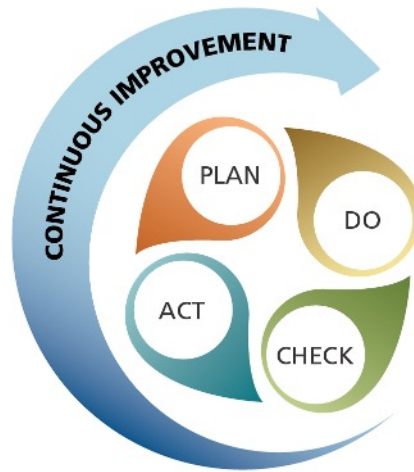# Executive Agile
REFRESHER

AGENDA

In this refresher we will discuss…

- Two foundational mindsets for agile adoption
  - *The PDCA Cycle*
  - *Lean Principles*
- Two essential guides for agile adoption
  - *The Agile manifesto*
  - *The Scrum Guide*
- Agile Product Leadership
- Agile Metrics

2 minutes

Mindsets: The PDCA Cycle

5 minutes

W. Edwards Deming is often considered the father of Quality Management. During WWII, he substantially improved the quality of munitions that were being produced in support of wartime operations. In the 1950s and 60s, Deming would take inspiration from the statistical methods of Walter Schewhart, and developed what came to be known that the Plan-Do-Check-Act, or PDCA, Cycle. This incremental process focused on achieving continuous improvement through small, iterative cycles, that would begin with an assessment and resulting plan for improvement, a small change to test the action, the gathering of data to evaluate the test, and then if the results confirm the hypothesis the baseline is reset to the new standard, at which point the cycle repeats.

In later years, Deming referred to the "check" phase as "study", and hence, the entire process as the PDSA Cycle. The reason for this was that he felt people often misinterpreted the "check" phase as a mere act of inspection, when the intent was to study the data at a deep level to derive evidence-based conclusions.

+Forerunner to lean and agile, Deming saw the problem with not checking assumptions for 2 years and the importance of short feedback loops. Waterfall predominately created for military and construction industry became the defacto standard applied to everything.

Animate the screen

Mindsets: The 5 Principles of Lean

Value	Defined from the perspective of the end customer
Stream	The value stream needs to be mapped, and wasteful steps eliminated
Flow	For the value-creating steps that remain, optimize the flow
Pull	Deliver what and when the customer wants, without stock-piling waste
Perfection	Continuously improve by finding and eliminating waste

8 minutes

Lean revolutionized the manufacturing industry, and along with the Toyota Production System (TPS), became significant influences in the Agile software development movement, with it's focus on customer value, and emphasis on continual improvement.

Notes to instructor Doing anything the customer won't pay for is waste. Different solutions are required depending on who you are trying to solve for (customer vs consumer (uses the product)) values different things.

Walk through what each principle means quickly

Mindsets

As a servant leader….

- Identify different ways to empower teams to embrace Continuous Improvement:
  - List leadership approaches TO EMBRACE

- Different ways to reduce top-down power expectations:
  - List leadership approaches TO AVOID

Completed by 12 minutes

TO EMBRACE examples:
- Encourage team-level problem solving by adopting PDCA Continuous Improvement
- Listen and ask questions: nudge in the right direction
- Work with Scrum Masters and RTEs to facilitate culture change
- Embrace and Empower framework roles

TO AVOID examples:
- Being the answer
- Setting up lots of Decision Gates
- Appointing Leads that make decisions on behalf of teams
- Adding Layers

13 minutes

(click)

What is a philosophy? Any ideas (click)
- *a system of thought centered on a set of truths or principles.*
- *The mindset or perspective that guides your approach to situations.*

Give me an example of a philosophy you live by?
- The Golden Rule. Treat others the way you want to be treated.

Why do we bother with adhering to a philosophy?
- Consistency
- Predictability
- Stability

WHAT IS SCRUM?

METHODOLOGY   FRAMEWORK   PHILOSOPHY

A supporting Structure for a System

14 minutes

(click)

What is a framework? Give me a definition (click)
- *a supporting structure for a system.*

Give me an example of a framework you have used?
- Angular
- SQL Framework
  - Naming conventions
  - Event Patterns
  - A Scaffolding/structure

Why use a framework?
- Consistency
- Transparency
- Ability to Share more easily

What happens if we break a framework (don't use the naming conventions, event patterns, scaffolding or structure)
- Lose the benefits (the Why)

What does it mean to "do scrum" or in contrast to "break scrum"?
- Disregard the conventions, patterns, and structure in a way that loses the benefits

WHAT ARE TECHNIQUES LIKE
the Daily Stand-up "Walking The
Board" Classified as?

METHODOLOGY   FRAMEWORK   PHILOSOPHY

*a **procedure** for accomplishing or
approaching something*

15 minutes

(click)
What is a methodology? I need another definition (click)
- *a procedure for accomplishing something*

Give me an example of a methodology or tactic you have used at work for sharing information on a project?
- *Email*
- *Documentation*
- *MS Teams/Chat*
- *Phone*
- *Face-to-face conversation*

Are some methods more well suited to particular frameworks and why (Example: Daily Stand-up: Would we communicate best using email for the daily stand-up)?
- *We would use MS Teams or face-to-face*

Do methods align with philosophy (remember philosophy is a system supported by a set of principles)?

- *Yes*

Why do we care if we pick methods that align with our philosophy and fit into frameworks?

- *So they are consistent, and we get the benefit from implementing our values.*

How do we as a team guard from picking methods that do not align with agile principles and values?

- *You cannot. BUT… We communicate. None of our methods are sacred. Remain flexible and inspect and adapt and grow.*

Agile Guidance: Learning

How do we learn Agile Philosophy?

www.agilemanifesto.org

19 minutes

www.agilemanifesto.com

How do we learn?
- Talk to others
- From our experiences of trying things and abandoning things that need improvement

(click)

Why do we care about understanding and knowing the values and principles and letting that guide HOW we operate?
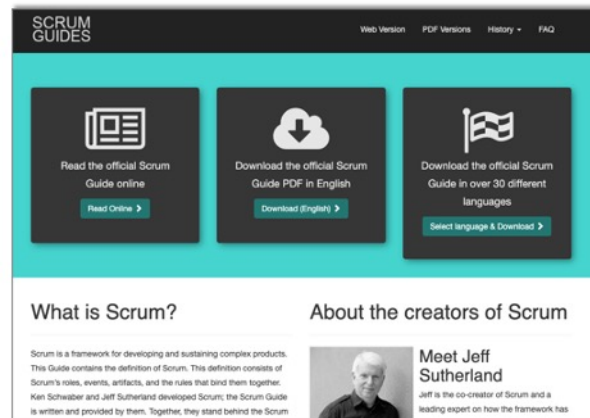- *Grow in the same direction together*

(Review values and principles)

21 minutes

www.scrumguides.org

How do we learn Scrum?
- Our Team (PO, Devs, Scrum Master)
- Our Scrum Master

Example: I am a Scrum Developer with 12 years of experience. I explain that scrum is "a methodology where we built a dependency relationship chart and sprint for 2-months at a time after 1-month of analysis". Does that sound correct? Why or why not?

What if I do something wacky that either doesn't match the framework, or violates our principles and values?
- *We need a refresher on these things and always act in service to the teams where we live.*
- *We agree to the agile manifesto values and principles, to implement the scrum guide, and to select methods that align… and we agree to continuously improve!*

(click)

Pop quiz:
How many Roles in the Scrum framework? *(3) Developers, Product Owners, Scrum Master*
Why not "Analysts"?
- *The role "developer" means "solution developer" not programmer. Programming is an element of solution development. What other kinds are there?*
- *Because someone with analysis skills is considered a solution "developer"*

How many events in the Scrum framework? *5 events*
- *Sprint Planning*
- *Daily Scrum (where Scrum gets its name)*
- *Sprint Review*
- *Sprint Retrospective*
- *The Sprint itself*

Is "Refinement" an event in the Scrum framework? *No*
Why not?
- *It is a definition of the expected state of the quality of artifacts and not an event*
- *Teams often implement the meeting method in order to achieve artifact quality*

Can refinement methods not align with the Agile Philosophy?
- *Yes*
- *How? If they do not encourage transparency and collaboration. If they ask people off the team to do it.*

What is the definition of the word Artifact in the scrum framework?
- *Something that represents work and it's value.*

What are the scrum event Artifacts?
- Product Backlog (The scope of work)
- Sprint Backlog (The goal of work)
- Increment (The outcome of work)

What is agile: Learning

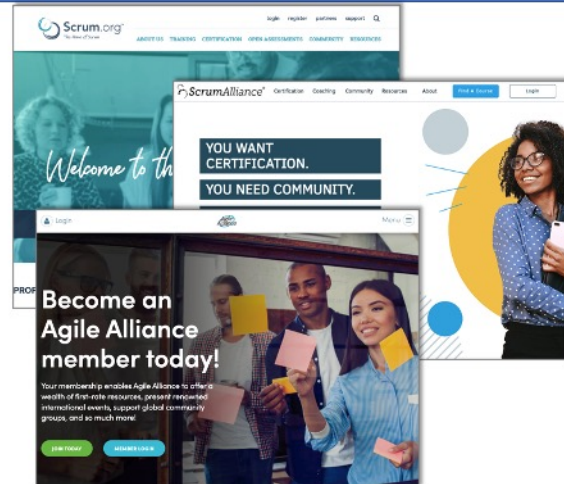How do we learn agile techniques and methods?

www.scrum.org
www.ScrumAlliance.org
www.agilealliance.org
https://osam.optum.com/
MS Teams: OSAM General
MS Teams: UHG Agile Community

22 Minutes

Links:
- www.scrum.org
- www.scrumalliance.org
- www.agilalliance.org
- https://osam.optum.com
- MS Teams for OSAM:
  https://teams.microsoft.com/l/channel/19%3a14108223f7a54285b0aba4e41ddb8
  30f%40thread.tacv2/General?groupId=48e30e06-0f5d-4967-af9c-
  cd17969c7ef3&tenantId=db05faca-c82a-4b9d-b9c5-0f64b6755421
- MS Teams UHG Agile Community:
  https://teams.microsoft.com/l/channel/19%3a7bad8cddf0ff4745807512744435fc
  19%40thread.tacv2/General?groupId=4ed65241-9ce6-4ea0-ace9-
  b348652c6ab5&tenantId=db05faca-c82a-4b9d-b9c5-0f64b6755421

Pop quiz: Does the Scrum Guide contain a list of methods we should use?
- *No. Just a consistent framework we put well aligned methods inside.*

How do we learn? Ideas?
- Friends and co-workers
- Our experiments to try new methods

(Again, sometimes our experiments might not align. Be open to hearing from each other on that point. Find good mature dependable sources to learn from in addition to experimenting together)

Let's look at some ways to learn: (click)

32 minutes
(10 minute video: https://www.youtube.com/watch?v=G11t6XAIce0)

WORKSHOP
PRODUCT VS PROJECT
(1 of 3)

ATTRIBUTE	PROJECT	PRODUCT
Initiative Kick-off	Project Manager (PrjM) brings together client, stakeholders, team to review high-level Project Management Initiative	N/A (*Initiatives are just content in the backlog that requires prioritization and refinement*)
Initiative Content	PrjM leads creation of Work Breakdown Structure, milestones, and resource allocations	Product Owner (PO) works with client to create Features under Capability in Product Backlog.
Initiative Content Analysis	PrjM works with specialized roles (architects, analysts, etc) to examine WBS goals and further decompose and estimate	PO leads team in Product Refinement sessions and specialized roles may attend to guide and support the team

37 minutes

WORKSHOP
PRODUCT VS PROJECT

ATTRIBUTE	PROJECT	PRODUCT
Initiative Prioritization	PrjM responsible for technical activity-focused dependency-oriented finish to start timeline with a focus on estimations, critical path, and resource availability	PO establishes User-focused value-driven increments prioritized often based on "weighted shorted-job first" with an eye on dependency reduction outside the team
Initiative Progress Management	PrjM leads resource re-allocation while maximizing parallel activity to reduce risk around the critical path	Product Owner (PO) observes team-level velocity to approximate product backlog item (PBI) completion, sprint-by-sprint, while serving team in Team-level retrospectives to support continuous process improvement

42 minutes

WORKSHOP
PRODUCT VS PROJECT

ATTRIBUTE	PROJECT	PRODUCT
Initiative Risk Management	PrjM focused on negotiating changing expectations with client by communicating root-cause factors and maintaining a risk registry (risk breakdown structure) to coordinate resolution, mitigation, and ownership)	PO supports team by helping coordinate risks identified by the team coming from Product Refinement, Sprint Planning, and is a resource to the team during Daily Scrum meetings.
Initiative Timeline Management	PrjM owns master project plan, watches critical path items that connect initiative technical SDLC-style milestones focusing on predetermined deadline (Estimation by date)	PO focus on Prod Backlog priority, maturing the state of features by refinement and sprinting, updating roadmaps relative to team velocity. (Empiricism by Quarter)

47 minutes

WORKSHOP
PRODUCT ORIENTATION

*Quality in a product or service is not what the supplier puts in. It is **what the customer gets out and is willing to pay for.** A product is not quality because it is hard to make and costs a lot of money...*

- PETER DRUCKER

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52 minutes

Keeping the customer in mind at all levels is important to managing the investment of a product.

Q: As Servant Leaders, how can we encourage keeping the customer at the forefront of our work?
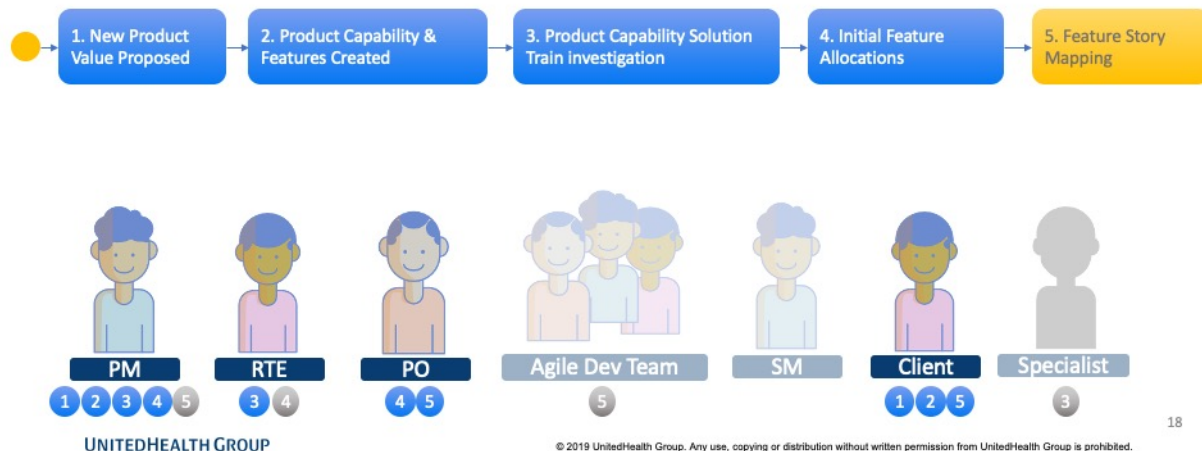
1h 2m

Explain how to find and build the value stream.
Recall the conversation about PDCA and Lean values.

Q: Reflect on prioritizing adaptability and team empowerment. What are the PROS and CONS of STANDARDIZATION vs ADAPTABILITY in the context of the value stream?
Q: Where should we empower changes to value stream assessment?

1h 17m

THIS IS AN EXAMPLE OF A TYPICAL SCRUM VALUE STREAM

Each step here has a number, and below each role You can see their associated involvement in that step.
If the number is in a grey circle, that means they are not required to participate regularly in that step.
If a number is missing and not associated with a role, it means they should not participate at all in that step.

Who are the top 3 busiest roles in Part 1 of the Product Development Process
1. The Product Manager
2. The Client
3. The PO

What is the <insert role from above here> doing in these activities?
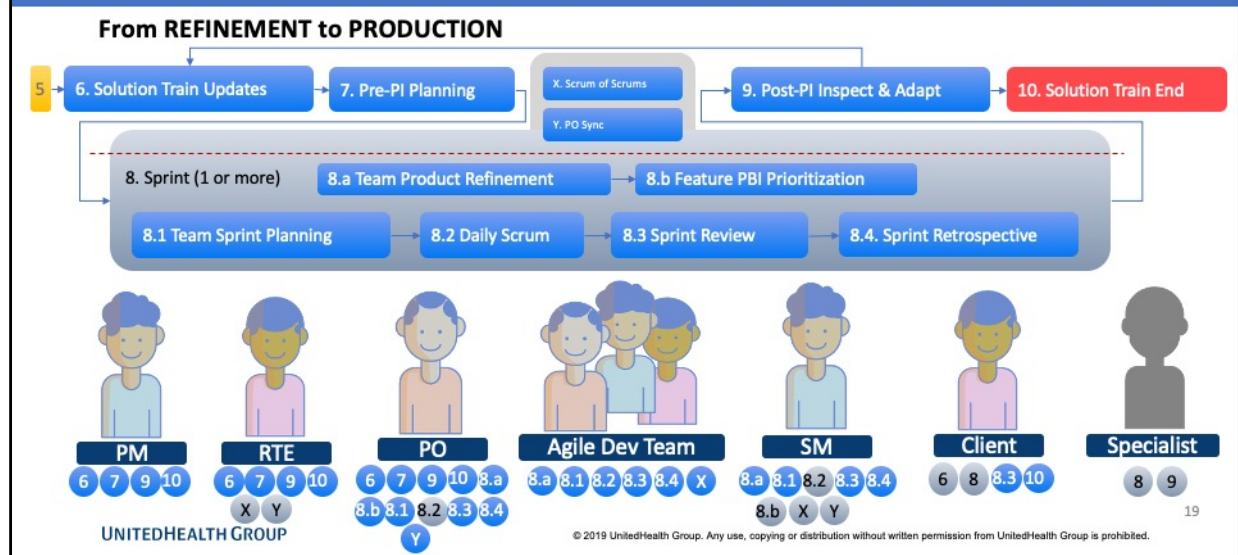Why should <insert role from above here> do that at this step?
Why should <insert role from above here> avoid doing <some out of order activity>

at that time?
Why isn't <insert role from above here> involved in this step?

1h 30m

Let's check out the busiest people in Part 2:
1. The Product Owner
2. Then the Agile Dev Team
3. Then the Scrum Master

During Part 2 the Product Manager lives at the Solution Train Level completely above the Red Line
Who else lives above the Red Line? (answer: the RTE) What are they doing? (answer: ensuring everyone is managing their interest in the process and outcome of the PI by coaching them)

Where does the Scrum Master Live in relationship to the Red Line? How involved is that Scrum Master in Steps X or Y and why?

Why does a client participate in Step 8.3?
Why would the Client participate in Step 6, the Solution Train Plan update?

Where are Subject Matter Experts involved, who are they on the board?
Where are technical architects involved, who are they on the board? Why are they not required? Do they "do things" or "coach" or "mentor" or all of the above?

WORKSHOP
PRODUCT OWNERSHIP METRICS

ROADMAPPING

DOs 👍

- Track Initiatives as Capabilities, as an aggregate of its prioritized features
- Track Initiative Features in the roadmap
- Track Feature size in T-Shirt sizes
- Track Feature in roadmap as a calculation of aggregate child PBI story points divided by the team's current velocity
- Reports on Roadmap progress should be hierarchies by Feature priority with percentage of completion, with progress in terms of number of sprints accomplished with details on Feature changes in: prioritization, Feature scope, team velocity factors (staff changes, poor estimation, staff availability), dependency risks

DON'Ts 👎

- Focus on arbitrary deadlines (only include a deadline if there is a strict contractual or regulatory requirement – instead, focus on negotiating priority of features over Initiative deadlines)
- Rank Features across Initiatives at the same priority for the same allocated team (you must put them in an order, across Initiatives even if that order must change later)
- Change the priority of a Feature in-progress (everything after it can change, be sure what's next is "ready")

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1h 45m

WORKSHOP
PRODUCT OWNERSHIP METRICS

VALUE STREAM METRICS

DOs 👍

- Periodically perform a limited time study on the identified value stream (a)value-add, (b) non-value-add, and (c)wait-time time lengths.
- Use the results of periodic time studies as a starting point to identify root-causes for long process times, wait times, and transform or eliminate non-value-add activities
- If high-level study reveals long running activities within a process, break out the process and value stream map the sub-process to determine waste factors.

DON'Ts 👎

- Run time studies in an on-going manner. *It will harm long term productivity metrics with an extremely low return on investment relative to the amount of data collection.*
- Neglect to identify potential change hypothesis without testing them. *Test and measure the resulting effectiveness.*
- Replace Retrospectives with time studies. *Whole Agile Teams (PO, SM, Dev Team) do and own the time study and the change hypotheses.*

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2h

WORKSHOP
PRODUCT OWNERSHIP METRICS

FEATURE METRICS

DOs 👍

- **Embrace the sprinting Feature Cycle Time metric.**
  - From the time the first PBI in the feature moves from TODO to IN-PROGRESS, until the last PBI in the feature moves to ACCEPTED.
  - Teams should embrace Time-To-Build.
- **Each Feature should be a set of related deliverable client value**
- **If a feature is too large, break up the feature by sorting deliverable value PBIs into multiple features.**
- **Refine whole features before you start to do work on any PBI in the feature**
- **Complete Features in sprinting before you start sprinting on a new Feature**

DON'Ts 👎

- **Work on multiple features at the same time.** *This will reduce your feature cycle time for both features.*
- **Change the content of a Sprint unless the sprint goal is truly dead.** *Changing your goal in the middle of a Sprint eliminates the outcome of the current goal, and ensures problems in the new goal, introducing errors and rush.*
- **Multitask the team.** *Refining in priority order increased the likelihood that exploring the next feature or PBI will relate to the previous one.*

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2h 15m

WORKSHOP
PRODUCT OWNERSHIP METRICS

SPRINT METRICS

DOs 👍

- Embrace TEAM VELOCITY as a measure of team productivity over a consistent cadence (how many relative points DONE by a team per 2-week sprint, for example).
- Embrace PBI Cycle Time showing how long it took from the moment the PBI moved to IN-PROGRESS to ACCEPTED.
- Embrace SPRINT BURN-UP showing Sprint point load over the course of the sprint, team point completion (for whole PBIs) aggregated throughout the sprint, showing DONE achieved daily.
- Reward whole Team Continuous Process Improvement resulting from Retrospective tested hypotheses for improvement.

DON'Ts 👎

- Reward increased Velocity. *Focus on Continuous Improvement and stabilizing velocity to reward consistency and sustainable improvement.*
- Change the Sprint cadence. *Changing the cadence makes it difficult to use the Velocity measure to help load a sprint.*
- Ask staff to focus on doing their tasks. *Instead, ask staff to finish PBIs.*
- Reward partial points for work that did not deliver value for a client.
- Sequester knowledge in sprint by working in a silo. *Share and update daily*

2h30m