ONCE UPON A TIME IN AGILE LAND

SESSION #5029
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PRESENTERS

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Once upon a time in Agile Land

Goal: To share lessons from adopting agile in teams that support enterprise systems.

Agile is a principle based approach to systems.

It is important not to undo the elegance and simplicity of agile by overthinking it and jargonizing it.

…hence the we are going back to basics i.e. fairy tales!

Agenda

- UQ Context
- Quick Agile Recap
- The Tales….
  - Three Billy Goats Gruff
  - Goldilocks
  - Pinocchio
  - Goose that laid the Golden Egg
  - Emperor’s new clothes
- Summary
- Useful references
- Questions

UQ Context

Systems and Environment

- PS Students and Finance
- Major organisational initiative to reduce spend on administration
- ITS restructure - principles
    - Be agile
    - Continuously improve
    - Be digitally integrated
    - Reduce complexity

Enterprise Support Systems Team

- Combined 2 teams with different approaches
- Reduced numbers - loss of corporate knowledge, numbers based on 'keeping the lights on'
- Introduced new operating model for governance and delivery
- Expectation that the new agile operating model would improve the delivery of services to UQ
- Parallel projects including Campus Upgrade to 9.2
- Agile exposure very limited

Quick Agile Recap

UQ Approach

- Scrum/squad - multi-disciplinary teams
  - 1 focusing on enhancements;
  - 1 on BAU – break/fix & requests
  - 1 on streamlining & problems
- Sprint – 3 week work plan
- Daily stand-ups
- Scrum of Scrums
- Retrospectives
- Quarterly planning, backlog grooming, sprint planning, meetings with Product Owners

Agile

- 4 Agile values
- 12 Principles from the Agile Manifesto

Agile Team Challenges

Project	Enhancements	BAU – break/fix & requests
Focus on project scope	Backlog groomed with Product Owners	‘Random’ activity
Limited/consistent stakeholders	Range of stakeholders Varying over sprints Complexity in external project interactions	Constant juggling of priorities Like a ‘daily sprint’ Stakeholders from all business units and levels of the University
Timeline defined Milestones defined for delivery of MVP	Quarterly & sprint timelines Can limit stakeholders per sprint	Variable timelines
Project Sponsor & Product Owners	Product Owners	System Owners

Three Billy Goats Gruff

Three Billy Goats Gruff

You need the big goat to deal with the trolls!

- Support from senior management always important (tale as old as time!)
- "Agile does not negate the need for good governance" B. Roberts, Agile Consortium
- Expectation management - deliverables have changed
- Consistent messaging is important

Three Billy Goats Gruff

Lessons

- Transition will be awkward if management expects doco, contracts and sticking to a detailed plan
- Invited senior business representatives to agile training
- Presentation about the new operating model
- External facilitation at some ceremonies
- When senior supplier not at Quarterly Planning translation of business expectations required

Three Billy Goats Gruff

Agile Values

1. Individuals and interactions over process and tools
2. Working software over comprehensive documentation
3. Customer collaboration over contract negotiation
4. Responding to change over following a plan

There will probably be trolls under the bridge, so make sure you have a big goat backing your approach!

Goldilocks

Goldilocks

Just like Goldilocks, it is important for an organisation/team/project to find what is ‘just right’ for them!

- Start anywhere and use the retrospective to choose the next Most Important Thing (MIT)
- Some training is important
- It is difficult to focus on everything at once, especially when you have to keep delivering through the changes
- Next MIT will depend on current challenges, workload, skill requirements etc.
- agile not Agile

Goldilocks

Lessons

- Definition of Done (DoD) - Enhancers were ready and came up with DoD easily but it was less significant for the BAU team
- Definition of Ready - not implemented until we started to focus on cycle time
- Other examples - sizing, breaking down stories

  Initially requirements broken down into waterfall stories, and now developing better approaches – we couldn't have done this on day one.

Goldilocks

Agile Value:

- Individuals and interactions over process and tools

Principles:

- Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
- The best architectures, requirements, and designs emerge from self-organising teams.
- At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behaviour accordingly.

Just like Goldilocks you can't decide which bed is just right

when she first entered the house!

Pinocchio

Pinocchio

The importance of truth.

What would happen if it was obvious every time you told a lie?

Agile delivers visibility:

- Progress on daily activities to the team through the stand-up
- Overall progress towards features/products through velocity measurement at the end of each sprint
- Projected completion based on actual delivery
- Takes into account complexity and certainty
- Builds confidence with the business about expectations

Pinocchio

Lessons

- Daily stand up
- Capacity vs sprint commitments
- Collaboration with stakeholders through Confluence
- UAT improvements
- Estimations – team estimations plus velocity
- Representation at Quarterly Planning

Pinocchio

Agile Values

- Working software over comprehensive documentation
- Responding to change over following a plan

Principle from Agile Manifesto

- The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
- Working software is the primary measure of progress.

Use the tools and practices to help you tell the truth,

because in the end the truth will be obvious to everyone.

Goose that laid the Golden Egg

Goose that laid the Golden Egg

The importance of sustainability.

- Expose work that shouldn't be done rather than expecting people to work long hours
- A positive team culture supports sustainability for individual members
- Quarterly Planning enables the business to prioritise within capacity or fund additional resources

Goose that laid the Golden Egg

Lessons

- Learning what NOT to do:
  - Development
  - Documentation
  - Processes
- Finding a more sustainable pace – allowing for ups and downs of the academic life cycle

Goose that laid the Golden Egg

Agile Values

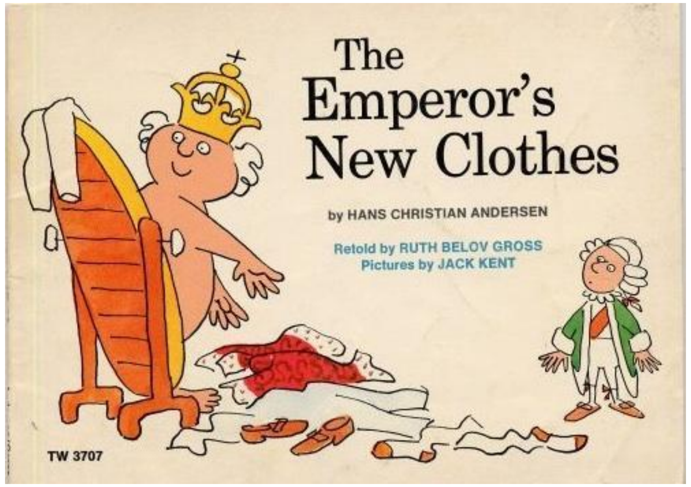
- Individuals and interactions over processes and tools

Principle from Agile Manifesto

- Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
- Simplicity – the art of maximizing the amount of work not done – is essential.

Killing the goose doesn’t produce more gold!

Emperor’s new clothes



The Emperor’s New Clothes

by HANS CHRISTIAN ANDERSEN

Retold by RUTH BELOV GROSS
Pictures by JACK KENT

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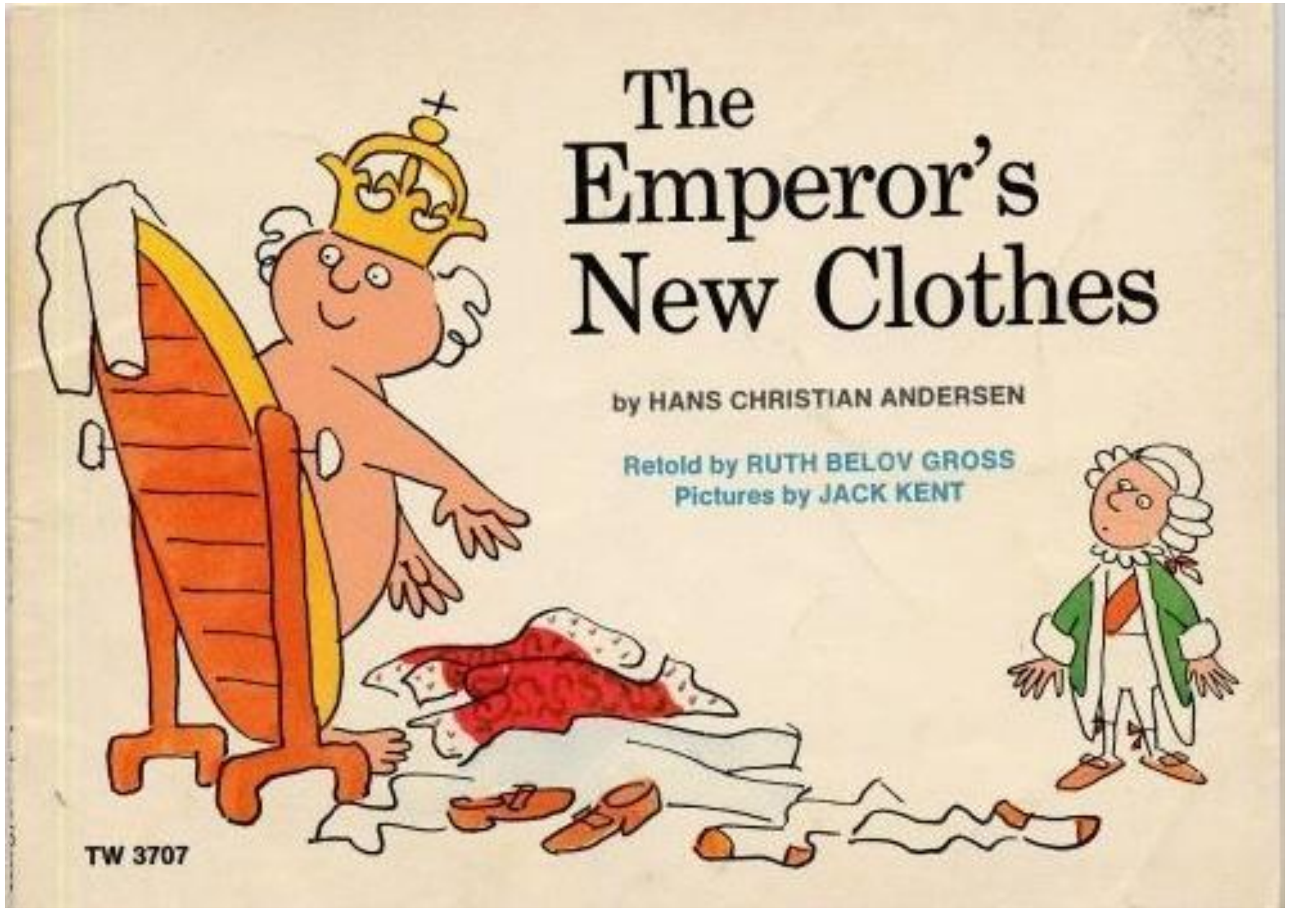

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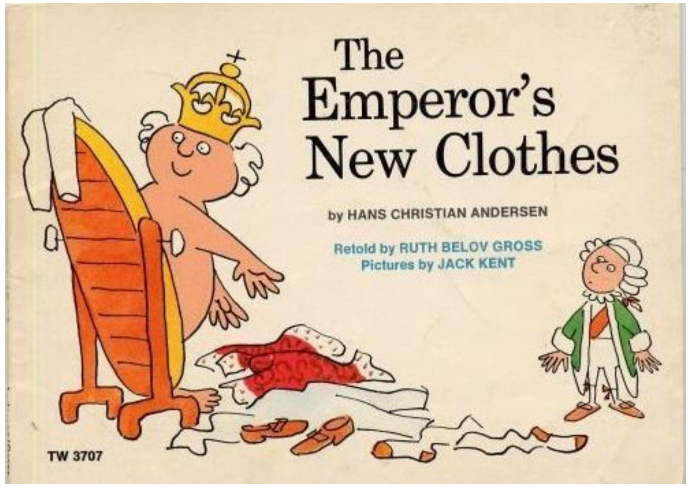
Emperor’s new clothes

The moral is we can’t let pride keep us from speaking up when we know the truth.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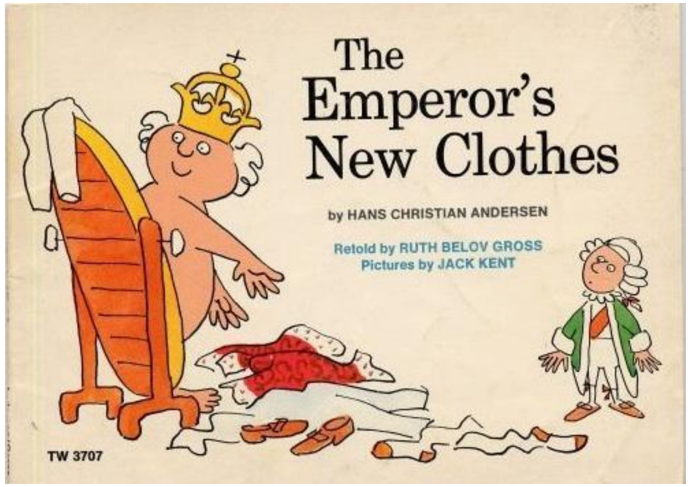
- Agile practices encourage cognitive diversity
  - Estimating
  - Daily stand up
  - Retrospective
- Everyone can make a suggestion
- Business value allows us to have an honest conversation about the work they want us to do
  - What is our BV
  - How do we assign

Emperor’s new clothes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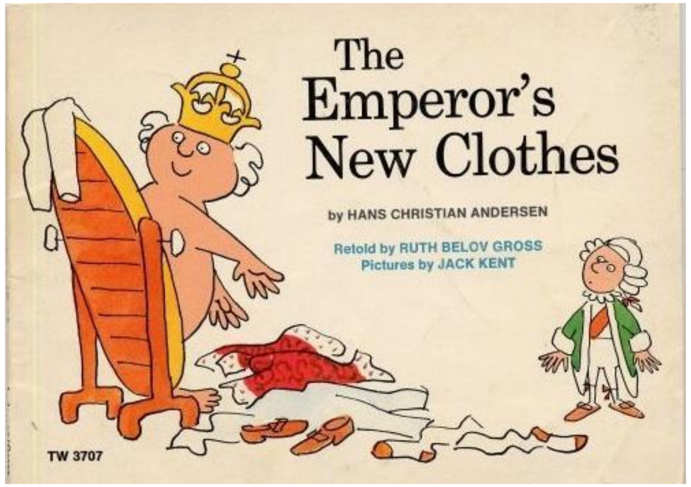
Lessons

- Culture change is required to get ceremonies to work
- Staff not only need to be empowered, they need to feel empowered
- Senior managers came to understand the power of Business Value
- Using Business Value

Emperor’s new clothes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Agile Value:

- Individuals and interactions over process and tools

Principles:

- The most efficient method of conveying information is face-to-face conversation.
- The best architectures, requirements, and designs emerge from self-organising teams.
- At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behaviour accordingly.

Encourage everyone to speak up, even if it creates discomfort, the earlier the truth is revealed the less damage will be done!

Summary

- ➢Have a Big Billy Goat to deal with the trolls
- ➢Keep finding what is ‘just right’ for you
- ➢Share, live with and be OK with the truth
- ➢Look after the geese!
- ➢Don’t be afraid to speak up

Before enlightenment chop wood, cart water, after enlightenment chop wood, cart water (Buddhist saying)

But…internally there is something very different happening - delivering value, sense of progress, business engagement.

…and they all lived happily ever after

Useful references

- http://agilemanifesto.org/
- https://en.wikipedia.org/wiki/List_of_fairy_tales
- Software in 30 Days: How Agile Managers Beat the Odds, Delight Their Customers, and Leave Competitors in the Dust (Ken Schwaber Jeff Sutherland)
- Scrum: The art of doing twice the work in half the time (Jeff Sutherland)
- Smarter Faster Better (Charles Duhigg)

…and they all lived happily ever after

Questions?

Agile Cheat Sheet

- **Burn Down Chart** - A graphical representation that shows the progress made during the sprint.
- **Capacity** – Amount of effort a team has available to work on a given sprint.
- **Definition of Done (DoD)** – Agreement by the team on what it means to be done. Applies at multiple levels (Project, Sprint, Epic, User Story).
- **Epic** – A larger User Story whose implementation typically spans multiple sprints. The team decomposes it into smaller User Stories that the team implements.The team can further decompose the User Story into Tasks.
- **Impediment** – Anything that is preventing a team member from working as efficiently as possible.
- **Sprint** – Time-boxed iteration where the team implements selected items.
- **Sprint Backlog** – List of tasks that the team is working on to implement the items for the current sprint.
- **Story Points** – Unitless measure of relative size of item to complete.
- **Task** – A work item that needs to be done as part the implementation of an item.Usually take less than 8 hrs.
- **User Story** – A common format to express requirements:
- *As a <who> I want <what> so that <why>.*
- **Velocity –** Number of story points a team historically delivers per sprint

Reference

Agile Does Not Mean Sloppy, McMaster University

Alliance Session 3973

March 1, 2017

Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

Individuals and interactions over processes and tools

Working software over comprehensive documentation

Customer collaboration over contract negotiation

Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

Principles behind the Agile Manifesto

Our highest priority is to satisfy the customer through **early and continuous deliver**y of valuable software.

Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

Business people and developers must **work together daily** throughout the project.

Build projects around **motivated individuals**. Give them the environment and support they need, and trust them to get the job done.

The most efficient and effective method of conveying information to and within a development team is **face-to-face conversation**.

Working software is the primary measure of progress.

Principles behind the Agile Manifesto cont’d

Agile processes promote **sustainable development**. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

Continuous attention to **technical excellence and good design** enhances agility.

Simplicity--the art of maximizing the amount of work not done--is essential.

The best architectures, requirements, and designs emerge from **self-organizing** teams.

At regular intervals, the **team reflects** on how to become more effective, then tunes and adjusts its behaviour accordingly.