

**Certified
Scrum Master®**



Participants Workbook

Peter Stevens
peter@saat-network.ch



Name: _____

Space for your notes :-)

These materials are made available under a Creative Commons License:
Attribution Share Alike CC-BY-SA 4.0

Original Author:

Peter Stevens, peter@saat-network.ch

Revision History

- Revision 1.33 Updated Scrum as a Story Map, High-Performance Team Graphics and End of Class activities
- Revision 1.32 Include Presentation Material from Roles and Events as Appendix
- Revision 1.30 Integrate corrections (typo etc) from Discovering Scrum Workshop, Update with Scrum Alliance path to CSP and current mentoring offerings
- Revision 1.21 Added Section of Retrospectives and Brainstorming, updated section on My Personal Agility.

Additional Contributors

Translation Team:

- Nicolas Delahaye – French
- Laura Quattri, Paolo Sammicheli – Italian

Special Thanks

Paolo Sammicheli, Alma Vazquez Lopez, Frederic Merizen and Ricardo Appleton for catching typos and errors in v1.21!

If you make additions or changes to this work, please

- Add your name to the list of contributors
- Otherwise, leave the list of contributors unchanged
- Send a source version of your update to the Original Author.

Fulfilling these three points confirms that you are in compliance with the requirements of the CC-BY-SA 4.0 License.

Certified Scrum Master and the Certified Scrum Master Graphic are ® Registered Trademarks of the Scrum Alliance. If you are not a Scrum Alliance Certified Scrum Trainer, then you must remove these trademarks.

You are welcome to contact the Original Author to join the project to develop and maintain these materials.

More space for your notes :-)

1. What do you want to learn?

Probable Agenda

Day 1: Learn the Basics

Day 2: Apply the Basics / Advanced Topics (maybe)

Successful Course

- Getting Started
 - What are the core principles of Scrum? 15 → Inspect and adapt
- How can we work together more effectively? 17 → Working Agreements
- What should you do before you leave the class? 55 → Checklist

Core Scrum

- How does Scrum work? 18 → Video, Answer 3 key questions about Scrum
- When is something (really) done? 24 → Definition of Done and the Increment
- Who is responsible for what? 25 → the Scrum Roles
- What happens when? 29 → the Scrum Activities
- How to improve performance? 31 → the Retrospective
- How to manage requirements in Scrum? 33 → the Product Backlog

Agile Practices

- How to organize work? → the task board
- How to monitor progress? 38 → the burn down chart
- How to react to change? 40 → prioritize

Feel the Passion!

- What does a great Scrum Master do? 41 → How do you have to change?
- How can the team improve performance? 43 → Collaboration, Focus, Flow
- Experience a Sprint! 46 → produce some deliverable.

Scrum and the Organization

- When is Scrum the right Framework? 48 Empirical vs. Defined
- How is Scrum Different - Architecture? 49 → effects and side effects
- How is Scrum Different - Mindset? 52 → Agile Mindset Evaluation
- How to apply Scrum to a team of one person? 54 → Personal Agility

Table of Contents

1.	What do you want to learn?.....	5
2.	About Peter Stevens.....	7
3.	What Are The Career Paths In Scrum?.....	11
4.	Mentoring and Support And Problem Solving.....	13
5.	What's on the Dropbox?.....	14
6.	What are the core principles of Scrum?.....	15
7.	How can we work together more effectively?.....	17
8.	How does Scrum Work?.....	18
9.	When is something (really) done?.....	24
10.	Who is responsible for what?.....	25
11.	What happens when?.....	29
12.	How to Improve Performance?.....	31
13.	How To Manage Requirements In Scrum?.....	33
14.	How To Get Backlog Items Ready For Implementation?.....	36
15.	How to monitor progress?.....	38
16.	How To React To Change?.....	40
17.	What does a great Scrum Master do?.....	41
18.	How Can the Team Improve Performance?.....	43
19.	Experience a Sprint.....	46
20.	When is Scrum the Right Framework?.....	48
21.	How is Scrum Different? - Architecture.....	49
22.	How is Scrum Different? - Agile Mindset.....	52
23.	How to apply Scrum to a team of one?.....	54
24.	What to do before you leave class?.....	55
Appendix A	Agile Manifesto.....	56
Appendix B	Scrum Glossary.....	60
Appendix C	Audio Visual Materials.....	66
Appendix D	Challenges of adopting Scrum and Agile.....	71
Appendix E	Further Training and Support.....	75
Appendix F	Answers.....	87

2. About Peter Stevens

As a Swiss-American Scrum Trainer, my goal is not just to teach Agile values and practices, but to live those values and share the passion that makes Scrum special!



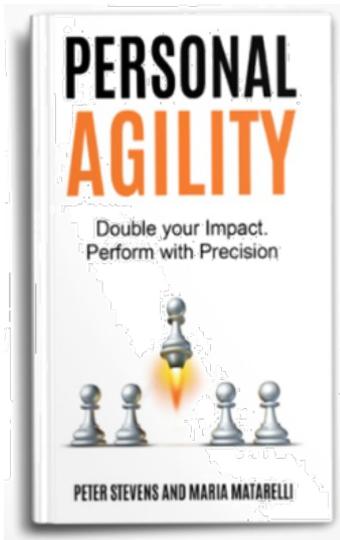
My mission is to inspire you to transform your world for the better!

I believe that Agile, Scrum and Lean Startup are transforming the world of work. This transformation is driven by people who are passionate about its potential for their own daily lives.



As a Certified Scrum Trainer, I am mostly active in Switzerland, Portugal and Italy. As a coach, my focus is on enabling start-ups to medium companies to meet the challenge of today's economy.

I have taught Scrum, the Agile mindset, and related practices to thousands of developers, project leaders, product managers, and line managers. My customers include many well known organizations in Switzerland and beyond. In 2012, I co-initiated the Stoos Network to rethink management.



Personal Agility is a simple framework to help you do more that matters. You can get more satisfaction in your life and achieve more at work.

Learn more and get free chapters at www.MyPersonalAgility.org!

Contact:

- peter@saat-network.ch <http://saat-network.ch>
- tel: +4179-422-6722 Skype: peterstev
- Twitter: @peterstev

*"We are uncovering better ways of doing what we do,
by doing it and by helping others to do the same."*

Blank lined area for notes on the left side of the page.

A-Ha! Moments

Numbered list (1-10) for recording 'A-Ha! Moments'.

To talk about back in the office

Numbered list (1-10) for recording items 'To talk about back in the office'.

Blank lined area for notes on the left side of the page.

A-Ha! Moments

Numbered list (1-10) for recording 'A-Ha! Moments'.

To talk about back in the office

Numbered list (1-10) for recording 'To talk about back in the office'.

Blank lined area for notes on the left side of the page.

A-Ha! Moments

Numbered list (1-10) for recording 'A-Ha! Moments'.

To talk about back in the office

Numbered list (1-10) for recording items to talk about back in the office.

3. What Are The Career Paths In Scrum?

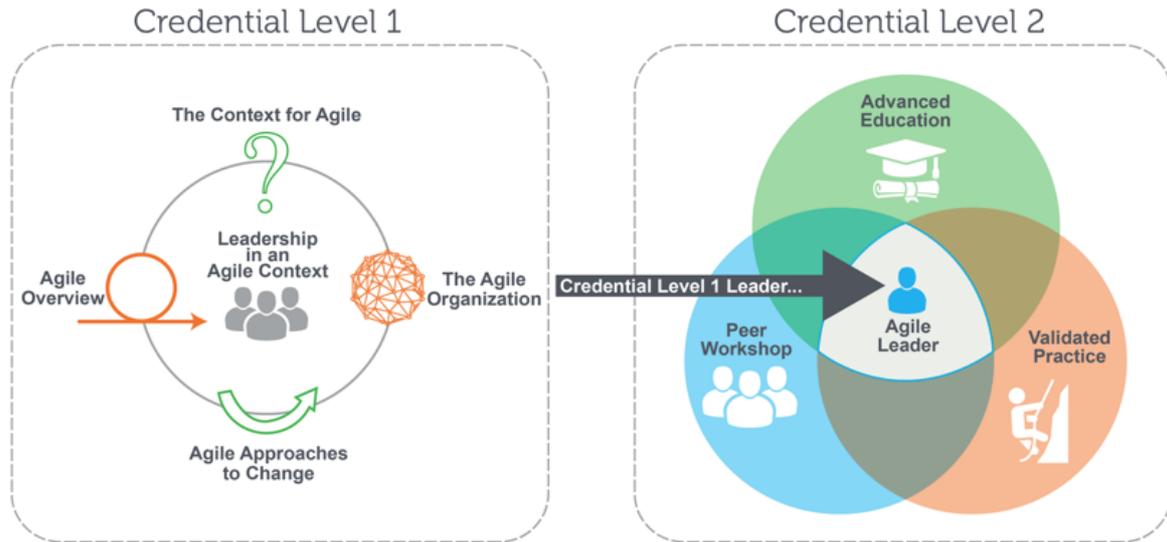
PATH TO CSP®



Interested in more information on Path to CSP®
Contact support at support@scrumalliance.org



Certified Agile Leadership Program



<https://www.scrumalliance.org/certifications>
<https://www.scrumalliance.org/agile-leadership>

4. Mentoring and Support And Problem Solving



Achieving Performance through Agile: Group Mentoring with Peter Stevens

For Project Managers, Managers, Scrum Masters, Product Owners and other Agile Leaders

5. What's on the Dropbox?

Top Level Directory	Subdirectory	Description
00_README.TXT		Information for using the dropbox
01_Preparation		Preparation Materials, XX means multiple languages available
	Manifesto for Agile Software Development_XX	The Agile Manifesto Values and Principles
	2016 Scrum Guide_XX	Official Definition of Scrum
	CSM Book vx.xx_XX	The current course materials
02_Material		Useful information
	00_Scrum Literature-EN.pdf	Suggested Readings
	00_Scrum Videos.pdf	Video (often used in courses)
	01 Authoritative Information	Sources considered authoritative in the Scrum Community
	02 Practitioners Guides	Guides Written by Leading Figures in the Agile Community
	11 Class Exercises	Material Used in Class
	12 Samples and Templates	Samples and Templates which might be useful to you...
	21 Other Stuff	exactly what it says
03_Presentation_de		Current Version of my German language slides
03_Presentation_en		Current Version of my English language slides

6. What are the core principles of Scrum?

Connection

Stand Up!

- Form a pair with someone you don't know well
- Interview each other
- Why are you here?
- What are your 3 principal goals at work?
- What is preventing you from achieving these goals?

Repeat until you have talked with 3 people .

When you're finished, take a seat next to the **last person** you spoke with. This will be your (first) pairing partner.

Concrete Practice

Prepare the impediments dashboard!

Explain "SMART" goals to your pairing partner, if needed.

Write your most important goal (one goal!) on a yellow card. Write your biggest impediment on a red card.

Timebox 3:00

Pairing

With your pairing partner, challenge each others goals. Is it SMART? Does it mean the recommendations for cards? If you want to rewrite your card, use the back of the card. Place your goal and your impediment next to each other on the impediments dashboard.

Timebox 3:00

"Departmental Scrum"

Stand with your table-mates around your impediments dashboard.

Each person reports to the group in 45 seconds:

- Who are you? Where do you work?
- Your biggest goal
- Your biggest impediment

One person keeps time. That person sounds the gong when a 45s time-box is up and immediately resets the timer for the next person. No pauses, just pass a talking stick from one person to the next. It's OK to finish (and pass the talking stick) early.

Time box per person: 0:45

Overall time box: (depend on team size): 6 people / Table: 5:00, 7 people: 6:00, 8 people: 7:00.

Summary

The core principle of Scrum is _____ and _____.

Common failure patterns are:

1. _____
2. _____
3. _____
4. _____
5. _____

Like weeds in a garden, evil is something you will never get rid of entirely. But you need to keep it in check otherwise you suffer negative consequences! Too many weeds in the garden means no tomatoes.

What should you consider as evil in your project, and keep to a minimum?

1. _____
2. _____
3. _____

7. How can we work together more effectively?

Connection

What agreements have you made with your colleagues so that you and they can work more effectively? What agreements have we already made in class? What effect have they had?

Timebox 2:00

Concepts

Agreement A binding, peer-to-peer decision, which constrains the behavior of the parties who made the agreement



I am in favor of this proposal



I cannot accept this proposal



I go with the team. Regardless of my preference, I abide by and support the teams decision. "Disagree and Commit."

Concrete Practice

1. What agreements could we make which would enable us to work more effectively?
Timebox 2:00
2. What agreement would you propose to address this issue?? Timebox 2:00
3. As a group, we will agree to address a few issues together.

Issue	Your Proposal	Our Agreement

Conclusion

Where do you find the Scrum Values (Openness, Courage, Respect, Commitment, Focus) in our agreements?

8. How does Scrum Work?

Connection

On the Story Map of Scrum (next page), write down as much as you know about each of the values, principles, roles, activities and artifacts. Timebox 1x 3:00

Concepts

Watch Lyssa Adkins Video on Scrum.

Concrete Practice

1. Work individually. Write your answers on post-its, one item per card. (3:00)
 1. How do you know, that everyone is working on the right thing?
 2. How do you know, that you will have a something of value at the end the project?
 3. What challenges do you see when implementing Scrum in your organization?
2. Compare your answers with those of your pairing partner. Where do you agree? Where do you disagree? (3:00)
3. Be prepared to present the answers you agree on to rest of the class

Scrum as a Story Map

Scrum as a Story Map

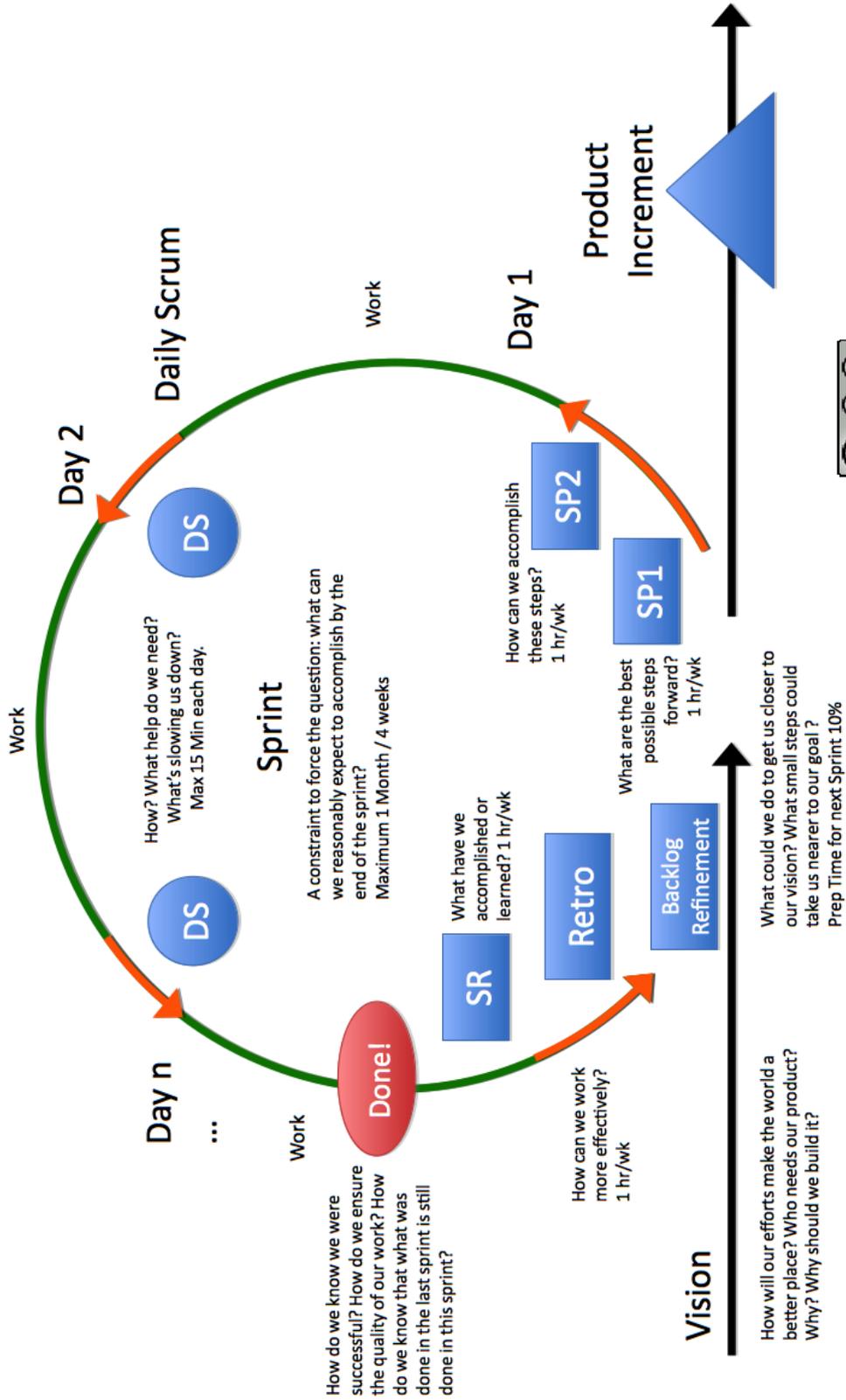
Principles	Values	Roles	Events	Artifacts	Agreements
Inspection	Focus	Scrum Master	Sprint	Product Backlog	Definition of Done
Adaption	Commitment	Product Owner	Sprint Planning	Forecast	Vision
Transparency	Courage	Development Team	Daily Scrum	Sprint Backlog	Sprint Goal
	Openness	(Scrum Team)	Sprint Review	Increment	Definition of Ready
	Respect		Retrospective		Working Agreement
			(Backlog Refinement)		Sprint Contract

Legend:

Scrum Guide 2017	Some sources	Peter's Practices
------------------	--------------	-------------------

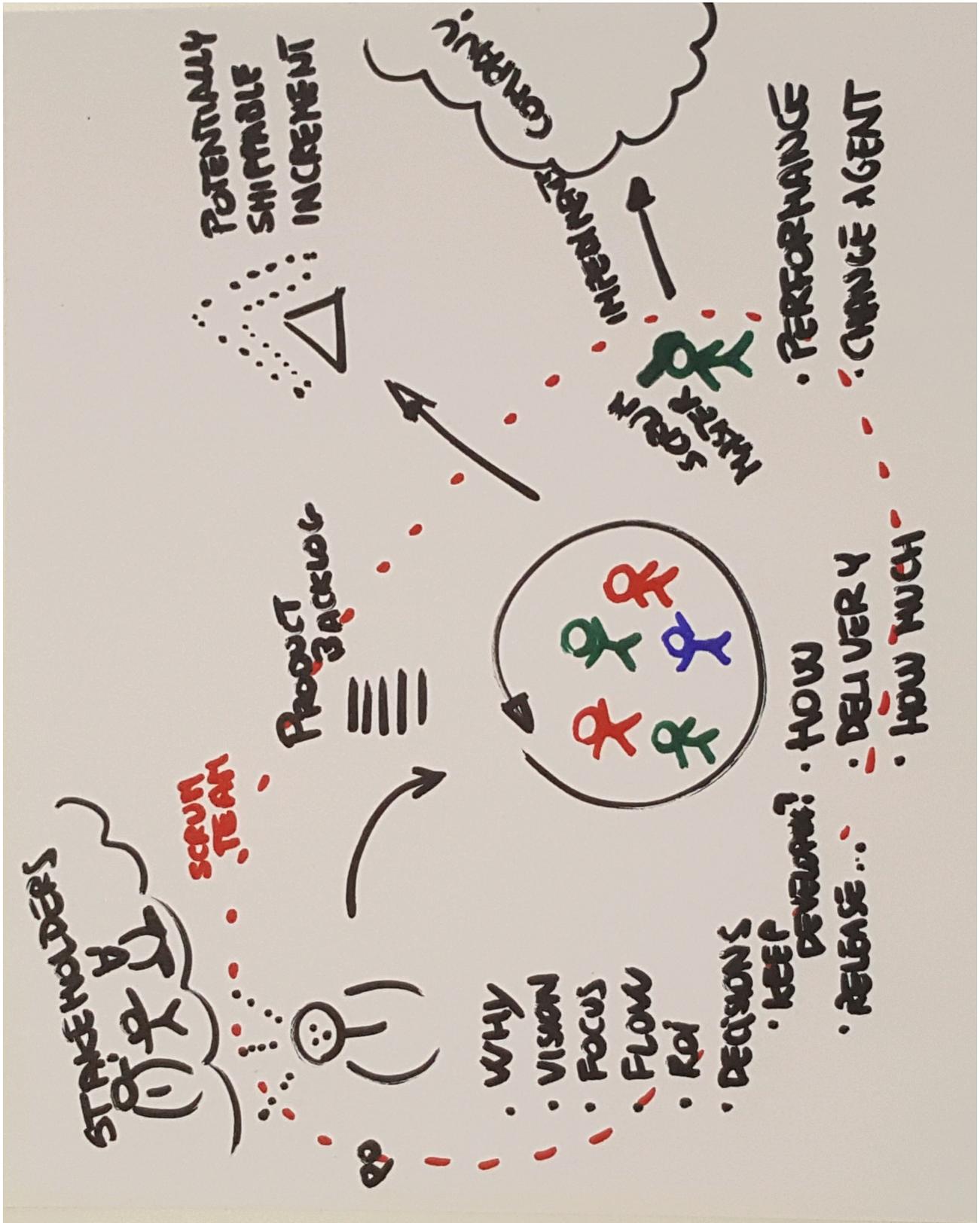


Scrum Flow as Powerful Questions



(CC BY SA) Peter Stevens

Overview of Scrum roles and their responsibilities



The Elements of Scrum

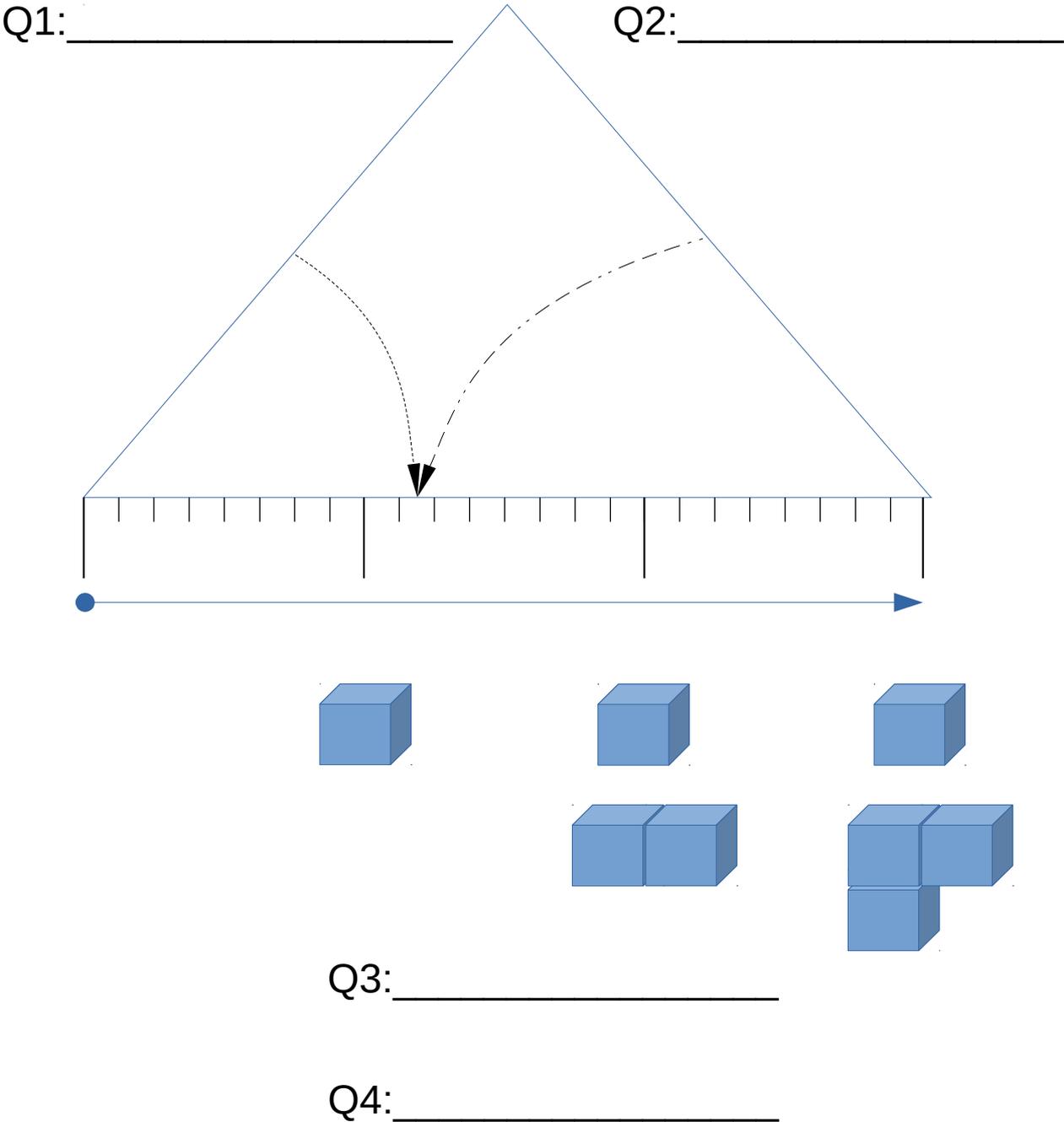
Term	Meaning	
Scrum Principles	Scrum Implements empirical process control. The key pillars are inspection, adaption and transparency. Scrum does not tell you how to solve your problems. It helps you ensure that you are asking the right questions at the right time.	
Scrum Values	Focus, Commitment, Courage, Openness, Respect Scrum enables you to create an environment where you can live these and other values.	
Scrum Team	Consists of the three roles: Product Owner, Development Team, and Scrum Master. The Scrum Team collaborates to achieve a common goal. Also known as the “Whole Team.”	
Product Owner	“The world's ambassador to the team”. The Product Owner maximizes the value of the work done by the Team. The PO decides on priorities and has the final say whether something is done. The PO is ultimately responsible for the answering the question “Why?”	
Development Team	The Development Team (and only the Development Team) creates the solution. Often referred to simply as “the team,” they has all the skills necessary to get from “Idea” to “Done”. The team is responsible for “How?”. The team is protected from noise but not isolated from the organization.	
Scrum Master	The Scrum Master is responsible for ensuring Scrum is understood and enacted. “The team's ambassador to the world”. The key word is performance. A Scrum Master needs to be a trainer, facilitator, consultant, coach and change agent. When the teams needs something from the organization, the Scrum Master's job is to make it happen.	
Sprint	A time-boxed period for completing work. A Sprint consists of planning, doing and review, both of the results and of how the Team worked. All forecast work should be Done by the end of the Sprint.	Time Box: Max: 30 d / 1 m / 4 wks Typical: 2 wks
Sprint Planning	Sprint planning addresses 2 questions: What to accomplish this Sprint, and how to achieve it. Only high priority items that can be completed to “Done” may be taken into the sprint.	Time-box: 2/hr per week PO, DT: Must SM: Should Others: on invitation
Daily Scrum	A daily opportunity for the development team to inspect and adapt on their progress through the sprint. Three defined questions help them recognize that they need to talk to each other (preferably right after the Daily Scrum).	Time-box: 15 Minutes DT: Must SM: Should Others: Not invited
Sprint Review	An opportunity to inspect and adapt on the product. This event is held for the stakeholders. Forecasted functionality should be Done before this event starts.	Time-box: 1/hr per week PO, DT: Must SM: Should Others: On invitation of PO
Sprint Retrospective	An opportunity to inspect and adapt on the team and the process. The Development Team reflects on how they worked to identify improvements for the next Sprint. If issues (“impediments”) extend beyond a single team, management is	Time-box: 1/hr per week DT: Must Others: On invitation of DT

Term	Meaning
	expected to help resolve the situation promptly.
Product Backlog	The single source of requirements for the product under development. It consists of functional and non-functional requirements. It is not used to plan work or define intermediate artifacts, like a specification, which have no value for the customer or user.
Forecast	The subset of (by definition top priority) Product Backlog Items that the Team reasonably believes it can complete during the Sprint. (Often mistakenly called the Sprint Backlog). The Team is expected to respect the other constraints of the "Sprint Contract" as well.
Sprint Backlog	The Forecast, enriched with a technical concept and a task planning. The Sprint Backlog represents the Team's concept for achieving the goal set during Sprint Planning 1.
(Product) Increment	At least once per sprint the team must produce something of potential value to customers or stakeholders. For software, this is additional working functionality, in a state suitable for shipment. For hardware, this is often a potentially testable unit. For a startups this might be a step closer to being a viable company.
Definition of Done	A working agreement between all members of the Scrum team. Ensuring that backlog items are really done, each sprint ensures the quality of the product and makes release plans dependable.
Vision	Scrum doesn't really say what this is, but the Product Owner is expected to have one, to make sure that the stakeholders support it, and to ensure that the Development Team understands it. (In Personal Agility, this is called "What Really Matters").
Sprint Goal	A business goal to be achieved through this sprint. This goal represents the best step forward given what you know today to achieving the Vision of the product.
Definition of Ready	Like the definition of Done for the Product Owner. Backlog items that are understood by the team, and small enough and well defined enough to fit into a sprint, are considered "Ready."
Working Agreements	The basis for making additional improvements in team performance and effectiveness. Working agreements can be made within the Scrum Team or with other parts of the organization.
Sprint Contract	The working agreement between the Development Team and the Product Owner. Time, Cost and Quality are fixed. Scope (the Forecast) is firm, but variable. A good Scrum Team always delivers on time and on budget, and what it delivers, works. It may deliver more or less than forecast. The entire organization must respect the Sprint Contract, others forecasts and commitments made by the Team are meaningless.

9. When is something (really) done?

Every Scrum Project Needs to Answer 3 questions (and Software Projects need to answer 4 questions) about the value they produce.

“The Three Faces of Done”



10. Who is responsible for what?

Connection:

What does a project manager do? Write as many functions of a project manager that you can think of on cards/post-its. Timebox 2 * 3:00 Minutes to get cards on the board.

Concepts

Read the presentation 12-Roles-CSM.v0XX until you get to the slide, *The interests of other stakeholders are represented by the Product Owner* (Currently Slide 18).

Concrete Practice

1. Check the box with the *best answer* for each duty.
2 * 3:00 Minutes (do your best! If you don't finish, don't worry)
2. Compare answers with your pairing partner. (Only talk about the differences). Understand why your partner had a different answer. It's OK to change yours!
2 * 3:00 Minutes
3. Score your test. Write your number correct / number answered on a card.
3:00 Minutes

Conclusion

Take your cards on the Project Manager Flipchart and move them to the corresponding Scrum Role.

Which role is most similar to a Project Manager? _____

What duties are still assigned to a Project Manager in Scrum? _____

What additional responsibilities are defined for the Scrum Roles compared to a Project Manager?

Self Evaluation

Number	Function	Scrum Master	Product Owner	Dev. Team	Whole Team	Line Manager	Not allowed	Not Defined
1	Requests a release							
2	Ensures discipline							
3	Changes the Sprint Goal during the sprint							
4	Distributes work among development team members							
5	May not also be the Product Owner							
6	Helps the Product Owner improve his/her work							
7	Does their best to deliver what was forecast							
8	Ensures for learning from success and failure							
9	Creates the product backlog							
10	Answers questions about the product backlog							
11	Is a single person, not a board or committee							
12	Explains to all the parties their responsibilities							
13	Defines and Implements standards which extend beyond a single team							
14	Ensures that sponsor's funds are well spent							
15	Protects the team from outside influences							
16	Refines the product backlog							
17	Decides how much can be delivered in the Sprint							
18	Formulates the Definition of Done							
19	Hires new team members							
20	Decides whether a backlog item is done							
21	Answers the phone when the customer calls							
22	Has authority to direct the development team							
23	Frames and communicates the product vision							

Number	Function	Scrum Master	Product Owner	Dev. Team	Whole Team	Line Manager	Not allowed	Not Defined
24	Might indicate dysfunction if not invited to the retrospective							
25	Ensures that the product backlog is created							
26	Leads the team like a project manager							
27	Takes responsibility for removing impediments							
28	May cancel a sprint							
29	Can change or modify task planning during the Sprint							
30	Ensures that everyone follow the rules							
31	Represents the interests of stakeholders							
32	Prioritizes (sequences) the requirements of the product							
33	Decides how to achieve the Sprint Goal							
34	Explains the Scrum Rules							
35	Is accountable for the quality of the Product							
36	Has all the skills necessary to deliver a product increment							
37	Accountable that productivity is increasing							
38	Knows the Vision of the Product							
39	Defines and Implements standards within the team							
40	Formulates Requirements on the product							
41	Estimates Product Backlog Items							
42	Decides about sprint length							
43	Consists of 7 +/- 2 people							
44	May not also be the Scrum Master							

Number Correct/Answered: ____/____

11. What happens when?

Connection

Review “Scrum as Powerful questions. Timebox 1x 3:00.

Concepts

Closed question: Yes/No answer

Open question: Invitation to discuss

Powerful question: Invitation to think before your respond!

Attendance

Must: the person must be present, otherwise the activity cannot be performed

Should: the person is highly important, but the activity does not stop just because that person is not available.

On Invitation: In theory, it is advantageous for the person to attend, but there may be risks or negative side effects. If the Development Team chooses to invite, this person may come.

Available: this person is not normally required, but might be needed in some cases. The person must be reachable if needed.

Concrete Practice

Imagine you are an actor in a play! Get ready to play your role! Work as a table group.

- Choose your roles: You need at least one person for each of Product Owner, Scrum Master, Development Team, and Customer/Stakeholder.
- The Scrum Master is responsible for time keeping. If you have more than one, choose one to be time keeper.
- Use masking tape to create the Scrum Flow and sticky notes or cards to identify the activities and their place on the flow.

For each event (Sprint Planning 1 & 2, Daily Scrum, Sprint Review, Retrospective, Backlog Refinement), discuss how you will play the role:

- What do you want to accomplish? (Goal, Desired Outputs)
- What do you need to see? (Inputs)
- What questions will you ask?
- What answers can you provide? (Outputs)

Timeboxes: Per activity: 3 Minutes, Total: 25 Minutes.

Note

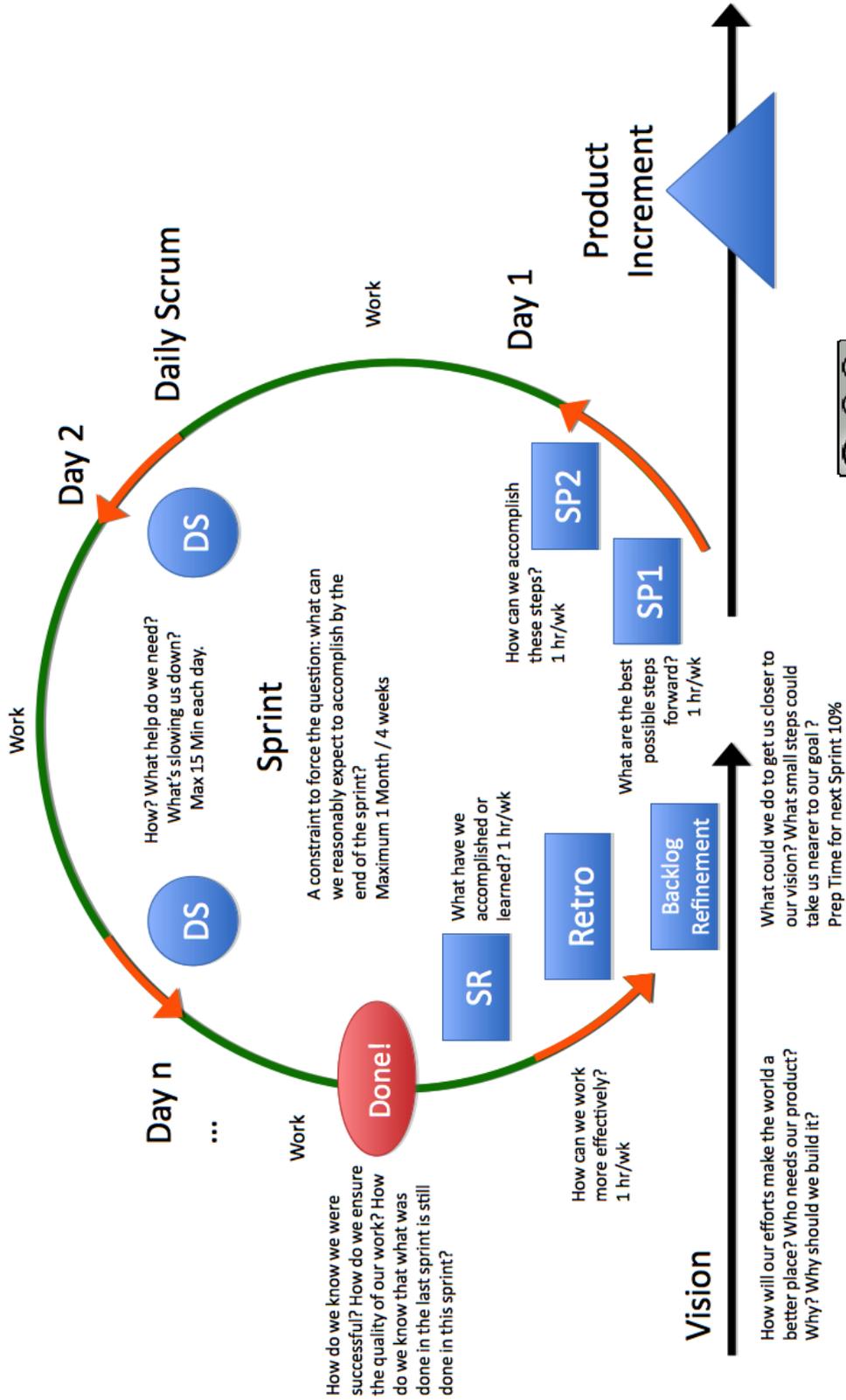
The Scrum Guide and Scrum Alliance consider Sprint Planning to be one meeting with two parts, corresponding to SP1 and SP2. The time box for Sprint Planning is simply the sum of both halves.

I prefer to consider Sprint Planning as two separate activities because they answer different questions, have different required participants, and scaling patterns treat the activities separately.

Answers can be found in 13-Meetings-CSM.v0XX



Scrum Flow as Powerful Questions



(CC BY SA) Peter Stevens

12. How to Improve Performance?

Connections

Why investigate an Airplane crash?

In a traditional project, what is the purpose of a “post-mortem”? When do you do it? What happens to the results?

Concepts

Retrospective Prime Directive

Regardless of what we discover, we understand and truly believe that everyone did the best job they could, given what they knew at the time, their skills and abilities, the resources available, and the situation at hand.

At the end of a project everyone knows so much more. Naturally we will discover decisions and actions we wish we could do over. This is wisdom to be celebrated, not judgement used to embarrass.

Steps in a Retrospective

- Create Safety
- Gather Information
- Create Insights
- Define Action Plan
- Close

Concrete Practice

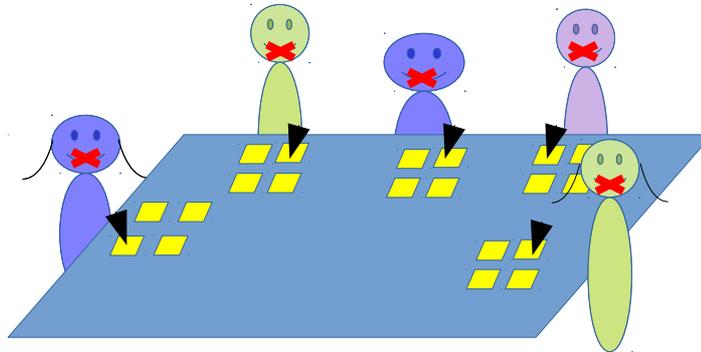
- Pick a Movie to retrospect on.
- Or retrospect on the Scrum Simulation from the Kick Off to the Sprint Review.

As a team, use the Brainstorming Techniques on Page Error: Reference source not found to answer:

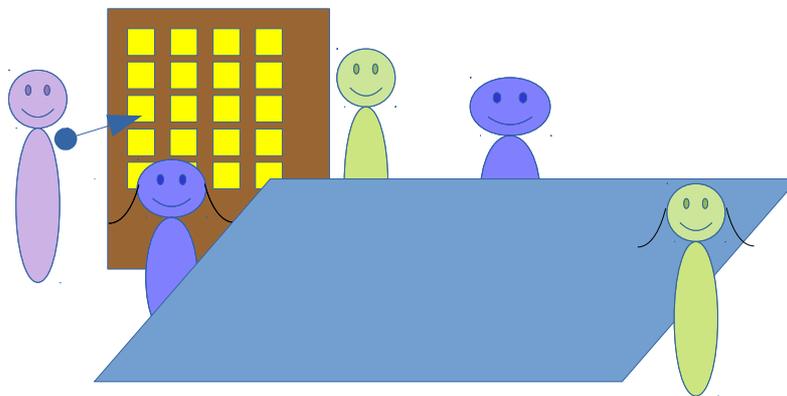
1. **What happened?** (Thinking and Sharing steps only). Visualize answers by how happy or sad they made you feel.
2. **What could you do differently?** More of, Less of, Problems that need solving. (Again, use Thinking and Sharing Steps)
3. **Identify what you want to do differently.** Use Consolidate and Prioritize steps to identify your top priority measures.

How to brainstorm?

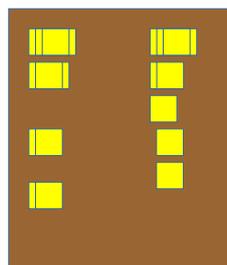
1. Think – Write ideas on cards
Don't talk to each other!



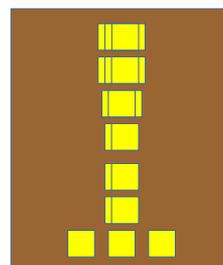
2. Share - Explain your ideas
One person at a time



3. Consolidate
(recognize duplicates)



4. Prioritize
(dot voting)



Typical Time Boxes in a Retrospective

	Thinking	Sharing	Discussion	Consolidate	Prioritize
Course	2 Minutes	1 Minute / Person	0	3 Minutes	3 Minutes
Real Life	3 Minutes	2-3 Minutes / Person	0 to 10 Minutes	5 Minutes	3 Minutes

13. How To Manage Requirements In Scrum?

Connections

Why do we create products? To satisfy some human need.

Scrum has a constraint: At least one per sprint, the Development Team must produce something of value to the customer or user.

Given that sprints are fixed, how can you constrain requirements so that you and your team can satisfy this constraint? Discuss with your pairing partner. Time-box 2:00

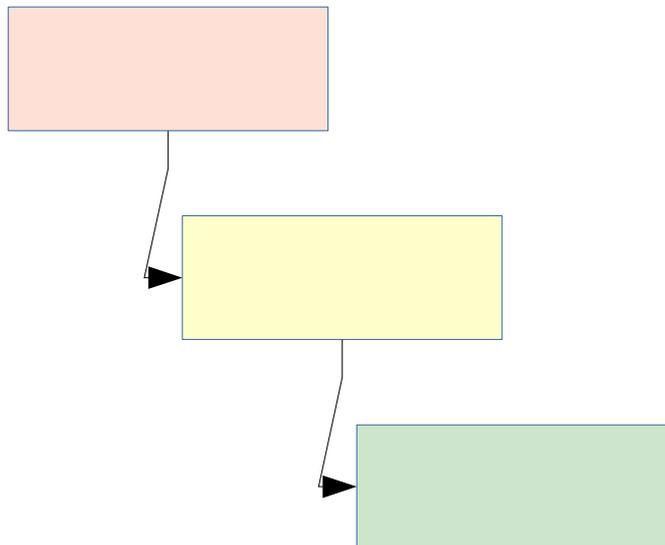
Ideas for constraining backlog items:

Content – User Stories

Although not formally part of Scrum, User Stories are a widely adopted practice for representing backlog items.

As some role, I want some feature to achieve some intrinsic goal.

Components of a User Story



Concrete Practice: User Stories

Write a story: write one functional requirement from your real-life context as a user story.(3:00)

Challenge your story: With your pairing partner, test you story against the INVEST-criteria. How big is it on the T-Shirt Scale? Rewrite if necessary to make it INVEST-compatible (Time-box 3:00 each)

Split a story. Take a big story, and split it into several little stories. Each new story should be INVEST-compatible, and the end result of the little stories together should satisfy the goal of the big story. (Time-box 2x3:00)

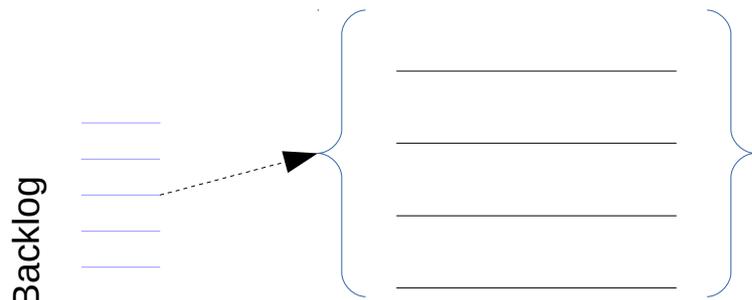
Concrete Practice

“INVEST” reminds us of the characteristics of a good backlog item. Map the INVEST term to the objective they serve:

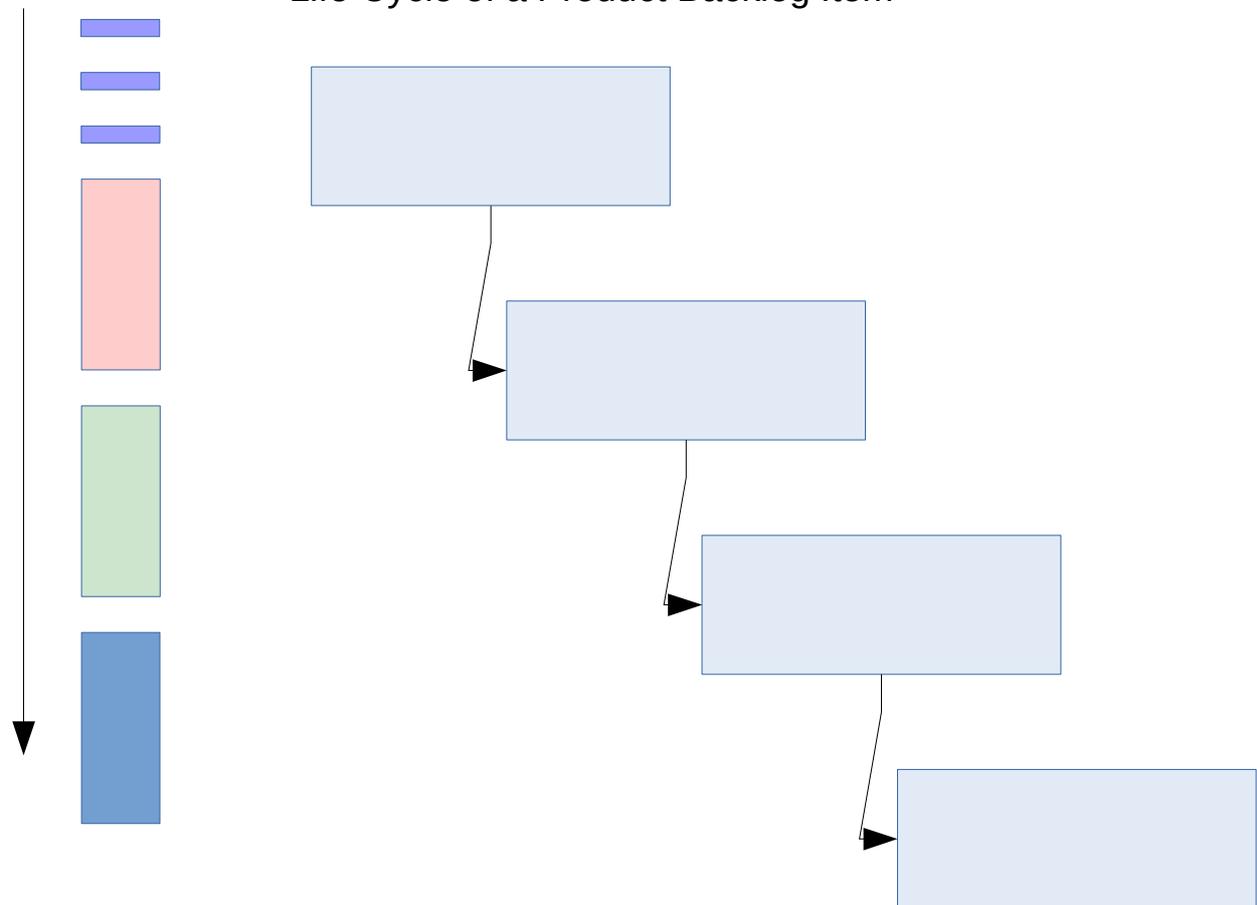
	a. Enable making decisions when most knowledge is available
	b. Ensure flexibility to do the right thing
Independent	c. No defining artifacts for developers
Negotiable	d. No Tasks, only features
Valuable	e. Not finishable
Estimatable	f. Not too big
Small (Right Sized)	g. Product Owner can sequence in any order
Testable	h. Not too vague
	j. Understood by Development Team

Concepts – What is the Product Backlog?

Product Backlog Item



Life Cycle of a Product Backlog Item



14. How To Get Backlog Items Ready For Implementation?

The process of backlog refinement can be explained through the metaphor a product backlog iceberg.

Concepts

Definitions

- Backlog item – represents value to a customer, user or stakeholder
- Task – used by the Development Team to help them organize themselves to implement backlog items. Tasks do not appear on the Product Backlog

General Classes of Backlog Items:

- Portfolio-level ideas: “Epics” “Themes” “Visions”
- Key Product characteristics: “Stories” or “Features”
- Ready to implement chunks: “Grains of Sand”

Widely used Agile Estimation Scales

- **XP Cards:** Description on the front of a card, confirmation on the back.
- **Story Points:** 1, 2, 3, 5, 8, 13, 20, 40, 100, Joker, Coffee.
- **T-Shirt Sizes:** XS, S, M, L, XL XXL, 3X.... Binary progression (1, 2, 4, 8...)
- **#NoEstimates:** 1, TFB, NFC. TB = Too Big, NC = No clue. F is For you to figure out.
- **Count Acceptance Tests.** Each step in How-To-Demo is a point.

Concrete Practice

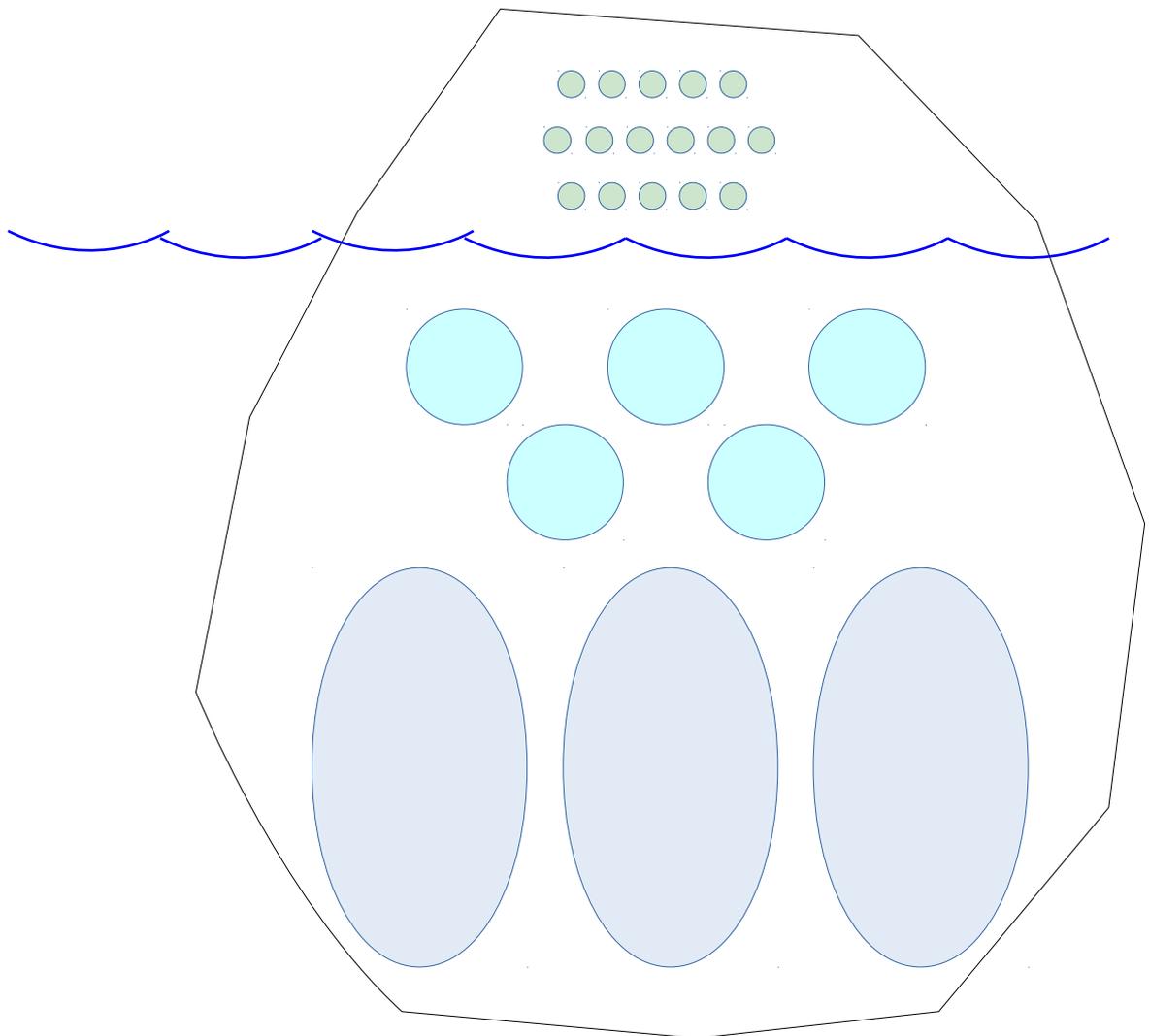
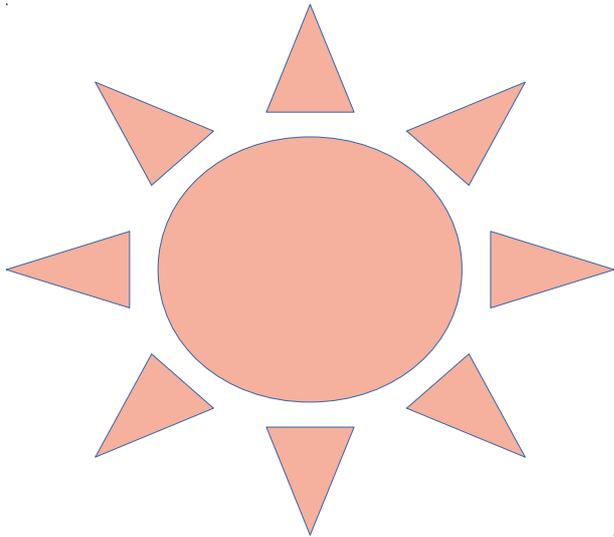
How does backlog refinement work? Annotate the diagram on the following page to explain the process.

Time-box 6:00

Some questions to answer:

- What is the significance of the water line?
- What are typical estimates for each size of Classes of Backlog Items?
- From idea to deployment, how long does it take to implement each class of backlog item in your company? How long should it take?
- When do you do backlog refinement?
- Who needs to be present for backlog refinement?

Product Backlog Iceberg



15. How to monitor progress?

Connection

You are going to visit your mother-in-law in Geneva.

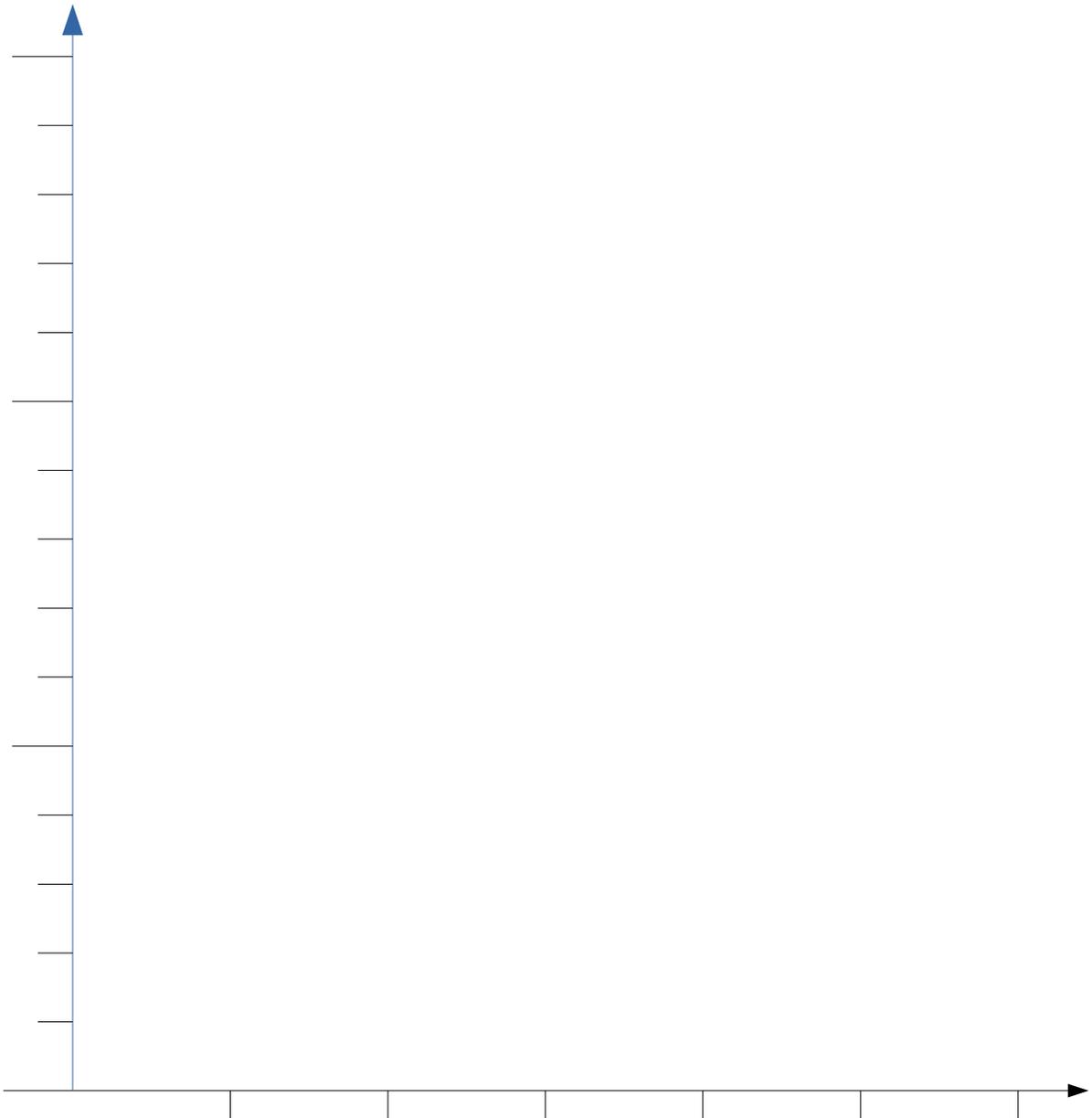
From Zurich to Geneva is 360 km. You plan to leave at 9:00am. Since the speed limit is 120 km/h, you tell her to expect you there at noon. She says, "Great!" and will have lunch ready!

You leave on time and expect to arrive in Bern, 120 km away at 10:00. Your actual arrival time however is 10:30. Now what?

- When do you expect to arrive in Geneva?
- When should you contact your mother-in-law?
- What options can you offer her?
- How is this case different than working with your stakeholders?

Timebox: 3:00

Wish vs. Reality (burn up chart)



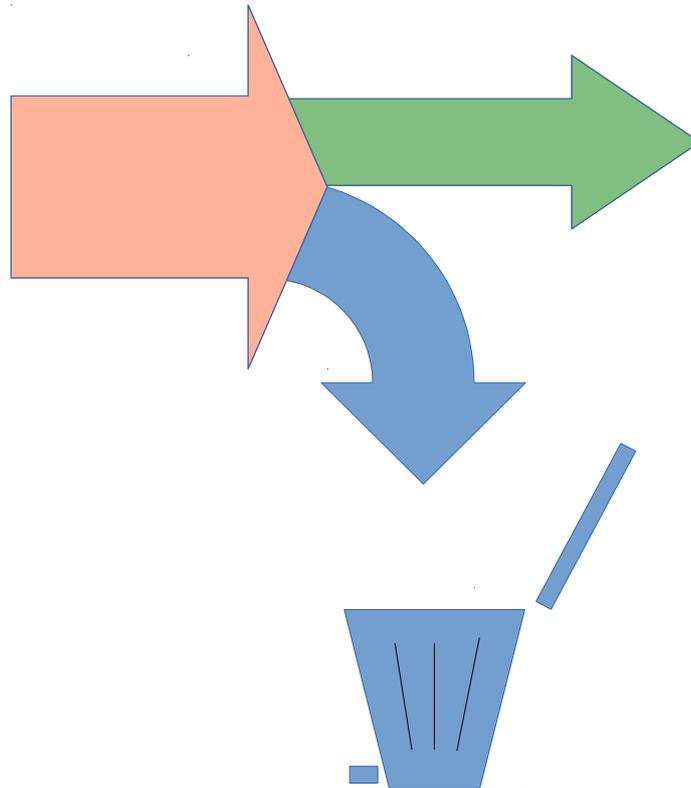
Concepts

- Label your axes!
- Wish: What you would like to have happen.
- Reality: What has happened.
- Projection: Extension of reality into the future.

Draw in Red
Draw in Green
Draw in Turquoise

16. How To React To Change?

Wish vs. Reality
(capacity with a time-box)



Visualize: by moving the “wish” lines on the burn down chart.

Identify 5 Strategies for meeting a deadline:

Idea	Costs Money?		
	Nope	Maybe	Definitely!

17. What does a great Scrum Master do?

Connection

How is a Scrum Master Different than a Project Manager? (2:00)

Concepts

Watch Marcel van Hoven, "The Scrum Master" (see Audio Visual Materials, p 66), Take notes on the following page.

Definitions:

- Doer – does the work
- Trainer – knows how to do the work, teaches others how to do the work
- Consultant – knows the best practice for your situation, tells you how to do it
- Coaching – asks questions to help you understand the problem and find solutions
- Mentor – has done it before, can give advice and open doors which make it easier for you.

Concrete Practice

Individually, draw a picture: What are the interfaces into and out of the Scrum Team? (3:00)

Conclusion

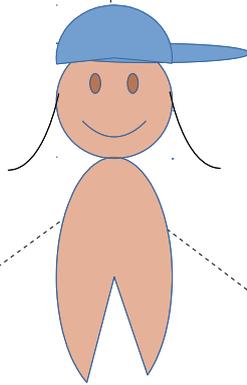
What will you do differently, now that you know what a Scrum Master to be a great Scrum Master?

1. _____
2. _____
3. _____

What Does a Scrum Master Do?

Does

Does not



Responsibilities

Essentials:

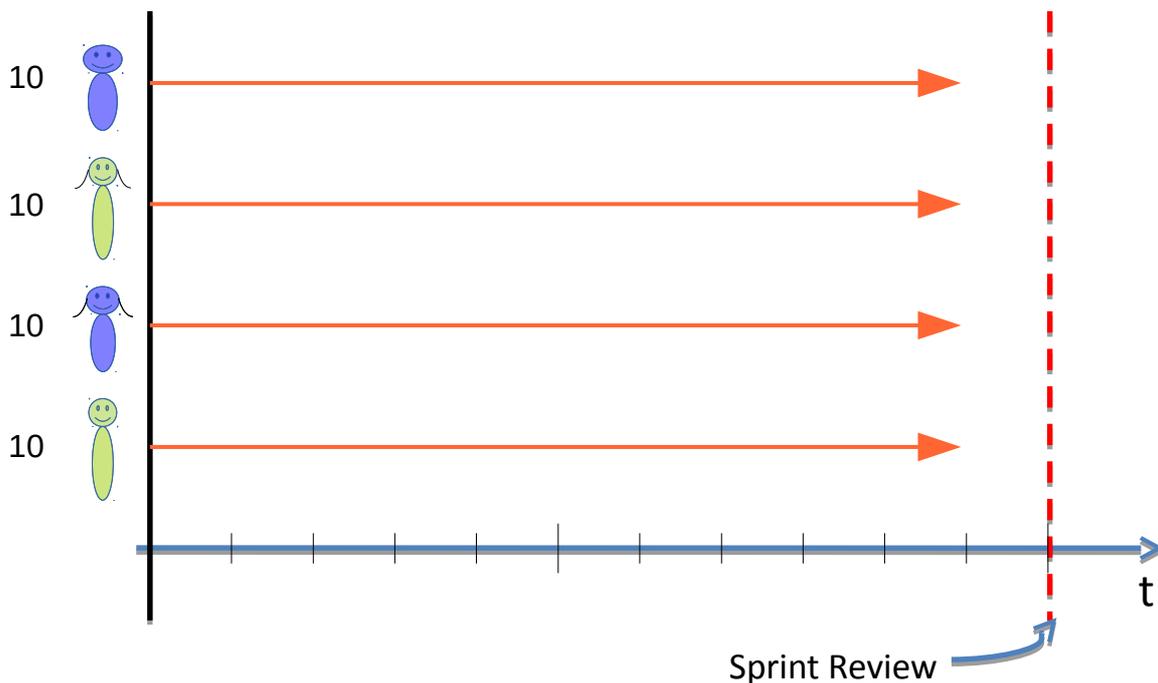
18. How Can the Team Improve Performance?

The Orange Team – Focussed but alone

Assume a team of 4 people. Each person says, I'm going to focus. No multitasking for me! Each backlog item is "10" which should fit perfectly into a 10-day sprint.

On day 9, how many stories are done? None. How many stories will be done at the end of the Sprint?

- Best Case: 40 Points
- Worst Case: 0 Points
- "Average" Case; 20 Points (average of 40 and 0)



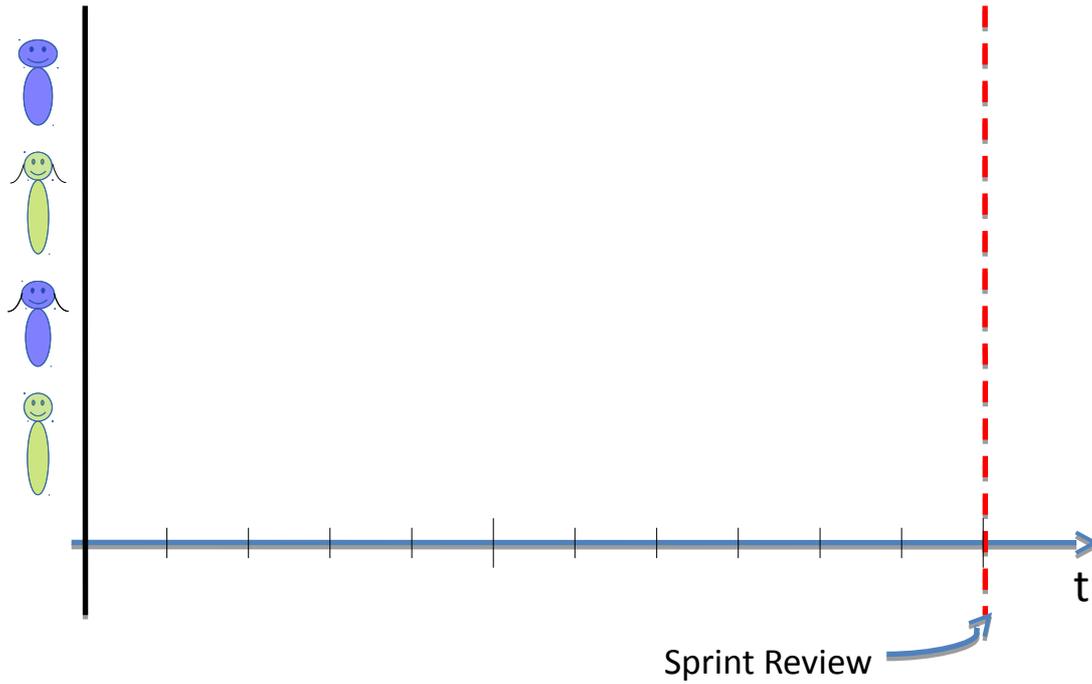
How many points do you think will actually get done? What are reasons why they might not? List possible reasons why they might not get done, and classify them as predictable or unexpected.

Reason	Predictable	Unexpected
	<input type="checkbox"/>	<input type="checkbox"/>

The Green Team – Swarming

Assume the entire team could work on one story at a time without changing the estimates.

Show how the team members would be working each backlog item. Draw this in Green!



When would you expect each story to be done?

On day 9, how many points would you expect to be done?

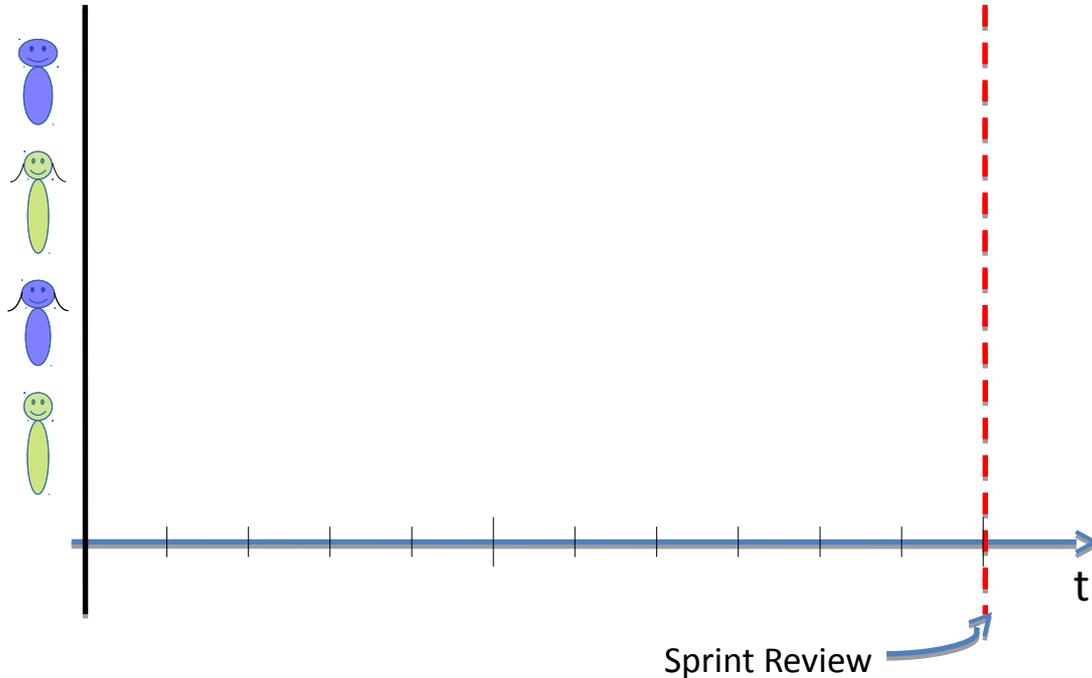
On the last day of the sprint, many points would you expect to be done?

- Best Case _____
- Worse Case _____
- Average Case _____

The Blue Team – Refining and Pairing

Assume the each story could split so that two people could finish each story in the same time as in the previous case. Instead for 4 stories, you have 8. Note: each story continued to represent potential value for a user for customer.

Show how the team members would be working on and finishing each story. Draw this in Blue!



On day 9, how many points would you expect to be done?

On the last day of the sprint, how many points would you expect to be done?

- Best Case _____
- Worse Case _____
- Average Case _____

Conclusions

What are the symptoms of having stories that are too big?

Suggestions:

- Stories should be small enough that the Team forecasts twice the team size
So with 4 people => about 8 stories in the Sprint
- Team should limit number of open stories to $\frac{1}{2}$ of Team Size
- The team should focus on the top priority stories

19. Experience a Sprint

Scrum Movie Posters

Scenario

“Our company's top management is convinced that they want us to become an Agile Enterprise. The company will start employing Scrum wherever it makes sense. The people directly involved will decide whether Scrum makes sense for them.

Our leadership have convened you, the Enterprise Transition Team, to lead this transition and asked me to serve as Product Owner! I am honored to work with such a great group of people! And has you can see, our management is quite committed to this project!”

Our mission

Create a Scrum Guide in the form of Flipchart posters. These will hang on the wall at all our employee and customer entrances around the world! Their purpose is to get people interested in Scrum and excited about doing Scrum. Staff should want to be on a Scrum Team; customers should ask us if they can do Scrum with us. Think Movie Posters: “Cool poster – I want to see the movie.”

Timings

We will perform 1 Sprint. The Sprint consists of Sprint Planning (10:00), 3 days of work (12:00 each), 2 Daily Scrums (4:00, one between each day), and a Sprint Review (5:00).

T-10:00	Prepare you environment (task boards) Define your Team(s) Scrum Master(s) & Product Owner(s) if necessary
T-05:00	Scrum Master Briefing with the trainer
T+00:00	Sprint Planning 1 – What?
T+05:00	Sprint Planning 2 – How?
T+10:00	Day 1 (work begins) Scrum of Scrums (Scrum Masters and maybe Product Owners) Scrum Masters assume responsibility for time keeping
T+22:00	Daily Scrum
T+26:00	Day 2 Scrum of Scrums
T+38:00	Daily Scrum
T+42:00	Day 3 Scrum of Scrums
T+54:00	Sprint Review Scrum of Scrums
T+59:00	Done

Product Backlog for Project Movie Posters

Estimate	Topic	Story	Acceptance
	Vision	For employees who will soon work with Scrum, we are creating a series of Scrum Movie Posters to get people excited about doing Scrum	Posters hang on the wall. Colorful. Pictures and/or Diagrams on every poster. Think Movie Poster!!
	DoD	Accessible in English, readable, attractive, understandable. Consistent Graphical Design & Corporate Identity, Factually Correct. Team in agreement with content.	The need to provide substance. They need to look nice together.!
1	Activities	As an employee, I want an overview of the Scrum Flow, so that I can understand quickly the relationship between the various meetings.	Complete Scrum-Flow with SP1, SP2, DS, SR, Retro and Estimation/Release planning
1	Roles	As an employee, I want understand the role of the ScrumMaster, so that I can decide if this role is for me.	
1	Roles	As an employee, I want understand the role of the Development Team Members, so that I can decide if this role is for me.	
1	Roles	As an employee, I want understand the role of the Product Owner, so that I can decide if this role is for me.	
1	Activities	As an employee, I want to understand Sprint Planning 1 so I can get excited about doing a project with Scrum	Contains Name, Time Box, Responsible, Goal, Input, Output
1	Activities	As an employee, I want to understand Sprint Planning 2 so I can get excited about doing a project with Scrum	Contains Name, Time Box, Responsible, Goal, Input, Output
1	Activities	As an employee, I want to understand the Daily Scrum so I can get excited about doing a project with Scrum	Contains Name, Time Box, Responsible, Goal, Input, Output
1	Activities	As an employee, I want to understand the Sprint Review so I can get excited about doing a project with Scrum	Contains Name, Time Box, Responsible, Goal, Input, Output
1	Activities	As an employee, I want to understand the Sprint Retrospective so I can get excited about doing a project with Scrum	Contains Name, Time Box, Responsible, Goal, Input, Output
1	Artifacts	As an employee, I want to understand the purpose and contents of the Product Backlog so that I understand it and can if necessary create one.	Contains who maintains the information, and which attributes and information this artifact contains.
1	Artifacts	As an employee, I want to understand the purpose and contents of the Sprint Backlog so that I understand it and can if necessary create one.	Contains who maintains the information, and which attributes and information this artifact contains.
1	Artifacts	As an employee, I want to understand the purpose and contents of the Release Burndown Chart so that I understand it and can if necessary create one.	Contains who maintains the information, and which attributes and information this artifact contains.

20. When is Scrum the Right Framework?

Step 1: Draw a line from each practice to the context for which it is most suited (left side).

Step 2: Draw a line each practice to the Framework it applies to (right side).

Timebox 2X 3:00

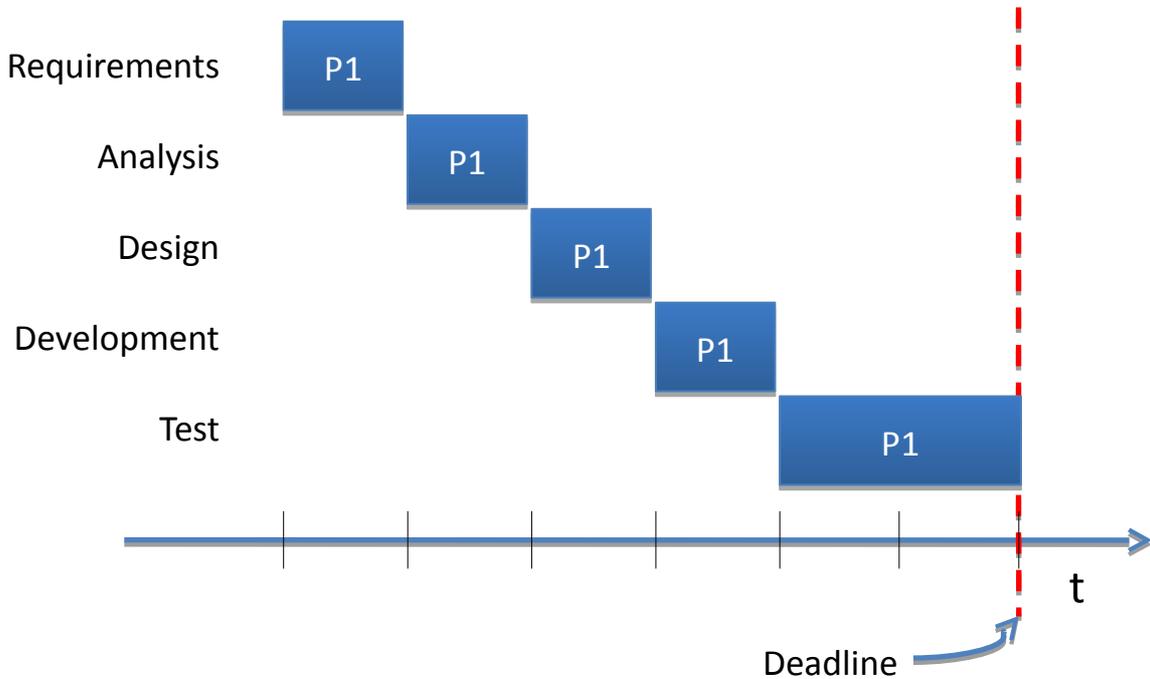
Context	Practice	Framework
Predictable Situation	Define a plan, follow the plan	(Defined Process) Classical Management
	Define milestones and check progress against milestones	
	Managers, Stakeholders and/or Customers decide	
	Bring specialists on board only when and as long as they are needed	
Unpredictable	Well-defined processes, carefully followed, ensure predictable results	(Empirical Process) Scrum
	Inspect & Adapt at regular intervals	
	Produce something of potential value at regular intervals	
	An interdisciplinary team solves the whole problem together	
	One voice speaks for the customer, user or stakeholders	
	A coach helps everybody get better	
Management leads and guides, and knows when to stay out of the way		

Bonus question: Do the people involved want to do Scrum?

21. How is Scrum Different? - Architecture

Connect

In a phase-oriented (“waterfall”) project, work is passed from one specialist to another until the deliverable is produced:

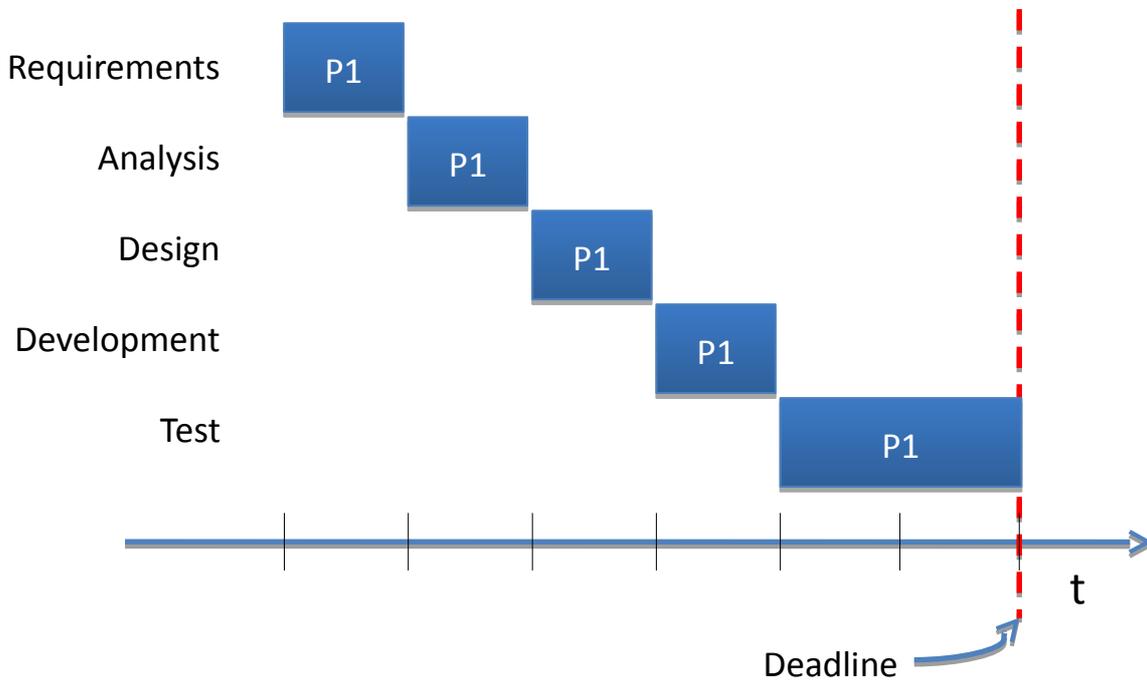


When can you release value to the customer?

If the analysis phase is delayed, what will happen to the expected delivery date? What will happen to the deadline? Update the picture to illustrate the impact.

Big Picture

Update the chart below to illustrate the staff utilization through the preceding project (P0) and subsequent projects (P2, P3, P4...). Assume that each phase of the other projects takes the same time as the corresponding phase in P1.



Dependencies

How will a delay in the Analysis phase of P1 impact the schedule for P1? How will it impact P2, P3, and P4 etc.? What phase is not impacted by the delay in P1's analysis phase?

How is Scrum Different?

In Scrum, all of the skills needed to get a project from “idea” to “done” (in this case Requirements, Analysis, Design, Development and Test) are in the Development Team. The team must produce a potentially shippable result at least once per Sprint.

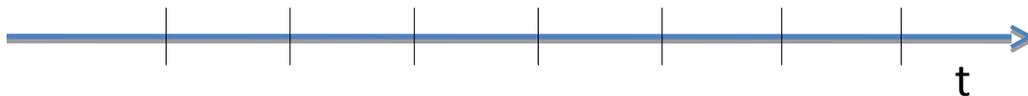
Assume Team 1 works on Project P1 and needs 3 sprints to create something shippable.

Fill in the chart to show:

- When will P1 have something that could be shipped to the customer?
- When will P1 actually ship?
- What project will team 2 work on from the first month?
- What project will Team 1 work on after P1 is finished?
- When do you get releases?

Team 1

Team 2



22. How is Scrum Different? - Agile Mindset

Homework

Read Appendix A, The Agile Manifesto

Watch Peter Green's Video *Lean and Agile Adoption with the Laloux Culture Model*. (See page 66)

Has it worked for you?

This is about values and principles, not practices! Discuss with your pairing partner:

- Identify two cases where your company has acted in accordance with the Agile values and Principles, where it has produced good outcomes for your customer or your company.
- Identify one case where either:
 - Acting in accordance with the Agile values has produced a **bad** outcome for the company or its customers, or
 - Acting in accordance with the **traditional** values has produced a good outcome for your company or your customers

Could it work for you?

Review your goals and impediments about your current project. Identify three things you could do which would a) bring you more in accordance with Agile values and principles and b) mitigate or eliminate your impediment. Write your most promising idea on a white card.

Find an example in your experience, where your company made a decision or set a policy where one of the agile values come into play. Was the decision more on the left or on the right? If it had been more to the right, how would the decision be different? How would the impact have been different? Discuss with your pairing partner.

Concrete Practice

Fill out *Peter's 5 Question Agile Assessment* for your team or your company.

Discuss with your pairing partner. What do you want to discuss with your team or your leadership when you return to the office? (3:00)

A note about the Assessment

Peter's 5 Question Agile Assessment should inspire you to reflect on your level of Agility. It is not about any particular practice, nor does it say there is right answer, nor does not give you a score. It intended to help you reflect on your values and principles, and to give you something to think about on the road to becoming Agile.

Peter's 5 Question Agile Assessment

Who are you answering for?

- Myself
 My Team
 Someone else: _____
 My company
 My company's leadership

1. What do you/they do, besides make money-? (your answer must include a verb)

How things are

How I would like them to be

How well do these statements describe you/them?

2. We are uncovering better ways of doing what we do by doing it (ourselves) 0 – 2 – 4 – 6 – 8 – 10 0 – 2 – 4 – 6 – 8 – 10
3. We are uncovering better ways of doing what we do by helping others to do the same (beyond our borders) 0 – 2 – 4 – 6 – 8 – 10 0 – 2 – 4 – 6 – 8 – 10
4. We have examined our own values in the context of the Agile Manifesto 0 – 2 – 4 – 6 – 8 – 10 0 – 2 – 4 – 6 – 8 – 10
5. We can explain why we believe what we believe 0 – 2 – 4 – 6 – 8 – 10 0 – 2 – 4 – 6 – 8 – 10

Help for question 4: How important are the Agile values in your/their daily decision making?

- Individuals and interactions over processes and tools 0 – 2 – 4 – 6 – 8 – 10 0 – 2 – 4 – 6 – 8 – 10
- [Customer visible value] over comprehensive documentation 0 – 2 – 4 – 6 – 8 – 10 0 – 2 – 4 – 6 – 8 – 10
- Customer collaboration over contract negotiation 0 – 2 – 4 – 6 – 8 – 10 0 – 2 – 4 – 6 – 8 – 10
- Responding to change over following a plan 0 – 2 – 4 – 6 – 8 – 10 0 – 2 – 4 – 6 – 8 – 10
- Our highest priority is to satisfy the customer through early and continuous delivery of customer visible value. 0 – 2 – 4 – 6 – 8 – 10 0 – 2 – 4 – 6 – 8 – 10
- Welcome changing requirements, even late in development. We harness change for the customer's competitive advantage. 0 – 2 – 4 – 6 – 8 – 10 0 – 2 – 4 – 6 – 8 – 10

Bonus question: How likely do you think it is, that a customer or potential customer would describe you/them as being "Agile"?

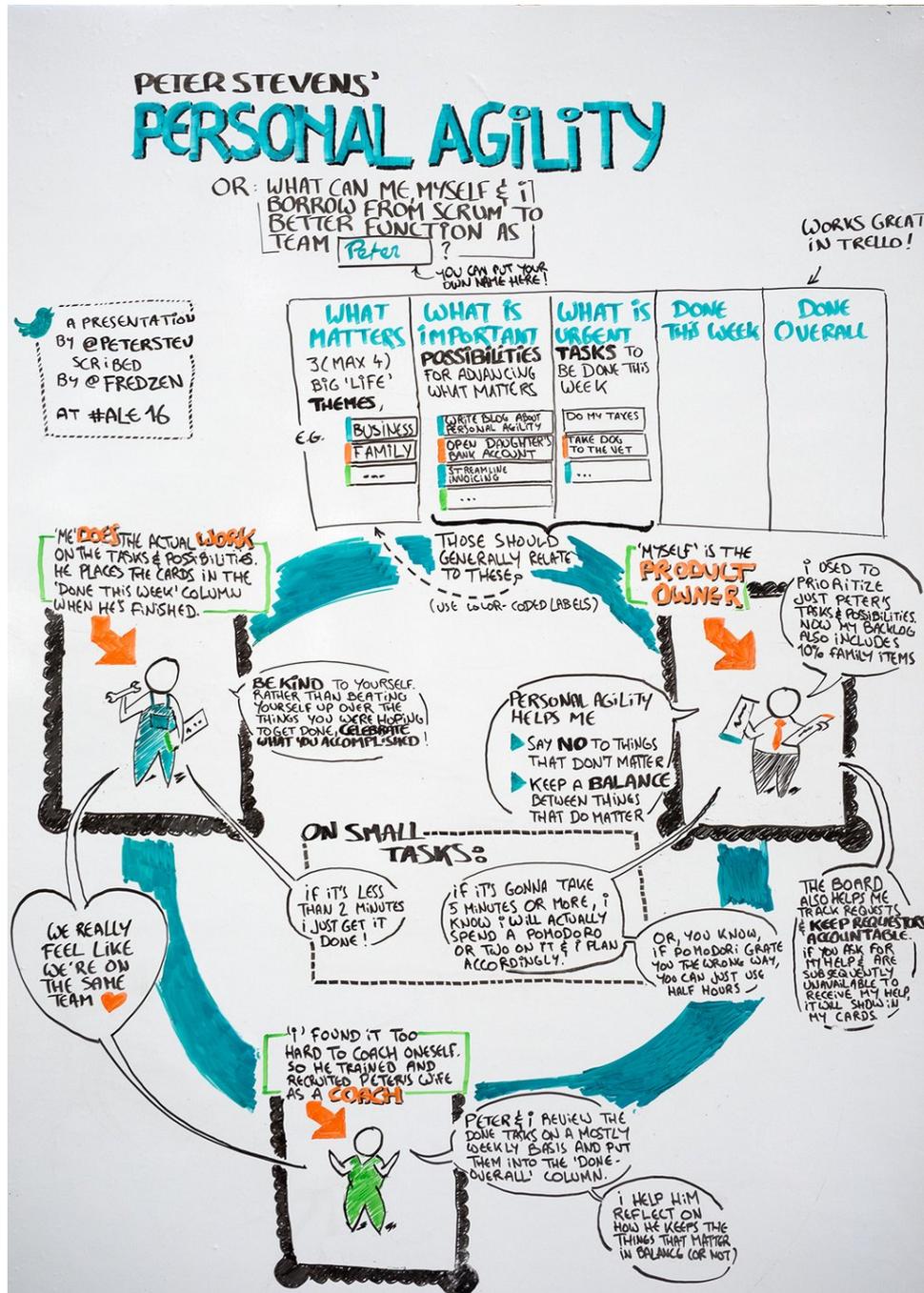
Very unlikely			Possible			Likely			Very likely	
0	1	2	3	4	5	6	7	8	9	10

What reason would they give?

23. How to apply Scrum to a team of one?

How do you do more of what matters? I have applied the principles of Scrum to create a new Agile framework to help you beat procrastination, improve alignment with your spouse or manager, and generally get your life under control.

I am now working on my book, which is tentatively titled, *How to do more that matters?*



Want to join the early adopter book club? Join at <https://MyPersonalAgility.org/>

24. What to do before you leave class?

Take this book and your notes with you!!

Check-out from the class

<https://saat-network.ch/check-out>



Record your Goal, Impediment and Try

My most important goal is: _____

My biggest impediment to achieving this goal is: _____

To fix/mitigate this impediment, I want to: _____

Plan: What will you do when you get back to the office?

Of all the Aha-Moments and Things to Discuss, what are the three most important things to start:

1. _____

2. _____

3. _____

Start your best project!

Set a reminder 6 months from today to tell the trainer how your best project started today!

Done

Appendix A Agile Manifesto

Learning Objectives

- What does it mean to be Agile?
- Scrum is one of many Agile frameworks, but not all Agile is Scrum.
- The values and principles of Agility were created for software development. Are they applicable to your situation?

Concepts

Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

- 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.

Principles behind the Agile Manifesto

We follow these principles:

1. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
3. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
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.
6. The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
7. Working software is the primary measure of progress.
8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
9. Continuous attention to technical excellence and good design enhances agility.
10. Simplicity--the art of maximizing the amount of work not done--is essential.
11. The best architectures, requirements, and designs emerge from self-organizing teams.
12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Source: AgileManifesto.org

What is the Agile Mindset?

Values are an expression of what really matters. If two people agree on what really matters, their decisions will be in alignment. If your values are aligned with the Manifesto, then you can claim to have the Agile mindset.

At the very least, someone who has the mindset is in alignment with the first sentence of the Agile Manifesto: The Agile Mindset is a learning mindset.

Someone with an Agile mindset knows what they do, besides making money! What value do you bring to those whom you value? Someone with an Agile mindset is uncovering better ways to do what they do, both by doing it and by helping others to do the same. This is about advancing the state of your art, having time to improve your skills and technology, and learning and sharing beyond your own four walls.

Someone with an Agile mindset knows what they value. They have reflected on the Values and Principles of the Agile Manifesto and found their own beliefs to be largely in harmony with them. Values guide decision-making, so their decisions will be aligned with the Agile Manifesto as well.

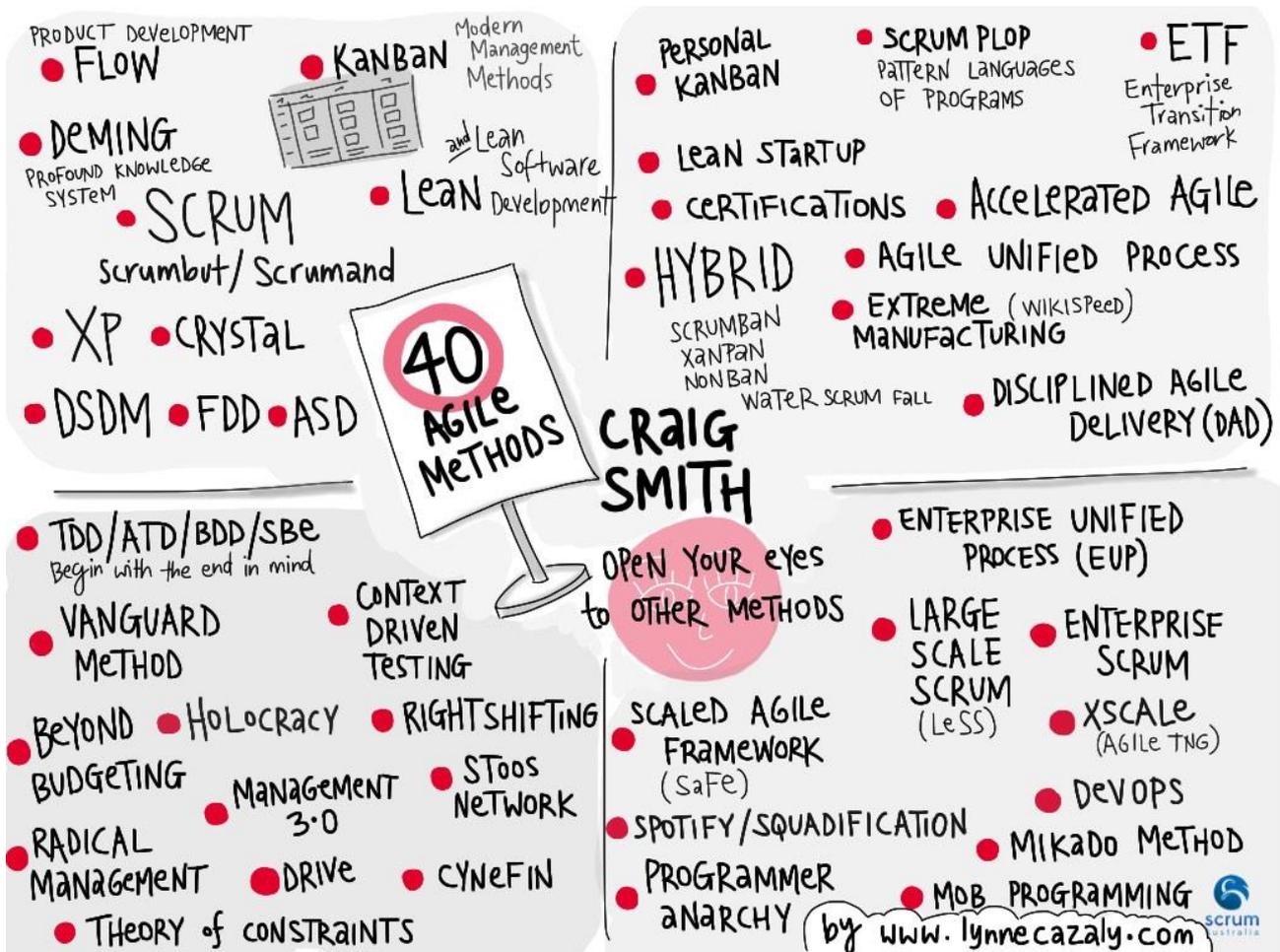
Finally, someone with an Agile mindset knows why they value what they value. Values are not to be blindly followed. You may value other things beyond the 4 values expressed in the Agile Manifesto or you may find some of them not appropriate in your context.

Peter's 5 Question Agile Self-Assessment

1. What do you do for those whom you value? The answer must contain a verb and is not "making money."
2. Are you uncovering better ways of doing what you do, by doing it?
3. Are you uncovering better ways of doing what you do, by helping others to do the same?
4. Have you reflected on the values and principles of the Agile Manifesto and what they mean for you?
5. Can you concisely explain what you value and why?

Background Information

Well-known Agile frameworks



Selected Non-Software Agile Frameworks

Name	Website
Agile Classrooms	https://www.agileclassrooms.com/
Agile Marketing	http://agilemarketingcertification.com/
Agile Product Management	http://www.romanpichler.com/
Betacodex	http://www.betacodex.org/de
Beyond Budgeting	http://bbbt.org/
Clean Language	http://www.cleanlanguage.co.uk/
Collaboration Superpowers	http://www.collaborationsuperpowers.com/
Core Protocols	https://liveingreatness.com/
Cynefin	http://cognitive-edge.com/
Design Thinking	https://en.wikipedia.org/wiki/Design_thinking
DevOps	https://en.wikipedia.org/wiki/DevOps
EduScrum	http://eduscrum.nl
Extreme Manufacturing	http://wikispeed.org/extreme-manufacturing/
Fearless Change	http://www.fearlesschangepatterns.com/
Fractal Organizations	http://fractalorgs.com/

Name	Website
Google re:Work	https://rework.withgoogle.com/
GROWTH	http://growsmethod.com/
Growth Hacking	https://en.wikipedia.org/wiki/Growth_hacking
Happy Melly	https://www.happymelly.com/
Holacracy	http://www.holacracy.org/
Human-Centered Design	https://en.wikipedia.org/wiki/Human-centered_design
Innovation Games	http://www.innovationgames.com/
Intent Based Leadership	http://www.davidmarquet.com/
Kanban	https://anderson.leankanban.com/
Large Scale Scrum (LeSS)	http://less.works/
Lean Canvas	https://leanstack.com/
Lean Software Development	http://www.poppendieck.com/
Lean Startup	http://theleanstartup.com
Lean UX	http://www.jeffgothelf.com/
LEGO Serious Play	https://www.lego.com/en-us/seriousplay
Liquid Organizations	http://liquido.cocoonprojects.com/
Management 3.0	http://management30.com/
Open Book Management	https://en.wikipedia.org/wiki/Open-book_management
Open Participatory Organization	https://medium.com/open-participatory-organized
Open Space Technology	https://en.wikipedia.org/wiki/Open_Space_Technology
OpenSpace Agility	http://openspaceagility.com/
Personal Agility	https://mypersonalagility.org/
Personal Kanban	http://www.personalkanban.com/pk/
Radical Management	http://www.stevedenning.com
Real Options	https://theitriskmanager.wordpress.com/
Reinventing Organizations	http://www.reinventingorganizations.com/
Responsive Organizations	http://www.responsive.org/
SD Learning Consortium	http://sdlearningconsortium.org/
Sociocracy	http://www.sociocracy.info/
Sociocracy 3.0	http://sociocracy30.org/
Startup Foundation	https://startup.foundation/
Strategy Deployment	https://www.lean.org/lexicon/strategy-deployment
The Responsibility Process	https://www.christopheravery.com/responsibility-process
Training from the Back of the Room	https://bowperson.com
Value, Flow, Quality	https://www.valueflowquality.com/
Vanguard Method	https://www.vanguard-method.com/

Some of these methods may be registered trademarks of their owners.

Source: <https://airtable.com/shrkJbP0PmK5IP7TU/tblyZPv4twL4YdQH>

Appendix B Scrum Glossary

Term	Meaning
Acceptance Criteria	Tests which must pass for the Product Owner or customer to consider the Story accepted. The Team should verify these before submitting a story for final approval. Acceptance tests help ensure External Quality. Most Product Backlog Items can be mapped to one or more Acceptance Criteria.
Agile	A movement for finding better ways of developing software. Scrum and Extreme Programming are two leading examples. Others, such as Kanban or Lean Startup do not define themselves in the Agile tradition, but are based on compatible values and principles.
Agreement	The basis for planning and completing work in Scrum. Examples: the Definition of Done, the Selected Product Backlog, the Sprint Contract, and the Definition of Ready.
Artifact	Something that archaeologists find when digging. Often used to describe the documents produced by a project management methodology. Scrum artifacts are all living documents to guide and monitor work. In Personal Agility they are called “tools.”
Best Practice	Some consultant's solution to someone else's problem. Is your context similar enough to the original for the solution to be applicable to you? Questionable. Will you do better by coming up with you own solution? Usually.
Ceremony	A fancy word for a meeting or routine process. In Personal Agility they are called “Events” to signify that something important happens and you want and need to be there!
Chickens	Deprecated term for people interested in the results of project, but not 100% committed to its success (e.g. due to conflicting priorities). Chickens can be very disruptive to the Team. Never call someone a chicken. Spectators is a better metaphor. The professional game is played for the spectators, but the spectators are not allowed to interfere with the game.
Commitment	A core value of Scrum which should not be interpreted to mean that the Team is expected to burn itself out trying to achieve unrealistic goals Sprint after Sprint after Sprint.
Daily Scrum	A daily opportunity for the team to inspect and adapt on their progress throughout the sprint. 3 defined questions to recognize that they need to talk to each other (preferably right after the Daily Scrum).
Definition of Done	An agreement on what 'this backlog item is done' actually means. Helps assure Internal and External Quality for each Story. Often expressed as a checklist to be completed before submitting the Story to the P-O. The Definition of Done applies to individual Stories, not to Tasks or the overall release.

Term	Meaning
Development Team	An interdisciplinary team with all the skills necessary to get a problem from wish to done.
Done (for a feature)	A binary state. Either a Story is completed according to the Definition of Done, or not.
Done (for a product)	A judgement call by the Product Owner. At the end of a Sprint, if the P-O believes that it's worthwhile to release, the product should be releasable. If it's not, there is undone work which should be addressed at the level of the Definition of Done in future sprints.
Estimate	A Team's best guess at the size, complexity or time involved to convert a PBI into a piece of finished functionality. An estimate is not a commitment.
Extreme Programming (XP)	An Agile approach to Software Development, often applied in conjunction with Scrum. XP defines the engineering practices needed to produce quality software in an iterative environment.
Evil	Something which is difficult or impossible to get rid of, but avoiding them is generally good for you. Weeds in the garden is one example. Treating Multitasking and Spillover as evil is usually good for team performance
Forecast	A Team's best guess at how much finished functionality it can deliver by the end of a Sprint. The team is normally expected to respect all the terms of the Sprint Contract, i.e. Quality, Time and Cost, which are more important than Scope
How-To-Demo	A short workflow for demonstrating to the Product Owner that the functionality has been implemented correctly. Also useful to limit scope creep while implementing a Product Backlog Item ("Story").
Impediment	Anything which slows the team down or prevents someone from working. Although the Scrum Master is charged with removing impediments and all Scrum meetings provide regular opportunities to recognize them, impediments can be identified and eliminated at any time by anyone.
Increment	An additional slice of customer visible value, delivered by the end of the sprint. The latest increment must integrate with the previous delivered increments to form a working whole.
Multitasking	Pretending you can do more than one thing concurrently. If there is unused capacity available, multitasking can improve performance. However multitasking has a cost, and if there is no free capacity it lowers performance by introducing wait times and creating dependencies between otherwise independent processes.

Term	Meaning
Must	Absolutely required, or else! The Product Owner must attend Sprint Planning 1, otherwise the meeting cannot be held.
PBI	Product Backlog Item
Pigs	<p>Deprecated term for those people 100% committed to the project at hand. Always refers to Scrum Master and Development Team. If it does not refer to the P-O, this is a sign of dysfunction.</p> <p>While it might be OK to call yourself a pig, “players on the field in a professional match” is a better metaphor. Yes the game is played for the spectators, and the spectators can have a surprising influence on the result, but the players must be able to play without undue interference.</p>
Priority	Sequence—which item comes first, second, third, etc. The term priority is deprecated because a) it contains emotional overtones and b) two items could have the same priority, but must have a unique place in line.
Product Backlog	The single source of requirements for the product under development. It consists of functional and non-functional requirements . It is not used to plan work or define intermediate artifacts, like a specification, which have no value for the customer or user.
Product Backlog Item (PBI)	An entry in the Product Backlog, consisting of a description (often a user story), a sequence position, and an estimate. Often enriched with Acceptance Criteria and other useful information. A PBI is not a specification, but rather a reminder to hold a conversation shortly before implementation.
Product Owner	A servant leader who guides the Development Team to produce customer visible value. Sometimes called the Voice of the Customer (or User), the role represents all interests outside the Development Team to the Team.
Quality, External	Did you build the right thing? Does it perform the way the customer or user wants and expects? Acceptance tests strive to ensure external quality.
Quality, Internal	Did you build it right? Does the product behave the way its creators intended? Unit tests ensure that a program continues to behave correctly, event after modifications have been made.
Quality, Overall	Also known as 'Fitness for Use.' A state achieved incrementally in Scrum. The Product Owner decides when this has occurred by calling for a release.

Term	Meaning
Release Burn-down Chart	A tool for visualizing the progress of the team toward a medium term release goal. The y-axis is the sum of the estimates in the Product Backlog. When a PBI is Done, its estimate can be deducted from the Burn Down chart. It is the primary tool for ensuring that wishes and probable reality stay reasonably aligned.
Release Planning Meeting	Team and Product Owner come together to refine the Product Backlog. Although time-boxed, there is no decision to be taken at the end of the meeting, so it is often a useful preparation for SP1.
Retrospective	The Team (and anybody they invite) reflects on how they worked to identify improvements for the next Sprint.
Ritual	Fancy word for a meeting or routine process. Kind of implies you won't miss anything if you don't go. Call it an Event or an Activity instead.
Scrum	A simple, team-based approach to solving complex problems. A mindset based on a culture of transparency and regular cycles of inspection and adaption. A popular approach for developing software.
Scrum Master	A servant leader who helps Product Owner and Development Team perform better. Coaches & Facilitates. Removes impediments. Sometimes called the voice of common sense.
Scrum Team	All three roles together make up the Scrum Team. Sometimes called the Whole Team
Selected Product Backlog	The subset of (by definition top priority) PBIs that the Team reasonably believes it can complete during the Sprint. (Often mistakenly called the Sprint Backlog). Today this is called the Forecast
Sequence	A unique ordering. First, Second, Third... The product backlog is sequenced.
Should	Highly recommended. The Scrum Master should be present at the Daily Scrum. This is much stronger than optional. However no activity in Scrum is cancelled due to the absence of the Scrum Master. See also "Must."
Spillover	Work that has been started but not completed by the end of the sprint. Contrary to popular belief, spillover does not automatically carry over into next sprint. Excessive Spillover is typically a symptom of over-commitment in sprint planning and/or multitasking in the team. Technical Debt is a subtle form of spillover.

Term	Meaning
Sprint	A time-boxed period for completing work. A Sprint consists of planning, doing and review, both of the results and of how the Team worked. Maximum time-box is 30 days. 2 weeks is common. All forecast work should be Done by the end of the Sprint.
Sprint Backlog	The Selected Product Backlog, enriched with a technical concept and a task planning. The Sprint Backlog represents the Team's concept for achieving the goal set during Sprint Planning 1.
Sprint Contract	The agreement between Product Owner and Team at the beginning of a sprint: Time (Sprint Duration), Cost (Team Composition), Quality (Definition of Done) and Scope (Selected Product Backlog). If the team should fail to deliver on any aspect, it should fail on Scope.
Sprint Planning	Sprint planning addresses 2 questions: What and How. The meeting is divided in two halves, SP 1 and SP 2 for addressing these questions. While the Scrum Guide considers this to be one activity, many practitioners consider each half to be a separate meeting with its own time-box.
Sprint Planning 1 (SP1)	The Product Owner and Development Team agree on what will be developed during this sprint. The PO defines priorities, the Team estimates how much is doable. So both parties influence the final agreement: the Forecast and the Sprint Goal.
Sprint Planning 2 (SP2)	The Development Team decides how to solve the problem accepted in SP1. The result is a technical concept and a task planning, often in the form of a task board.
Sprint Review	The Team and Product Owner come together to inspect and adapt the product, based on Done functionality. They will review what has and has not been completed, and reflect on how to change the Product Backlog before the next sprint planning
Stoos	A movement for finding better ways of managing organizations that was inspired by the Agile movement. Stoos seeks to catalyze a lasting change in how businesses do business.
Story	Term often used to refer to a Product Backlog item, even if not formulated as a User Story. Can also refer to a medium sized backlog item (on the scale of Epic >> Story >> Grain of Sand)
Story Point (SP)	A unit to gauge the size of a PBI relative to other PBIs, estimate the size of a project and monitor progress. Something like a kilometer for code.
Task	The Team uses Tasks to plan the work in the Sprint. When all Tasks associated with a Story are completed, the Story should be Done. Typically a Task represents a goal for the day, or something smaller. Most coaches no longer recommend estimating tasks in hours.
Task Board	A visual representation of the work to be completed in the Sprint. Typically 4 columns, organized in swim lanes, per story: Story, Tasks Waiting, Tasks in Progress, Tasks Done. Often supplemented with Burn-down Charts, Impediments and other useful information.

Term	Meaning
TDD Test Driven Development	Also known as Red-Green-Refactor. 1) Write a failing unit test (red) 2) Code a first draft to turn the test green, keeping all other tests green). 3) "Refactor" to create an improved and final draft. TDD improves productivity by reducing misunderstood requirements, rework, and escaped errors.
Team	An older term for the Development Team. Because effective collaboration between P-O and Development Team is associated with high performance, Product Owner, Scrum Master and Development Team are now referred to as the "Scrum Team."
Technical Debt	A consequence of poor engineering practices which make a program difficult to modify. Like financial debt, technical debt must be paid off or technical bankruptcy follows: Throw the program away and write a new one.
Time-box	A constraint to prevent a complex situation from degenerating into chaos. All rituals in Scrum are time-boxed.
Undone Work	Can you release the product at the end of the Sprint? If not, there is undone work. Typical examples include: regression testing, usability testing, customer acceptance tests. The less undone work you have, the more predictable your release dates. See Spillover.
Unit Tests	Automated tests written by the Development Team to assure Internal Quality. Unit tests enable Refactoring and provide an essential safety net, so that changes and fixes do not introduce new errors.
User Story	A people-centered approach to defining requirements with a standardized form: As <some role or persona> I want <some value> so that I can achieve <some goal or purpose>. The word 'user' should never appear in a User Story.
Velocity	A unit to gauge the speed of development and estimate the completion date of large projects. Usually expressed as Story Points per Sprint.
WAP	Widely Adopted Practice, often used together with Scrum, but not part of Scrum—you may do it or not if you feel it applies to you. Examples include Story Points, User Stories, Definition of Ready.
Whole Team	An XP term for the Scrum Team
Work in Progress "WIP"	Work that has started but has not yet been completed. Lots of WIP is associated with poor performance and inability to get things done. See "Spillover."
Working Agreement	An agreement among interested parties to enable more effective work. Working agreements are the basis for improvement in Scrum.

Appendix C Audio Visual Materials

Videos

Basics/For the ScrumMaster

Title	Author	URL
The Scrum Framework	Lyssa Adkins	https://www.youtube.com/watch?v=_BWbaZs1M_8
The ScrumMaster	Marcel van Hove	https://www.youtube.com/watch?v=yuHuSHoZlmk
Dysfunctional Daily Scrum	Various Scrum Trainers	https://www.youtube.com/watch?v=B3htbxlkzzM
High Moon Studios	High Moon	http://www.youtube.com/watch?v=UT4giM9mxHk
Lean and Agile Adoption with the Laloux Culture Model	Peter Green	https://vimeo.com/121517508

Basics/For the Product Owner

Title	Author	URL
Agile Product Ownership in a Nutshell	Henrik Knieberg	http://www.youtube.com/watch?v=502ILHjX9EE
Agile Product Ownership in a Nutshell / German Version	Henrik Knieberg Toby Baier	https://www.youtube.com/watch?v=ZUwo8tKoYnQ
Flash build	Nordstrom Innovations	http://www.youtube.com/watch?v=szr0ezLyQHY
Wikispeed TED Talk	Joe Justice	http://www.youtube.com/watch?v=x8jdx-lf2Dw
Start with Why	Simon Synek	https://www.youtube.com/watch?v=IPYeClTpxw
Dropbox MVP	Dropbox MVP	http://www.youtube.com/watch?feature=player_embedded&v=7QmCUDHpNzE

Other Videos worth watching!

Title	Author	URL
Engineering Culture at Spotify – 1	Henrik Knieberg	https://labs.spotify.com/2014/03/27/spotify-engineering-culture-part-1/
Engineering Culture at Spotify – 2	Henrik Knieberg	https://labs.spotify.com/2014/09/20/spotify-engineering-culture-part-2/
The Puzzle of Motivation	Daniel Pink	http://www.ted.com/talks/dan_pink_on_motivation
Bradley Fighting Vehicle		http://youtu.be/aXQ2lO3ieBA

Title	Author	URL
Piano Stairs	TheFunTheory.com	https://www.youtube.com/watch?v=2lXh2n0aPyw
Why you need to Fail	Derek Sivers	https://www.youtube.com/watch?v=HhxcFGuKOys
First Follower: Leadership Lessons from Dancing Guy	Derek Sivers	https://www.youtube.com/watch?v=fW8amMCVAJQ

Literature

The ScrumMaster's short list – what you need to know

- Twice the work in the half the time. Jeff Sutherland. I wish he'd called it twice the value in half the time, but you get the idea. Many examples from outside of software.
- Agile Project Management with Scrum. Ken Schwaber. Some of the advice is a bit dated, but is still *the* book on Scrum. Start here.
- Five Dysfunctions of a Team. Patrick Lencioni. Creating a culture of fearless trust is the basis for almost everything else in a modern enterprise.
- Switch: How to Change Things When Change Is Hard. Chip Heath and Dan Heath – a simple approach to leading change. Combine with Storytelling.
- Squirrel Inc, Steve Denning – the Storytelling approach to Leadership. Storytelling is the single most effective way to lead change, regardless of your position in the company.
- User Stories Applied: Agile Software Development, Mike Cohn. After Ken's book & Mike's books I felt I was ready to conceive, plan and deliver software projects effectively
- The Art of Agile Development Jim Shore. OK, if you're a developer, you might prefer to start here.

The Product Owners short list – what you need to know

- Agile Project Management with Scrum. Ken Schwaber. Some of the advice is a bit dated, but still the book on Scrum. Start here.
- Agile Estimating and Planning. Mike Cohn. Estimating & planning are not black magic.
- User Stories Applied: Agile Software Development, Mike Cohn. After Ken's book & Mike's books I felt I was ready to conceive, plan and deliver software projects effectively
- Leaders Guide to Radical Management. Steve Denning – The purpose of a company is to delight its customers. Agile practitioners will recognize much of what Steve writes and profit tremendously from the rest.
- The Lean Startup, Eric Ries – the purpose of a company is to learn what its customers will pay for. Learn quickly! This book tells you how.

Scrum and Agile Project Management

- Agile Project Management with Scrum. Ken Schwaber. Start here.
- Agile Estimating and Planning von Mike Cohn. Proof that estimating & planning are not black magic.
- User Stories Applied: Agile Software Development, Mike Cohn. After Ken's book & Mike's books I felt I was ready to conceive, plan and deliver software projects effectively.
- Scrum and XP from the Trenches. Henrik Kniberg. This is what Scrum is really about.

- Lean Software Development: An Agile Toolkit for Software Development Managers, Tom & Mary Poppendieck. A bridge for managers between their MBA studies and real agility.
- Implementing Lean Software Development: From Concept to Cash Tom & Mary Poppendieck. Tools for putting your company on a diet.
- The Software Project Managers Bridge to Agility Sliger & Broderwick. If your manager is a PMP, this book will help her or him understand that words "agile" and "project management" can be applied to the same project successfully

Agile Development Practices

- The Art of Agile Development Jim Shore. OK, if you're a developer, you might prefer to start here.
- FIT for Developing Software: Framework for Integrated Tests Rick Mugridge und Ward Cunningham. Tests are the bleeding edge between customer and developers. How to know that you are getting what you want and that it stays what you want.

Scaling Scrum

- Scaling Lean & Agile Development, Larman and Vodde. An approach to scaling Scrum or an architecture for your company?
- The Enterprise and Scrum, Ken Schwaber. An approach for Scaling Scrum.
- Agile Software Development in the Large: Diving Into the Deep Jutta Eckstein. One of the first books on scaling agility. (Oddly, although the author is German, I found the English more readable. Maybe it's because I'm Swiss.)

Leading Change

- Switch: How to Change Things When Change Is Hard. Chip Heath and Dan Heath – a simple approach to leading change.
- Squirrel Inc, Steve Denning – the Storytelling approach to Leadership. Storytelling is the single most effective way to lead change, regardless of your position in the company.
- Fearless Change: Patterns for Introducing New Ideas Linda Rising. Changing the organization is the hardest part of agile.

Coaching Teams

- Five Dysfunctions of a Team. Patrick Lencioni. Creating a culture of fearless trust is the basis for almost everything else in a modern enterprise. This book should be under management, the concepts are so fundamental!
- Coaching Agile Teams – Lyssa Adkins book is a great companion for ScrumMasters to help them understand what their job really is and how to do it.
- Agile Retrospectives: Making Good Teams Great Esther Derby. The classic book on retrospectives.

Management/Agile Leadership

- Leaders Guide to Radical Management. Steve Denning – values, principles and practices for running and transforming a company in the 21st century. Agile practitioners will recognize much of what Steve writes and profit tremendously from the rest.

- The Lean Startup, Eric Ries – the purpose of a company is to learn what its customers will pay for. Learn quickly! This book tells you how.
- Disruptive Innovation, Clayton Christensen – why companies are challenged by innovations they could have done themselves
- The Ultimate Question (and the Ultimate Question 2.0), Frederick Reichheld – delighting your customer is the key to success in the 21st century. Here’s why. A super attitude for Product Owner.
- Leading Lean Software Development Mary Poppendieck.

German Language Literature about Scrum and Agile

Title	Authors	Published
Agile Entwicklungspraktiken mit Scrum	Roman Pichler und Stefan Rook	30. Mai 2011
Agile Projekte mit Scrum, XP und Kanban...	Henning Wolf	31. Oktober 2011
Agile Softwareentwicklung	Henning Wolf und Wolf-Gideon Bleek	25. Oktober 2010
Agiles Produktmanagement mit Scrum: So entwickeln Sie Produkte, die begeistern	Roman Pichler	16. Januar 2012
APM - Agiles Projektmanagement: Erfolgreiches Timeboxing für IT-Projekte	Bernd Oestereich und Christian Weiss	29. November 2007
Der agile Festpreis: Leitfaden für wirklich erfolgreiche IT-Projekt-Verträge	Andreas Opelt, Boris Gloger, Wolfgang Pfarl und Ralf Mittermayr	6. September 2012
Die Kraft von Scrum: Inspiration zur revolutionärsten Projektmanagement	Henning Wolf und co.	19. September 2012
Geschichten vom Scrum: Von Sprints, Retrospektiven und agilen Werten	Holger Koschek	1. November 2009
IT-Projektmanagement: Was wirklich funktioniert - und was nicht	Matthias Geirhos	28. September 2011
Kanban in der IT: Eine Kultur der kontinuierlichen Verbesserung schaffen	Klaus Leopold, Siegfried Kaltenecker,	
Scrum - Einführung in der Unternehmenspraxis	Dominik Maximini	7. Dezember 2012
Scrum - kurz & gut	Dräther, Holger und Sahling	28. Februar 2013
Scrum in der Praxis: Erfahrungen, Problemfelder und Erfolgsfaktoren	Röpstorff und Wiechmann	1. Oktober 2012
Scrum Kompakt	Sebastian Neus und Carsten Oltmann	18. September 2012
Scrum mit User Stories	Ralf Wirdemann	3. März 2011
Scrum und das Standardmodell wirksamen Managements nach Malik: Eine Synthese systemischen Managements	Jacqueline Sharma	August 2012
Scrum: Produkte zuverlässig und schnell entwickeln	Boris Gloger	17. Januar 2013
Scrum: Schnelleinstieg	Andreas Wintersteiger.	7. März 2012
Testen in Scrum-Projekten: Leitfaden für Softwarequalität in der agilen Welt: Leitfaden für	Tilo Linz	27. Februar 2013

Title	Authors	Published
Softwarequalität...		

English Works Available in German Translation

Title	Authors	Published
Kanban	David J. Anderson und Barbara Heitger	3. Mai 2012
Agile Softwareentwicklung: Mit Scrum zum Erfolg!	Mike Cohn	19. August 2010
Agiles Projektmanagement mit Scrum	Ken Schwaber und Thomas Irlbeck.	4. Oktober 2007
Kanban: Evolutionäres Change Management für IT-Organisationen	David J. Anderson	24. Januar 2011
Scrum - Agiles Projektmanagement erfolgreich einsetzen	Roman Pichler	
User Stories: für die agile Software-Entwicklung mit Scrum, XP u.a.	Mike Cohn	25. Juni 2010

Created 2013 by Peter Stevens

Appendix D Challenges of adopting Scrum and Agile

Learning Objectives

- What are the biggest challenges of an Agile transition?
- What do you need for a successful Scrum implementation?
- Biggest impediments to achieving high performance teams
- Roadmap for a successful implementation

Connection

Where do you think Scrum and Agile are a good fit in your organization?

What will be the biggest challenges to implementing Scrum in your organization?

Concepts

Seven Levels of Delegation (from Management 3.0):

- Tell – Manager decides
- Sell – Manager explains why their solution is the best
- Consult – Manager asks for opinions before deciding
- Agree – Manager and “other” decide together
- Advise – Manager gives opinion, “other” decides
- Inquire – Manager asks “other” about the decision and/or the successful implementation
- Fully Delegate – Manager gives “other” the problem and does not even inquire about the success of the result

Why do companies fail to achieve their expectations through Scrum and Agile?

The basic motivation for switching to Scrum and Agile is performance. Getting better at delivering what your customers and stakeholders really want, and doing it faster.

I just completed interviewing 25 managers, executives and agile leaders from 20 different companies. Only three of them sounded genuinely happy with the progress of their organizations toward achieving the promise of Agility.

What's getting in the way? I see five recurring factors:

1. **Missing shared goal or purpose.** The goals and objectives of the project are not clear, not known or not supported throughout the organization. Individual objectives may not be in alignment with project goals.
2. **Missing mindset.** Too many people in the organization don't understand or haven't bought into the agile mindset. The result is lip service or worse. Surprisingly, it's not just management. The challenges extend up and down the organization.

3. **Inability to create alignment.** If too many things matter, than nothing matters. Many organizations are not able to create alignment among their stakeholders about what should be done and why, so they are not able to focus their resources enough to achieve high performance.
4. **Inability to get things done.** Most teams are unable to perform the basic skill of delivering bug-free value to the organization or its customers at frequent, regular intervals. The happy organizations – could do this, the unhappy ones could not.
5. **Inability to hold the new mindset/Roadmap to agile organization is missing.** Old habits die hard. The agile mindset represents a new way of thinking, but it is easy to revert to the old ways before the new way is fully established. People often come out of their basic Scrum training full of enthusiasm, but making it real is challenging.



Points 1 through 4 are mostly about groundwork, i.e. points that must be addressed at the beginning and cemented during the first 6 to 12 months of the transformation. Point number 5 is about holding the course once you get started and never really ends.

Typical challenges

Classical management is fundamentally a “Tell” architecture. Agile frameworks usually operate at the levels of Consult, Agree, and Advise. In *Tell*, the discussions focus on what to do. In Agile organizations, the discussions focus on why to do them.

The typical challenges of getting a Scrum started include:

- Identifying and empowering a single product owner to make decisions about the product Often the product owner does not have the standing in the company to make decisions or the person who has the authority refuses to “step up to the plate.”

- Identify and empower a Scrum Master to identify and fix impediments – Often the Scrum Master is charged with other tasks, reports to the product owner, is not given the necessary access to management or is otherwise prevented from identifying and removing impediments to performance.
- Creating a dedicated cross-functional team with all the skills needed to transform an idea from a backlog item to something “done” for the customer or stakeholder. Often people are scattered geographically, (over-)committed to multiple projects, and assigned to different departments.
- Reacting and rapidly fixing impediments (requires active support from management) - Sometimes the first levels of Management even see the Scrum Masters as threats to their position.

The challenges of transitioning from classical to agile organizations revolve around;

- Reorganizing functional units and time-shared staff as dedicated, cross-functional teams. with all the skills – including business skills – necessary to get to “Done”
- Delegating decision-making to those teams.
- Transitioning from Tell to Consult, Agree and Advise – The subject of discussions move from “what?” to “why?” Some managers perceive this as a loss of control; it is better described as a change from control to influence.
- Fear – Scrum does not define roles like Manager, Architect, Business Analyst or Chief Anything. So some people wonder what Scrum means for them personally. If they are afraid, they will resist the change. The good news is, nearly all of the skills are still needed.

What do you need for a successful Scrum implementation?

What is your goal? A single project or an Agile Enterprise?

You can create “an island of common sense” by doing Scrum at the project level. This will probably be an improvement over what you had before, but it will not be stable. The leadership is not operating by the same value system as the project teams. Eventually the leadership will undermine the success of the project teams and the organization will revert to its previous performance level.

The alternative is to create a company which can rapidly and reliably react to customers' needs. There are many companies which offer agile consultancy. Some of those companies actually live the agile mindset, while some only sell the services while living classical values. It is easy to tell which is which, especially at the first bump in the road.

Background Information

Eight Steps for starting a Scrum Project

1. Start with the willing. You need a desire to do Scrum from the future Scrum Team itself, its upstream and downstream stakeholders, and its management at least two, and preferably three levels up.
2. Agree and commit to doing Scrum. This includes:
 - A dedicated, interdisciplinary team with all the skills and authority needed to get work items done.
 - A Product Owner empowered to make decisions.
 - A Scrum Master empowered to identify and resolve impediments. The Scrum Master needs access to management.

- Commitment from management to respect the Sprint Contract.
 - Commitment from management to resolve impediments and other request from the Scrum Team quickly and positively.
3. Fill the roles: Scrum Master, Product Owner, Development Team
 4. Learn how to do Scrum. Initial training should include the Scrum Team, stakeholders up and downstream, and management three levels up.
 5. Identify initial impediments to doing Scrum and resolve as many of them as possible.
 6. Define or update the vision for the project and confirm support from stakeholders.
 7. Create the product backlog, at least enough for the first sprint
 8. Hold your first Sprint Planning.

Coaching and mentoring can lower the risk, reduce the cost and speed up the return on investment of the transition.

Six Steps for starting an Agile Enterprise

1. Start with the willing. The prerequisites are essentially the same as above. The leadership must want to establish an Agile mindset throughout the company. Leadership will apply Scrum to lead the transition.
2. Take away the fear. Ensure that everyone, especially managers and other leaders, know that their jobs and positions are safe. Their role may change, but they do not need to worry.
3. Start two Scrum projects in parallel: One project is about the business of the company (a traditional Scrum project), the other is about creating a more effective company (EnterpriseAgility Team).
4. The Project Team is created as described above.
5. The Enterprise Agility Team is also created as described above. The Product Owner and Scrum Master are senior executives of the company. The product backlog consists of measures to improve the organization and impediments generated by the project teams that they are unable to solve themselves
6. Add additional teams slowly as they desire to join the Agile eco-system in your company.

How to apply Agile concepts where a Scrum Team is not appropriate or possible

Use Personal Agility to identify what really matters and ensure that activities support what really matters.

Appendix E Further Training and Support



As a Certified Scrum Trainer I offer training, coaching and mentoring services to help you achieve a smooth transition:

Trust, Shared Mindset

- “Discovering Scrum” Workshop – discover how Scrum can enable high performance
- In-House Scrum Master Training – lay the foundation for high-performance teams
- “Scrum bei uns” Workshop – how to apply in your context
- Initial Coaching – get up to speed doing Scrum yourself as quickly as possible

Capability

- Certified Scrum Master Training – lay the foundation for high-performance teams
- Scrum Development: How to Develop Bug-Free Software (in development)
- Scrum for Traditional Companies: How to build non-software products with Scrum

Prioritize

- Agile Business Basics (for customers and stakeholders): Get ready for Scrum & Agile
- Certified Scrum Product Owner Training: Leading Innovation
- PAS, The Personal Agility System: Double Your Professional Impact in 8 Weeks

Communicate, Leadership

- Guiding the Agile Transition: Leadership Mentoring with Peter Stevens
- Achieving Performance: Agile Supervising with Peter Stevens
- PAS, The Personal Agility System: Double Your Professional Impact in 8 Weeks

For more information, please contact me: peter@saat-network.ch

Blank lined area for notes on the left side of the page.

A-Ha! Moments

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Numbered lined area for recording 'A-Ha! Moments'.

To talk about back in the office

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Numbered lined area for recording 'To talk about back in the office'.

The Personal Agility System [PASs]™

Have more impact at work

A workshop for Corporate Decision Makers, Advisory Boards, Executives and other leaders.

This workshop can be tailored for other staff in your organization.

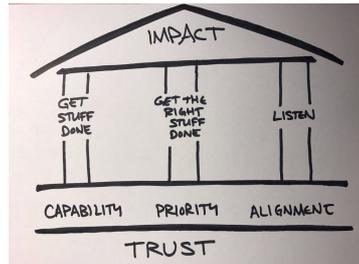
Would you like to...

- Make promises you can keep?
- Have confidence about what really matters?
- Achieve alignment with those above, below, or around you?
- Be more efficient?
- Be more fulfilled and have more energy?



*This workshop is lead by
Peter Stevens, Certified Scrum Trainer,
Author and Inventor of PASs*

The Three Pillars of Impact



Learn the skills for achieving impact

This course is ideal for you if you have:

- Many projects in progress, few getting done
- Permanently shifting scope and targets
- Frequent interruptions
- Overwhelming workloads
- Lots of time wasted on inefficiency

What you can expect from The Personal Agility System

The Personal Agility System [PASs] is a simple framework for doing more that matters. At a personal level, it helps you understand what really matters to you and choose your actions accordingly. Because you know what matters and why, you have confidence in the priorities you set. It's easier to decide what to do next. You get more of the right things done and have more energy while you do it!

PASs is also a simple leadership framework for building agreement among peers, managers and direct reports. You can figure what really matters to your organization, what to do and why. Actions and decisions become aligned. Priorities shift less often, so there are fewer interruptions. You can focus more and get projects done faster. You go beyond being efficient to inspire collective action!

Learn to apply the Personal Agility System in 8 lessons

Part 1 – Do more that matters

Get your own act together so that you are good at getting the right things done!

- Lesson 1 – Manage your time for maximum impact.
- Lesson 2 – Achieve alignment with your first stakeholder.
- Lesson 3 – Identify priorities, set priorities, and make them stick.
- Lesson 4 – Identify potential to get even better at getting things done.

Part 2 – Have more impact at work

Apply Personal Agility Leadership at scale to become a “mover and shaker” in your organization!

- Lesson 5 – Improve interactions to achieve desired outcomes.
- Lesson 6 – Lead colleagues, managers and direct reports more effectively.
- Lesson 7 – Achieve alignment among multiple stakeholders.
- Lesson 8 – Create Alignment up and down the organization

For information contact

This workshop is offered publicly as an online workshop. See <https://saat-network.ch/pas> for details.

For company courses, you can hold the workshop in an online or face-to-face format, or in combination. Contact Peter Stevens, peter@saat-network.ch for more information.

What are people saying about the PAS Workshop?

"It gave me more focus on and helped me understand better the difference between the important and the urgent!"

– Thomas Bindzus

"Now I feel much more focused on what is really important and what makes my life happier!"

– Laura Quattri

"It allowed me to have... gives me a good framework in context to have a meaningful conversation with my wife about actual things that we need to get done"

– Rijon Erickson

"It also gave me a wider time horizon, what I need to do today, next week, what I accomplished last week, I'll give myself a pat in the back"

– George Verdolaga

"Now I know what is most important for me and what I have to do first, and this is the best thing I have learned from this program, to set my clear priorities"

– Piyali Karmakar

"Personal Agility has helped me to refocus on what really matters and be much more intentional about the things that I do"

– Maria Matarelli

Details subject to change without notice, © 2017 Peter Stevens

Achieving Performance through Agile: Group Mentoring with Peter Stevens

For Project Managers, Managers, Scrum Masters, Product Owners and other Agile Leaders

Are you transitioning to Agile or Scrum? Your Agile voyage can be difficult. Would you like to:

- Help with transition challenges?
- Learn from other practitioners?
- Discuss specific problems with your peers?
- Develop & cultivating your own Agile Mindset?
- Share your successes?

Would you like access to an expert? Would you like to share experiences with other practitioners?

You can join a community of like-minded professionals. Under leadership of Peter Stevens, we celebrate our successes and collaborate to solve our problems.

Agile Group Mentoring is ideal for you if:

- You and maybe your organization are striving to change from classical leadership to Agile self-organization
- Parts of your organization may be moving (or not) at different speeds towards agility
- You need an experienced, independent perspective on the challenges you are facing
- You want to reduce the risk of your Agile transition

What you can expect

I will help you on your voyage. As an experienced Scrum trainer and coach, I have helped many organizations, teams and individuals discover Agility and transform themselves. As author of *Personal Agility, Do More that Matters*, I have explored the Agile Mindset and have a deep understanding of how to build alignment around Agility.



We meet online. In each session, we review last month's challenges, the applied solution and what actually happened. Then we consider 3, maybe 4 issues brought by you (or your fellow Agilists). They propose solutions. I will propose a solution. You get to choose which one(s) to implement. Next month you report back on what happened. This process is called Supervising.

What you bring

- You have a Scrum role or a formal or informal leadership role or in your company
- You are serious about wanting to create a high performance team or organization
- You are committed to participate actively
- You have completed (or intend to complete) at least a Certified Scrum Master or a Certified Product Owner Training
- You are not a vendor of Scrum or Agile coaching, training or related services

* Please contact us if you have doubts about satisfying any of these criteria.

More space for your notes :-)

Agile Business Basics: Get ready for Scrum & Agile

(c) 2017 Peter Stevens.
Preliminary, Subject to change

For Decision Makers, Business Managers and Customers who want their Agile project to be a success.

Would you like to:

- Be successful with your upcoming agile project?
- Generate better results for your organization, faster?
- Hold constructive discussions about how and why agile processes work?
- Reduce the risk and costs of ineffective collaboration?

This course is ideal for you if:

- You are responsible for investments in business or technology projects.
- You are under pressure to deliver faster or to use Scrum and Agile
- You have experience with Agile but are not getting the quality or the performance you want.
- You don't have enough time to take a one or two-day course on Scrum or Agile

What this workshop is and is not

- This workshop is a mixture of prerecorded content and live training and coaching
- This workshop is helping you achieve your goals in an agile context
- This workshop does not block large chunks of your time
- This workshop is not trying to sell you on Scrum or Agile
- This workshop is not a replacement for Product Owner Training (which might be a logical next step)

Outcomes

By the end of this program you will be able to:

1. Understand and apply confidently Scrum and Agile
2. Make decisions on whether Scrum & Agile are appropriate
3. Budget, forecast and monitor progress of an Agile Project
4. Evaluate Supplier Performance & Deliverables
5. Know when and how to pull the emergency brake if necessary
6. Get better results and lower costs through better collaboration
7. Contract with an Agile Development company

Topics

Week 0- Kick-Off

1. Introductions, goals and objectives, how the course works. Get the technology working.

Week 1- Understanding the Basics

1. Under what conditions do Scrum and Agile make sense
2. What is Scrum, What is Agile, How do they work
3. What is your role in an agile project

Week 2 – How to Work with an Agile Team

1. What happens when a team starts doing Scrum
2. How to set up a project with Agile
3. How to forecast cost and schedule

Week 3 – Succeeding with an Agile Team

1. Who should supply the Product Owner and Scrum Master
2. How much planning is necessary
3. How do I know when it will be done

Week 4 – Where to go from here

1. Failure patterns to avoid
2. When to pull the emergency brake
3. Where else does it make sense to apply Scrum and Agile?

What you get

In this program you can get access to:

- The essentials delivered to your inbox 3 days per week with a link to a podcast
- In-depth podcast or video to learn. Each video or podcast for more in-depth information if you want it. Listen or watch at your convenience
- Five weekly live mentoring and coaching sessions, consisting of a brief presentation of the week's topics, followed by Question and Answer and Problem solving. All live sessions led by Peter Stevens, Scrum Trainer and author of Personal Agility: Do More That Matters
- Participant's workbook in electronic form with content and exercises
- A personalized list of talking points for improving your situation after each workshop
- Lifetime access to our private Scrum for Stakeholders community for mutual support
- Feedback on your progress from the instructor and fellow participants on your progress
- Access to our Scrum for Stakeholders electronic repository of videos (including recordings of all mentoring sessions), templates, tools, and quick reference cards
- Certificate of attendance for all who participate in the live sessions

Certified Scrum Master Training: Foundations of High-Performance Teams



For anyone involved in Scrum Project

ScrumMasters, Product Owners, Managers, Developers, Testers, Change Agents, Business Analysts, Consultant, Project and Program Managers

Would you like to:

- Apply Scrum in your team or project?
- Get better at doing Scrum in your team or project?
- Improve the reliability, predictability, and performance of your development efforts?
- Turn your current project into your best, most successful project ever?
- Become part of the world's largest most active Scrum community?

This course is ideal for you if:

- You suffer constantly changing and conflicting priorities
- Your timelines shift and interruptions are frequent
- You are under pressure to deliver faster or to use Scrum and Agile
- You are not getting the quality or the performance you want from Scrum or Agile
- You'd like work to be more fun

What this training is and is not

- This training is a two-day interactive, face-to-face workshop
- This training is taught by Peter Stevens, an active practitioner of Scrum and Agile
- This training is about helping you achieve your goals in an agile context
- This training does not put you through “death by PowerPoint”
- This training is not trying to sell you on Scrum or Agile

Outcomes

By the end of this program you will be able to:

- Understand and apply confidently Scrum and Agile
- Coach your team through all of the events in the Scrum Flow
- Introduce Scrum into your team or organization
- Identify and address impediments to team and individual performance
- Serve as a Scrum Master in your team
- Qualify for Certification as a Certified Scrum Master® (test required)

Topics

Day 1

- What Are The Core Principles Of Scrum?
- How Does A Team Self Organize?
- How Does Scrum Work (in 10 Minutes)?
- How Is Scrum Different? - Architecture
- When Is Something (really) Done?
- Who Is Responsible For What?
- What Happens When?
- How To Organize Work? - The Task-board
- How To Monitor Progress? -Burn up or burn down charts

Day 2

- What Does A Great Scrum Master Do?
- How To Manage Requirements In Scrum – The Product Backlog
- How To React To Change?
- Experience A Sprint
- How To Facilitate A Retrospective
- How To Get Started
- How Is Scrum Different? - Mindset
- When Is Scrum The Right Framework?
- Transfer – What To Do Before You Leave The Class?

What you get

In this program you can get access to:

- Two-Day face to face training with Peter Stevens, Certified Scrum Trainer®.
- 60 page Participant's handbook in electronic form with content and exercises, made available to you under a Creative Commons license
- Access to dropbox repository of course materials, templates, checklists, practitioners guides and other useful information
- 15 SEUs/PDUs
- 2 year membership in the Scrum Alliance
- Test fees for Certification as a Scrum Master
- A personalized list of discussion points for improving your project or organization
- Certificate of attendance



Create great products with your Scrum Team!

For Product Owners, Product Managers, Business Analysts, Project and Program Managers, Consultants, Scrum Masters and Agile Coaches

Would you like to:

- Understand or fulfill the duties and responsibilities of the Product Owner role?
- Create products that are valued by users and customers?
- Deliver projects that are on-time and on-budget?
- Transition from a Business Analyst or Project Manager role?
- Achieve higher team performance, happier stakeholders, and more engaged staff?

This course is ideal for you if:

- Your product is not getting the traction you expect
- Your timelines shift and interruptions are frequent
- Your team is complaining about the User Stories and/or the Product Backlog
- You are not getting the quality or the performance you want from your Agile team
- You'd like work to be more fun

What this training is and is not

- This training is a three-day interactive, face-to-face workshop about creating great products
- This training is taught by Peter Stevens, an active Product Owner
- This training is not a repeat of the Scrum Master class (though it may refresh you on the basics if you need it)
- This training does not put you through “death by PowerPoint”

Outcomes

By the end of this program you will be able to:

- Validate with your customers and stakeholders that you are building the right product
- Collaborate effectively with your team through all of the events in the Scrum Flow
- Create user stories and prioritize the Product Backlog effectively
- Predict when your product will be ready
- Recognize and react when your project is challenged
- Serve as a Product Owner in your team
- Qualify for Certification as a Scrum Alliance Certified Product Owner®

Topics

Day 1 – The Product Owner

- Why Scrum?
- What are the core principles of Scrum?
- What does a Product Owner do?
- How does the P-O impact team performance?
- What happens when?
- How to manage requirements in Scrum?
- How to get stakeholders to agree on priorities?
- How to monitor progress?

Day 2 – From the Vision to the Minimum Viable Product

- What does it mean to be Agile?
- How do you work with customers and stakeholders?
- How do you craft and validate a vision?
- Which features must be present?
- Which MVP will we build?
- How do you create a product backlog from a vision?
- How to get the backlog ready for implementation?
- Sprint! Create your MVP

Day 3 – Scrum and the Organization

- How to react to change?
- Who is responsible for what?
- When is something (really) done?
- When is Scrum the right framework?
- Transfer – What will you do when you get back to the office?
- Questions and Case Studies
- Other topics as requested

What you get

In this program you can get access to:

- Three-day face-to-face training with Peter Stevens, Certified Scrum Trainer®
- 80 page Participant's handbook in electronic form with content and exercises
- Access to repository of course materials, templates, checklists, guides & useful information
- 22 SEUs/PDUs
- 2 year membership in the Scrum Alliance
- Recommendation for Certification as a Scrum Product Owner (if you meet the conditions)
- A personalized list of discussion points for improving your project or organization
- Certificate of attendance

Appendix F Answers

1. What are the core principles of Scrum

The key principle of Scrum is **Inspect and Adapt**.

Common failure patterns are:

1. Don't Inspect
2. Dont Adapt
3. Garbage In / Garbage Out
4. The Bulb must want to change
5. The First Impediment: not be allowed to really do Scrum.

What should consider as evil in your project, and keep to a minimum?

1. Multitasking is evil
2. Dependencies are evil
3. Bugs are evil
4. Honorable Mention: Spillover

Multitasking is evil because it is extremely detrimental to personal and team performance.

Dependencies are evil because they are usually a result of coordinating multiple functional teams. This dramatically increases the number of people involved to get work done: the workers themselves, their managers, and their managers' stakeholders, etc.

Bugs are evil, because finding bugs is a factor of hundred more effort than producing the original code in the first place. Like bugs in the kitchen, it is better not to have them in the first place!

Spillover is evil because it is a symptom of multitasking and limits your organizational agility.

2. When Is Scrum the right Framework?

Scrum is a simple, team-based framework for solving complex problems. The results of a complex project are **not easily predictable, like product development or organizational transformation**.

Scrum implements a small set of patterns, that are associated with highly productive teams:

- Inspect & Adapt at regular intervals.
- Produce something of potential value at regular intervals.
- One voice in the team speaks for the customer, user or stakeholders.
- An interdisciplinary team solves the whole problem together.
- A coach helps everybody get better.
- (Management leads and guides, and knows when to stay out of the way.)

Scrum is most effective, when people want to do it.

Classical Management is suitable for problems sets that are **predictable**. The path to success can be defined in advance. Patterns associated with classical management include:

- Define a plan, follow the plan
- Define milestones and check progress against milestones
- Managers, Stakeholders and/or Customers decide
- Bring specialists on board only when and as long as they are needed.
- Well-defined processes, carefully followed, ensure predictable results.

3. Who is responsible for what?

Number	Function	Scrum Master	Product Owner	Dev. Team	Whole Team	Line Manager	Not allowed	Not Defined
1	Requests a release		X					
2	Ensures discipline	X						
3	Changes the Sprint Goal during the sprint						X	
4	Distributes work among development team members			X				
5	May not also be the Product Owner	X						
6	Helps the Product Owner improve his/her work	X						
7	Does their best to deliver what was forecast			X				
8	Ensures for learning from success and failure	X						
9	Creates the product backlog		X					
10	Answers questions about the product backlog		X					
11	Is a single person, not a board or committee		X					
12	Explains to all the parties their responsibilities	X						
13	Defines and Implements standards which extend beyond a single team			X				
14	Ensures that sponsor's funds are well spent		X					
15	Protects the team from outside influences	X						
16	Refines the product backlog				X			
17	Decides how much can be delivered in the Sprint			X				
18	Formulates the Definition of Done				X			
19	Hires new team members							X
20	Decides whether a backlog item is done		X					

Number	Function	Scrum Master	Product Owner	Dev. Team	Whole Team	Line Manager	Not allowed	Not Defined
21	Answers the phone when the customer calls							X
22	Has authority to direct the development team						X	
23	Frames and communicates the product vision		X					
24	Might indicate dysfunction if not invited to the retrospective		X					
25	Ensures that the product backlog is created	X						
26	Leads the team like a project manager						X	
27	Takes responsibility for removing impediments	X						
28	May cancel a sprint		X					
29	Can change or modify task planning during the Sprint			X				
30	Ensures that everyone follow the rules	X						
31	Represents the interests of stakeholders		X					
32	Prioritizes (sequences) the requirements of the product		X					
33	Decides how to achieve the Sprint Goal			X				
34	Explains the Scrum Rules	X						
35	Is accountable for the quality of the Product				X			
36	Has all the skills necessary to deliver a product increment			X				
37	Accountable that productivity is increasing	X						
38	Knows the Vision of the Product				X			
39	Defines and Implements standards within the team			X				
40	Formulates Requirements on the product		X					
41	Estimates Product Backlog Items			X				
42	Decides about sprint length	X						
43	Consists of 7 +/- 2 people			X				
44	May not also be the Scrum Master		X					

Which role is most similar to a Project Manager?

Product Owner

What duties are still assigned to a Project Manager in Scrum?

None. Scrum does not define the role Project Manager

What additional responsibilities are defined for the Scrum Roles compared to a Project Manager?

Product Owner	Scrum Master	Dev Team
Why?	Performance	How?
Decisions	Change Agent (Organization)	How Much?
ROI / Maximizing the value of the teams work	Remove Impediments	Solve the Problem
Vision, Focus, Flow		3 to 9 (7 +- 2) people

4. How to monitor progress

The mother-in-law problem:

- That depends on your assumptions: If continue to calculate at 120kmh, in 2 hours, i.e. 12:30 or 30 minutes late. If you assume that your first 120km is a good predictor for the remaining voyage, you would forecast to arrive in Geneva 3 hours later, or 4h30 after departure: 13:30 (9:00 + 3 * 1:30)
- That depends on your relationship with your mother-in-law. The level of trust and mutual respect you have may influence your decision.
- Some options are: Drive faster, meet in the middle, meet later, cancel the trip

5. How to manage requirements in Scrum

Which principles assure which benefits?

- Independent: c, d, g
- Negotiable: b, d, (a)
- Valuable: d,
- Estimatable, Small and Testable: e, f, h, j

6. How to get backlog items ready for implementation?

- The waterline signifies your next release, or the next business goal. It should not be more than 3 months in the future.
- Typical Estimates (Story Points / T-Shirt / #NoEstimate scales)
 - Epics: 40 to 100 /XL / NFC
 - Features: 13 to 20 / M to L / TFB
 - Grains of Sand: 1 to 5 / XS to S / 1

- How long to implement? Often waiting time is more important than actual implementation time. Eliminating waiting time improves organizational performance and agility.
- When to do backlog refinement: continuously
- Who should be present? The whole Scrum Team, plus additional stakeholders and domain experts as appropriate.

7. When is something really done?

The Definition of Done is an agreement among all Scrum Team members.

Every Scrum Project Needs to Answer 3 questions (and Software Projects need to answer 4 questions) about the value they produce:

1. How do we know we have built the right thing?
Customer Intent/Perspective, External Quality/Acceptance Criteria
2. How do we know we have built the thing right?
Developer Intent/Perspective, Internal Quality
3. How do we know we have built enough functionality to satisfy the user or market?
Completeness, Fitness for Use
4. How do we know that the stuff that was done last sprint is still done this sprint?
Part of (2) but cannot be achieved economically without automation

The Definition of Done covers questions 1, 2 and 4. Question 3 is the responsibility of the Product Owner.

Note: A deeper answer to question 1 would also include validation: Will the users use it? Will the market buy it? How can you reduce the time to validate that you have really built the right thing?