



Agile Software Project Management



Who is a Project Manager?

- Planning
- Scheduling
- Coordinating
- Working with people

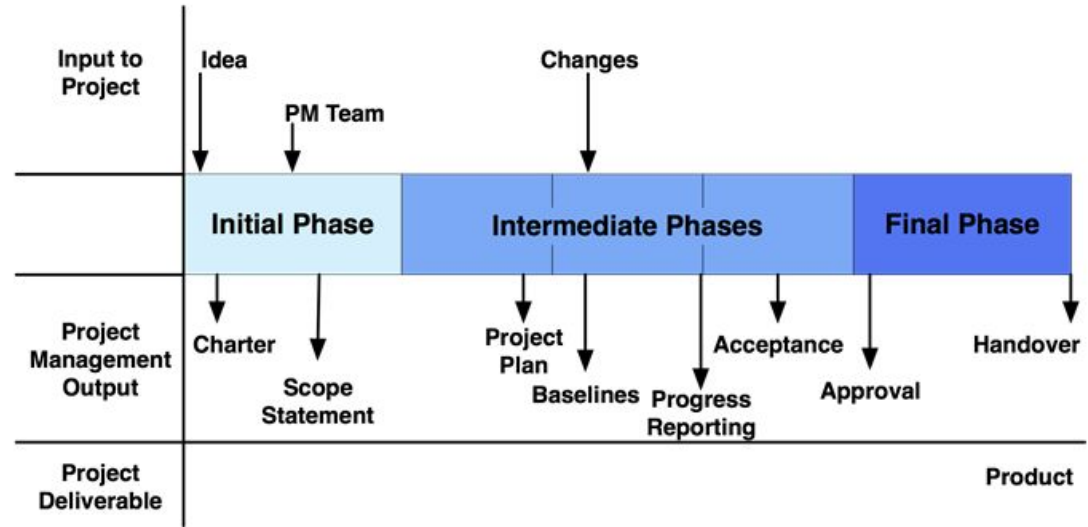


Phases In a Project Life Cycle

The completion & approval of one or more deliverables defines a project phase.

In **iterative systems development**, new phase can start without closing the previous phase.

A phase can be closed without initiating subsequent phases.



*Adapted from PMBOK
Guide 3rd Edition Fig. 2-3*

Project Parameters

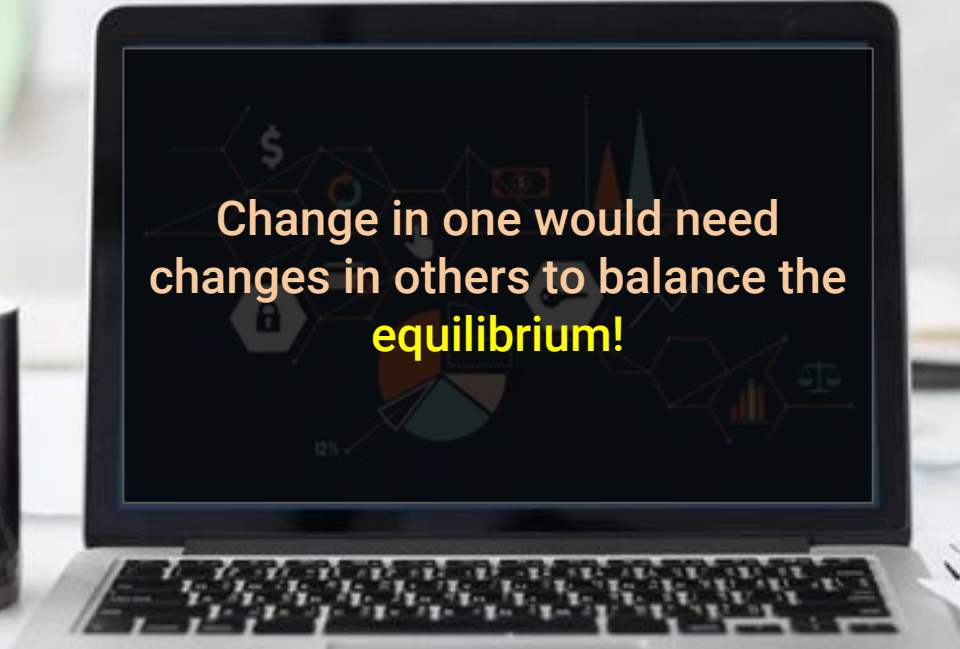
Scope

Quality

Cost

Time

Resources



Change in one would need
changes in others to balance the
equilibrium!

Scope

A background image showing the lower half of a person walking on a paved road. The person is wearing blue jeans and brown sandals, and is walking along a yellow line that runs down the center of the road. The image is slightly blurred, giving it a sense of motion.

*Defines **boundaries**
of the project*

*What's **done** & **not done***

Quality

Product Quality

Quality of the deliverable from the project

Process Quality

Quality of project management. Focus on how well the process works and how can it be improved.

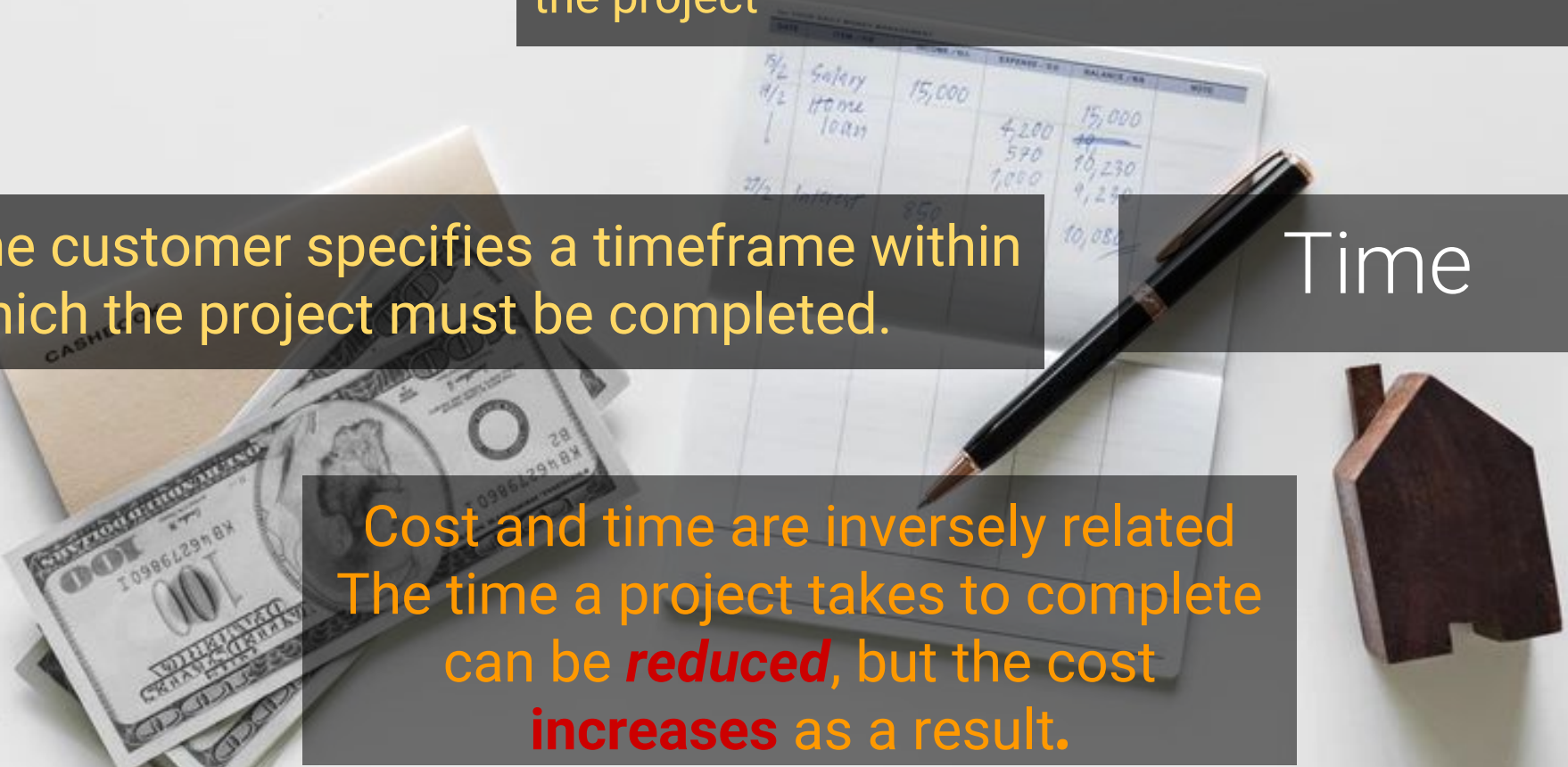
Cost

The X amount of dollars that will cost to do the project / the budget that has been established for the project

The customer specifies a timeframe within which the project must be completed.

Time

Cost and time are inversely related
The time a project takes to complete
can be **reduced**, but the cost
increases as a result.



Resources

A collection of stationery items including pencils, pens, paper clips, and a small ice cream cone figurine on a dark blue background.

Assets such as *people, equipment, physical facilities or inventory* that have limited availabilities, can be scheduled or can be leased from an outside party.

Some are *fixed* others are *variable* only in the long term. Central to the scheduling of project activities and the orderly project completion.

Organizational Structures

Functional

Engineering, Marketing, Design, etc
P&L from production

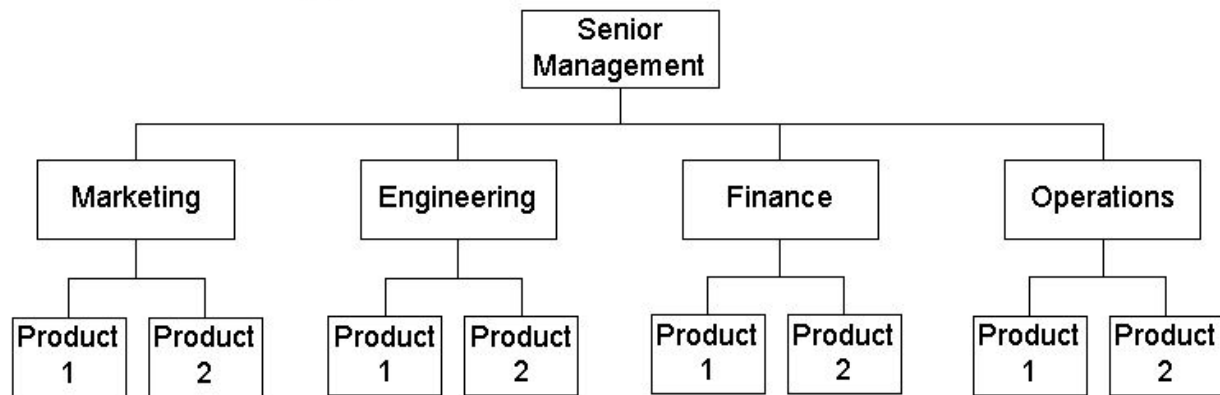
Projectized

Project A, Project B
Income from projects
PM has P&L responsibility

Matrix

Functional and Project based
Program Mgmt. Model
Shorter cycles, need for rapid development process

Functional Organization



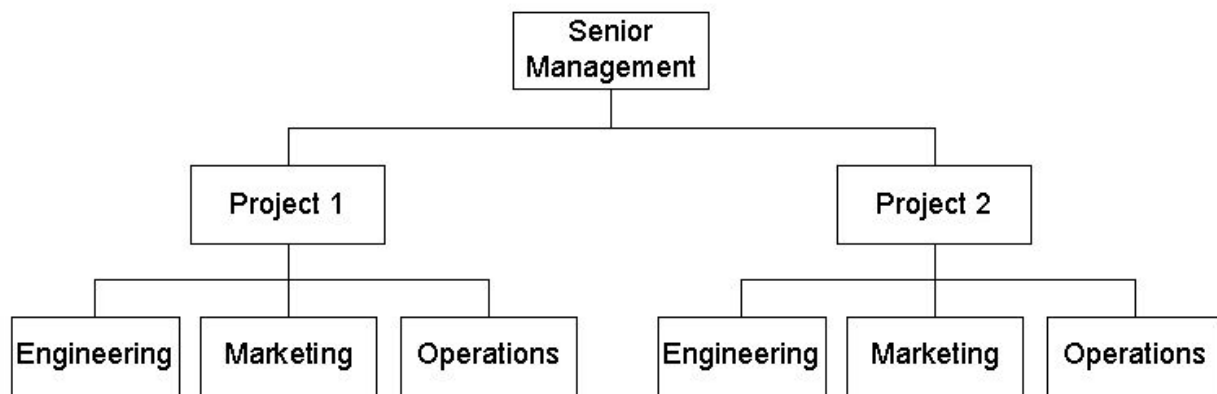
Pros

- Clear definition of authority
- Eliminates duplication
- Encourages specialization
- Clear career paths

Cons

- “Walls”: can lack customer orientation
- “Silos” create longer decisions cycles
- Conflicts across functional areas
- Project leaders have little power

Projectized Organization



Pros

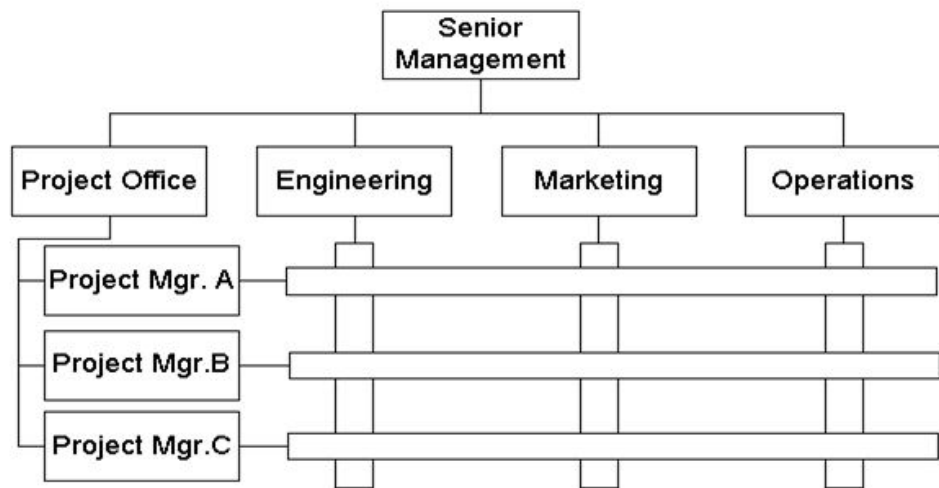
- Unity of command
- Effective intra-project communication

Cons

- Duplication of facilities
- Career path

Examples: defense avionics, construction

Matrix Organization



Pros

- Project integration across functional lines
- Efficient use of resources
- Retains functional teams

Cons

- Two bosses for personnel
- Complexity
- Resource & priority conflicts

Matrix Forms

Weak, Strong, Balanced

Degree of relative power

Weak: functional-centric

Strong: project-centric

Organizational Structure – Influences on Projects

<div> <div>Organization Type</div> <div>Project Characteristics</div> </div>	Functional	Matrix			Projectized
		Weak Matrix	Balanced Matrix	Strong Matrix	
Project Manager's Authority	Little or None	Limited	Low to Moderate	Moderate To High	High to Almost Total
Percent of Performing Organization's Personnel Assigned Full-time to Project Work	Virtually None	0-25%	15-60%	50-95%	85-100%
Project Manager's Role	Part-time	Part-time	Full-time	Full-time	Full-time
Common Title for Project Manager's Role	Project Coordinator/ Project Leader	Project Coordinator/ Project Leader	Project Manager/ Project Officer	Project Manager/ Program Manager	Project Manager/ Program Manager
Project Management Administrative Staff	Part-time	Part-time	Part-time	Full-time	Full-time

Agile Transformation



Agile Manifesto

Individuals & Interactions
Over
Tools & Processes

Agile Manifesto

Working Software
Over
Comprehensive Documentation

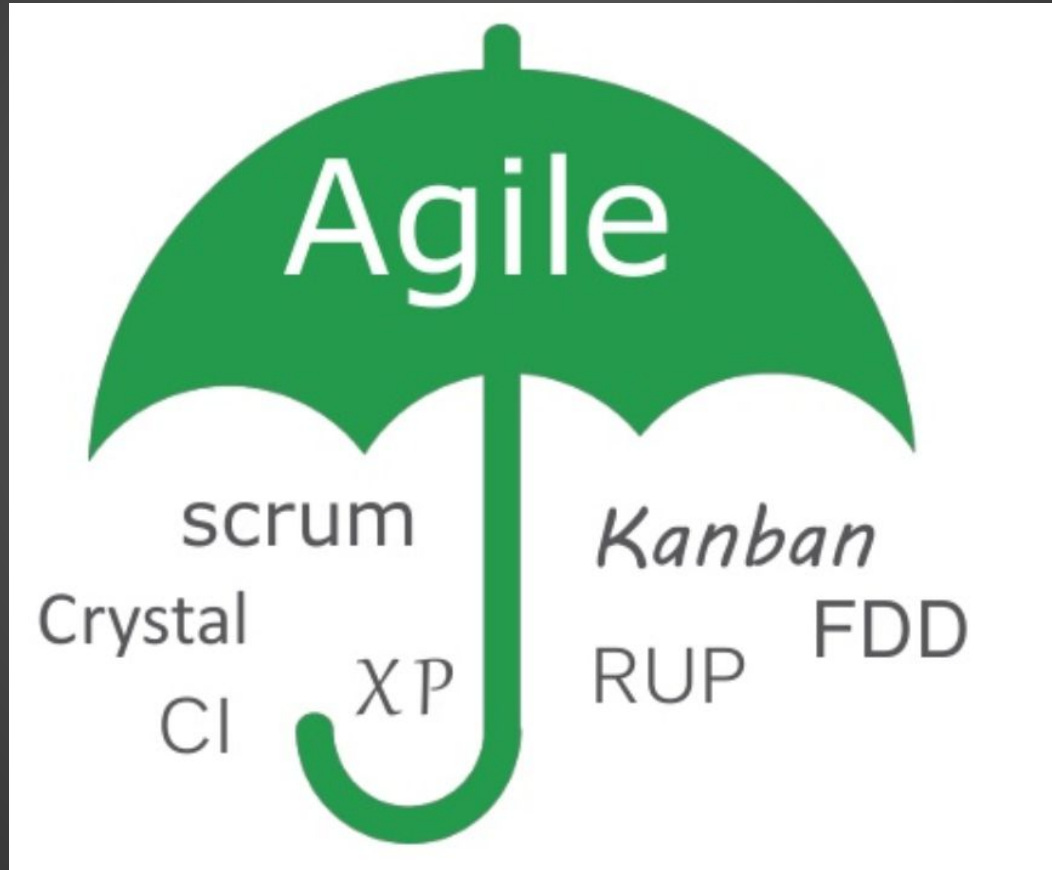
Agile Manifesto

Customer *Collaboration*
Over
Contract *Negotiation*

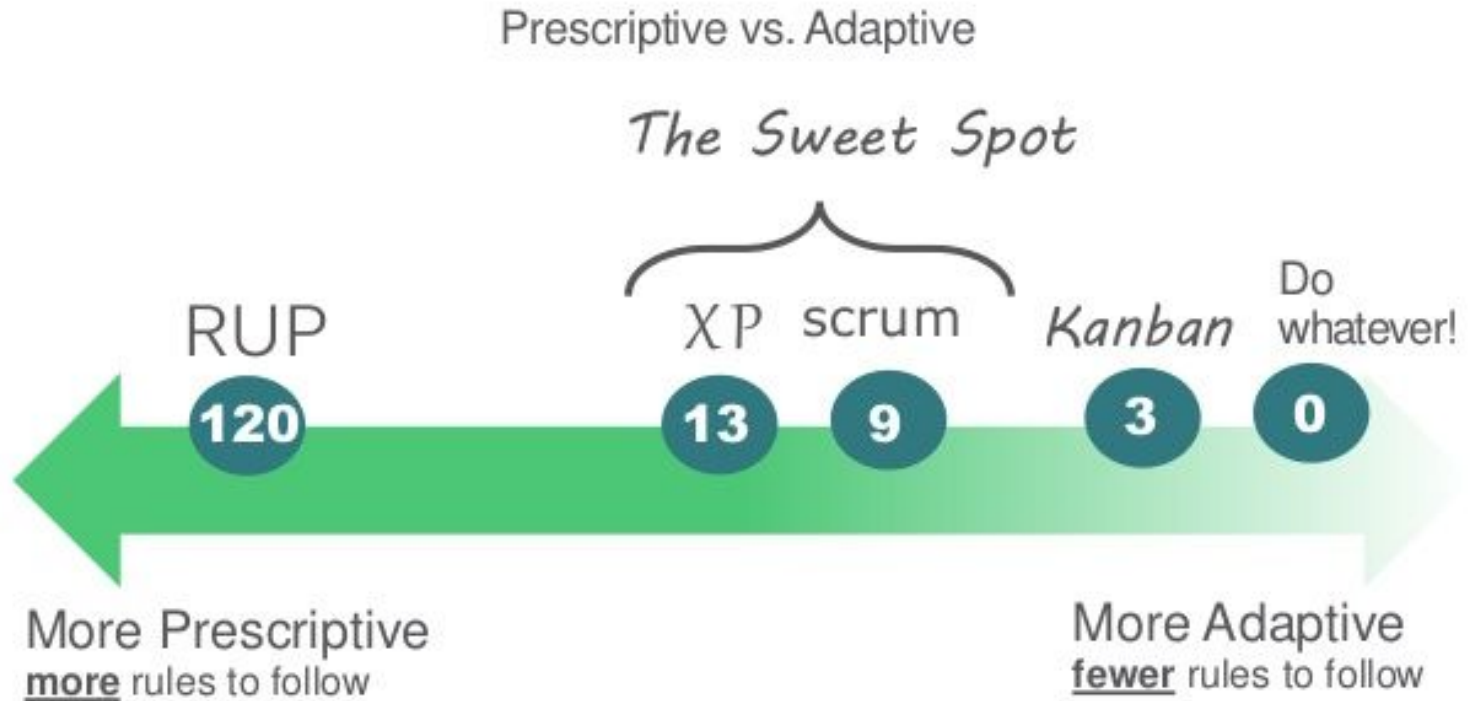
Agile Manifesto

Respond to Change
Over
Following a Plan

Agile Methodologies



Agile Methodologies



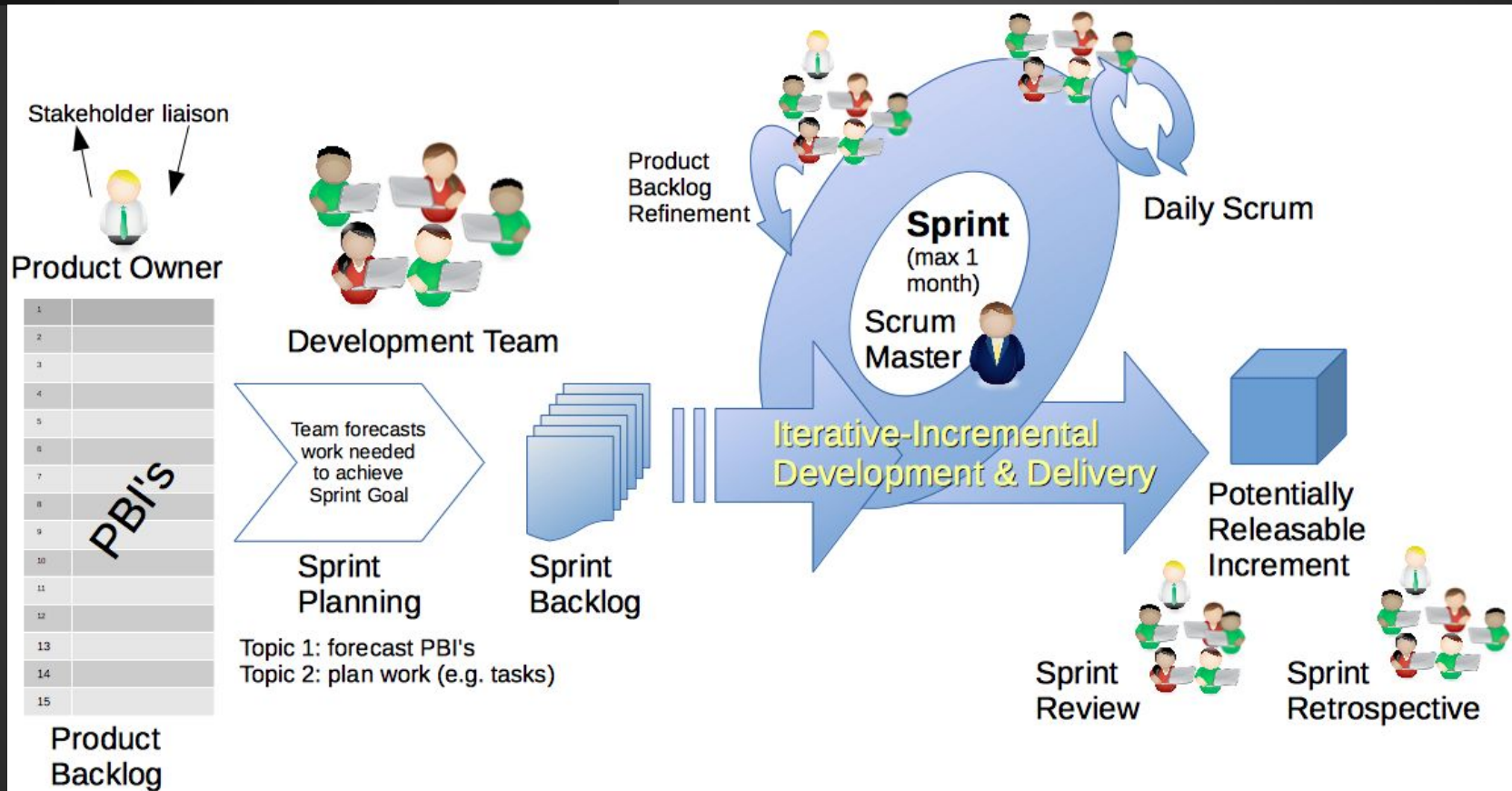
SCRUM Master

Servant Leader
Resolves blockers
Guardian of the Project!

SCRUM Master



SCRUM Framework



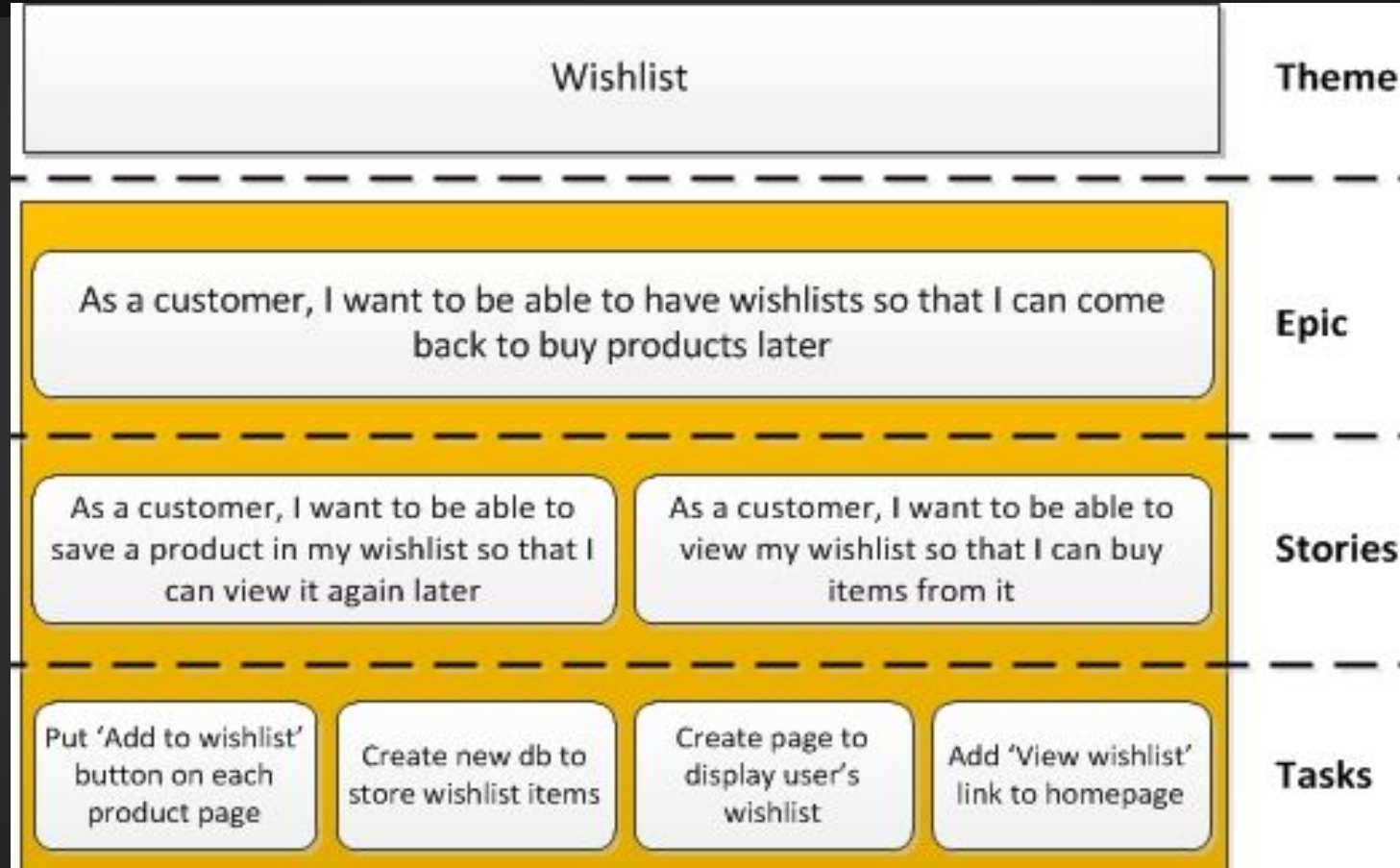
Writing User-stories/Epics

As <persona> ,

I want <what?>

so that <why?>.

Writing User-stories/Epics



Backlog Grooming

- Removing user stories that no longer appear relevant
- Creating new user stories in response to newly discovered needs
- Re-assessing the relative priority of stories
- Assigning estimates to stories which have yet to receive one
- Correcting estimates in light of newly discovered information
- Splitting user stories which are high priority but too coarse grained to fit in an upcoming iteration

Backlog Grooming

How its Done!
(Video)

Scrum Estimation



Planning Poker



<https://play.google.com/store/apps/details?id=com.samcarton.planningpoker&hl=en>

Planning Poker



Planning Poker

How its Done!
(Video)

Daily Scrum

What did you do yesterday?

What are you going to do today?

What are your Impediments?

Daily Scrum

How its Done!
(Video)

Demo

Target Process

Thank You