

# The story of an Agile Transition: Livestock Improvement Corporation



---

---

---

---

---

---

---

---

## Background



- Livestock Improvement Corporation
  - Farmer owned
  - Established 1909
  - Dedicated to herd improvement
- Farm Systems Division
 

“To create a reliable, efficient and high quality development capability in order to facilitate fast delivery of high integrity software technology products for our customers”



---

---

---

---

---

---

---

---

## Success



- Award winning
- Happy customers
- Exhausted team...
- **There must be a better way!**



---

---

---

---

---

---

---

---

### Agile? / AGILE DEVELOPMENT

software EDUCATION LIC

---

---

---

---

---

---

---

---

### The team

software EDUCATION LIC

---

---

---

---

---

---

---

---

### The Environment

software EDUCATION LIC

---

---

---

---

---


---

---

---

## How We Work Together

Team Awesome



- 1 Treat each other with respect
- 2 Strive for perfection
- 3 Have fun



---

---

---

---

---

---

---

---

## Story Wall



---

---

---

---

---

---

---

---

## User Stories

- Whole team elaborating stories
- Everyone understand the work
- Common idea of expected results
- Estimates of how much work is involved



---

---

---

---

---

---

---

---

## Acceptance Criteria

- Test design specification
- Reviewed by the whole team
- More generic than old docs
- Include business rules
- Developers consult them when coding



---

---

---

---

---

---

---

---

## Getting a build to testing

- Automatic builds
- Automatic notification
- Co-location – “the build is ready!”
- Whole team can access builds
- Check in comments visible to all
- No waiting!



---

---

---

---

---

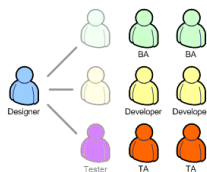
---

---

---

## Testing Process

- Moved to Behavioural models
- Test log per iteration
- Testing is everyone’s business
- Generalising specialists



---

---

---

---

---

---

---

---

## Automated Testing

- Tackled the time consuming work first
  - Regression testing
  - Stories with lots of permutations to test
- Continuous Integration
  - Build on every check-in
  - Smoke test on every build



---

---

---

---

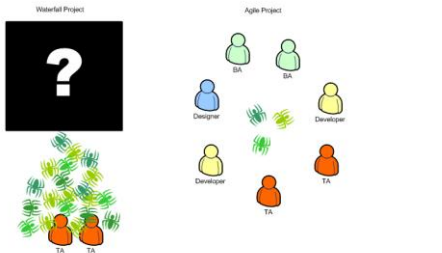
---

---

---

---

## Bugs



---

---

---

---

---

---

---

---

## Bugs and Buglets

- Bug
  - Defect that existed in previous version
- Buglet
  - Defect identified in iteration related to a story and to be resolved before story is done



---

---

---

---

---

---

---

---

## Process Improvement

- Retrospective at end of every iteration
- Reflect and improve for next time
- Constantly tweaking
- Everyone is listened to
- Venting is healthy!




---

---

---

---

---

---

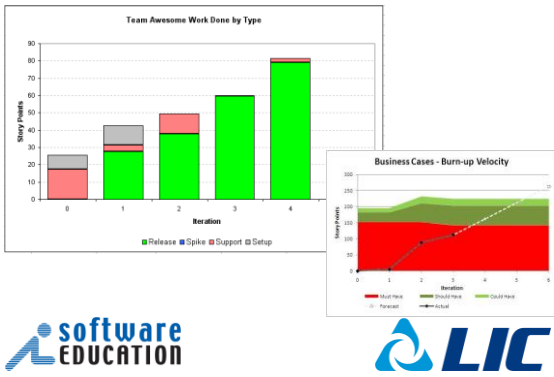
---

---

---

---

## Progress Reporting




---

---

---

---

---

---

---

---

---

---

## Showcases

- Show work completed in iteration to stakeholders
- Get feedback – are we going down the right path?
- Comments, improvement, gotchas




---

---

---

---

---

---

---

---

---

---

### Time, cost, scope



- Waterfall project
  - Over time
  - Over budget
  - Scope dropped



- Agile project
  - On time
  - Under budget
  - All 'musts', all 'shoulds', most 'coulds'

*"We achieved in one day what normally takes us six weeks!"*  
Rob Ford




---

---

---

---

---

---

---

---

### Post release bugs



- Waterfall project
  - Still finding/fixing them!
  - Major impact on other projects



- Agile project
  - Some suggestions from users
  - NO reported bugs




---

---

---

---

---

---

---

---

### Closing Thoughts



- Testing in Agile is different
- Testing mindset is the same
- Testers engaged throughout the project
- Bias towards automation where it is useful
- Lots of exploratory testing
- Testers as "first class citizens"
- Tests as long-lived valuable assets




---

---

---

---

---

---

---

---

## Thank you

- Shane Hastie

- Email: [shaneh@softed.com](mailto:shaneh@softed.com)
- Twitter: [@shanehastie](https://twitter.com/shanehastie)



- Software Education

- Website: [www.softed.com](http://www.softed.com)
- Blog: [softwareeducation.wordpress.com](http://softwareeducation.wordpress.com)



---

---

---

---

---

---

---

---

## Acknowledgements

- Livestock Improvement Corporation
- Jenny Saunders – Farm Systems Software Development Manager
- Simon Crutchley & Mike Ward for slide content
- The Members of Team Awesome and the other Farm Systems teams



---

---

---

---

---

---

---

---