Lean Product Development using Scrum

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Leo Monford, Kaylene Scanlon

Want Better Employees?
Be a Better Employer.

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Raise your hand if this has happened to you…

- You get pressure to do more with fewer people & resources
- Unreasonable goals are set without your input and you cannot say no
- Your team is consistently interrupted or wastes time on non-value-added work
- Your people must simultaneously support many projects and teams

Great job! Another successful iteration.

http://www.agilebuddha.com

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Simulation Sprint 1

Group into teams of about 15-20 people

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The Ball Point Game

Objective: score as many "ball points" as possible in a two minute iteration

- One "Starter" and one "Finisher" per team
- Each ball begins with the Starter and ends with the Finisher
- Each ball that goes through a full pass of the entire team and ends in the Finisher Box counts as one "ball point"
- Pass balls individually
- Each pass needs air time
- No passing to your immediate neighbor (right / left)
- Dropped ball = restart that ball

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To help you succeed, each team will have a Manager

Your Manager will help you…
- Determine who does what
- Set goals
- Keep track of the work

Managers, you will have <u>2 minutes</u> to organize your teams.

At the end of 2 minutes, Managers tell us how many "ball points" your team will deliver during Sprint 1.

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<u>Managers</u>: Take 2 minutes to organize your teams, <u>starting now</u>

Objective: score as many "ball points" as possible in a two minute iteration

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Ready…Set… GO!

Time remaining:

2:00	1:5...	...:20	1:10
1:00	0:...	...20	0:10

Stop!

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Sprint 1 Debrief
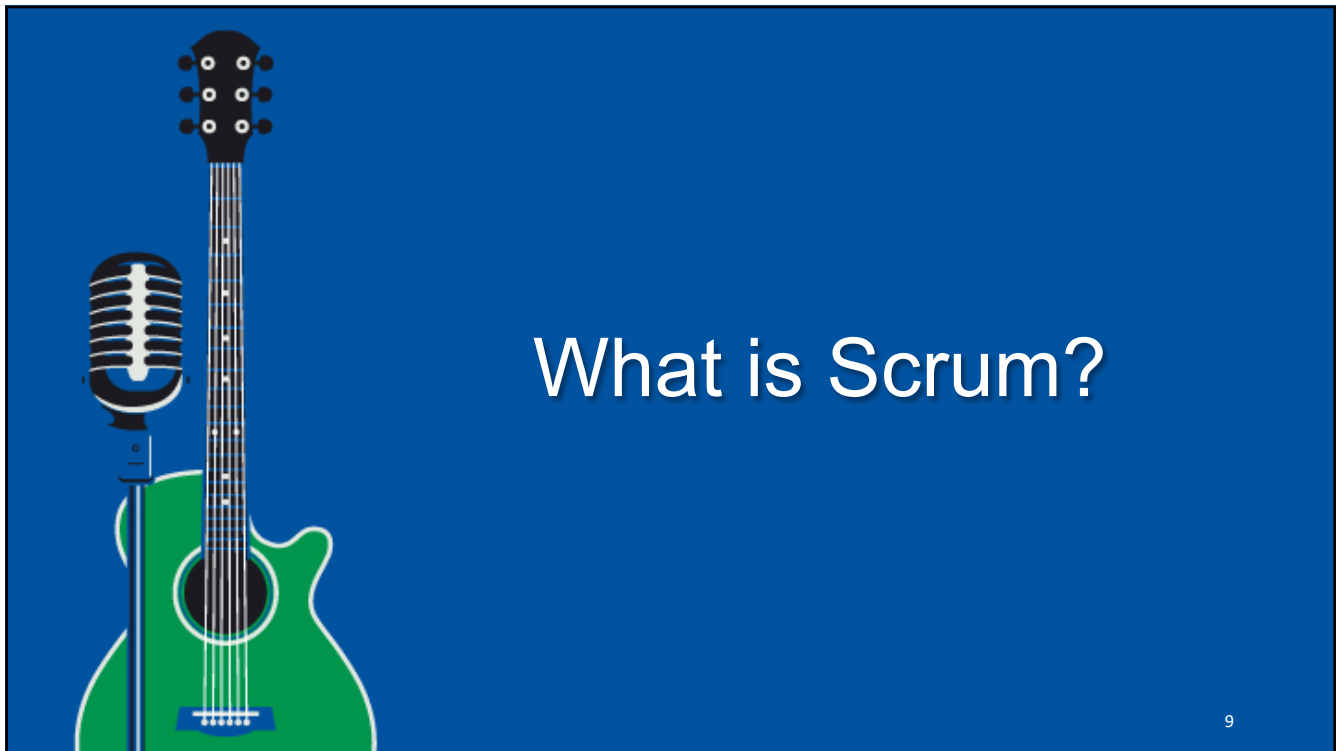
Managers, record your "ball point" performance for S1.

Team members,
- How well did your *team* perform?
- How engaged did *you* feel?

Score either **H**igh, **M**edium, or **L**ow and add your vote to the debrief poster

		S1	S2
Points committed			
Points delivered			
Team performance	H M L		
Your engagement	H M L		

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What is Scrum?

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Harvard Business Review

LEADING TEAMS

The New New Product Development Game

by Hirotaka Takeuchi and Ikujiro Nonaka

FROM THE JANUARY 1986 ISSUE

In today's fast-paced, fiercely competitive world of commercial new product development, speed and flexibility are essential. Companies are increasingly realizing that the old, sequential approach to developing new products simply won't get the job done. Instead, companies in Japan and the United States are using a holistic method—as in rugby, the ball gets passed within the team as it moves as a unit up the field.

"The old, sequential approach to developing new products simply won't get the job done. Instead, companies…are using a holistic method – as in rugby."
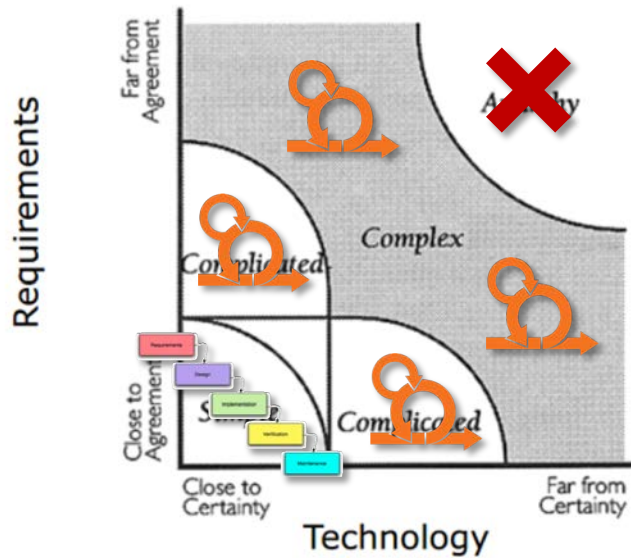*- Hirotaka Takeuchi and Ikujiro Nonaka*

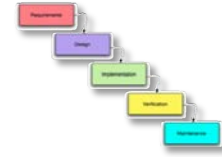"This was the formal birth of 'Scrum'"
- Jeff Sutherland

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When to use Scrum…and when not to
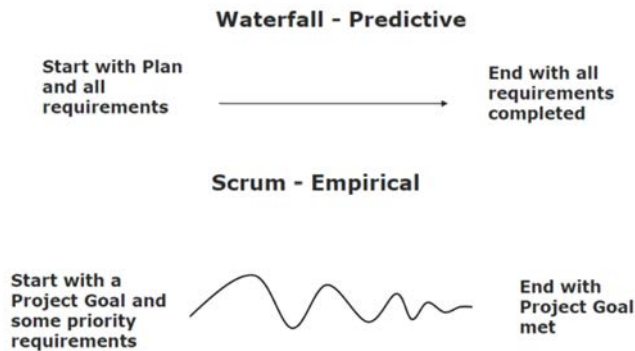

Waterfall - Predictive

Scrum - Empirical

Source: Strategic Management and Organizational Dynamics by Ralph Stacey

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Scrum Principles

1. Empirical, not Predictive

Waterfall - Predictive

Start with Plan and all requirements → End with all requirements completed

Scrum - Empirical

Start with a Project Goal and some priority requirements → End with Project Goal met
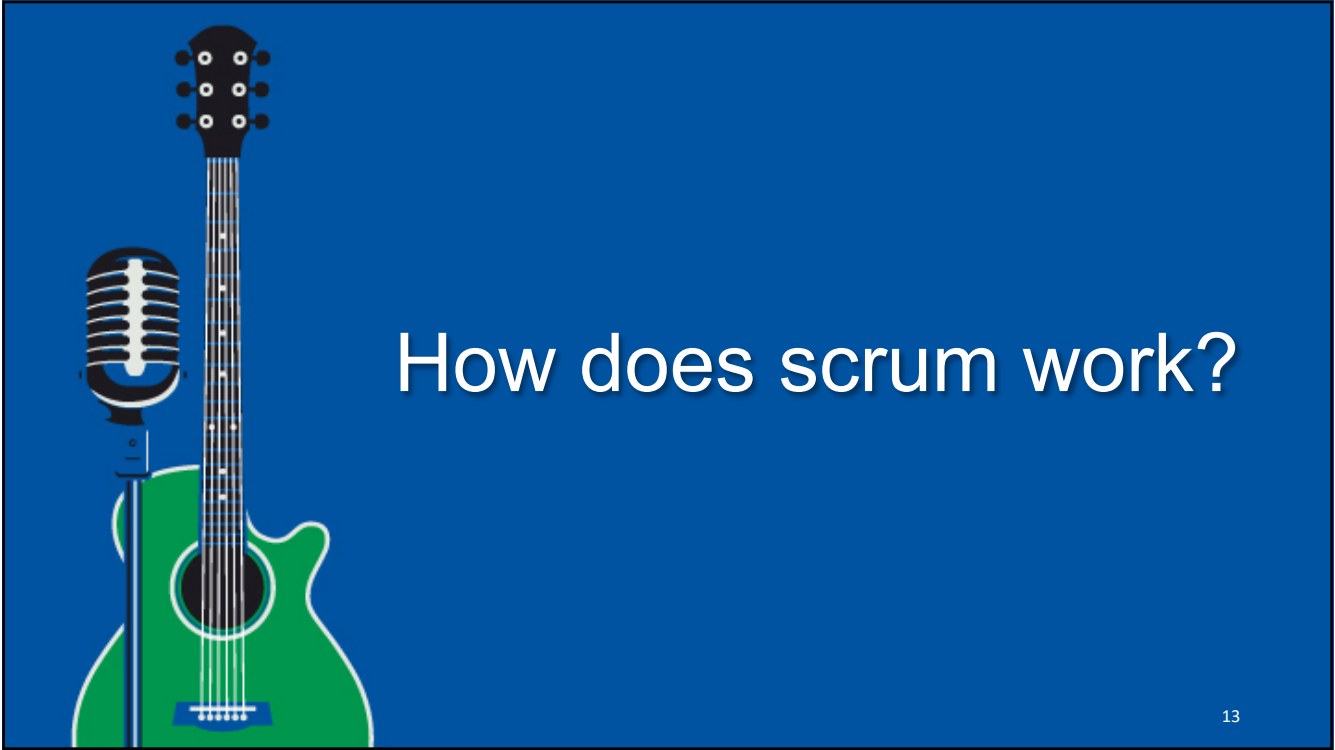
2. Self-organization

Scrum teams are small, cross functional teams of responsible experts that self-organize around goals and given constraints.
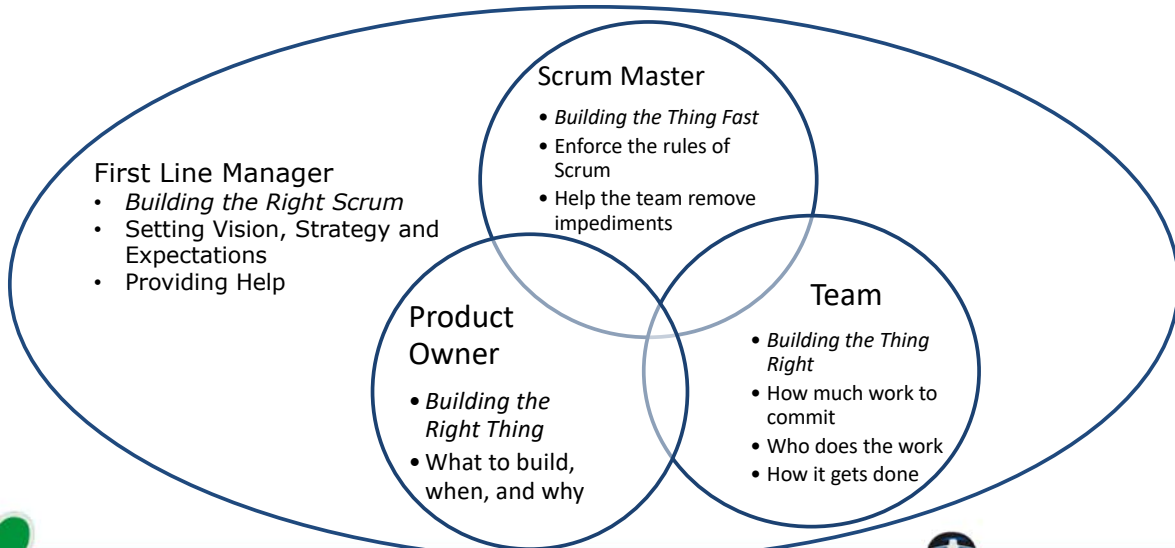
The team owns:
- How to do the work with quality
- Who will do the work
- How much work to commit
- How to improve the work

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How does scrum work?

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Scrum Framework at a Glance

Inputs from Executives, Team, Stakeholders, Customers, Users

The Sprint

Check

Sprint Planning

Purpose & Vision
"What can we commit to finish?"

Plan

Self-organizing team executes the "how"

Typically between 1 and 4 weeks long

Do

Sprint Retrospective

"What did we actually finish?"

"What can we do better?"

Adjust

Purpose, Team of Experts, Cadence

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Scrum Roles, Rights, and Relationships

Scrum Master
- *Building the Thing Fast*
- Enforce the rules of Scrum
- Help the team remove impediments

First Line Manager
- *Building the Right Scrum*
- Setting Vision, Strategy and Expectations
- Providing Help

Product Owner
- *Building the Right Thing*
- What to build, when, and why

Team
- *Building the Thing Right*
- How much work to commit
- Who does the work
- How it gets done

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What are the benefits of Scrum?

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Business Value from Scrum

1. Cadence of predictable delivery
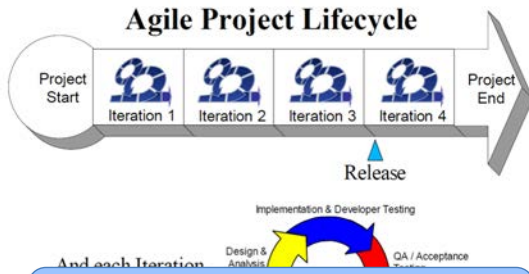
The scrum team commits to small increments of fully-tested work

2. Cadence of continuous improvement

A retrospective at the end of every 2 week sprint…

26 retrospectives / year ➜
26 improvements / year ➜
Per scrum team ➜

A LOT of improvements

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Scrum enables visual control for knowledge work

Kanban board

Burndown chart

Why does scrum make employees happier?

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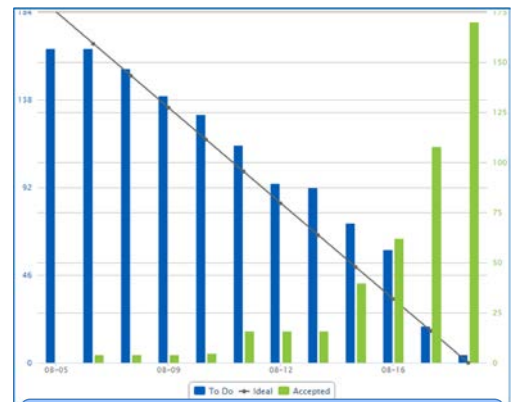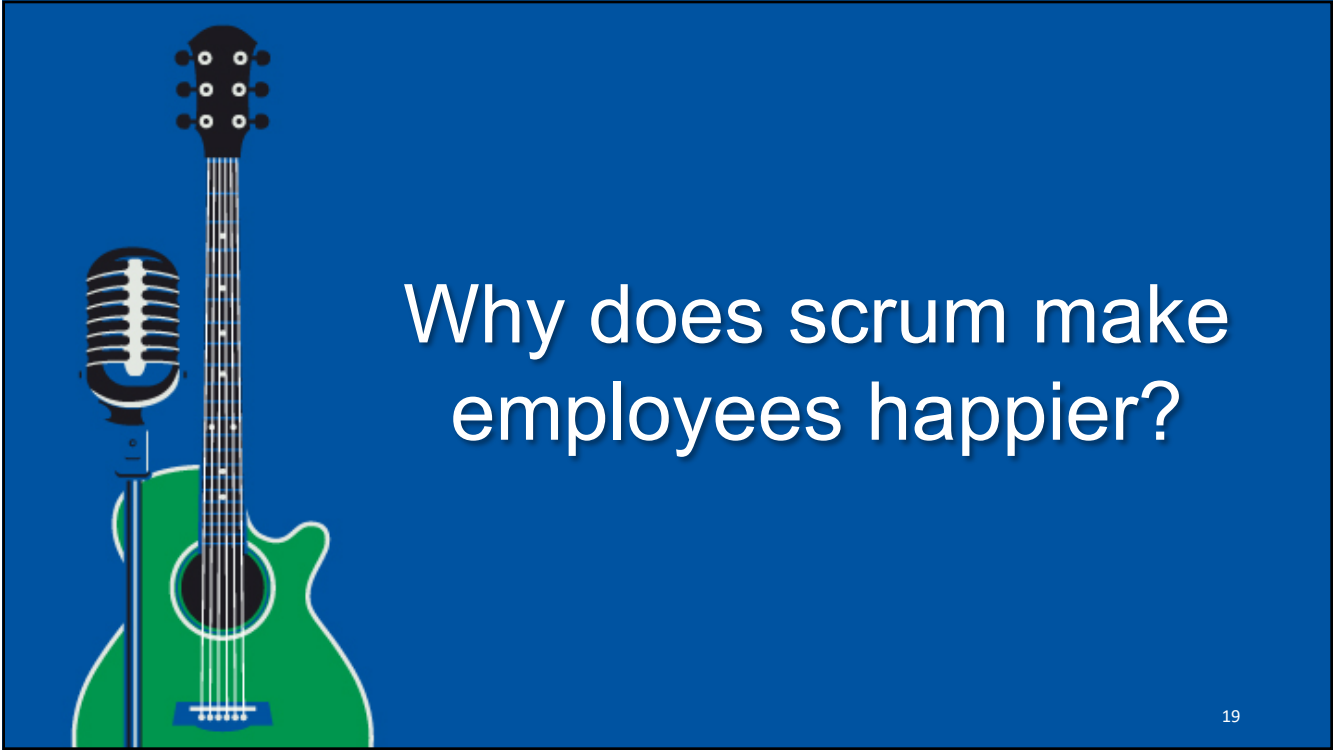
Scrum enables Autonomy, Mastery and Purpose

"What are the things that actually make people happy? They're the same things that make great teams: Autonomy, mastery, and purpose."
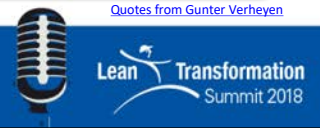*- Jeff Sutherland, "Scrum"*

Autonomy
Ability to control your own destiny

The Team

The team owns how, how much, and who

Mastery
Feeling that you're getting better at something

Sprint Retrospective

The team decides what needs to improve

Purpose
Knowing that you're serving a larger purpose

Product Owner

The PO prioritizes work based on V.O.C.

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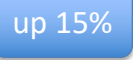## Scrum Values support Autonomy, Mastery & Purpose

We commit to the team.

We show courage in not building stuff that nobody wants.

We focus on what's most important right now.

We respect diversity. (experience, background, opinion) It makes us stronger.

We are open about our work, our progress, our learning and our problems.

Commitment

Courage

Focus

Scrum

Respect

Openness

Quotes from Gunter Verheyen

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Scrum-based planning fosters intense collaboration

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Our Organizational Health Improved

In the first 3 years of our lean & scrum transformation, the scores on our internal Org Health survey increased by 14% on average, including:

up 15%	"My work group looks for ways to change processes to improve productivity"
up 12%	"I feel encouraged to come up with new and better ways of doing things"
up 18%	"I like the kind of work I do"
up 23%	"I see evidence that my work group is making changes to improve customer satisfaction"

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Simulation Sprint 2

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By the way, why are we playing this game?

Ball Point Game = Scrum in Action
- Self Organization
- The team sets goals and determines how to meet them
- "Inspect and Adapt"
- Potential for extraordinary productivity
- Subject to pressure from external forces

This time, let's try it the scrum way

Your team has __2 minutes__ to…
- **Reflect** on Sprint 1
- **Self-organize** to make improvements
- Decide **who** will do what
- Decide **how** to do it
- Decide **how much** you can commit to

At the end of 2 minutes, tell us how many "ball points" your team will deliver during Sprint 2.

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Teams: Take 2 minutes to…

Reflect on Sprint 1
Self-organize to make improvements
Decide who will do what
Decide how to do it
Decide how much you can commit to

Starting now

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Ready…Set… GO!

Time remaining:

2:00   1:5   :20   1:10

1:00   0:   20   0:10

Stop!

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Sprint 2 Debrief

Managers, record your "ball point"
performance for S2.

Team members,
• How well did your *team* perform?
• How engaged did *you* feel?

Score either **H**igh, **M**edium, or **L**ow and
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Closing thoughts

Key points
• Scrum = lean
• Use scrum when requirements and/or technology are uncertain
• Scrum principles: Empirical process & Self-organization
• Scrum business value: Cadence of predictable delivery & Cadence of continuous improvement
• Scrum helps make employees happy by enabling Autonomy, Mastery, and Purpose

Some hints for successful scrum (& lean!) transformation
• Scrum is a recipe, not a menu. You have to do it all to get the results.
• Executive sponsorship is critical to successfully transform. "Participation is not optional."
• The leaders have to go first – they must be able to engage and teach
• Train everyone (especially managers) on scrum
• Tear down the old system as you build the new – control the overhead

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Questions?

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