



THE LEAN ENGLISH PODCAST

Episode 4: Agile
Part I



EPISODE REVIEW

Episode 1: Introduction

- Intro to the company, podcast and process improvement
- History of method development
- Similarities and differences between methods

Episode 2: Lean

- Major principles and values
- Toyota's influence
- Waste identification and elimination
- Types of improvement
- Problem solving tools

Episode 3: Six Sigma

- The principles of Six Sigma
- Lean and Six Sigma as one method
- Five phase project structure
- Goals and requirements by phase



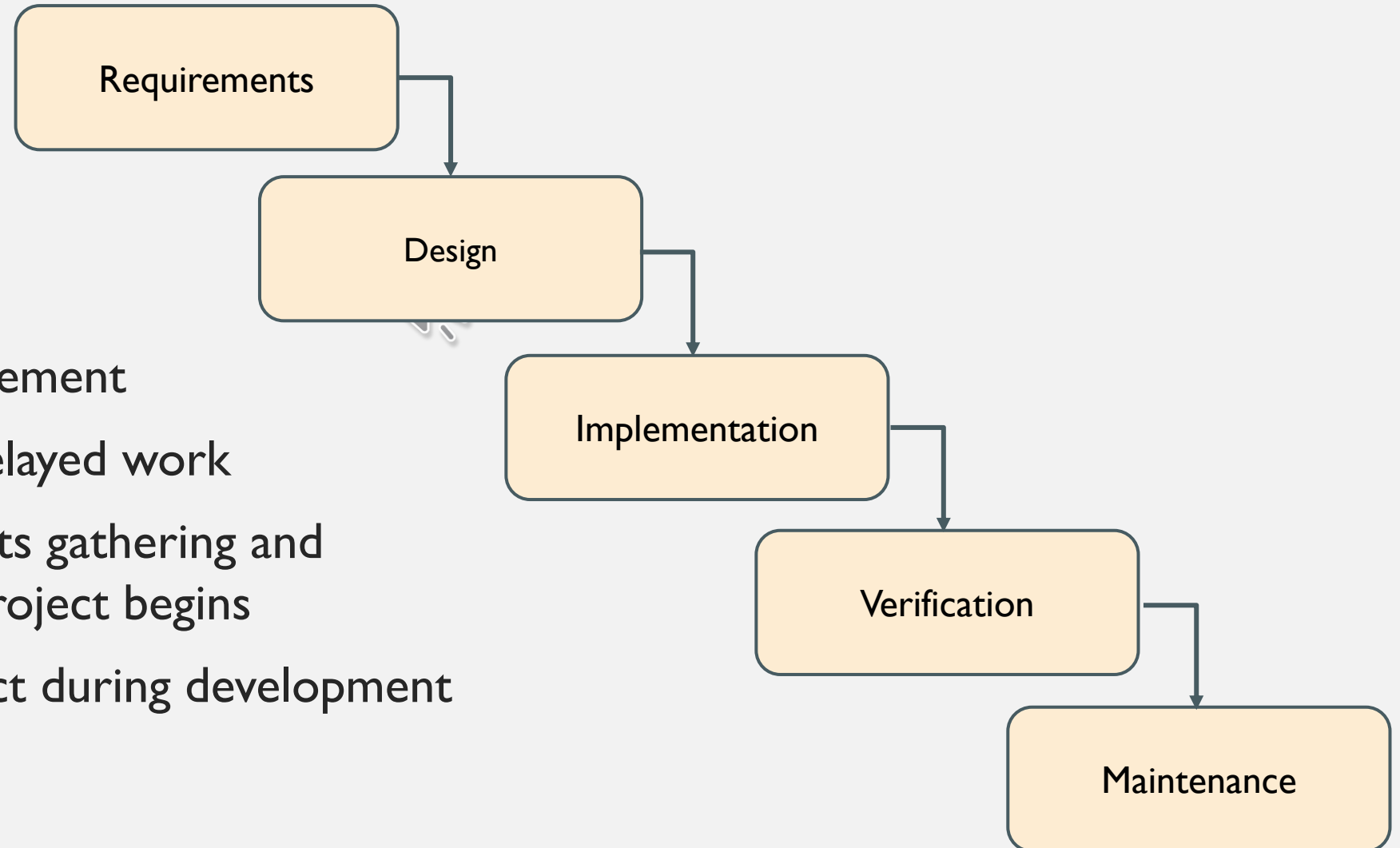
OUR AGENDA

- Comparison with Waterfall
- The Agile Manifesto
- 4 Values and 12 Principles
- Scrum project lifecycle
- Release delivery timeline
- Scrum meetings
- Team Roles and Responsibilities





WATERFALL PROJECT MANAGEMENT



- Toll-gated Project Management
- Contract negotiations delayed work
- Emphasis on requirements gathering and documentation before project begins
- Minimal customer contact during development



AGILE MANIFESTO VALUES

- The Agile Manifesto was signed in February 2001, by 17 leading software developers.
- It is considered the key reference for all Agile practices.
- The goal was to create a document to show companies and developers that there is an easier, more inclusive way of delighting customers.

We prefer...

Individuals and interactions
Working software
Customer collaboration
Responding to change

Over...

Processes and tools
Comprehensive documentation
Contract negotiation
Following a plan



AGILE MANIFESTO PRINCIPLES

Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.



AGILE MANIFESTO PRINCIPLES

Businesspeople and developers must work together daily throughout the project.

Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.



AGILE MANIFESTO PRINCIPLES

Working software is the primary measure of progress

Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

Continuous attention to technical excellence and good design enhances agility.



AGILE MANIFESTO PRINCIPLES

Simplicity--the art of maximizing the amount of work not done--is essential.

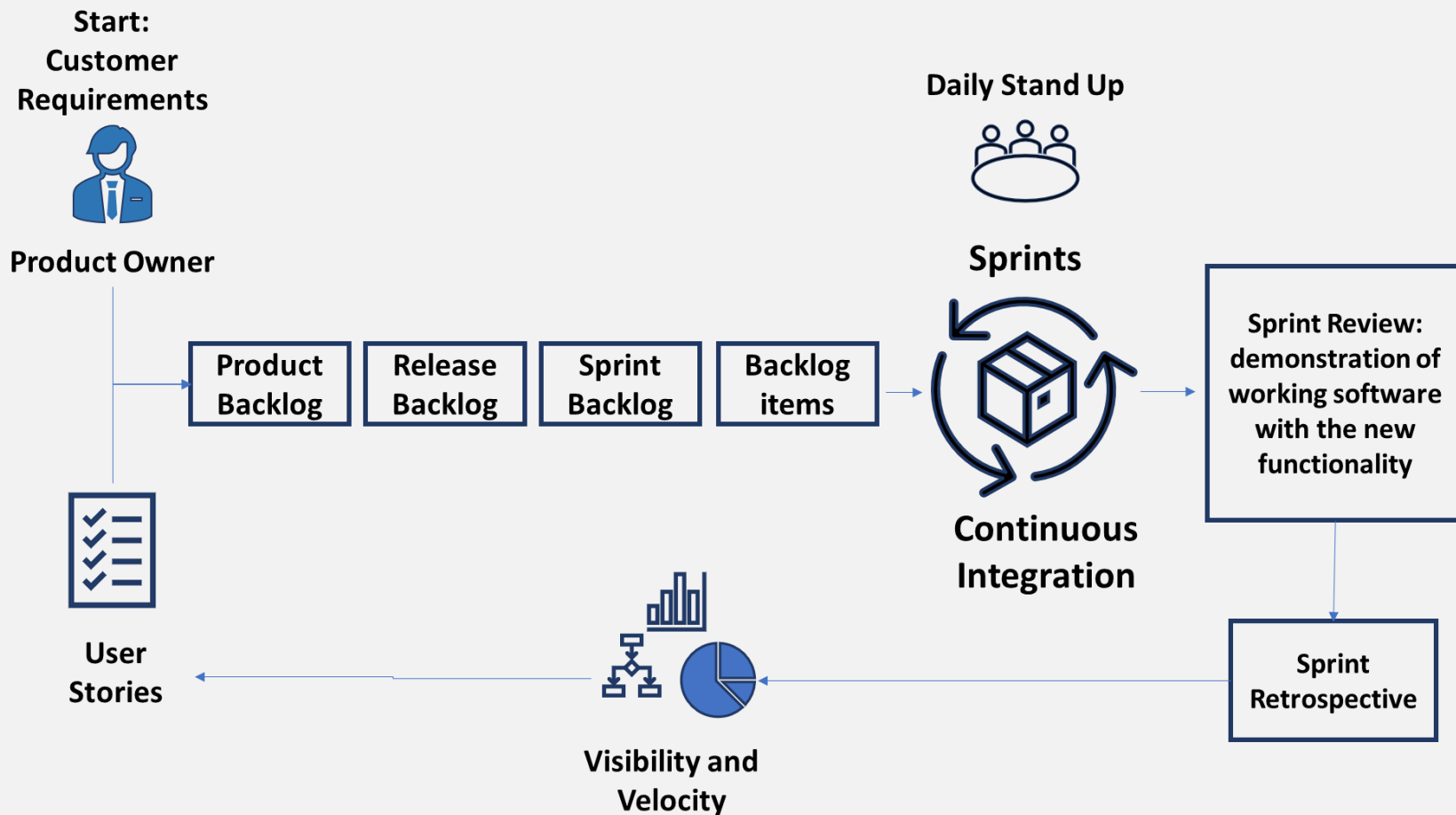
The best architectures, requirements, and designs emerge from self-organizing teams.

At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

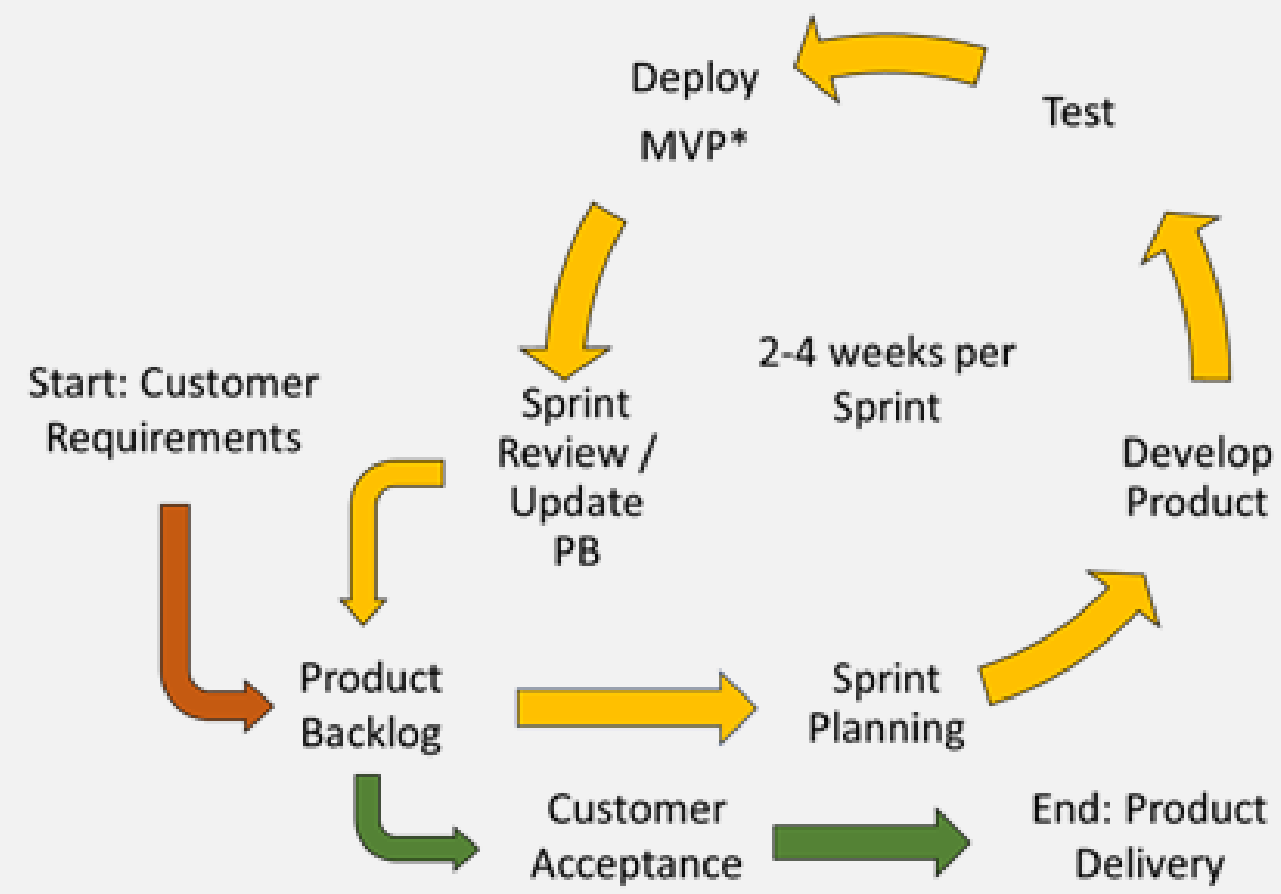


SCRUM PROJECT LIFECYCLE

- **Product Backlog**
- **Sprint Planning**
- **2–4-week Sprint**
- **Sprint Review**
- **Sprint Retrospective**

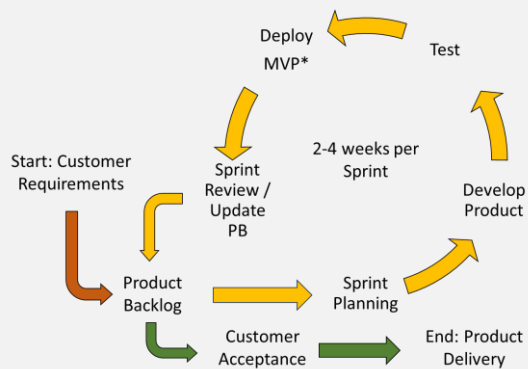


RELEASE AND
DELIVERY

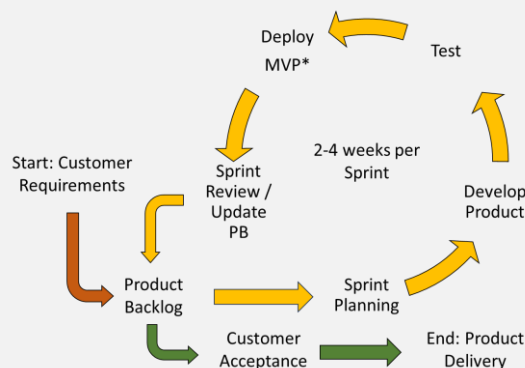




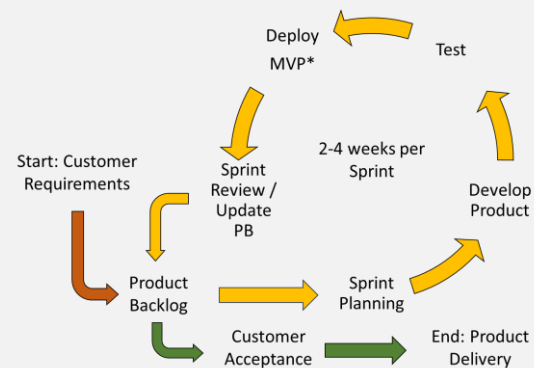
FINAL PRODUCT TIMELINE



Release #1



Release #2



Release #3
Final Product



THREE PILLARS OF SCRUM



Transparency

Being transparent with the customer, leadership and the team members

Shared spaces, information radiators and open testing



Inspection

Regular inspection and testing permits only high-quality work to proceed

Open to finding errors rather than covering them up



Adaptation

Technology develops quickly, so adaptation to the market is necessary

Agile teams embrace change and know this ability gives them an advantage over traditional development



SPRINT PLANNING MEETING



This meeting is conducted at the beginning of every sprint.



It usually is timeboxed for 1-2 hours per week of sprint, but also the complexity of the user stories can add time to the meeting.



The goal is for the team to have a clear “Definition of Done.”



The entire team should agree and commit to the sprint goal, which should be realistic and achievable.



DAILY STAND UP

- Conducted before work each day
- Attended by Scrum Master and Development Team
- Each team member gives 3 updates:
 - Tasks completed yesterday
 - Tasks scheduled for today
 - The issues that require Scrum Master support
- Time-boxed to 15 minutes
 - If larger issues arise from the meeting, they are discussed offline



CONDUCTED AFTER
EVERY SPRINT



TEAM SHARES THE
WORKING SOFTWARE
THEY HAVE COMPLETED
DURING THE SPRINT



ATTENDED BY PRODUCT
OWNER, SCRUM MASTER,
DEVELOPMENT TEAM
AND POTENTIALLY
OTHERS DEPENDING ON
NECESSITY



TIME-BOXED TO BE 1
HOUR PER WEEK OF
SPRINT



FEEDBACK FROM THE
PRODUCT OWNER HELPS
THE TEAM GROOM
(REPRIORITIZE) THE
PRODUCT BACKLOG

SPRINT REVIEW



SPRINT RETROSPECTIVE

Conducted after every Sprint Review

Time-boxed to be 45 minutes per week of Sprint

Scrum Master, Development Team and possibly External Facilitator

Makes issues visible to identify improvement opportunities:

- What went well
- What went poorly
- What the team needs to do to improve the next Sprint – team takes ownership

This is the team's commitment to continuous improvement



SCRUM ROLES & RESPONSIBILITIES

Product Owner

- Represents the demands of the customer
- Drives customer's vision, requirements and priorities

Scrum Master

- Responsible for the team
- Acts as Servant Leader, removing obstacles so the team can perform at their best

Development Team

- Five to nine engineers
- Self-organized, closely linked and often paired

END OF PART I