draw high-level story cards, graphical depictions of functional requirements.

Starting with iteration 1, small cross-functional sub-teams were established. Each sub-team was dedicated to a specific module of the system and included representation from the client, Business Analysts, Technical Architects, Developers, Data Base Administrators, Technical Writers and Testers.

Each monthly iteration started with a review of the customer generated story cards. The story cards were further refined into functional use cases and test plans. Developers and Technical Writers relied on use case documents to direct their efforts while the Testers employed test plans to develop automated and manual testing scripts.

By involving the entire team in the process of moving from story card to use case and test plan, the project avoided problems with misunderstood or misinterpreted requirements. This eliminated the need for lengthy, onerous requirement documents.

Iterations ended with a 60 minute wrap up session. During this session the client could see, feel and touch an updated working system. This wrap up session also provided the basis to re-factor the coming iteration. Critical defects or additional requirements would be discussed and scheduled for delivery in a future iteration. The opportunity to obtain feedback on issues early in the development process and control feature creep, other key tenants of Lean Software Development, helped maintain cost and quality control.

The project was delivered within the twelve-month goal, required far less initial investment than similar previous projects and contained features the clients deemed most valuable.

Client: A leading global banking software providing innovative & pioneering products & software solutions

Industry: Information Technology

Service: Lean Software Development

Challenge:

- Develop a small business loan processing system in twelve months with minimum initial investment
- Meeting international requirements, a technology base that was new to the company, and utilizing an internationally dispersed work force added to the complexity

Solutions:

- Embraced new Lean Software Development principles
- Small cross functional teams were created, trained and empowered to deliver the end product in incremental phases called iterations

Results:

- The team delivered the first functional system for user acceptance testing within three months
- Monthly iterations were delivered to expand the features and capabilities of the system
- The full feature set was delivered within the twelve month period and maintained the original budget