

FdSc Computing

- ⦿ 'Scrum: Easy to understand, yet difficult to do' or
- ⦿ ('Scrum: Giving education a kick')

You: Show of Hands

- ⌚ Type of Industry?
- ⌚ Level of experience with Scrum?

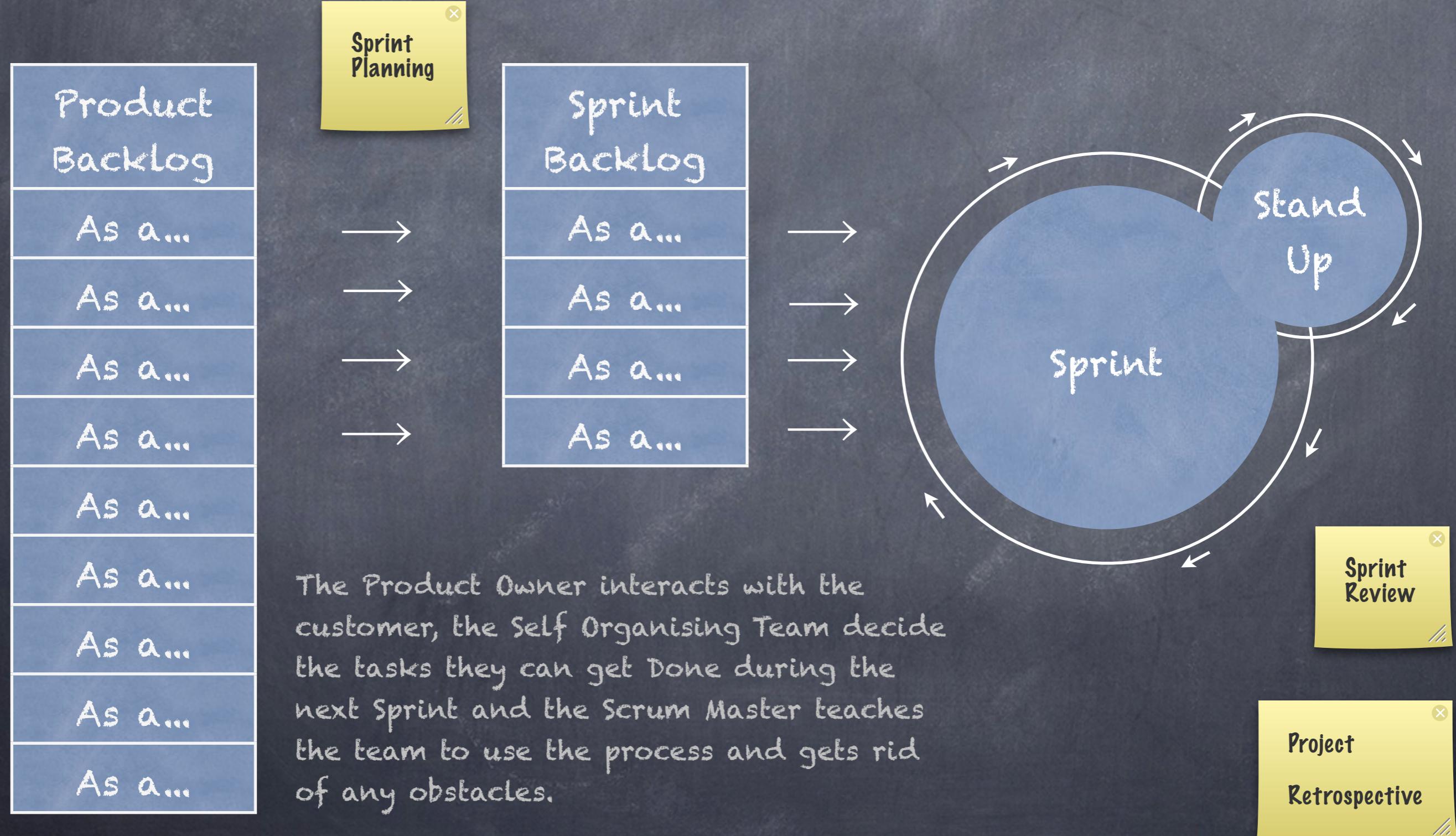
Me

- ⦿ Taught HE for 12 years
- ⦿ Attended Jeff Sutherland's ScrumMaster course in 2010 (to update the Project Management Module)
- ⦿ 'I am going to do this'

Me

- ⦿ Introduced Scrum Sept 2010
- ⦿ CSPO 2011
- ⦿ CSD 2011
- ⦿ Teach OO, Java, UML, HCI, Web

Scrum Diagram



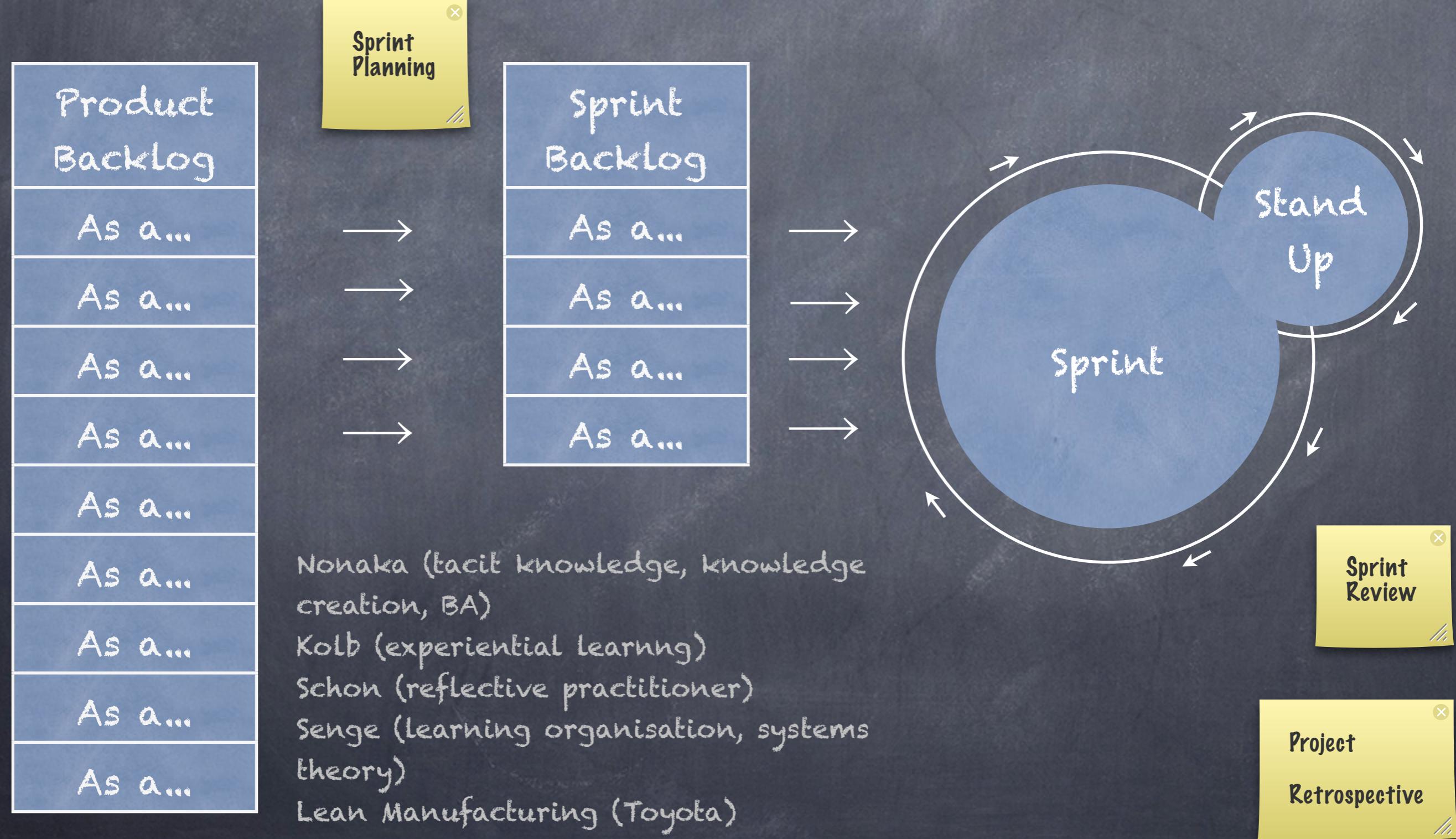
Theory

- ⦿ Product Owner
- ⦿ Scrum Master
- ⦿ Team
- ⦿ Meetings: Sprint Planning/Review
- ⦿ Retrospectives

Theory

- ☛ Can I introduce this?
- ☛ Is it 'flavour of the month'?
- ☛ The education of students is at stake

Scrum Diagram (theory)



Theory

- ⦿ Nonaka (tacit knowledge, BA, knowledge creation)
- ⦿ Kolb (experiential learning)
- ⦿ Schon (Reflective Practitioner)
- ⦿ Senge (Learning Organisation)

Pre Scrum

- ⌚ Would this work in education?
- ⌚ I should be teaching this

Scrum Introduction

- ⦿ Carefully
- ⦿ Similar to Google Adwords

What we already had

- ⌚ Heavy Workload
- ⌚ Frequent Changes
- ⌚ Strict Deadlines
- ⌚ Dysfunctional Team
- ⌚ Lecturer culture - individualistic

What we already had

- A team of Lecturers
- Users: students on the course
- Timeboxed activities: assessment marking turnaround

Meetings

- ⌚ Programme Committee
- ⌚ Subject Assessment Panel
- ⌚ Team Meetings (two a year - if lucky)

Customers

- University Partner Colleges Faculty
- Blended Learning co-ordinator
- HE co-ordinator
- External Examiner

Requirements (User Stories)

- ⦿ Action Plan from Programme Committee meeting
- ⦿ Action Plan from Subject Assessment Panel
- ⦿ External Examiner recommendations
- ⦿ ‘things change, regularly’

Product Backlog

- ⦿ Generated from the above sources
- ⦿ Assessment verification ('are we doing the right thing')
- ⦿ Assessment validation ('did we do it right')

Product Backlog

- more Maths
- more Blended Learning
- Students as Researchers: Academic papers embedded

Product Backlog

- ⌚ Internships
- ⌚ module reviews
- ⌚ keeping modules current (me as customer)
- ⌚ VLE updated

Introducing the Stand Up

- Weekly
- three different times last year

Stand up problems

- ➊ breaking user stories into enough detail
- ➋ aligning the stand up with the board
- ➌ balance of course management and teaching - 'getting the job done'

Stand Up reactions

- 'don't think I can make it'
- 'Look - I'm sitting down' – and waiting
- comes from a 'culture of useless meetings'

Comments

‘stand up meetings were seen by me and the other team members as being a nuisance, to start with ... as the period continued we started to feel the usefulness of collaboration’

Comments

- 'a short discussion on what we were all doing allowed us to find common ground and possible sharing of ideas'

Comments

‘bringing these details to mind and gradually ensuring that they got done did reap benefits with a more trouble free end to the year’

Why

- ⦿ overworked/frustrated lecturers
who want to do a good job
- ⦿ 'good people do bad things'

Result - Done

- ⌚ Verification - Done
- ⌚ Validation - Done
- ⌚ Module Reviews - Done

Result - Done

- ⦿ External Examiner requests - Done
- ⦿ students becoming researchers - Done
- ⦿ Formation of team - Done

Result - Done

- ⦿ The introduction of Scrum created the team
- ⦿ Scrum introduced as underlying methodology of course
- ⦿ Even badly implemented Scrum worked

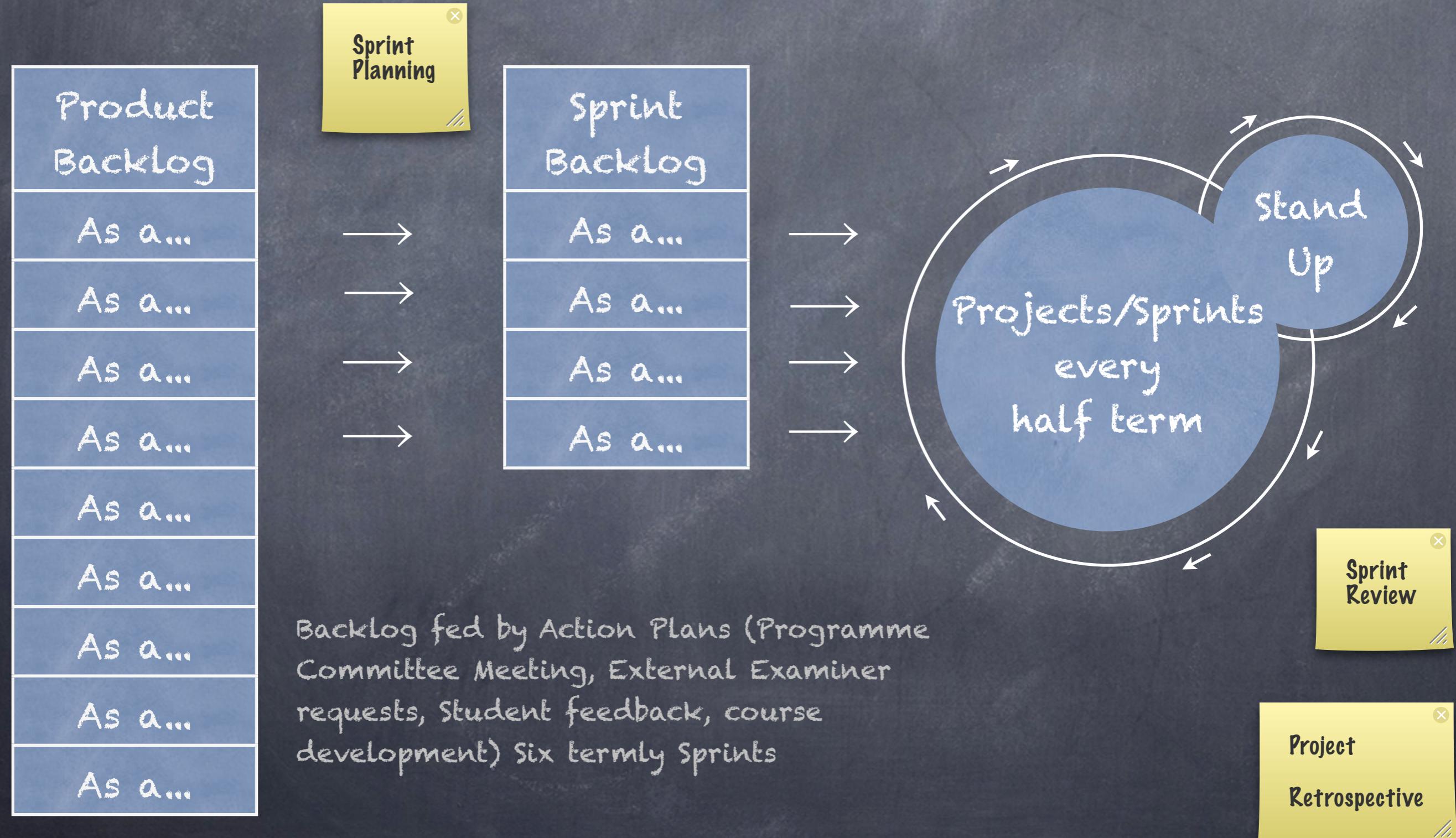
Result - Done

- ⦿ Change in vocabulary - done
- ⦿ Boards as 'information radiator'
- ⦿ User Stories

Success

- ⦿ Measure of success in education is the amount and quality of a student's learning
- ⦿ Getting it done and quality (refactoring?)
- ⦿ Value added - stats count - results

Scrum Diagram (education)



Theory

- ⦿ Backlog fed by Action Plans:
- ⦿ Programme Committee
- ⦿ External and Student requests
- ⦿ Course Development

Questions

- ⌚ Even badly implemented Scrum worked
- ⌚ Is it better to keep a dysfunctional system or face the dangers of change?
- ⌚ Comments so far

Where are we going?

- ➊ Hyper productive
- ➋ Values

Hyper Productive

- ➊ Done
- ➋ Efficient management of the Backlog

Hyper Productive

- The Cosmic Principle – how to get to a hyper productive state
- ‘it is dependent on NOT doing and the components being in alignment’

Hyper Productive

- ⦿ But have to have a modular structure - make changes to the system by refactoring and the Architecture emerges - choose backlog tasks that will maximise the evolutionary 'ripple' effect.
- ⦿ Sutherland - Secret Sauce - Youtube

Restructuring

- ⦿ Closer alignment to industry
- ⦿ Each half term is a specific project
- ⦿ All assignments as Backlog for the students to pull from

Hyper Productive

- Want students to move to a hyper productive state - iPhone user experience.
- Want team to move to a hyper productive state.
- Can Scrum be applied to Learning?

Hyper Productive

- ⦿ BA - Nonaka
- ⦿ a shared space that serves as a foundation for knowledge creation
- ⦿ Workplace and Classroom
- ⦿ Communication Saturation (Coplien)
Quattro Pro

Discussion

- Looking back, what do you wish your Degree had given you?
- All assignments as backlog for students to pull from?

Agile Values

- ⦿ Respect for the worth of every person
- ⦿ Truth in every communication
- ⦿ Transparency of all data, actions, and decisions
- ⦿ Trust that each person will support the team
- ⦿ Commitment to the team, and to the team's goals

Goethe - On commitment

- Until one is committed there is hesitancy, the chance to draw back, always ineffectiveness. Concerning all acts of initiative and creation there is an elementary truth, the ignorance of which kills countless ideas and splendid plans, that the moment one definitely commits oneself then providence moves too. All sorts of things occur to help one that would never otherwise have occurred. A whole stream of events issues from the decision in one's favour, all manner of unforeseen incidences and meetings and material assistance, which no man could have dreamed could have come his way. Whatever you can do, or dream you can, begin it. Boldness has genius, power, and magic in it. Begin it now.

Work in Progress?

- ⌚ It is always a work in progress
- ⌚ Thanks
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