

11:30 2 Things to do tomorrow to be more Agile

**Lunch and Panel Discussion** 

#### UNDERSTAND AGILE START TO FINISH

Break

\* ONE DAY \* ONE TRACK



7:30 Registration

8:30 Initial Remarks Phil Japikse 2:00 Enterprise Agility 9:00 Agile Flavors Mark Windholtz **Break** 9:45 Agile Success Story 2:45 Budgeting an Agile Project Sujit Upadhye Jim Weirich 3:15 Retrospectives 10:15 Engineering Practices 3:45 Business Practices Break 11:00 Estimation Mike Eaton

**Brian Prince** 

1:30 Why Agile Fails

Phil Japikse

4:15 Closing Remarks and Raffle

**Matt Van Vleet** 

Ed Sumerfield and

**Chris Nelson** 

Joe Obrien

**Mark Windholtz** 





































## **Enterprise Agility:** Applying Scrum in a Waterfall World

By Philip Japikse Phil.japikse@pinnsg.com MVP, MCSD.Net, MCDBA, CSM, CSP Principal Consultant Microsoft Pinnacle Solutions Group Professional





## Microsoft GOLD CERTIFIED Partner

#### Who am I?

- Principal Consultant, Pinnacle Solutions Group
- Microsoft MVP
- MCSD, MCDBA, CSM, CSP
- Enterprise Application Architect
- Trainer/Mentor/Speaker
- Lead Director, Cincinnati .NET User's Group
- President, Agile Conferences, Inc.
- Contributing Author www.nplus1.org





#### Can't we all just get along?

- Teams don't work in isolation
- Teams must interact with many other groups in the enterprise that
  - Typically are not agile and/or
  - Have no desire/ability to become agile





## Making Scrum work

- Courtesy and Respect
- Don't just assume they "don't get it"
- Be "Agile" in interactions
- Disclaimer: Some of the concepts in the following slides are not traditional Scrum





## Release Planning

- Enterprise projects
  - Usually consist of multiple sprints
  - Require a great deal of coordination between teams
- Product Backlog must be
  - Complete\* (still subject to change)
  - Prioritized (all items, not just top n)
- Time-box the release
  - Priorities and scope will change
  - Estimates will be wrong
- Involves Product Owner, Architect(s), Security, Infrastructure, QA, etc





#### Inter-Team Communication

- Host meetings with representatives from all affected teams on a regular schedule
  - Development team reports:
    - High level progress status
    - Reaffirms architecture
  - Other teams report:
    - Status of infrastructure required for release
    - Any changes to external requirements
- Meet more often as release gets closer





#### Swim Lanes

- Instead of Burn Down Charts
- "Stolen" from Kanban
- Tasks/Features move from
  - In Queue
  - In Process
  - Ready for QA
  - Ready for UAT
  - Ready for Release





### Refining Requirements

- A good requirement is one that you can wrap a test around
- All Backlog items need to be defined well enough that a:
  - Developer can understand and code the intent
  - QA Resource/Tester can validate the code
- Incomplete items are removed





#### Wireframes

- Used to visually layout the User Interface
- All proposed screens
- Important to not look "finished"
- Tools:
  - www.mockupscreens.com
  - www.balsamiq.com

Employe	e List			×
EmplD	Name	Title	Manager	
1	Bob	Manager	Sue	
2	Sue	VP		
3	Andy	Sales Rep	Bob	
			ОК	)



Partner

#### **User Stories**

- User Stories
  - As an [X] I Want [Y] So That [Z]<sup>1</sup>
    - X is a role
    - Y is a feature
    - Z is the benefit

#### 1 http://dannorth.net/introducing-bdd

- As an <u>Account Manager</u>, I want to be able to <u>Edit a Customer's Address</u> so that <u>we can</u> <u>Effectively Communicate with them</u>
- Includes success criteria





#### Success Criteria

- Must be testable
- Use Given/When/Then syntax
  - Given 2000 customers
  - When selecting one
  - Then the form should open in < 1 second</li>





## Context Specification<sup>1</sup>

- When Editing a Customers Address
  - It Should Load in < 1 sec with 2000 customer records
  - It Should allow an Account Manager to edit the address

<sup>1</sup>Behavior Driven Development (Code Magazine) – Scott Bellware





## Defining "Done"

- All (Dev, Users, QA, etc) must agree on definition of Done
  - Developer
    - Unit Tests, Documentation, Code Reviews, etc.
  - QA
    - Integration Testing, Black Box Testing, etc
  - Users
    - UAT
- Will be different based on the product
  - NASA vs XBOX



# Test/Behavior Driven Development

- Development needs to be Test Driven
  - QA personnel need to understand what that means
- Successful T/BDD development teams build confidence in themselves and with others
  - QA shouldn't have to test that
    - Math.Add(2,3) returns 5
  - QA can focus on the bigger picture
    - Making sure the requirements are met
    - Integration Testing





#### Users

- Most users/customers don't understand software development
- Used to waiting months/years to see projects delivered
- Coaching is required
  - Product Owner is their single Point Of Contact
  - User Testing of Sprints is a new concept



Partner

#### **User Testing**

- User Testing is used to validate the state of the software after every sprint.
  - Key Users should be testing the codebase from the previous sprint
  - The Team (via the Product Owner) must fully disclose what they believe to be working and not working
- Users can enter *potential* defects into the tracking system





#### **QA/Testers**

- Best if QA is part of The Team
  - Corporate Silos can prevent this
- QA/Testers are used to the waterfall approach
  - Development creates something, throws it over the wall
  - QA tests it, throws it back
  - Ad infinitum
- Must adopt a different approach to testing





## Sprint QA Testing

- As soon as the Sprint Backlog is determined:
  - Begin creating Test Plans for items in the sprint
  - Create/Update Integration Test Plans for current and previous Sprints
- When developers believe they are "Done"
  - QA Reviews Unit Tests
    - Validate that they are testing the requirements
- Bottom line, QA should be *Pro*active, and not *Re*active





### **Bug Triage**

- Bug triage meetings happen immediately after the Daily Standup
- Triage Team
  - Lead QA, Architect/Dev Lead, Product Owner
- Bugs are marked for either:
  - Sprint Backlog
  - Product Backlog
    - Bug
    - Change Request





#### Sprint 0

- Also referred to as the Foundational Sprint
- Occurs before full Team is formed
  - Product Owner, Application Architect
- Used for:
  - Configuration (e.g. Build Server, developer Virtuals)
  - Product Backlog creation
  - Acquiring Funding
  - Release/Hardware planning
  - Assembling the Development Team





## **Verification Sprint**

- Occurs after code "chill"
- Used for:
  - Security audits
  - Performance/Load/UAT/Integration testing
  - Deployment documentation
- Team uses this time to work on:
  - Required documentation, improving Unit Tests, etc.
  - NOT refactoring application code





#### Contact Me

- phil@skimedic.com
- www.skimedic.com/blog
- www.twitter.com/skimedic





## Questions?

