Scrum @BioWare: Lessons Learned

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"*BioWare's vision is to deliver the best story-driven games in the world.*"

Quick Intro

- BioWare started on Agile three years ago
- All Projects now using Agile
- We are still learning and adapting
- Here are some of our lessons learned along the way
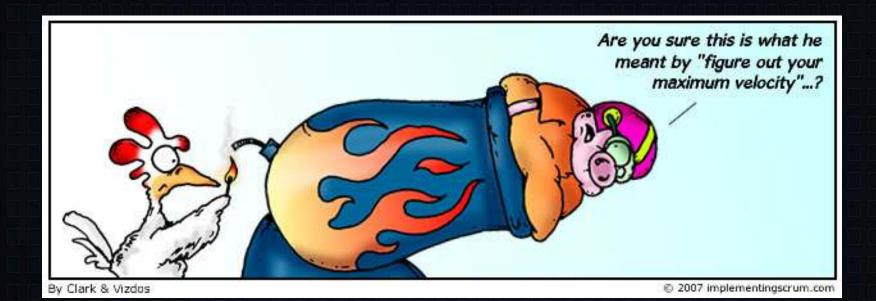
The Goal

High Quality Games, at lower cost and that are as fun to develop as they are to play

- High metacritic rating (www.metacritic.com)

- Less rework, less over-engineering

- Less overtime, less voluntary departure

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How we got started…

How we got started…

- Hired some good leaders with Agile experience
- Pilot Project – no commitment, one team, one month, internal training only
- Results showed good progress and momentum
- Other projects interested, and wanted in
- External Training to solidify knowledge

When the simplest thing that could possibly work doesn't work

The simple single-team & single product owner scenario doesn't fit our reality, so we do have a more complicated Scrum environment:

– Large project team size requires multiple scrum teams

– Large variety of skillsets requires careful dependency coordination

– Large project scope requires multiple product owners

– Multiple teams / owners requires additional meetings for some roles (SM/PO)

Lesson Learned #1

A clear Release Roadmap
is critically important!

Release Roadmap

- Essential for the key stakeholders of the project
- Sprints focus on short-term
- Releases focus on the long-term
- Roadmap keeps the destination in mind

Release Roadmap

- Offsite meeting (reduce distractions)
- Define Release Objectives
  - Defined by themes (e.g.: prototype) or events (shows/conferences)
  - Release duration: 9-12 weeks
- Create <u>one</u> product backlog for all teams
  - Only Epic user stories
  - Estimated
- Roadmap: distribute user stories throughout releases
- Review once per quarter

Release Planning

- Half-day to a day long meeting (~2 weeks prior of the release)
- Establish goals and acceptance criteria for the release
- Scope, not date or quality is the variable
- Review team composition
- All teams commit to the same rhythm of iterations (easier to manage dependencies)
- Last sprint is dedicated to polish (no new development)
- How we deal with technical debt

Facilitator and Leader are key!

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Lesson Learned #2

Multi-discipline teams
should be seated together

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Team Composition

- **Seat the team together!**

- **Make teams multi-functional until**

- **…all questions and risks are answered (Production)**

Iteration/Sprint planning

- Pre-Sprint planning meeting
  - review release backlog
  - update priorities
  - create acceptance criteria
- Sprint planning meeting
  - Product Owner go over the top user stories
  - Team review and proposes scope for the sprint and <u>commits to it</u>
  - Create sprint goal
  - Explode user stories in tasks
  - How to demo – a high-level description of how this backlog item will be demonstrated at the sprint demo
- Unplanned items (Rate of Discovery)
- Only QA and Product Owner can confirm that a user story is 'done'

Lesson Learned #3

Delegated Product Ownership
is necessary for large projects

Product Ownership

- Delegate responsibility
  - Exec Producer to Core Leads
- Product ownership council w/ Leader
- Separate backlogs, reviewed together
- Need a system for new entries into backlog
- Regular review and re-prioritizing must be a priority!

Lesson Learned #4

Teams like visual and
tactile communication systems

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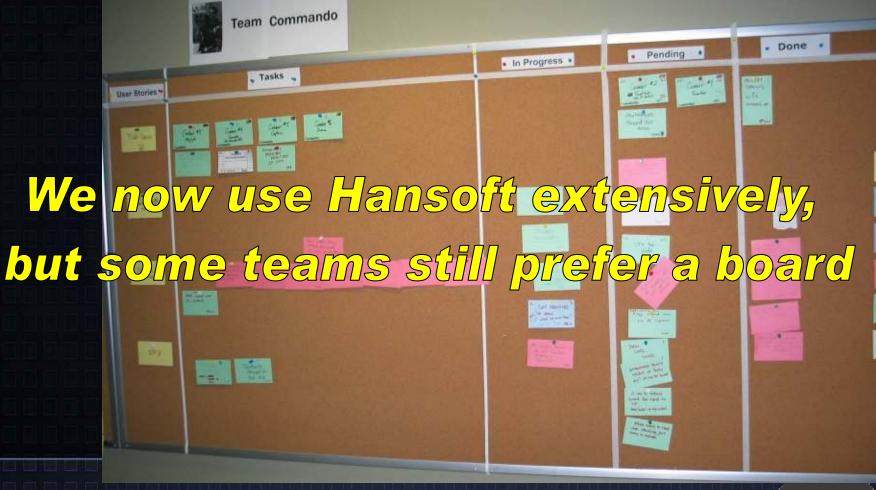
Team composition – visual tool

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Task board

We now use Hansoft extensively, but some teams still prefer a board

Lesson Learned #5

Get the right people in the key roles of
Product Owner and Scrum Master

Product Ownership

- Primary responsibility of the Product Owner is to create and maintain the product backlog:
  - Approving and prioritizing new stories added to their backlogs
  - Ensuring that all stories have up to date (high-level) estimates
  - Regularly re-prioritizing the list so that sprint teams always have up to date backlog lists
  - Approving the deliverables for each sprint

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ScrumMaster responsibilities

The ScrumMaster is a Leader and Facilitator and is responsible for:

- Manage and ensure that the process is followed.
- Shield the team from external interferences and promptly sort out anything that is slowing down the team.
- Work closely with the product owner and QA to establish the acceptance criteria for all user stories. (very important task!)
- Work closely with QA to ensure that all user stories are verified before the end of the sprint.
- Ensure that the user stories in the backlog are prioritized and estimated. The ScrumMaster also schedule and facilitate the planning poker sessions.
- Track team's velocity and understand the deltas between sprints and react accordingly.
- Communicate decisions made by the team to the other teams and product owners in a timely fashion.
- Motivate, inspire and improve the lives and productivity of the development team.
- Review and improve the practices (e.g.: TDD, new tools).

ScrumMaster

- Project Managers (Dev Managers or Associate Producers) are best at this role
  - Can handle 1-2 scrum teams at a time
- Keep development staff making content & code
- Keep the Product Owners on top of the backlog
- Manage roadblocks, communicate to other teams

Lesson Learned #6

Do public sprint reviews

Sprint Reviews

- Team
  - Team and PO do sprint retrospective to identify changes for next sprint.
  - Start/Stop/Continue
  - Review objectives, demo functionality, discuss improvements for next sprint.

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Sprint Reviews

- Project
  - Entire team meets to view progress.
  - Only passed/accepted user stories are shown.
  - Highly biased toward playable, in-game content (NO SLIDEWARE!)
  - Open to a wide audience (potentially anyone in BW that's interested).

Lesson Learned #7

Know your rate of discovery

Velocity & Burndown Charts

- Know your current "Rate of Discovery"
- Data tracked over time provides a great source for planning
- Teams don't usually like to see charts, but they provide useful info
  - ScrumMaster tracking, team planning, dedication to process, and more
- Understand when discovery rates change

Summary: Lessons Learned

- Do a release roadmap
- Multi-functional teams should sit together
- Use product ownership delegation
- Use simple visual communication tools
- Get the right people in key roles
- Do public sprint reviews
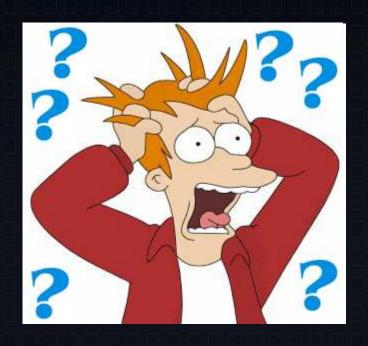- Know your rate of discovery

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Conclusions

- Scrum has helped us meet short term goals
- Team velocity and productivity has improved
- Still requires good planning, leadership and management of teams
- Training is worth it!

Questions?