



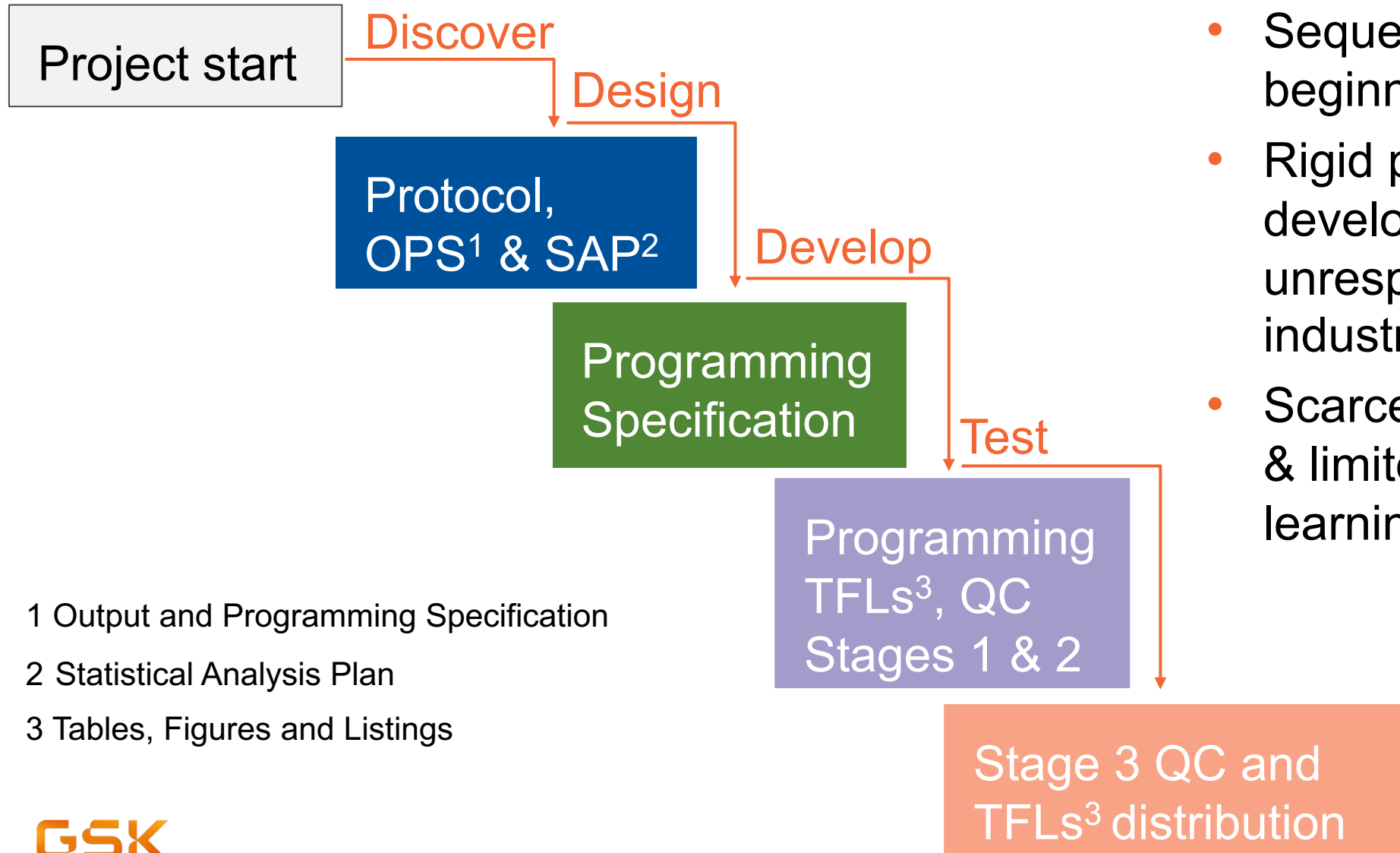
The Implementation Of Scrum Framework in Clinical Programming

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Agenda

1. The traditional project management framework (Waterfall model) and why it is not enough
2. Why Scrum and what are the benefits?
3. What is Scrum framework?
4. How Scrum framework implements the “Why?”
5. My experience of Scrum and use case from Clinical Programming

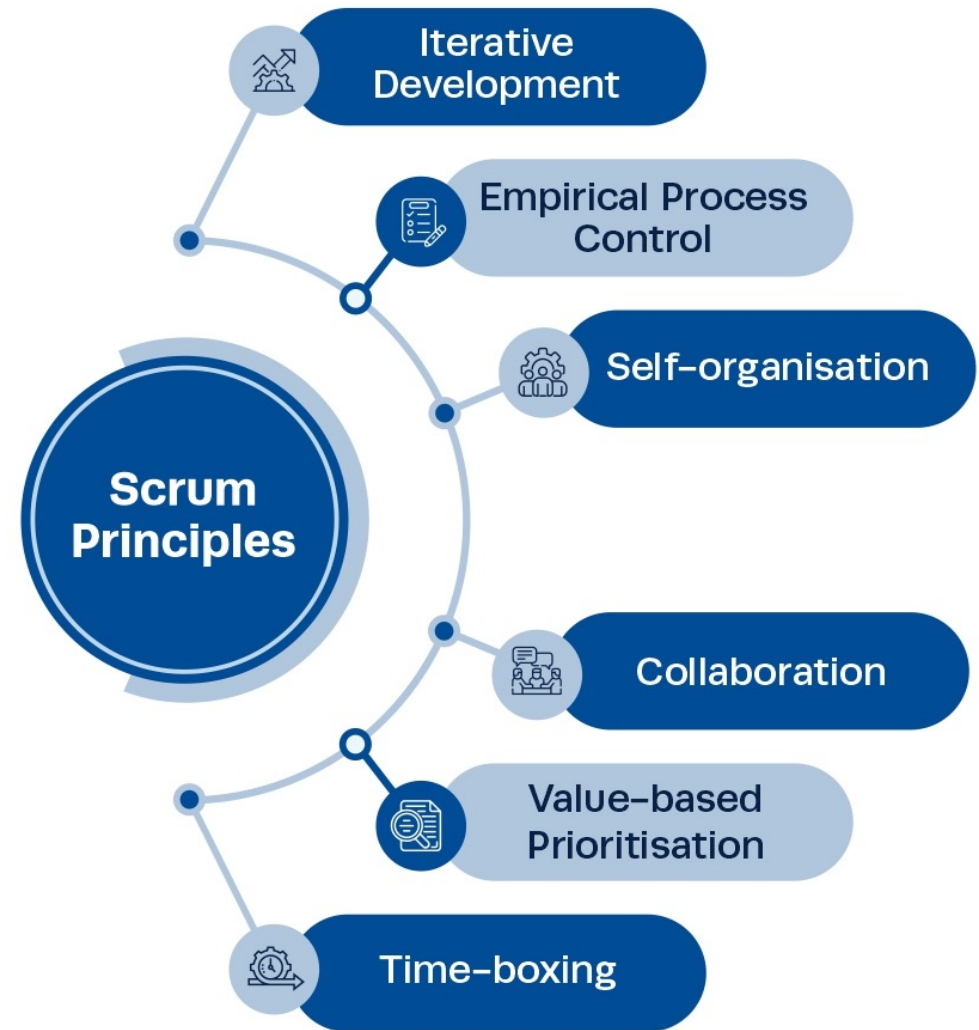
Waterfall project management model is not enough...



- Sequential – step-by-step beginning to end process
- Rigid plan after the project development stage → unresponsive to changing industry requirements
- Scarce team communication & limited opportunity for learning

What is an alternative to Waterfall model framework?

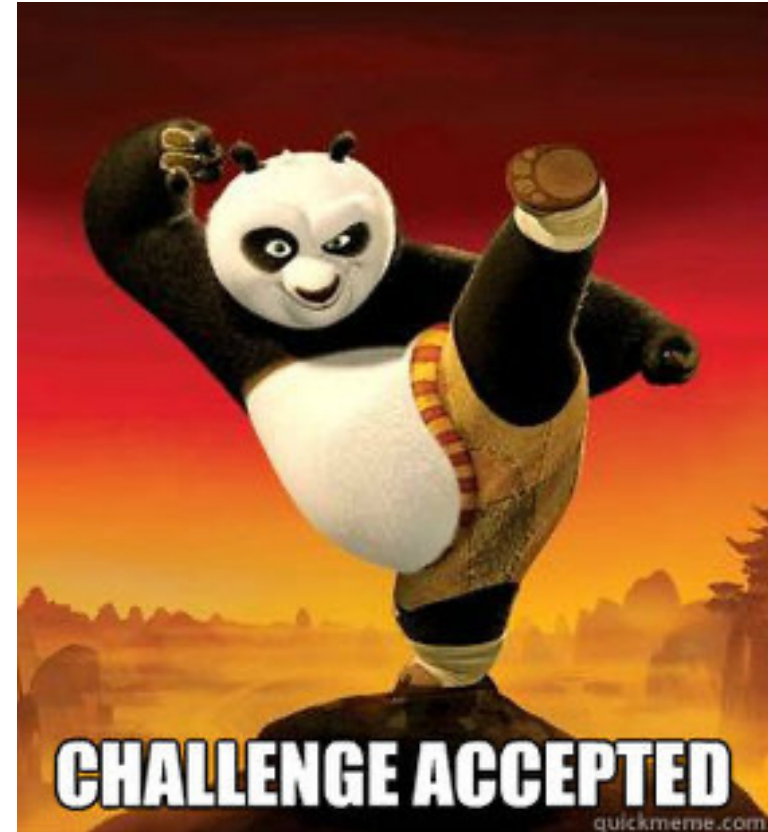
- Scrum - agile project management
 - Transparency, adaptation and inspection
- Scrum in Rugby: method of restarting a play
 - Unity of purpose → whole team pushes the ball up the field
 - Clarity of goal → team attempts to get possession of the ball



Source: Scrum The Ultimate Guide, 6 Scrum Project Management Principles, Institute Project Management

Can Scrum overcome limitations from traditional model?

1. Flexibility and bringing incremental value
 - Priorities can be adapted and regularly reviewed
 - Reduces uncertainty for time estimates
2. Collaboration
 - Transparent communication
 - Team cross-functionality and autonomy
3. Continuous improvement
 - Plan, Do, Check, Act
 - Action based on observation
 - Consistent reflection on performance

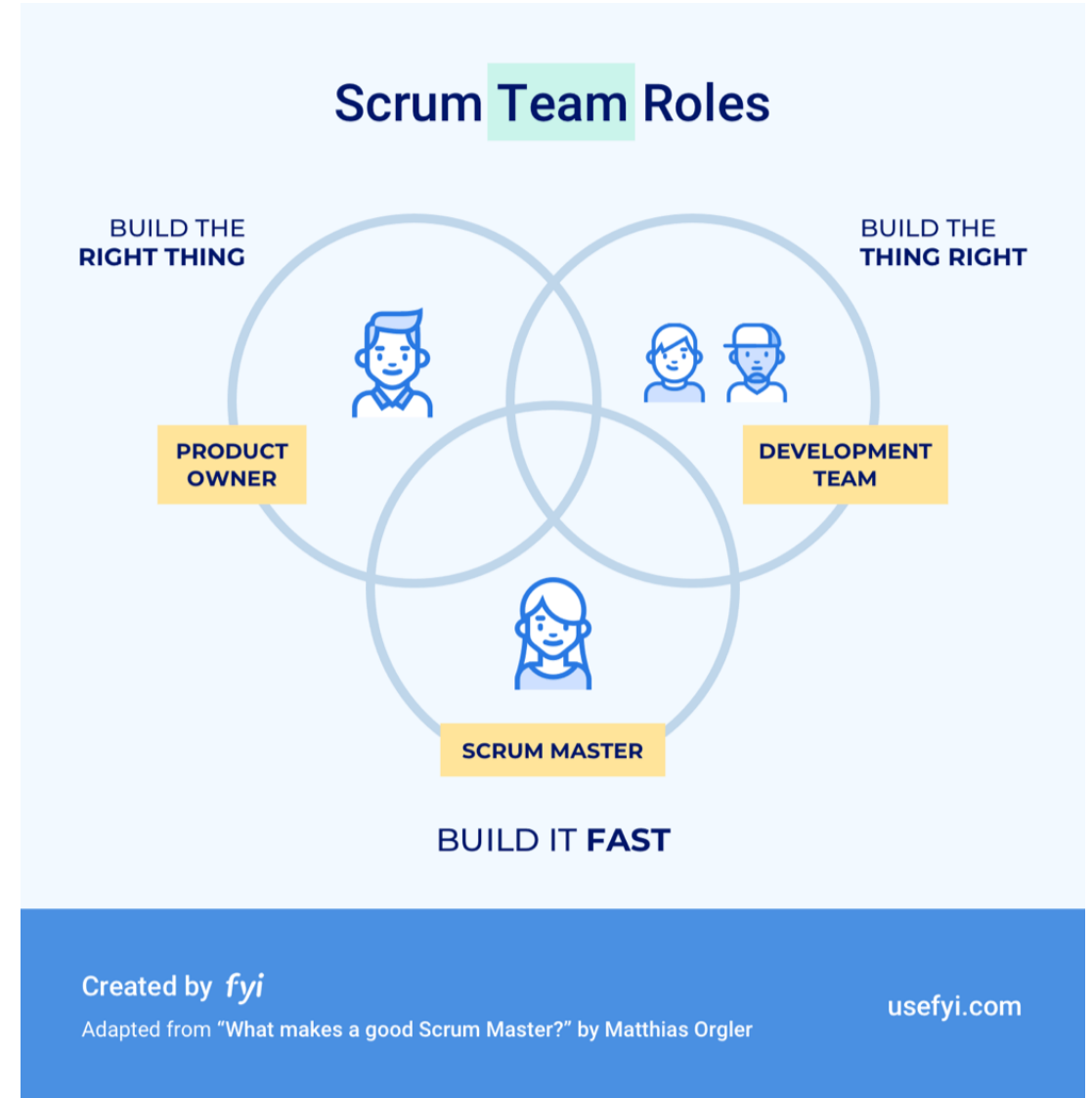


What makes up Scrum?

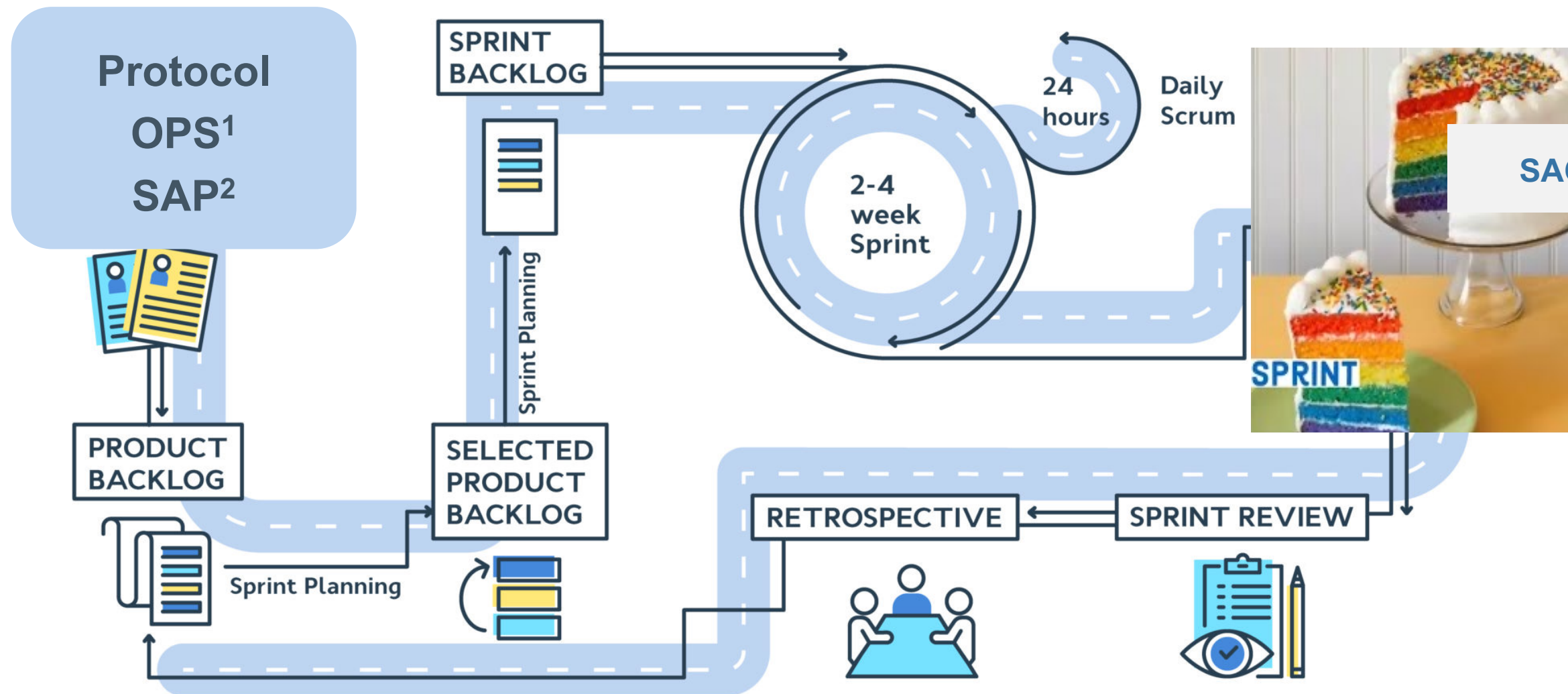
- Scrum Team: Product Owner (Project Programmer), Scrum Master (Study Lead Programmer), Clinical Programming Team

Core components:

- Product Backlog – to-do list of all study tasks
- Sprint - fixed time interval (2-4 weeks)
- Sprint Backlog - priority study tasks for Sprint
- Sprint Board – task status tracker
- Meetings:
 - Daily Scrum (10 min max)
 - Retrospective at the end of each Sprint



The Journey in Scrum Framework



Modified from source: Geekbot, 2020
& Being Agile, 2022, [0:20-3:37]

4 Statistical Analysis Complete

Product and Sprint Backlog

- Prioritisation:
 - 80/20% principal – tasks with greatest value and lowest risks/effort first
 - Project Programmer finalises Product Backlog
 - Definition of Done and Ready
- Time estimation for task:
 - Fibonacci sequence numbers method (1,3,5,8,13...)

Example of section of Sprint Backlog



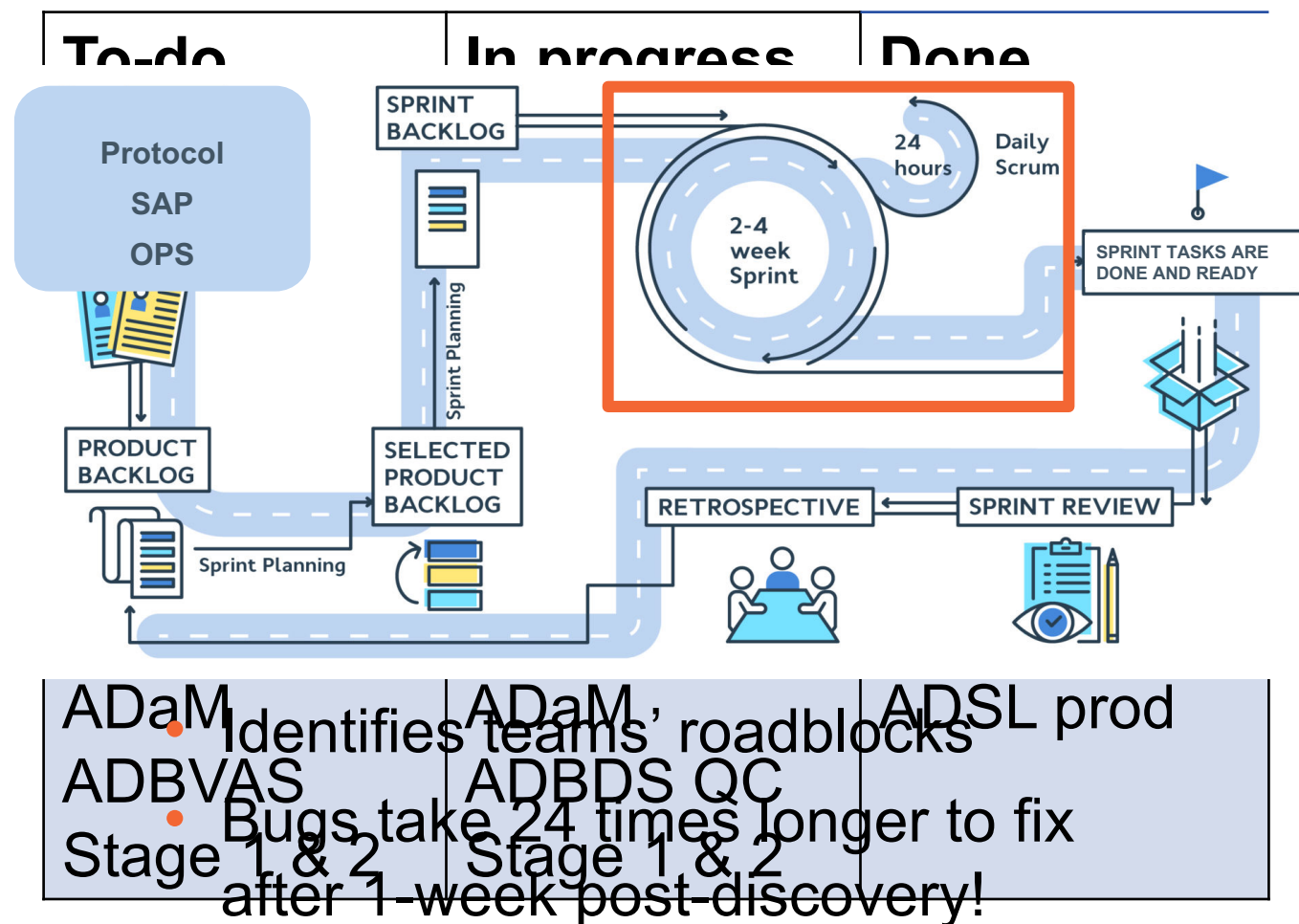
- ADS
 - ADBDS
 - ADBVAS
- Source: Mike Cohn, "Does Poker Planning Work?", Mountain Goat Software

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How to Scrum?

Scrum Board and Daily Scrum

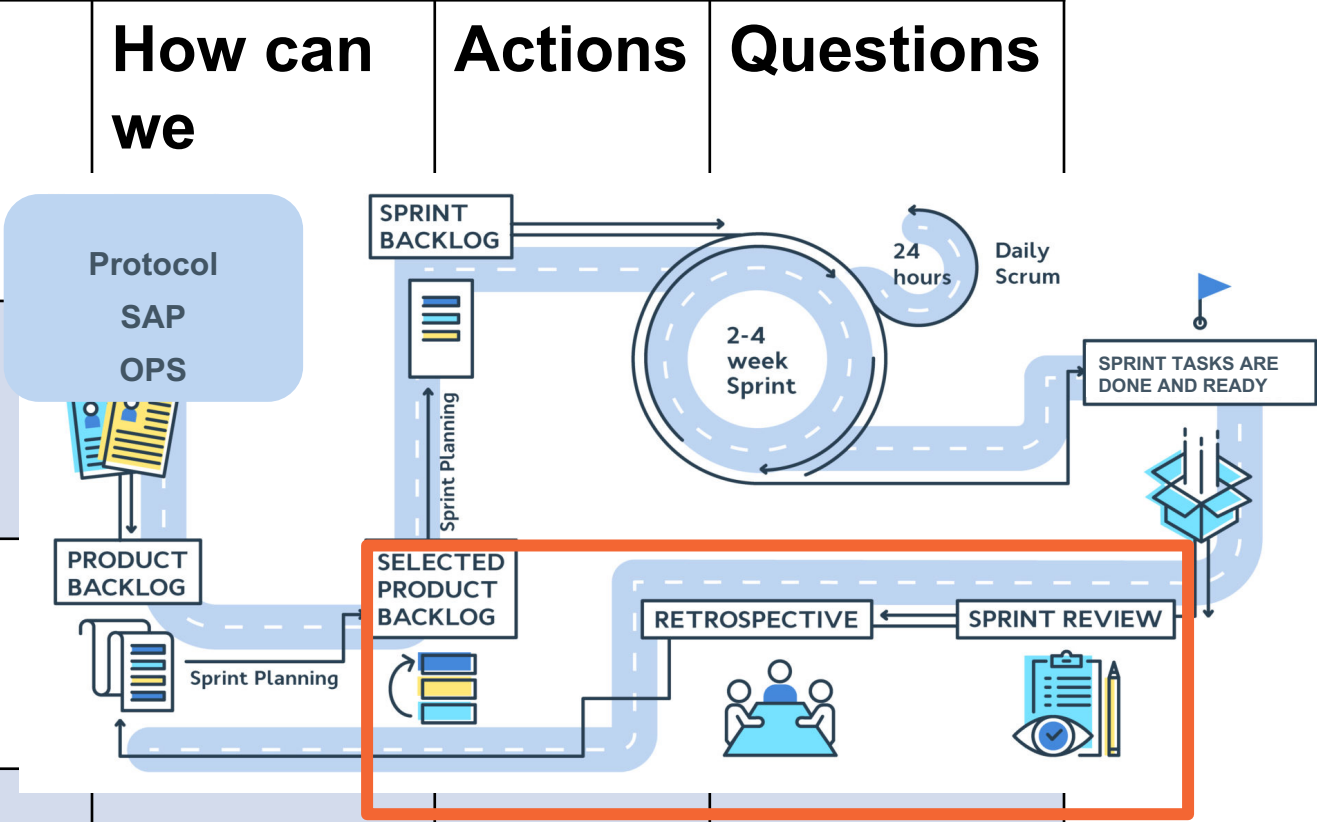
- Daily Scrum (Morning Meeting) and Daily Scrum Board: What did you do yesterday to help the team finish the Sprint?
- What will you do today to help the team finish the Sprint?
- What obstacles do I face which prevent me from completing the task?



How to Scrum?

Sprint Review and Retrospective Sprint

Retrospective meeting agenda:	What went well?	To improve
• What tasks are done and what went well this Sprint?		
• What did not go well in this Sprint?		
• How can we improve in the next Sprint?		
• How can we go faster to our end goal?		
Team member A		
Team member B		
Team member C		



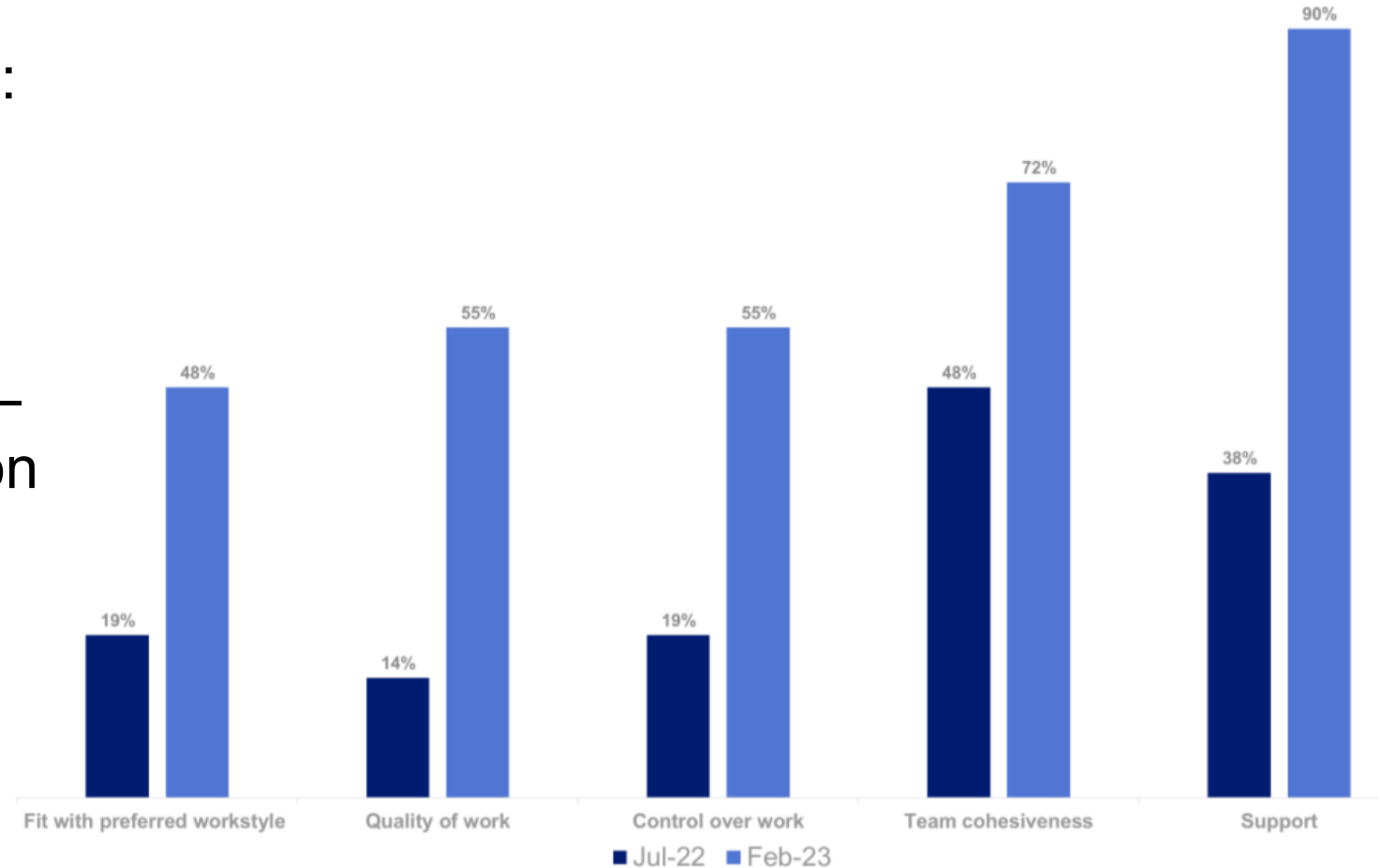
My experience with Scrum framework

- Daily Scrum → 3 times a week for 10 min
- Use Daily Scrum to plan ad-hoc meetings and minimise task-switching
- Retrospective meetings with Trello board → plan actions for next Sprint
- Motivation from seeing progress and contribution to the team
- Learning from my senior colleagues

Scrum framework in Statical Programming: Jazz Pharmaceuticals

Key outcomes after 6 months:

- Greater transparency – visibility of work done and understanding of progress
- Increased communication – ownership for value creation
- Better alignment with business objectives



(Aghi and D'Angelo, *PHUSE US Connect*, 2024)

Key takeaways and contact information

- Adapt the framework to your team and company needs!
- Start small, make mistakes, but be consistent – Plan, Do, Check and Act
- Identify with what you do in a project, not your title

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