The Agile **Team** Development Lifecycle

Cincy Deliver 2019 Speaker: Robbie Sykes, Ascendum

Synopsis

- Layer the Agile SDLC over Tuckman's stages of group development (storming, forming, norming, and performing).
- Within that framework, discuss how to evolve our approach to Agile so it continues to challenge our teams to grow.
- Our goal is to build happy, productive teams that create incredible software

Feel free to ask your questions along the way! We'll do Q&A at the end as well.

About the Speaker

- Robbie Sykes
- Director of Product Management @ Ascendum
- Blue Ash, Ohio
- With the Ascendum Digital team
- Focused on product and project management for software development
- Delivering "digital transformation"

About the Speaker

- 9 years as a product owner / project manager / scrum master
 - Small to midsize companies means lots of hats.
- Hired at 4 different companies as one of the first 20 employees
- 3 of those companies grew to 100+ employees and still exist today
- 2 of those companies awarded Business Journal's "Best Places to Work" awards
- Formally trained ~15 project managers and provided Agile coaching as a professional service.

About the Speaker

- Not a psychologist!
- Did not minor in psychology!

The Setup: Agile

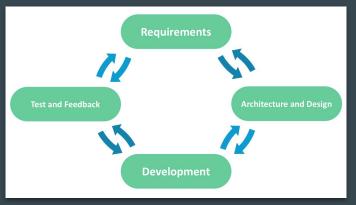
Agile Manifesto (agilemanifesto.org)

"Individuals and interactions over processes and tools"

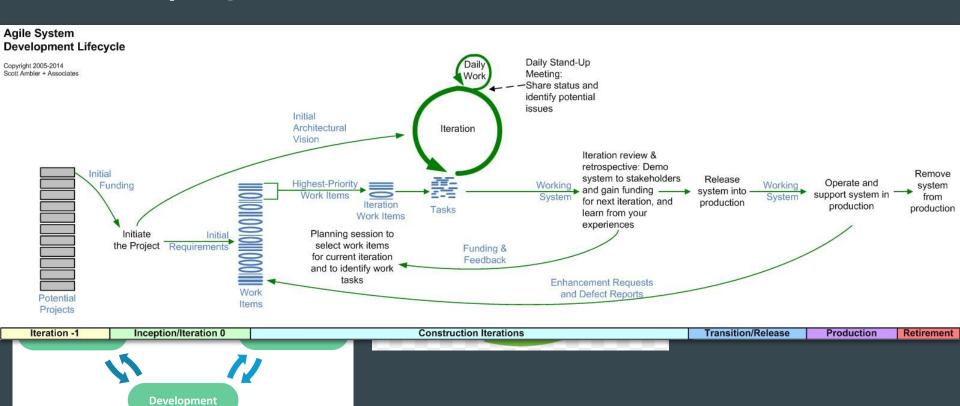
Agile Principles

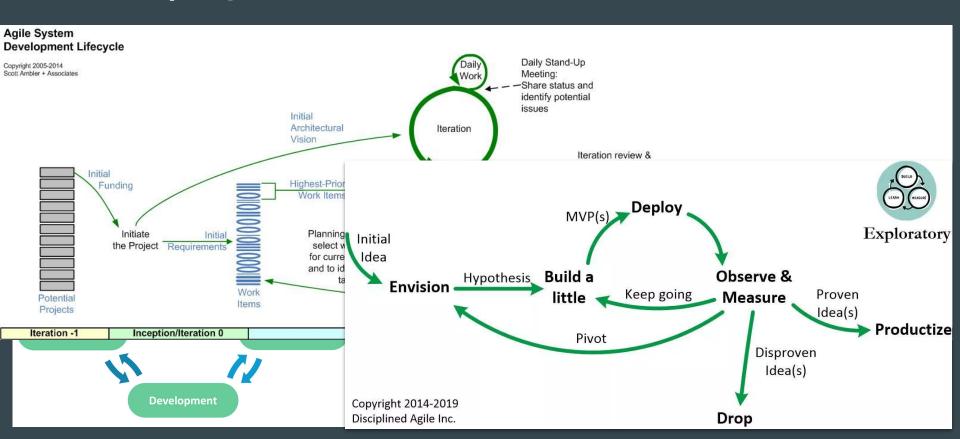
- 4. "Business people and developers must work together daily throughout the project."
- 5. "Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done."
- 12. "At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly."

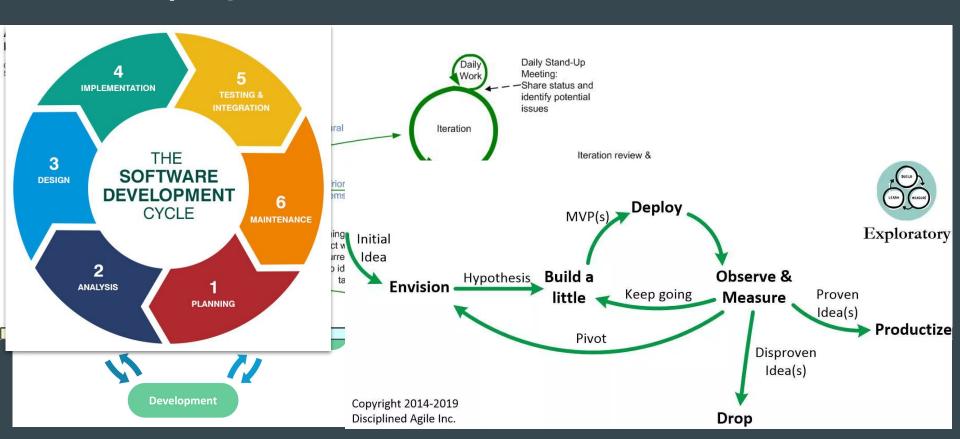


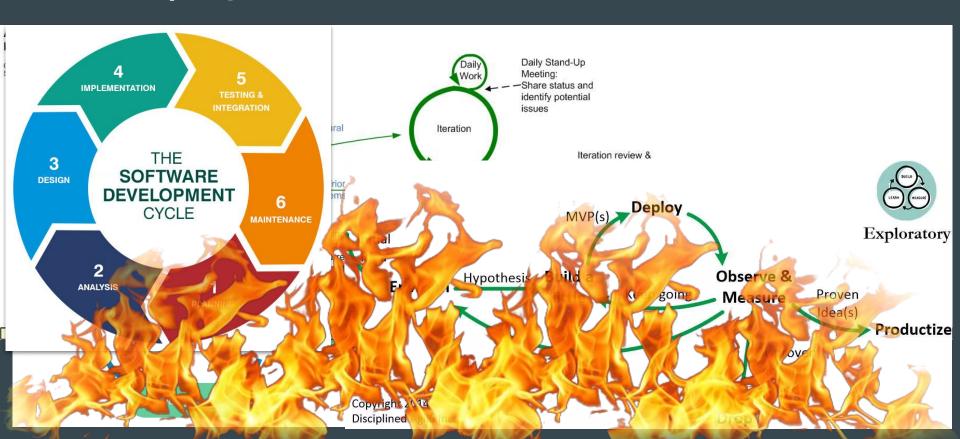




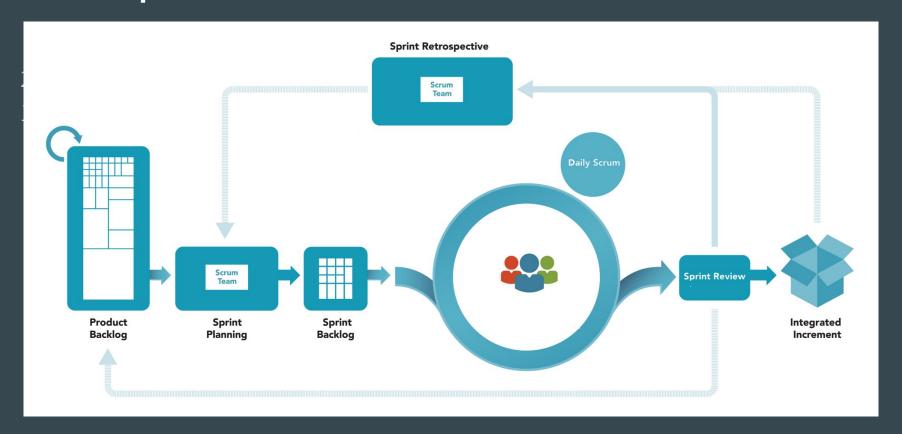








The Setup: Scrum

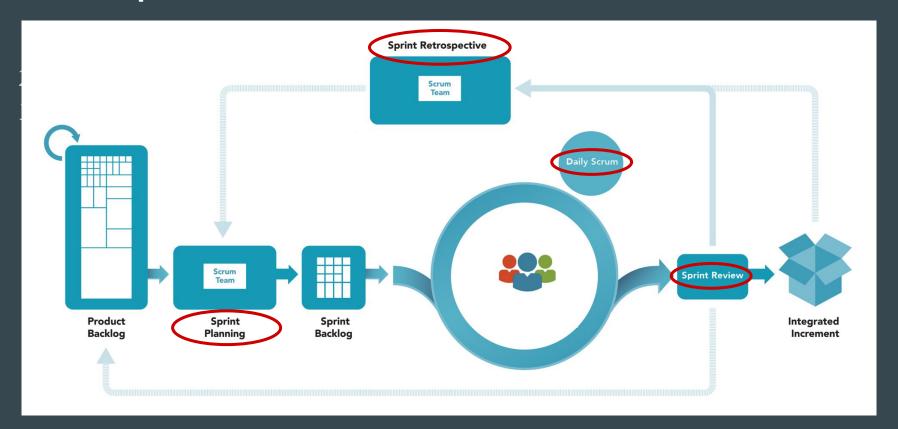


The Setup: Scrum

- 1. Possibly the most popular Agile framework
- 2. Fairly simple construct with consistent terminology used in the industry
- 3. Has the necessary elements built-in

The takeaways today can be leveraged for your version of Agile.

The Setup: Scrum



The Setup: Sprint Planning

The team pulls from the product backlog, estimates the groomed (ready to be worked on) features, and commits as a team to the goal for the sprint.

The Setup: Daily Scrum

The team meets each morning to review work status. It's common for these 3 questions to be answered by each team member:

- 1. What did you do yesterday?
- 2. What are you doing today?
- 3. Do you have any blockers?

The Setup: Sprint Review

Demo working software to the users and stakeholders to show progress, gain trust, and gather feedback.

The Setup: Sprint Retrospective

The team meets at the very end of the sprint to discuss how the team behaved, worked together, issues that arose, improvements that can be made.

Classic meeting frameworks:

- 1. Start doing, stop doing, keep doing
- 2. What went well, what went poorly

Aim for a couple of clearly defined action items to then review at the next retro.

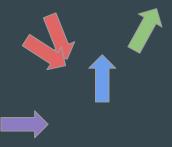
1. Forming

- a. A group of individuals
- b. Unclear purpose
- c. Little team agreement
- d. Excitement & anticipation
- e. Zero to very low output, unknown quality



2. Storming

- a. Seeking shared vision, contribution, and purpose
- b. Reality sets in
- c. Conflict & power struggles
- d. Role definition begins
- e. Low output, poor quality







3. Norming

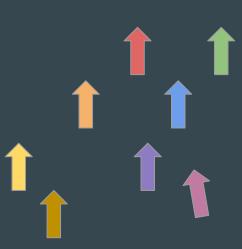
- a. Clear roles & responsibilities
- b. Agreement & consensus
- c. Trust & healthy conflict
- d. Scaling can occur
- e. Accelerating output and quality improvement



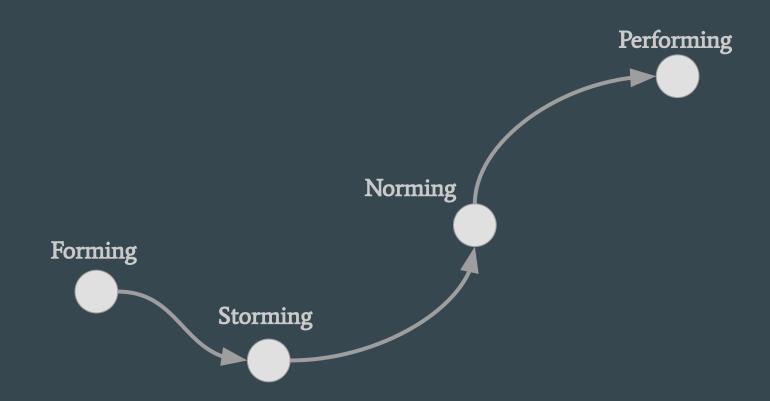


4. Performing

- a. Team independence
- b. Sacrifices for the greater good
- c. Open debate, very low conflict
- d. Individuals & team have strong sense of their value
- e. High output with plateauing gains, very high quality



The Setup: Stages of Group Development Flowchart



Team Development Stage	Leadership Strategies	Keys to success
Forming (Setting the stage) ^[11]	Coordinating Behaviors	- Purposefully picking the team - Facilitate team to identify goals - Ensure the team development of a shared mental model
Storming (Resolving conflict and tension) ^[11]	Coaching Behaviors	- Act as a resource person to the team - Develop mutual trust - Calm the work environment
Norming & Performing (Successfully implementing and sustaining projects) ^[11]	Empowering Behaviors	- Get feedback from staff - Allow for the transfer of leadership - Set aside time for planning and engaging the team
Outperforming & Adjourning (Expanding initiative and integrating new members) ^[11]	Supporting Behaviors	- Allow for flexibility in team roles - Assist in the timing and selection of new member - Create future leadership opportunities

Forming

The team is new, the goal is undefined.

Key objectives:

- 1. Provide clarity
- 2. Accomplish early wins

We accomplish both of these with *goals*. Set the goal-oriented expectation from the very beginning.

Forming & Sprint Planning

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- 2. Have a unit of estimation decided. Have seeded examples from other software's features using your unit of estimation. Define what's included with the estimate: bugs, investigation, testing?
- 3. Avoid role definitions. Right now, it's a group of people helping each other out.

Forming & Daily Scrum

1. What did you do yesterday? What did you do today? Any blockers?

Forming & Daily Scrum

1. <rant>

What did you do yesterday? What did you do today? Any blockers?"

Re-state the sprint goals. How are we progressing towards the goal? What are you doing towards those goals today? Where can the team help? What is the team blocked on?

Have the board visible! Talk from the Sprint board (or Kanban, task, etc.). </rant>

Forming & Sprint Review

1. Called "Sprint 0" instead of "Sprint 1" because there's generally not much delivered yet. The project is being setup.

Nonetheless, we set out clearly defined goals! Did we hit the goals?

The early Sprint Reviews with stakeholders are where to build trust. Trust begets confidence. Report on knowledge gained, risks removed.

Forming & Sprint Retrospective

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- 1. Have a format ready. Any will do. The most important takeaway is the few action items. Those action items have reasons and goals attached to them.
- 2. "Did we accomplish our goals? If not, why?"
- 3. "How well did we estimate? Why were we off?"
- 4. Do the action items! Put them on the board, assign them to someone.

We emphasize hitting our commitment. We focus on good estimations so we can set ourselves up for realistic goals.

Storming & Sprint Planning

- 1. Start the conversation on "projected velocity".
- 2. There's not enough historical data yet to look at the average, and the team's changing so rapidly that what happened in the first sprints is different enough.
- 3. "Projected" includes talking about what will be happening ahead of the current moment. New team members, changes in architecture, etc.
- 4. Challenge the team to think critically about how much work they can take on before the numbers are ready. How close will they be?

Storming & Daily Scrum

- 1. More important than any process, a team's morale / motivation / attitude is the best indicator of success and potential output.
 - a. Solve for the *whole* team, not the worst offender.

Storming & Daily Scrum

- 1. More important than any process, a team's morale / motivation / attitude is the best indicator of success and potential output.
- 2. At end of scrum, check the team's confidence with a blind vote. Throw a fist with 1-5. 1 is very low confidence, 5 is very high. Discuss discrepancies of 2 or more.
 - a. "Fist of Five"
- 3. Introduce the burndown chart. It is *information*, but does not provide guidance without context. It should not be used, in a vacuum, to drive decisions.
- 4. Keep updates related to the project itself, and the team's operations on that project.
- Start timeboxing.

Storming & Sprint Review

- 1. Early wins by delivering workable key features and solving key risks. This is the correct strategy for solving the product & business's needs.
- 2. These early wins are incredible for morale. Celebrate them!
- 3. We continue to focus on building trust with the customer. Having the customer's trust is a morale boost for the team.

Storming & Sprint Retrospective

- 1. Sprint teams are cross-functional and the team's goals are shared.
- 2. As roles and responsibilities shake out, continue to impress the importance of everyone ultimately being responsible.
- 3. Encourage code reviews, lunch and learns, paired programming, etc.
- 4. Strong understanding of the whole encourages shared ownership and greater sense of confidence and responsibility.

Norming & Sprint Planning

- 1. Consistency has started to form, now we improve!
- 2. Look for opportunities to slowly increase velocity *with the team's confidence*. It is still their commitment.
- 3. Explain that this will plateau, but we want to find the plateau.
- 4. Now that we're finding consistency, focus on grooming to get ahead of the next sprint. We want to build a lead on estimates so forecasting can be presented.
- 5. Forecasting builds trust, and gives the team clarity.

Crunchy timelines can make it very difficult to accelerate in this stage.

Norming & Daily Scrum

- Read the room. This is the temperature check to understand the team's current stage of development.
- 2. The team is having constructive conversations each morning.
- 3. The team identifies action items from the meeting and chases them down immediately with the necessary people.
- 4. The team starts the day with a clear sense of direction and urgency!
- 5. Confidence still varies, but the team makes effective corrective actions.

Norming & Sprint Review

- 1. The Sprint Review is a bright spot. The customer is used to see incremental improvement, and are active participants in giving feedback.
- 2. There's urgency, but the team looks forward to the Sprint Review. Celebrating successes means the Sprint Review is confirmation of work well done.

Norming & Sprint Retrospective

- 1. Conversations from the team are tactical and focus on incremental improvements.
- 2. The conversation is fluid and collaborative for all team members. Everyone has found a voice.
- 3. Continually reviewing our estimate accuracy.
- 4. Beginning to tackle project risks as a variable that will impact forecasts and timelines.
- 5. Risks should be communicated as a larger range to the forecasted schedule.
- 6. Estimated scope vs. desired scope is always a factor to report on.

Performing & Sprint Planning

- 1. The team spends much less time grooming now because a lead on estimates is built and only needs maintained.
- 2. The team is also practiced at their refinement and estimates, meaning the commitments for a Sprint can be made in under 30 minutes.
- 3. The team finds consensus on confidence quickly.

Performing & Daily Scrum

- 1. Confidence is regularly between a 3 and 5 because significant risks are forecasted ahead of the sprint and removed.
- 2. The meeting feels light, positive, smooth, routine.

Performing & Sprint Review

- 1. The customer has confidence that the commitment from two weeks ago is what they will see.
- 2. Continual delivery... the team is reporting on the *value* or *results* of the software as much as they are talking about the features delivered. Seeing the impact of the effort, the fruits of their effort, is another huge boost to morale.

Performing & Sprint Retrospective

- 1. When have you hit the plateau versus gotten stuck at a bottleneck?
- 2. The team is performing regularly, but continues to challenge itself to improve.
- 3. Rarely are projects consistent for so long that this is easily maintained. What changes have happened? What changes are coming? What is the impact?

Q&A

Thank you!

Robbie Sykes

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