RSM8432 Agile Workshop DRAFT

October 10, 2019
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Topic for this Workshop

- Introduction
- Agile Team
- Working Habits
- Wrap-up

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Section 1

Introduction

What You Will Learn

- Describe the benefits of using agile project management framework to complete the course project
- Formulate an approach to work as an effective team to complete the course project
- Create key deliverables and plan sprints to complete the course project

Workshop Rules

- Participate

- Ask questions

- Be present - No devices

Introductions

- Joanna Tivig
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- Peter Monkhouse
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- You
    - What is the first word that comes to your mind when you hear Agile?

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Agile Approach – Major Highlights

- Anchor foundational project management principles to discover better ways of doing everything with a growth mindset vs. a fixed mindset

- Think Client/ User first and always invite them to be part of the team; accept the product that is being built for them, with them

- Bring work to the team vs. team to the work; let the team choose the work they prefer to do and take accountability on it

- The goal is high performing organizations through the means of Agile; this will translate into speed, less waste and a delivery culture
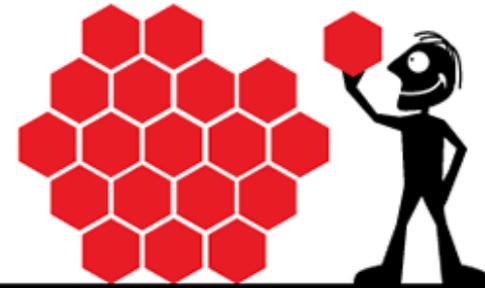
Traditional (Waterfall) vs Adaptive (Agile)
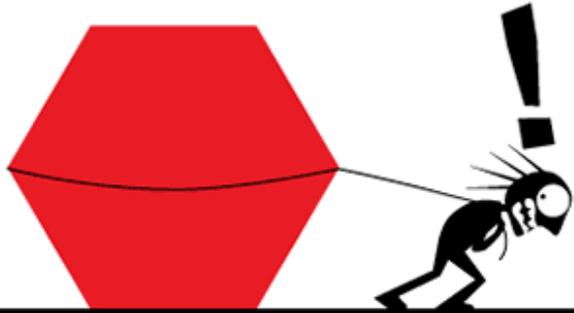
Core Characteristics of Agile

- The law of the small team
  - That is what you have

- The law of the customer
  - Focus is to deliver value to the customer
  - If work is not adding value, why is it being done?
  - For your project who is the customer? What value are you delivering to them?

- The law of the network
  - Work collaboratively towards the common goal of delivering value to your customers
  - Let your interactions help you deliver
  - How can you use the network in this course?

Agile Values

- 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

What is a Sprint?

A time-boxed work cycle (1-4 weeks) during which a team creates a product increment that is intended to add value to the customer

- Has a defined overall goal that cannot be changed

- Has priorities and commitments

- Has four major events:
  - Sprint Planning
  - Daily Sprint Meeting
  - Sprint Review/ Demo
  - Sprint Retrospective

- Has a potential product increment release, only if agreed by project team and product owner/ customer

Why Work in Sprints?

- Help you start – create commitment to get the work done

- Move you from abstract to concrete – create concrete discussion on one topic at the time

- Keep you focus on what is important – create priority list

- Force crisp decision making – strive for consensus and be transparent about how choices are made

- Encourage fast follow-up – focus on getting things done and get frequent feedback

Benefits of Agile

- How can an agile approach help you complete the course project?
  - Identify three ways agile can help
  - Think about your experience on the Datathon

Section 2

Agile Team

Agile Team

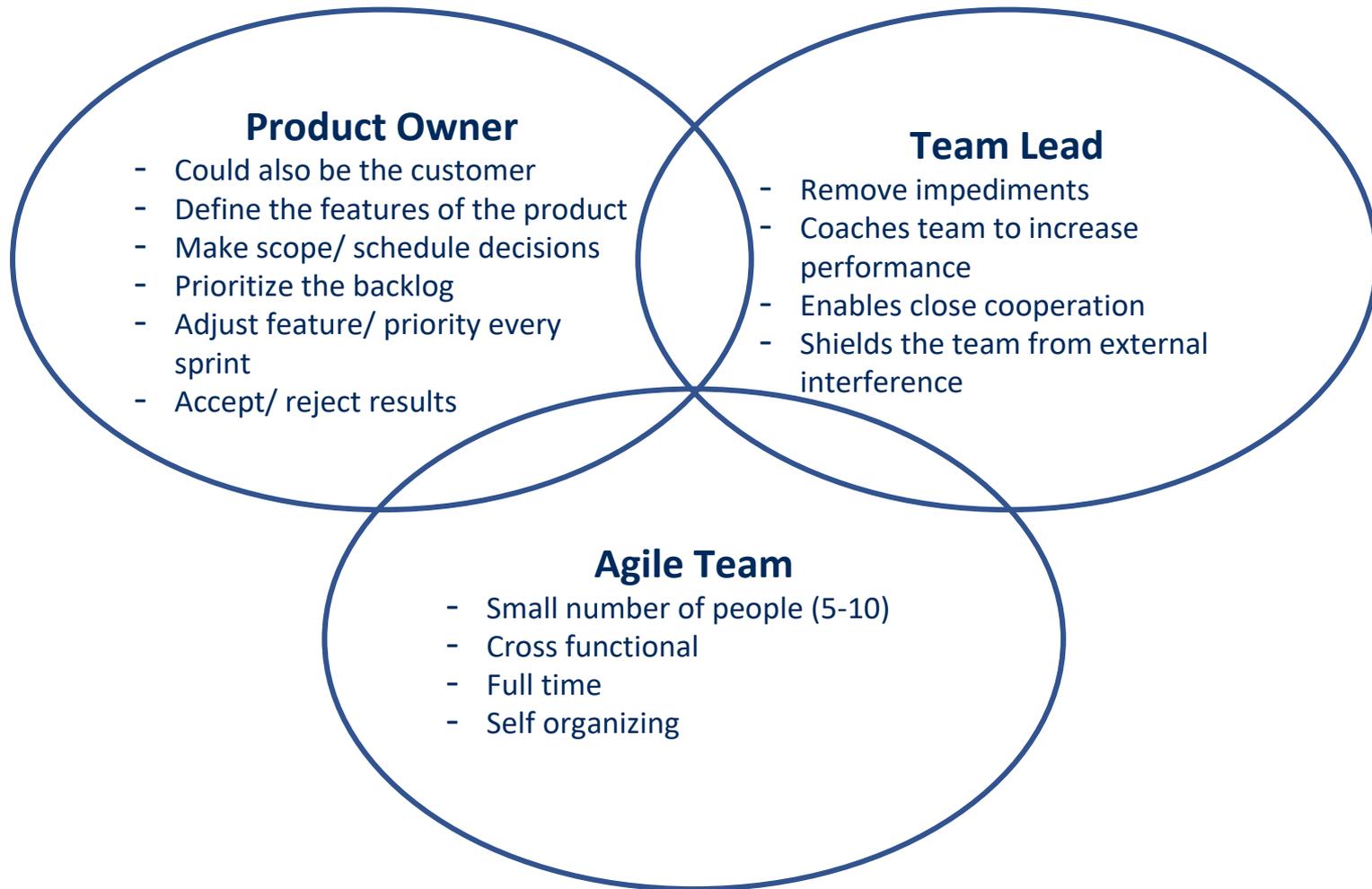FUNCTIONAL SILOS VS.
CROSS-FUNCTIONAL TEAMS

Agile Roles

Product Owner
- Could also be the customer
- Define the features of the product
- Make scope/ schedule decisions
- Prioritize the backlog
- Adjust feature/ priority every sprint
- Accept/ reject results

Team Lead
- Remove impediments
- Coaches team to increase performance
- Enables close cooperation
- Shields the team from external interference

Agile Team
- Small number of people (5-10)
- Cross functional
- Full time
- Self organizing

If you want to know more about the role of Product Owner: https://www.youtube.com/watch?v=502ILHjX9EE

Team Dynamics - Concepts

- Conflict Management
- Emotional Intelligence
- Ethical Behaviour
- Servant Leadership

Team Charter

- How your group will communicate (i.e., use of technology, frequency, emergency contact)

- Meeting guidelines (schedule, roles, and responsibilities)

- Conflict resolution process

- Document management (where documents are stored)

- Team roles (leaders, document submission, etc.)

Sprint 1: Complete Team Charter

- Using the provided template, complete your team charter
- You have 10 minutes

What is a Retrospective?

- It is a mandatory event at the end of each sprint
- Done at the end of a release or at the end of an agile project
- Engage the team to answer questions of what went well in the release and what did not go
    - Use Start-Stop-Continue
- Focus on continuous improvement for process and team
- All team members participate

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Retrospective - Best Practices

Do's

- Provide a "safe" environment to ensure active participation and honest feedback
- Attempt to use a different approach in every session
- Do retrospectives around the agile values

Don'ts

- Blame team members or foster a hostile environment in the team
- Allow participants to take over the meeting
- Select too many action items to try and focus on

Source: Agile Estimating & Planning (Mike Cohn)

Sprint 1: Retrospective

- Do a quick Start-Stop-Continue
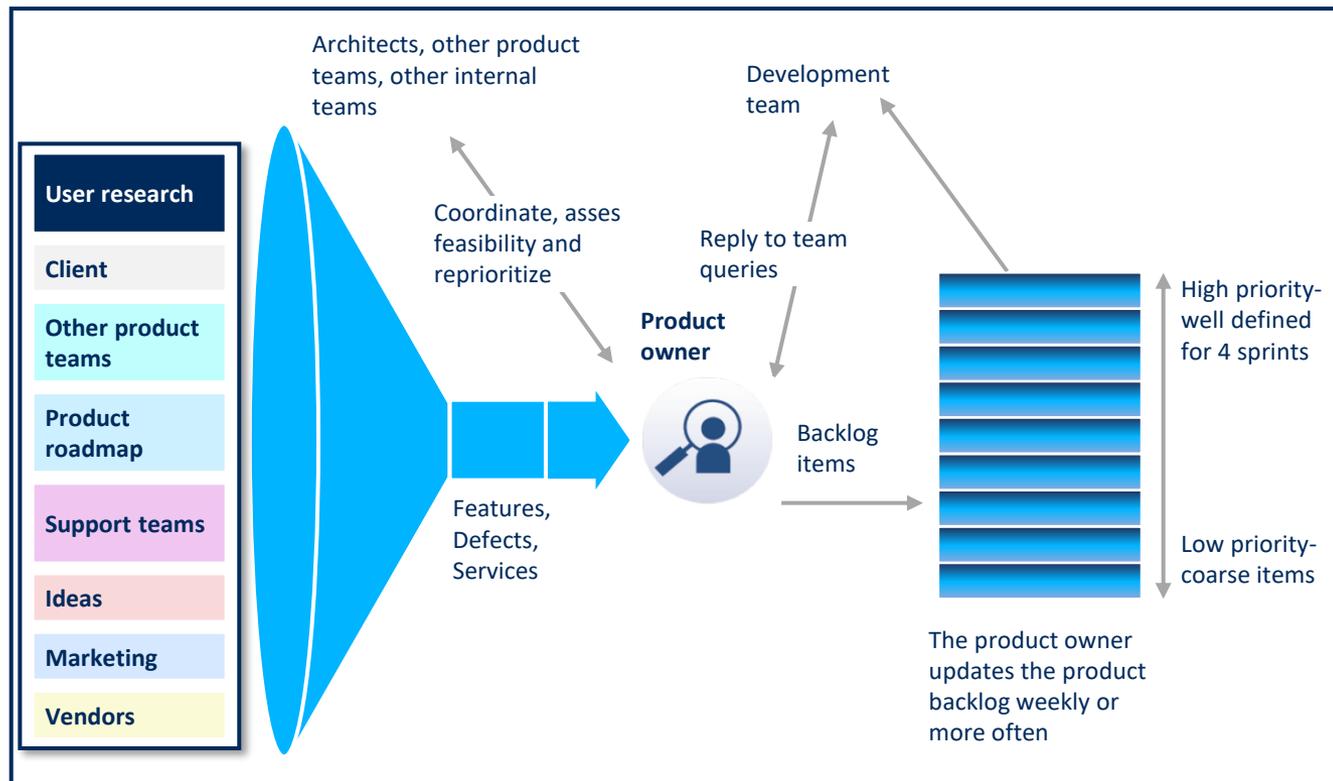- You have 5 minutes

Section 3

Working Habits

What is Product Backlog?

- Every project needs a scope
- Every scope needs to be clearly understood by the team
- Prioritizing the scope is the responsibility of the Product Owner based on feedback from stakeholders, including the team

Product Backlog – Themes and Epics

- Backlog represents themes and epics
- For example, on your Project Proposal
  - Theme: Data sources
    - Epics
      - As a student, I need access to current data sources in order to asses the quality and appropriateness of the data
      - As a student, I need to develop a data model in order to analyze the data
      - As a client, I need to know the data sources in order to arrange for access

Sprint 2: Backlog

- Create a Backlog for your class project
- You are identifying features that are required for your project
- You have 10 minutes

Sprint Planning Worksheet

Backlog	Initial Sprint Plan				
	Sprint 0 – Oct 18	**Sprint 1 – Nov 15**	**Sprint 2 – Dec 15**	**Sprint 3 – Jan 6**	**After Sprint 3**
	User Story *Tasks* • • •	**User Story** *Tasks* • • •	**User Story** *Tasks* • • •	**User Story** *Tasks* • • •	**User Story** *Tasks* • • •
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Decomposition

- Review the backlog and group related features
- From the group of features create themes and then within the theme create epics
- For each epic, create user stories
- Once you have the user stories, prioritize them
  - Focus on customer value

Decomposition of Work

Level	Theory Example	Class Project
Theme	• Wish list	• *Data sources*
Epic	• As a customer, I need to be able to have wish lists so that I can come back to buy products	• *As a student, I need access to current data sources in order to asses the quality and appropriateness of the data*
Stories	• As a customer, I need to be able to save a product in my wish list so that I can view it again later • As a customer, I need to be able to view my wish list so that I can buy items from it	• **As a student, I need access to the Canadian census data by 3 digit postal code in order to view customer demographics**
Tasks	• Put 'Add to wish list' button on each product page • Create new database to store wish list items • Create page to display user's wish list • Add 'View wish list' link to homepage	• **Submit request for access to census data** • **Obtain access** • **Test access** • **Extract sample data**
Acceptance Criteria	• Able to save a product to a wish list • View products saved on the wish list • Purchase products from the wish list	• **Success access of required data** • **View census data for customer demographics**

User Stories - CUTFIT

Example: As a <**Who**: Manager> *I need to* <**What**: *view orders submitted to me*> So that <**Why**: *I can take action on those very fast*>.

- **Consistent**: A consistent requirement does not conflict with another requirement
- **Unambiguous**: The reviewers of a requirement statement should be able to draw only one interpretation of it, regardless of their role
- **Testable**: We should be able to create test cases for a requirement. If a requirement is not testable, trying to determine whether it is correctly implemented is a matter of opinion
- **Feasible**: It must be possible to implement each requirement within the known capabilities and limitations of the system environment
- **Independent**: No "user story" should be dependent on another "user story" with a sprint
- **Traceable**: You should be able to link each requirement to a user and to goals

KANBAN Boards - Trello

30

Sprint 2: User Story

- Create three user stories using CUTFIT
- Prioritize your user stories into 5 buckets:
  - User stories required for Sprint 0 due October 18
  - User stories required for Sprint 1 due November 15
  - User stories required for Sprint 2 due December 15
  - User stories required for Sprint 3 due January 6 – Detail Proposal
  - User stories required after Sprint 3
- For the user stories in Sprint 1, identify the tasks required to complete the user story
- Document the task, assign the owner, start and completion date. User story number, and any dependencies with other tasks
- Complete the retrospective for this sprint
- You have 20 minutes
- If you have time, input Sprint 1 in Trello and work on Sprint 2

Agile Development Process

Agile Methodology

At the end of each sprint/ iteration there is a:
- Review or prototype demo
- Reflection on were the team is in completing the deliverables (analyze the speed of work and any remaining items)
- Adjustment or improvement for next sprint/ iteration
- Decision on whether the is a 'shippable product'
- Planning for the next sprint/ iteration

DoD (Definition of Done)

- For you team, what does done mean?
  - Designed
  - Developed
  - Tested
  - Integrated
  - **Accepted**

Section 4

Wrap Up

<u>Reflection</u>

- Plan next activities
  - Review your backlog
    - What should be added
    - What is not required
    - What has to be clarified
  - Update your themes and epics
  - Sprint 0 to complete your Sprint Plan to delivery your Project Proposal on January 6
    - Due October 18

What You Will Learn - Review

- Describe the benefits of using agile project management framework to complete the course project
- Formulate an approach to work as an effective team to complete the course project
- Create key deliverables and plan sprints to complete the course project

Any questions?

Thank You

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Section 5

Appendix

High-performing Teams

Self-organizing	▪ Team decides how to best organize themselves to meet the goals.
Self-managing	▪ Every member of the team is responsible for 'managing' the team. They hold each other accountable for practicing agile principles in spirit and action.
Co-located	▪ Ideally co-located in a single room to shorten feedback loops, reduce communication overheads and foster team spirit.
Cross functional	▪ Have all skills necessary to go from product backlog to production ready solution.
Well-sized	▪ 10 +/- 2 team members.
Accountable	▪ Accountable for delivering features agreed upon at the beginning of every sprint.
Empowered	▪ Authority to do whatever is needed to meet the commitment.
Focused	▪ Members should be dedicated or at least not spread too thin.
Fixed	▪ While in a sprint: team structure and sprint scope does not change.