Certified ScrumMaster

A two day course of theory & simulations on how to use Scrum.

Scrum Alliance
CSM
CERTIFIED

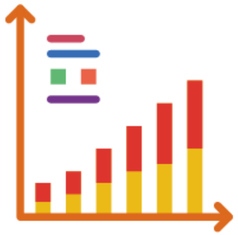
Jem Jelly

What would you like to get out of these 2 days?

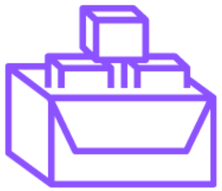
As a <role>
I want <the impact>
So that <your why>

COACHING

TEAM TRANSFORMATION



METRICS



PROJECT TO PRODUCT

TECHNIQUES, TOOLS

ORG. TRANSFORMATION

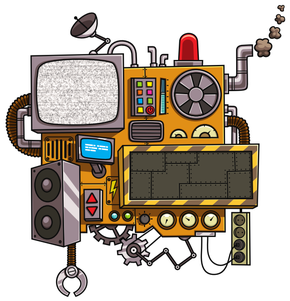
Exam info.

- We will focus on the learning objectives to become a Certified Scrum Master
- Requires full attendance to be eligible to sit exam
- 50 multiple - choice questions based on learning objectives
- 60 minute time limit

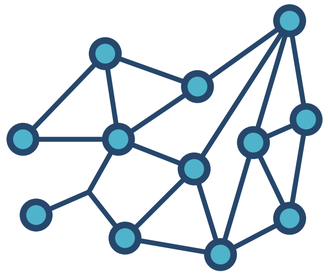
About Me

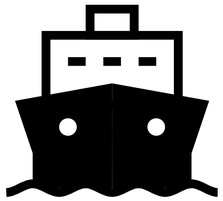
Jem Jelly

- Been around the Scrum framework since 2005
- Worked with over 150+ teams using Agile frameworks
- I've trained over 4,000 students in Scrum & Agile

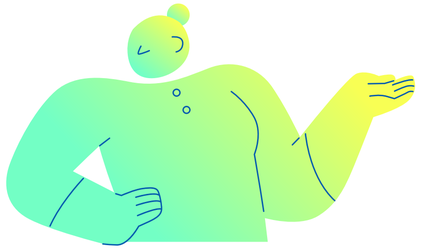


Different Ages may benefit from different ways of working...



Age	System	New Infrastructure		Management Approach
1771 -1829 Industrial revolution	WATER-POWERED MECHANISATION		Canals,sailing ships	Factory systems, entrepreneurship
1829-1873 Age of steam & railways	AGE OF STEAM RAILWAYS		Railways, steam ships	Joint stock companies, subcontracting
1875-1918 Age of steel & heavy engineering	ELECTRIFICATION OF EQUIP. & TRANSPORT		Steel ships, Steel railways	Taylorism
1920s Age of oil & mass production	MOTORISATION OF TRANSPORT & ECONOMY		Radio, motorways	Mass production, Fordism, Lean
1970s Age of software & digital	DIGITISATION OF ECONOMY		Internet, software	?

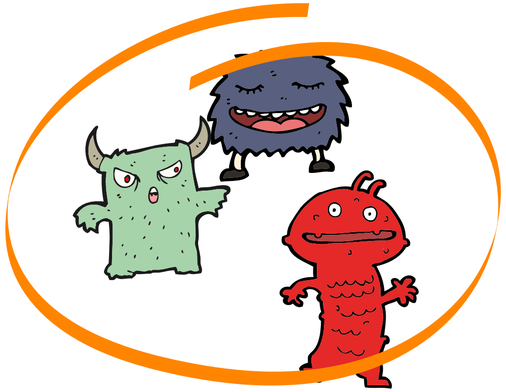
What industry are you in?

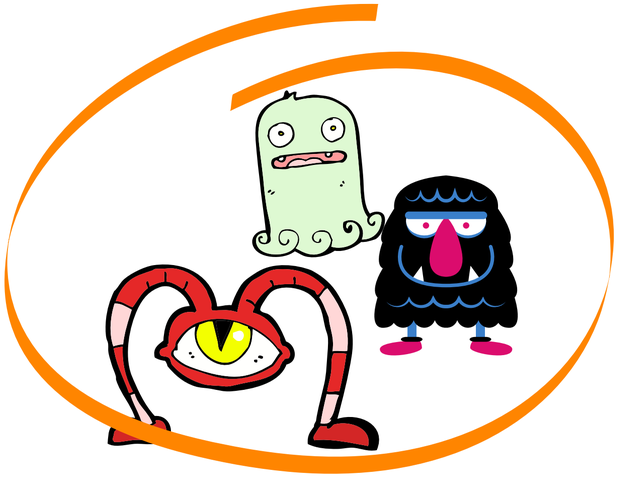


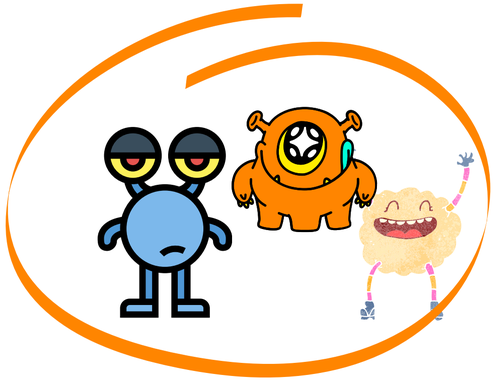
Can you think of one which doesn't use technology?

SETTING UP AS A TEAM

This is a container for a Group







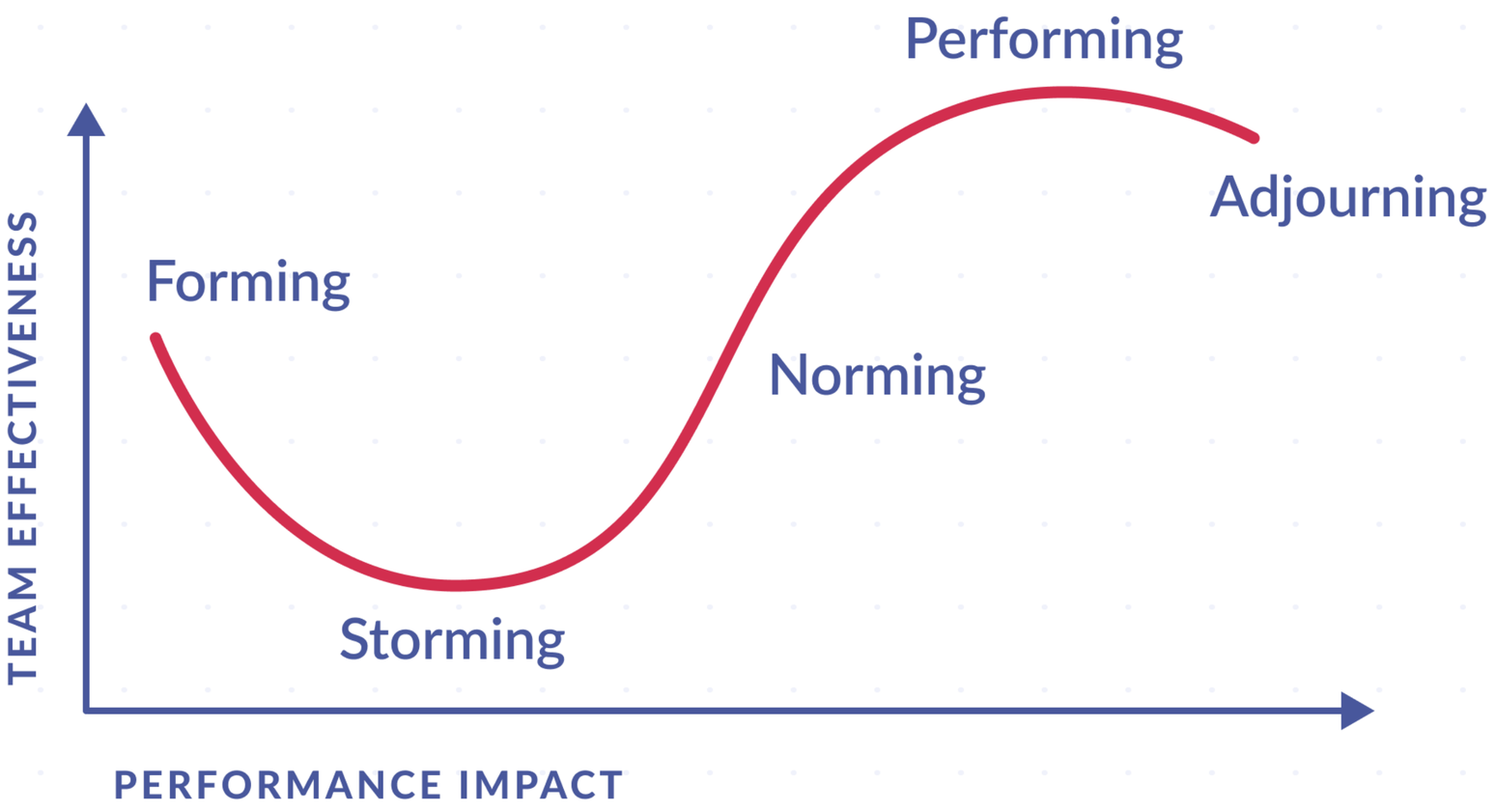
These are containers for Teams

How do we want to work together?

What makes us a team?

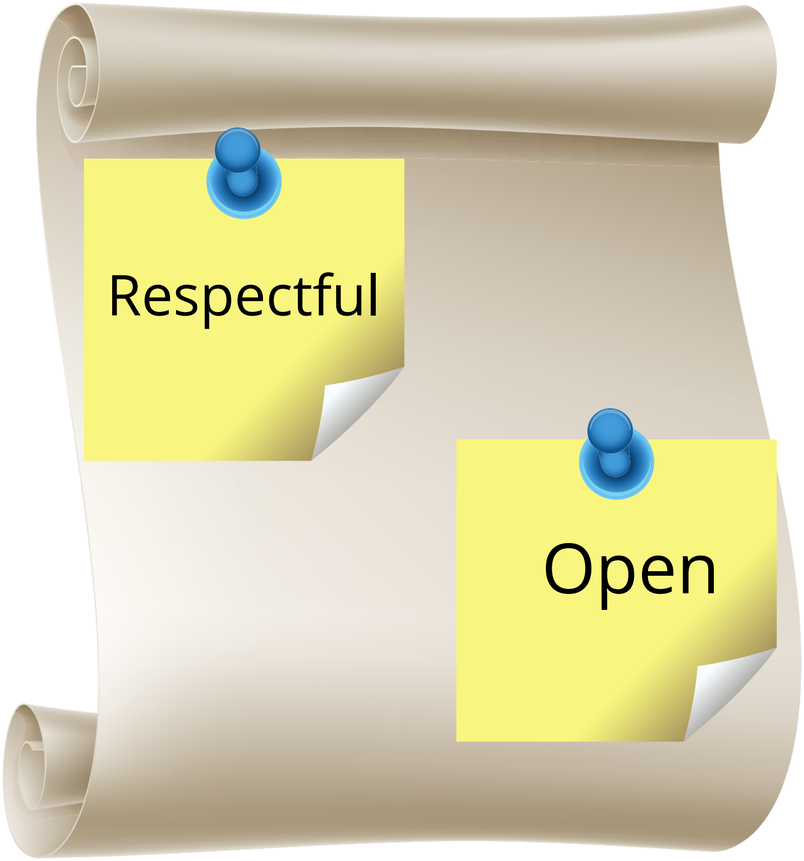
How will we know we are succeding?

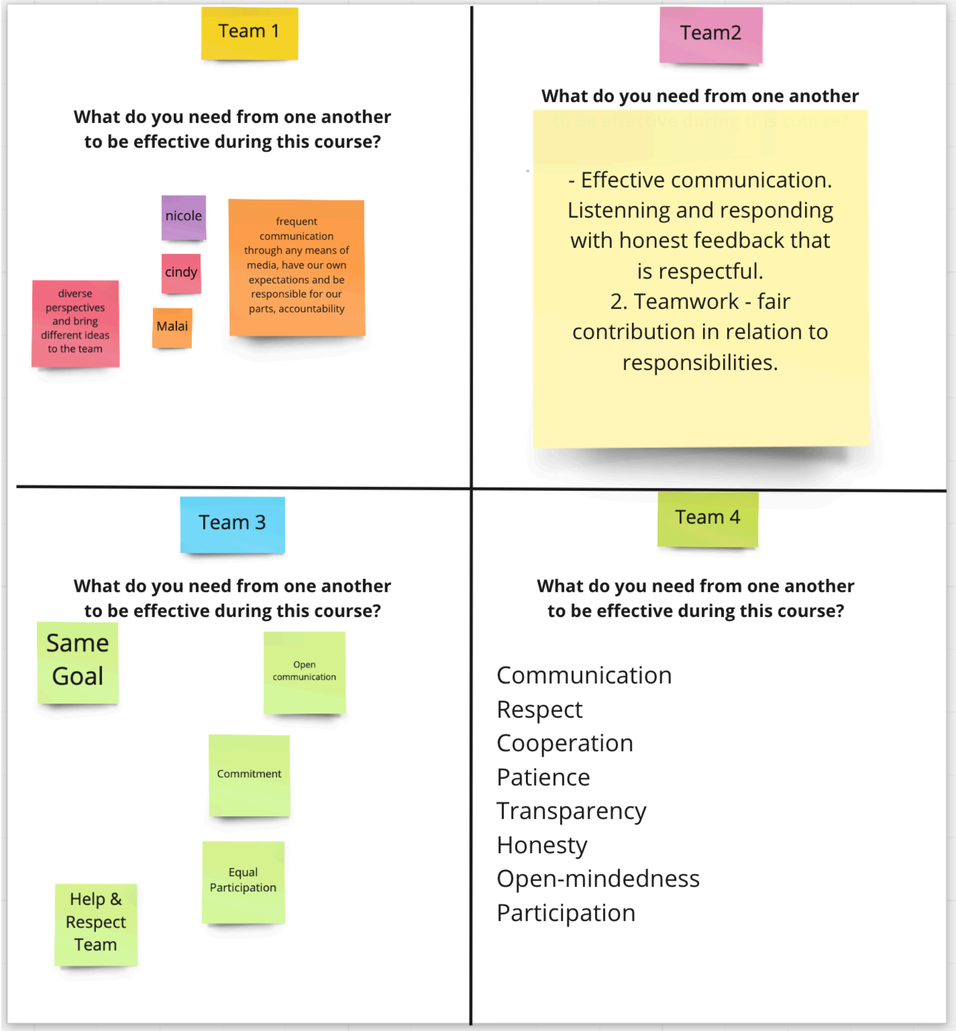
Tuckman Cycle



Team Dynamics

TEAM WORKING AGREEMENT



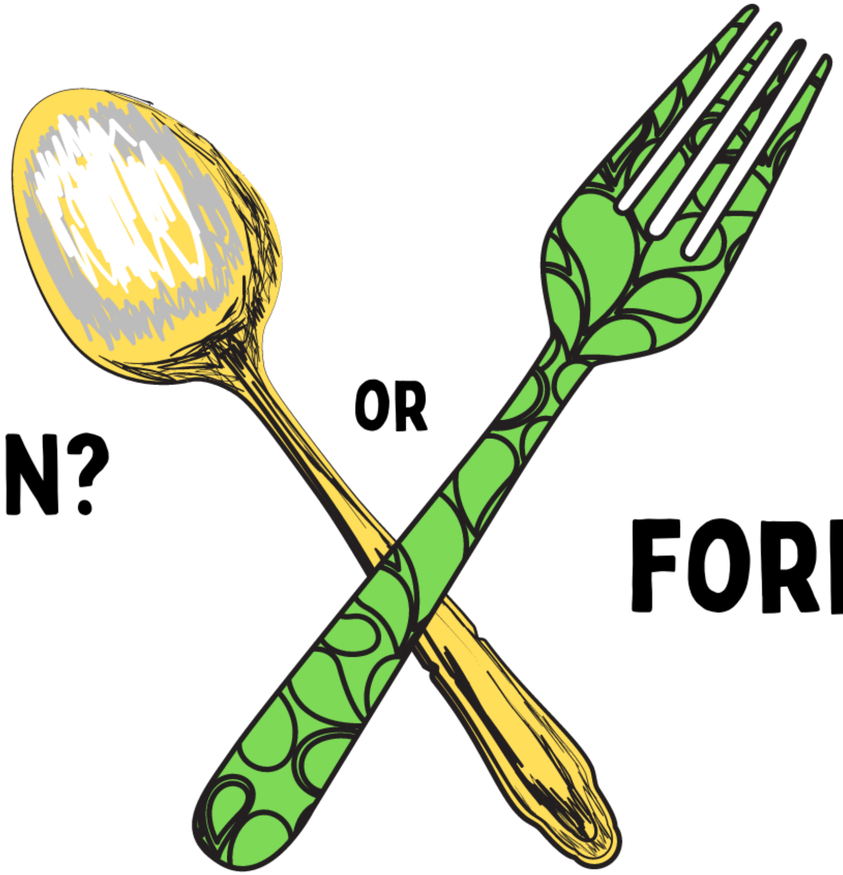

Team 1
What do you need from one another to be effective during this course?
nicole
cindy
Malai
diverse perspectives and bring different ideas to the team
frequent communication through any means of media, have our own expectations and be responsible for our parts, accountability
Team2
What do you need from one another
- Effective communication. Listenning and responding with honest feedback that is respectful.
2. Teamwork - fair contribution in relation to responsibilities.
Team 3
What do you need from one another to be effective during this course?
Same Goal
Open communication
Commitment
Equal Participation
Help & Respect Team
Team 4
What do you need from one another to be effective during this course?
Communication
Respect
Cooperation
Patience
Transparency
Honesty
Open-mindedness
Participation

Trust = Effective teams.

5 Dysfunctions of a team

-Patrick Lencioni

SO, WHAT'S 'BETTER'?

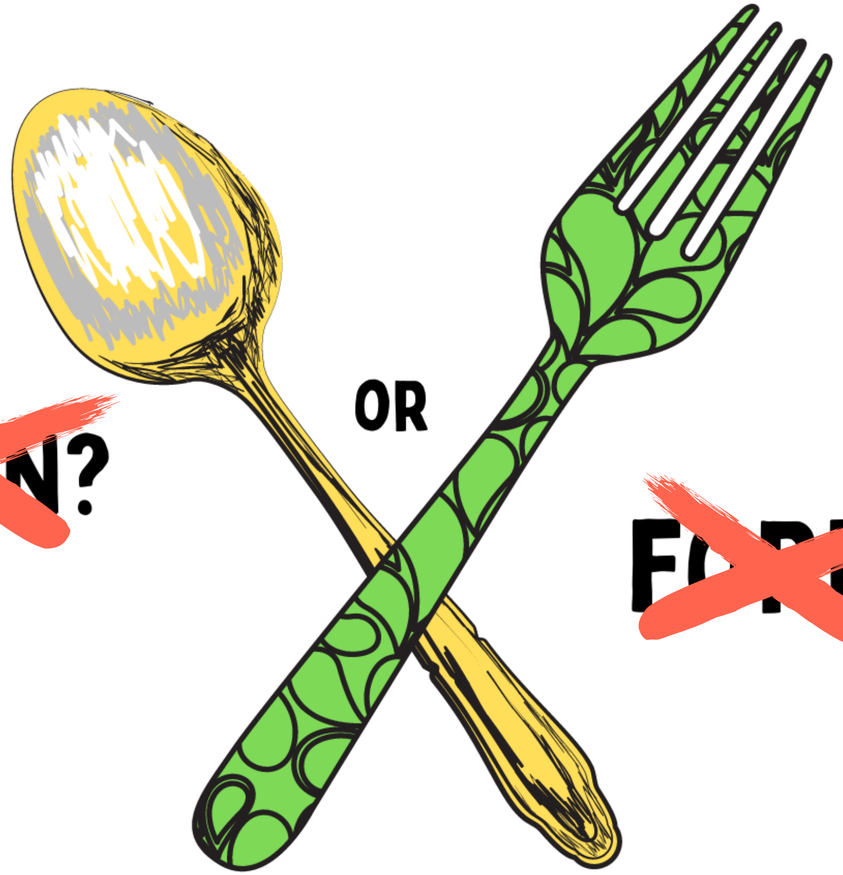


SPOON? OR FORK?

SO, WHAT'S 'BETTER'?

Waterfall

~~SPOON~~?



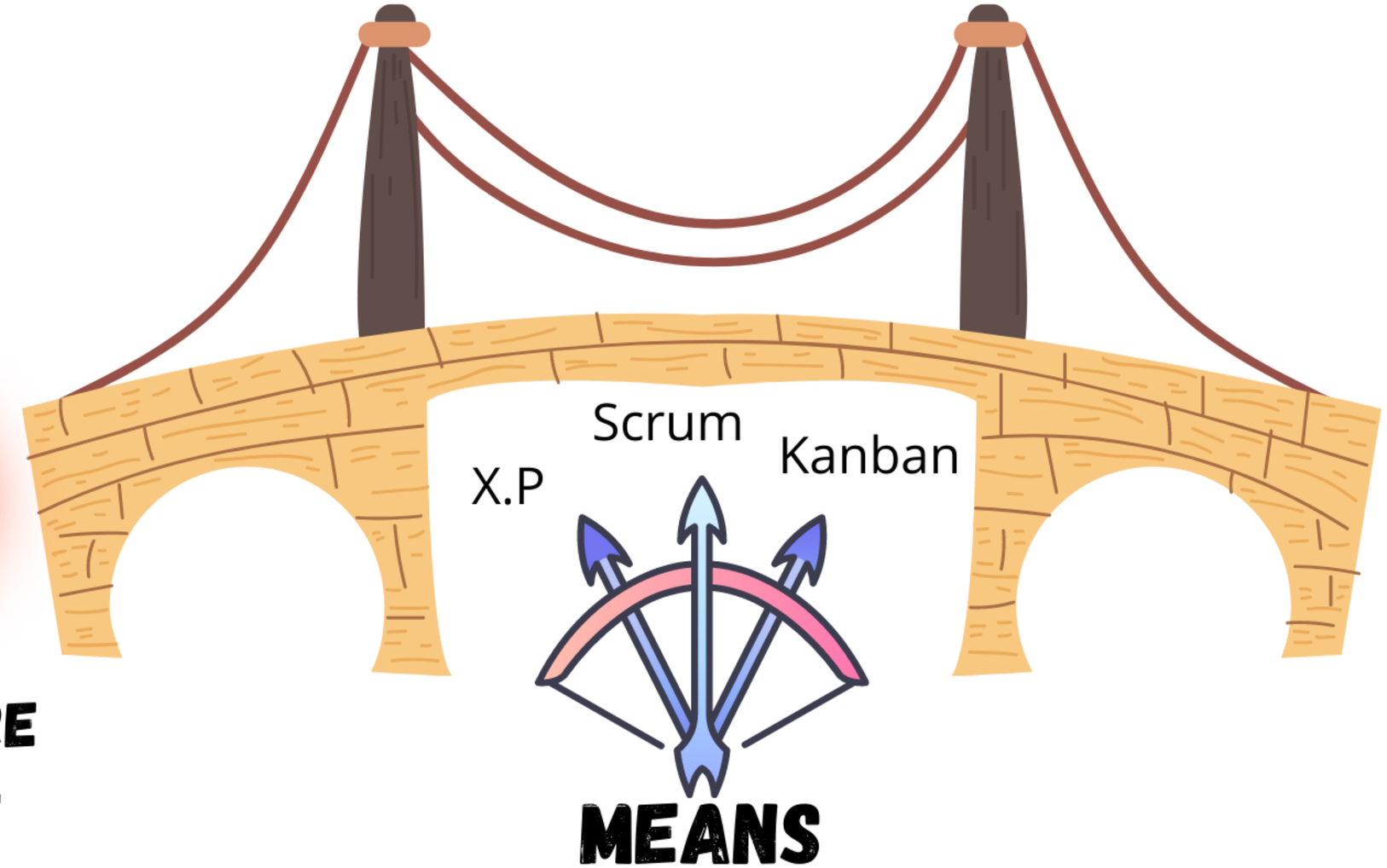
OR

Agile

~~FORK~~?

"TO SOMEONE WITH A HAMMER, EVERYTHING LOOKS LIKE A NAIL"

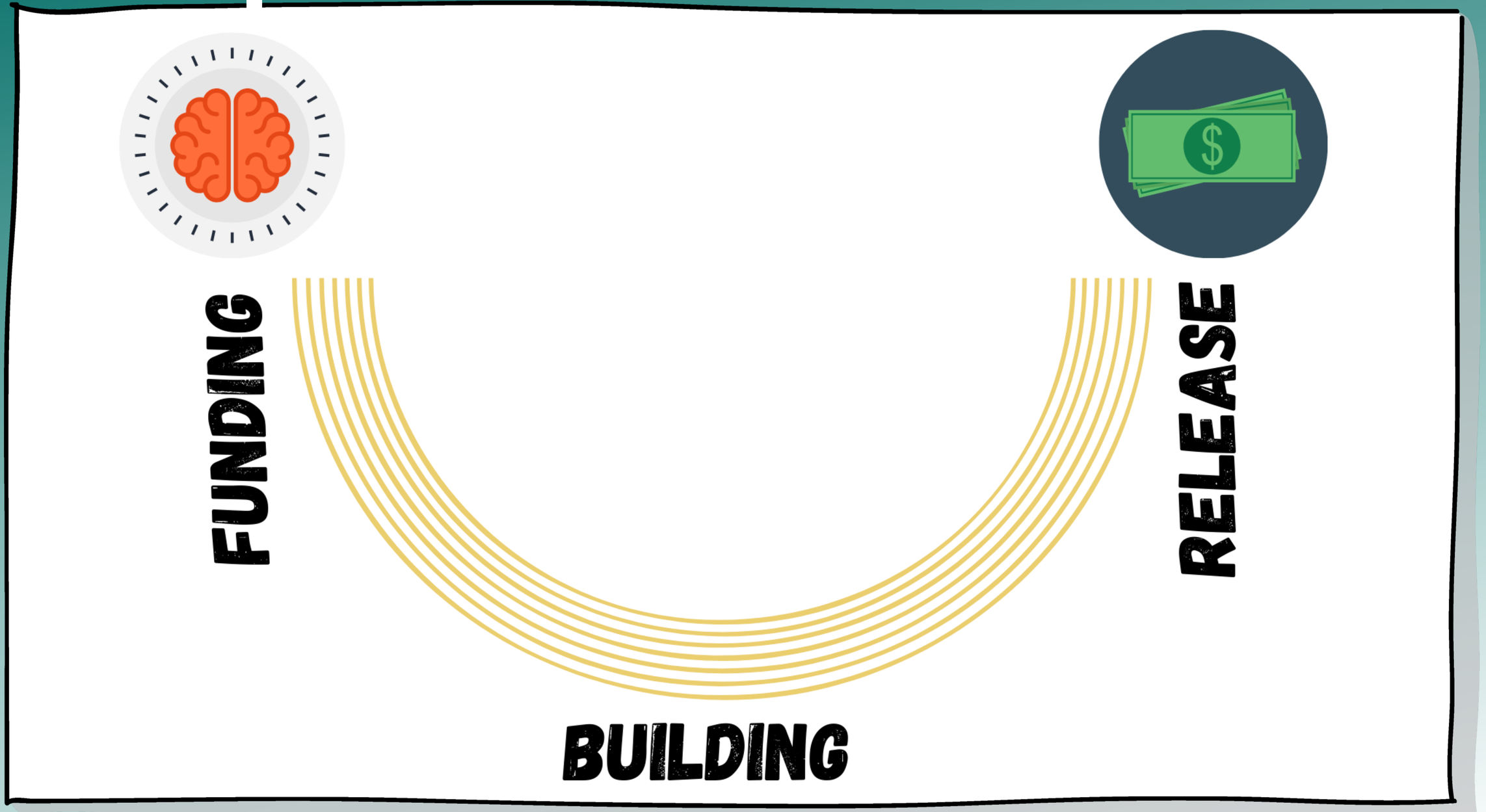
-Mark Twain



YOU ARE HERE

VALUE

Concept to cash



Concept to cash

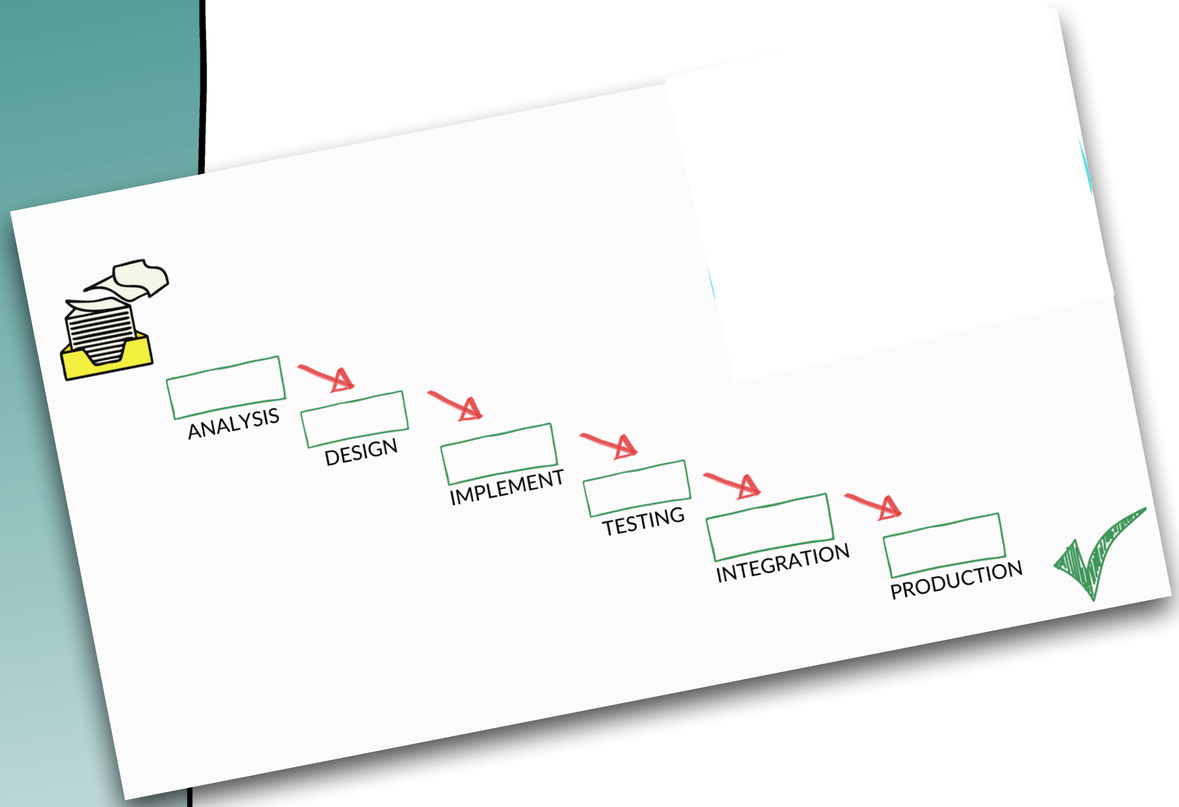
*"**Zara** changes its clothing designs every two weeks on average, while competitors change their designs every two or three months"*

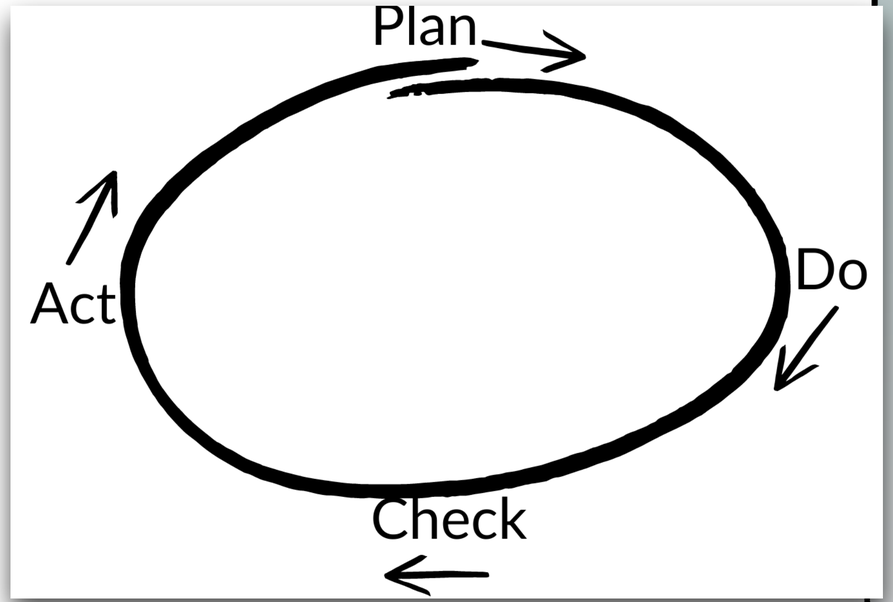
—Steve Denning

“All we are doing is looking at the time from the moment the customer gives us an order to the point when we collect the cash.

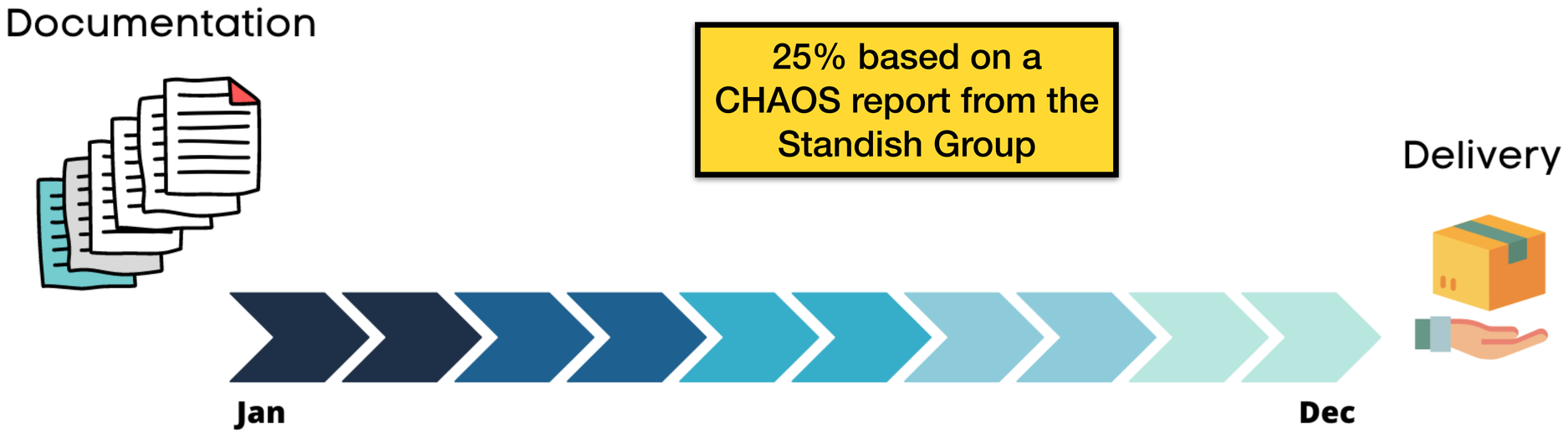
–Taiichi Ohno

Waterfall & Agile thinking





How much stayed the same?



Traditional thinking

(Waterfall, Defined approach)

Waterfall approach:

Requirement

Analysis

Design

Implement

Testing

Integration

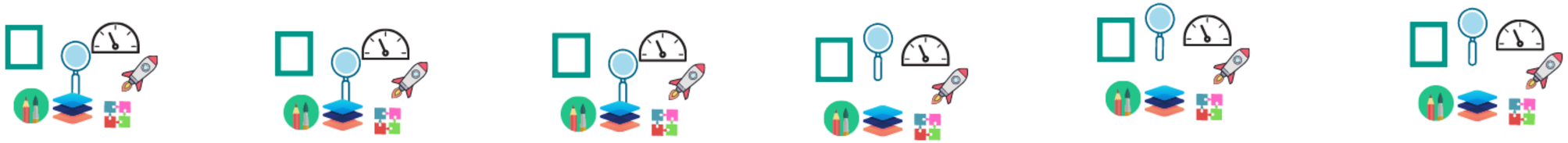
Deploy

January

June

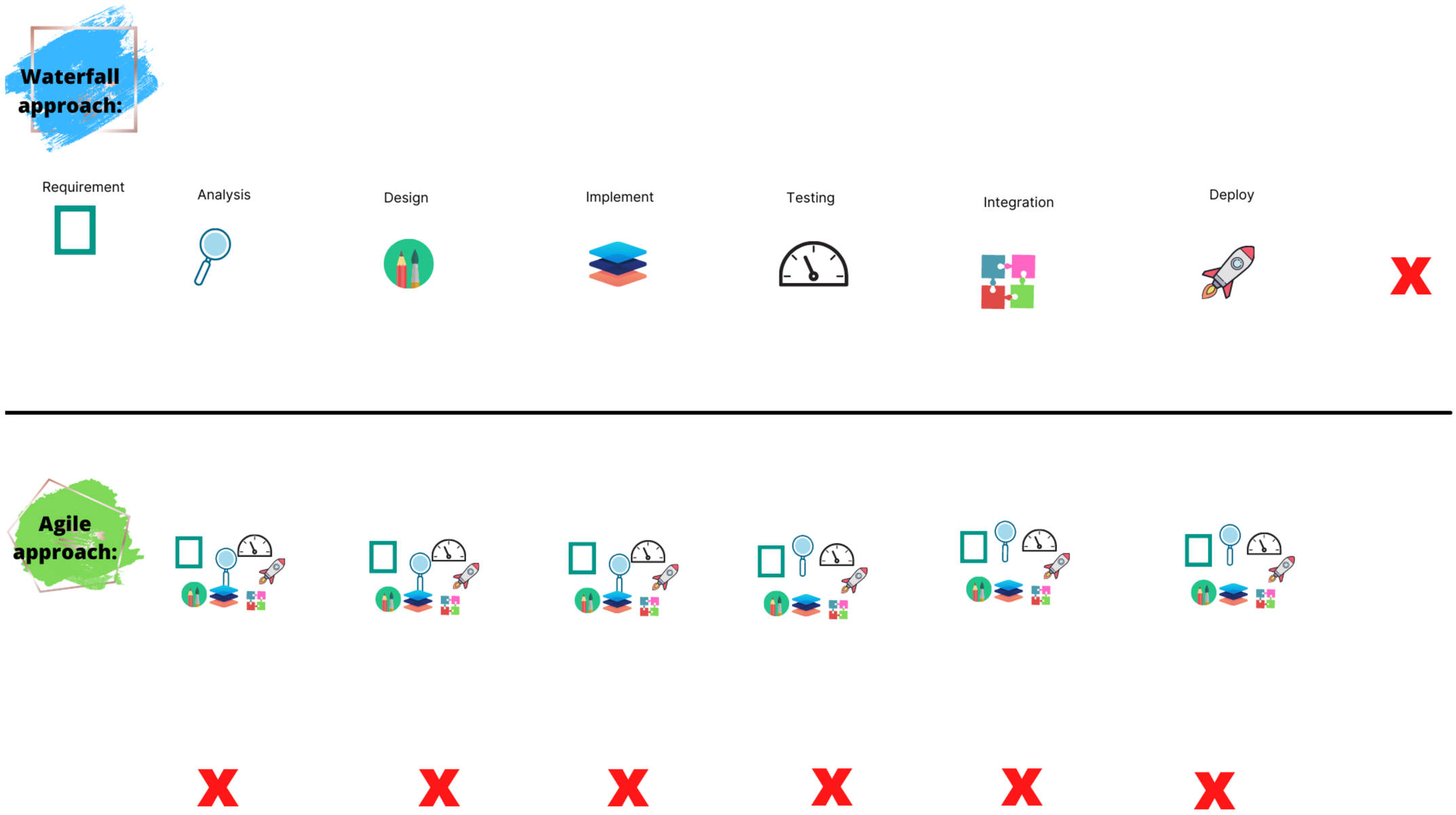
Empirical Thinking
(Agile, Adaptive)

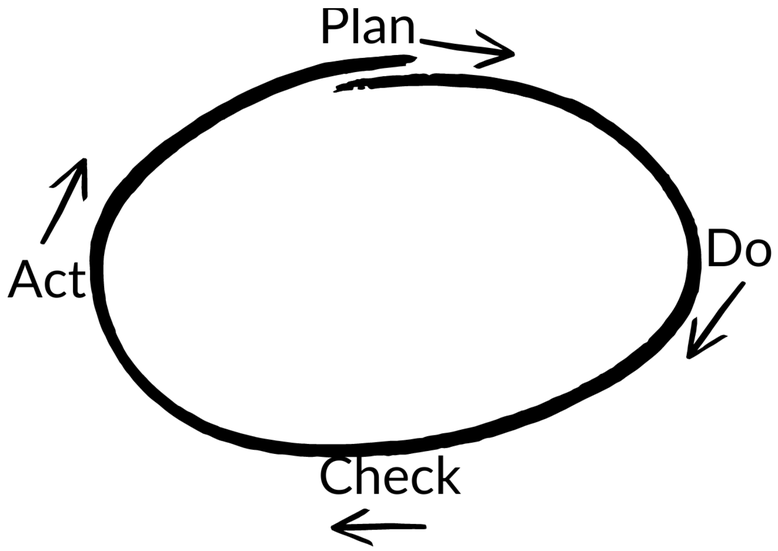
Agile approach:

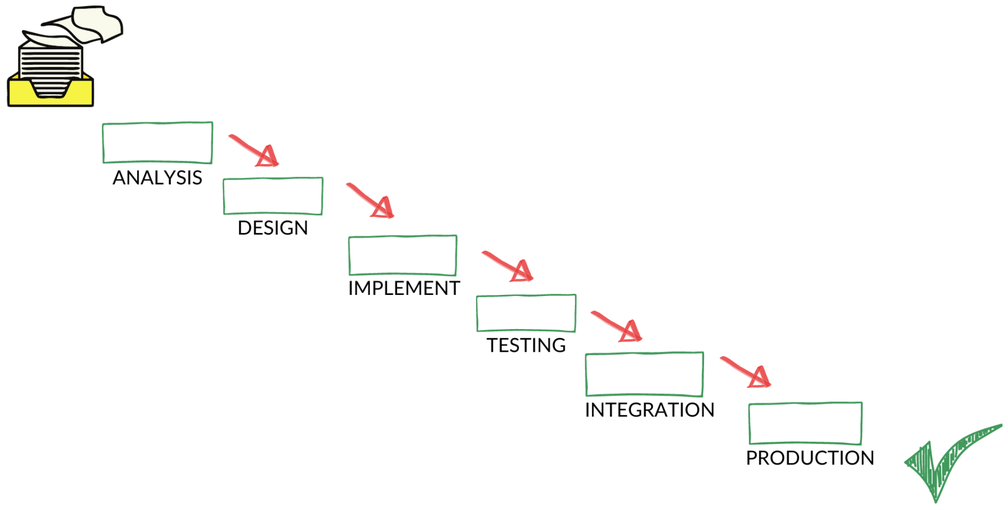


Jan	Feb	March	April	May	June
X	X	X	X	X	X

What are the differences between the two?

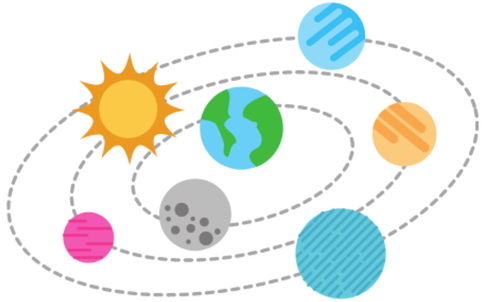






Agile	Waterfall
• Adaptive	• Predictive
• Embraces change	• Protects scope
• Iterative delivery	• Big Bang delivery

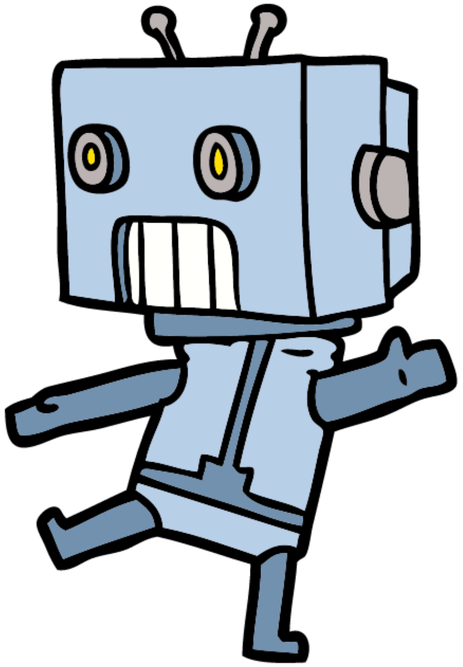
Systems Thinking



"A SYSTEM IS A GROUP OF INTERACTING OR INTERRELATED ENTITIES THAT FORM A UNIFIED WHOLE"

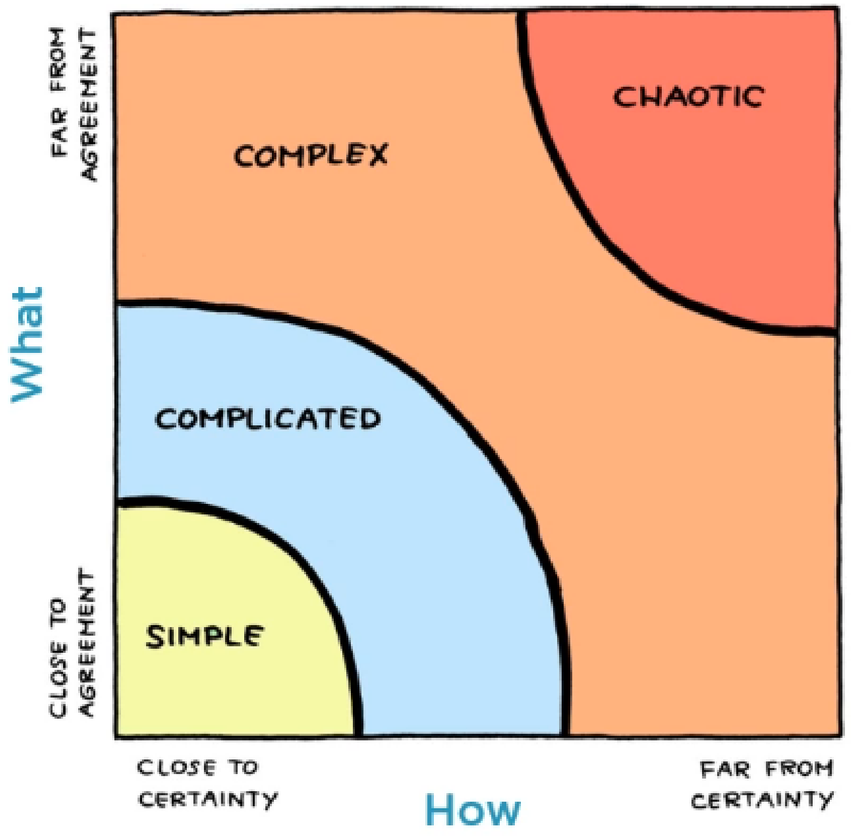
Different systems …

MECHANICAL



ORGANIC

Making sense of ‘stuff’

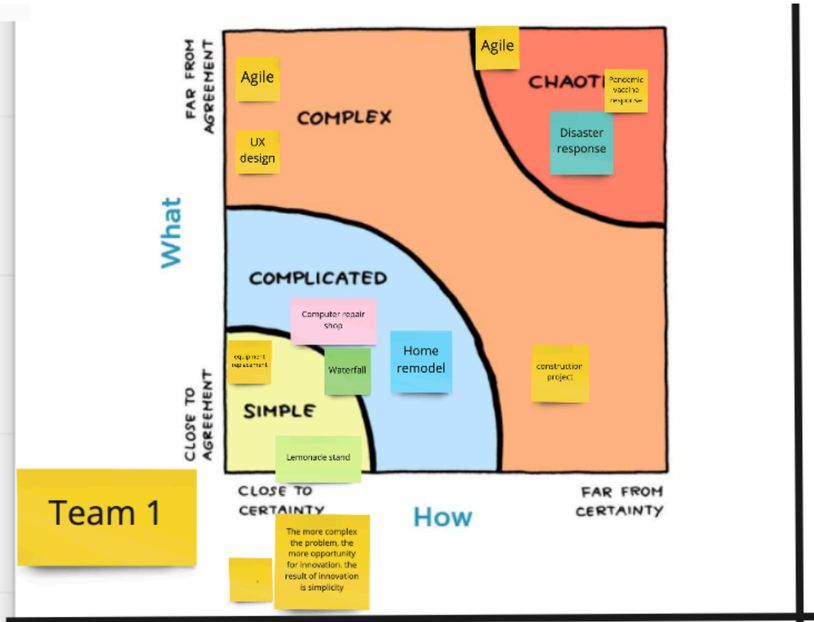


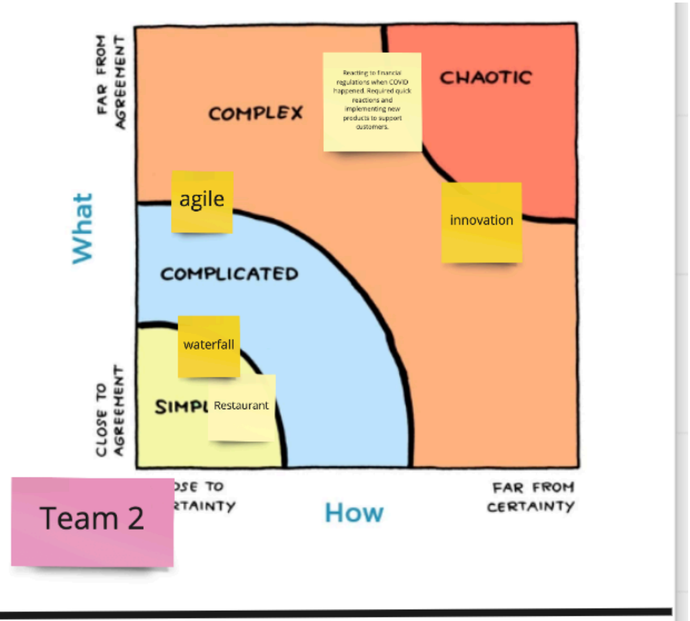
SIMPLE This type of work has very little uncertainty. Detailed planning is effective here. Simple work is handy for when we build the same thing over & over again. Cause & effect is known. Examples such manufacturing or switching on a light.

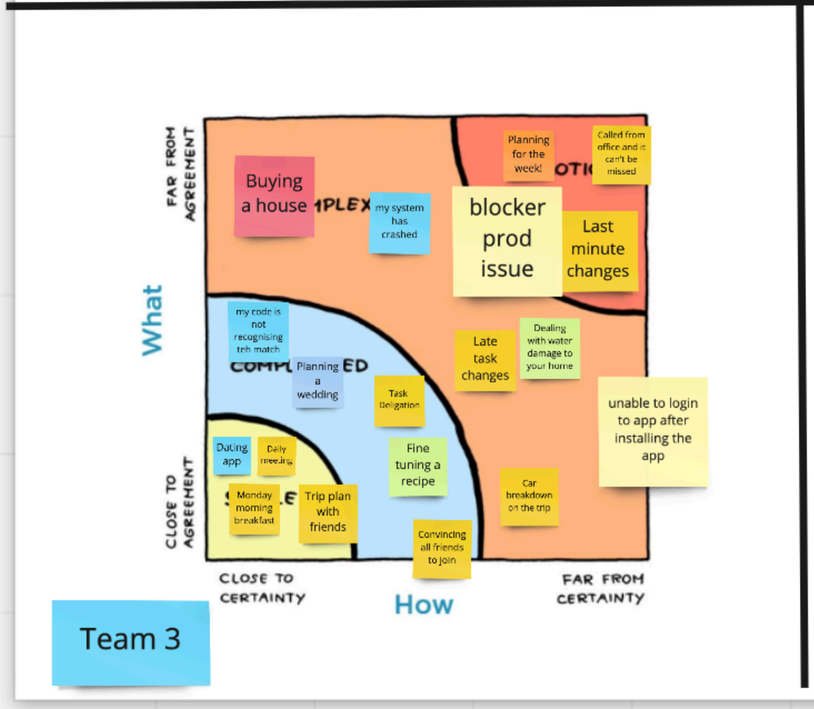
COMPLICATED Here, experts can break down a very challenging problem & through breaking it down into small details are able to figure it out. Such experts are effective when dealing mechanical systems. Examples such as watch-maker, accountant etc.

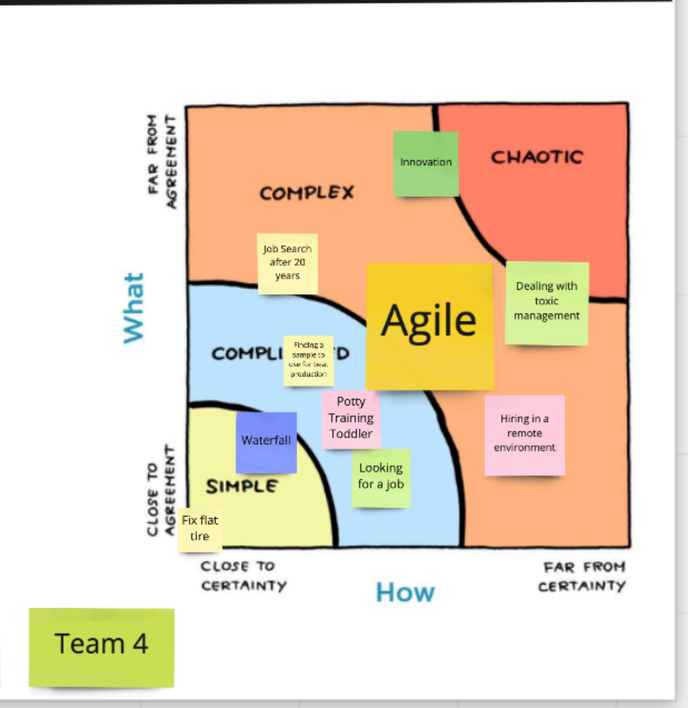
COMPLEX Complexity means we cannot know what is required until we we put our plans into action. A customer may have an idea of what they want but often when they experience the service or product their needs change. Think of new product development. This space is very much about experimentation.

CHAOTIC It is unclear on what to do in this space. This could be a natural disaster (tsunami) which we have not encountered before. It is clear that we need to respond & that taking too long to analyse would be costly.


Team 1
FAR FROM AGREEMENT
CLOSE TO AGREEMENT
What
How
CLOSE TO CERTAINTY
FAR FROM CERTAINTY
COMPLEX
CHAOTIC
COMPLICATED
SIMPLE
Agile
UX design
Disaster response
Computer repair shop
Waterfall
Home remodel
construction project
Lemonade stand
The more complex the problem, the more opportunity for innovation, the result of innovation is simplicity

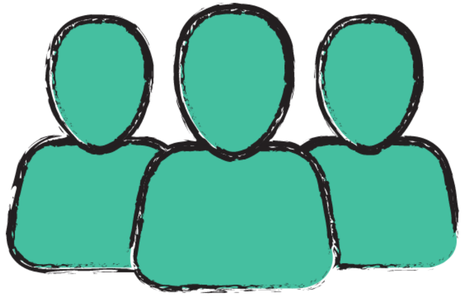

Team 2
FAR FROM AGREEMENT
CLOSE TO AGREEMENT
What
How
FAR FROM CERTAINTY
COMPLEX
CHAOTIC
COMPLICATED
agile
innovation
waterfall
Restaurant


Team 3
FAR FROM AGREEMENT
CLOSE TO AGREEMENT
What
How
CLOSE TO CERTAINTY
FAR FROM CERTAINTY
Buying a house
my system has crashed
blocker prod issue
Last minute changes
Planning for the week!
Called from office and is can't be missed
my code is not recognising teh match
Planning a wedding
Task Delegation
Late task changes
Dealing with water damage to your home
unable to login to app after installing the app
Dating app
Daily meeting
Monday morning breakfast
Trip plan with friends
Fine tuning a recipe
Car breakdown on the trip
Convincing all friends to join


Team 4
FAR FROM AGREEMENT
CLOSE TO AGREEMENT
What
How
CLOSE TO CERTAINTY
FAR FROM CERTAINTY
COMPLEX
Innovation
CHAOTIC
Job Search after 20 years
Agile
Dealing with toxic management
Potty Training Toddler
Hiring in a remote environment
Waterfall
Looking for a job
SIMPLE
Fix flat tire

Is innovation essential?

PRODUCT



A TEAM

AN ATHLETE

Team 1

Is innovation essential?

We are defining innovation as improving, finding ways to do things better. Check out the questions on the post-it notes below & generate your own cards to answer questions.

Question 1

Are there real world examples of where innovation helps?

Virtual meetings, Delivery apps, UBER

Question 2

Are there real world examples of where lack of innovation has cost?

Blockbuster; PRISM; online eye glasses

Team 2

Is innovation essential?

We are defining innovation as improving, finding ways to do things better. Check out the questions on the post-it notes below & generate your own cards to answer questions.

Question 1

Are there real world examples of where innovation helps?

Amazon\

Food/Grocery delivery apps

Question 2

Are there real world examples of where lack of innovation has cost?

Blockbuster Kodak

Team 3

Is innovation essential?

We are defining innovation as improving, finding ways to do things better. Check out the questions on the post-it notes below & generate your own cards to answer questions.

Artificial intelligence

Question 1

Are there real world examples of where innovation helps?

Plant based meat

Pandemic

Manufacturing

Plastic Substitutes

Productivity

Kitchen if u dnt cook something diff u will go for take away

Unplanned pandemic which impacted serveral industries

Question 2

Are there real world examples of where lack of innovation has cost?

Climate Change

Schooling

IE closed after 50 years of service

Kodak on entering Digital Images

Blockbuster

Team 4

Is innovation essential?

We are defining innovation as improving, finding ways to do things better. Check out the questions on the post-it notes below & generate your own cards to answer questions.

Question 1

Are there real world examples of where innovation helps?

Medicine (ex: mRNA)

Music (ex: clipping., digital vs analog, home software)

Environment & Sustainability (ex: replacing slurry feed with wild clover)

Energy (ex: Texas power grid)

Question 2

Are there real world examples of where lack of innovation has cost?

Housing (lack of supply in Ireland, lack of flexibility for alternative solutions like co-ops)

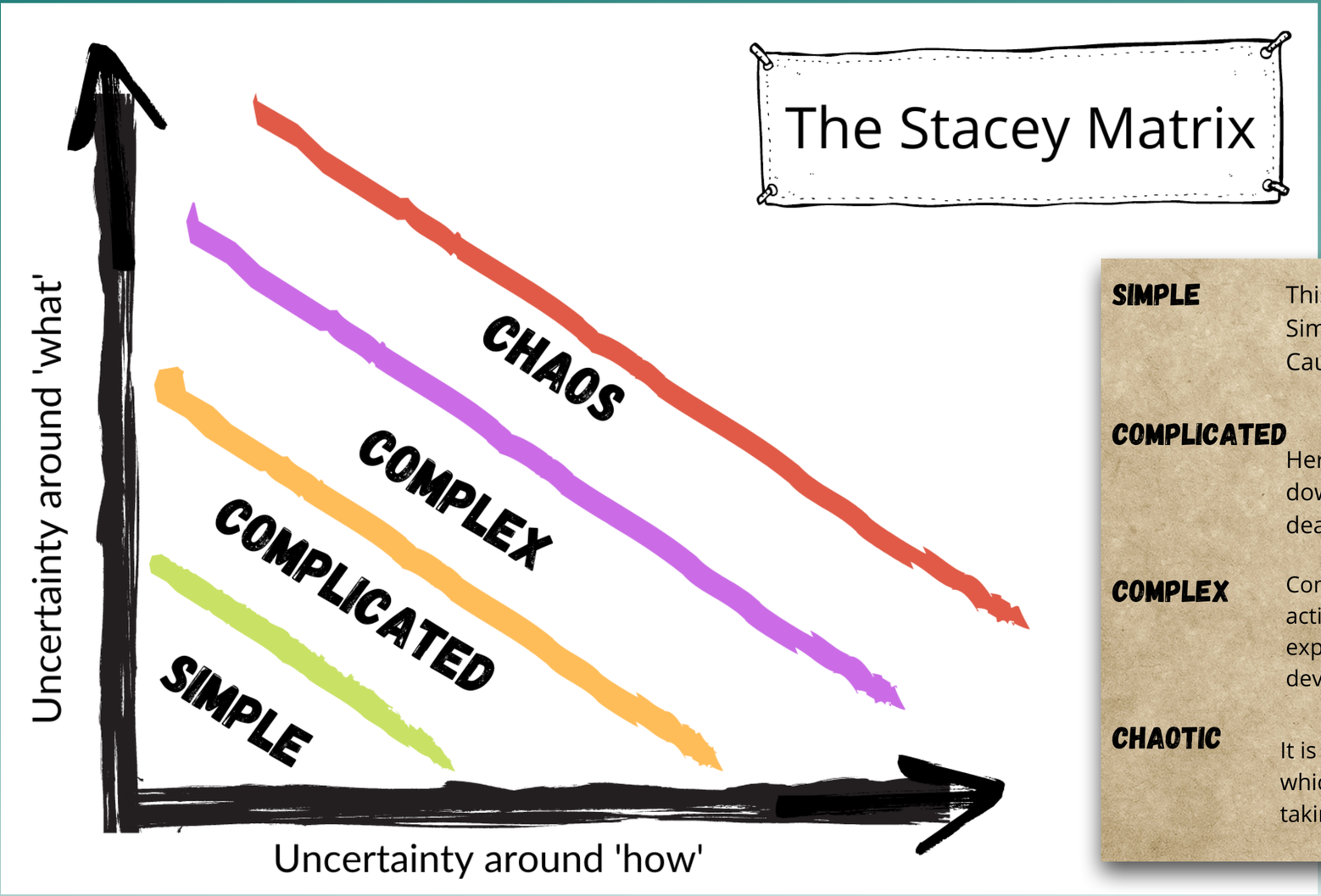
Water (ex: fire/drought management in California)

miro

Innovation requires experimentation.

Experimentation can mean failure aka learning!

When to use Agile?



SIMPLE

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COMPLICATED

Here, experts can break down a very challenging problem & through breaking it down into small details are able to figure it out. Such experts are effective when dealing mechanical systems. Examples such as watch-maker, accountant etc.

COMPLEX

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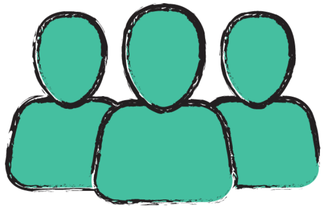
CHAOTIC

It is unclear on what to do in this space. This could be a natural disaster (tsunami) which we have not encountered before. It is clear that we need to respond & that taking too long to analyse would be costly.

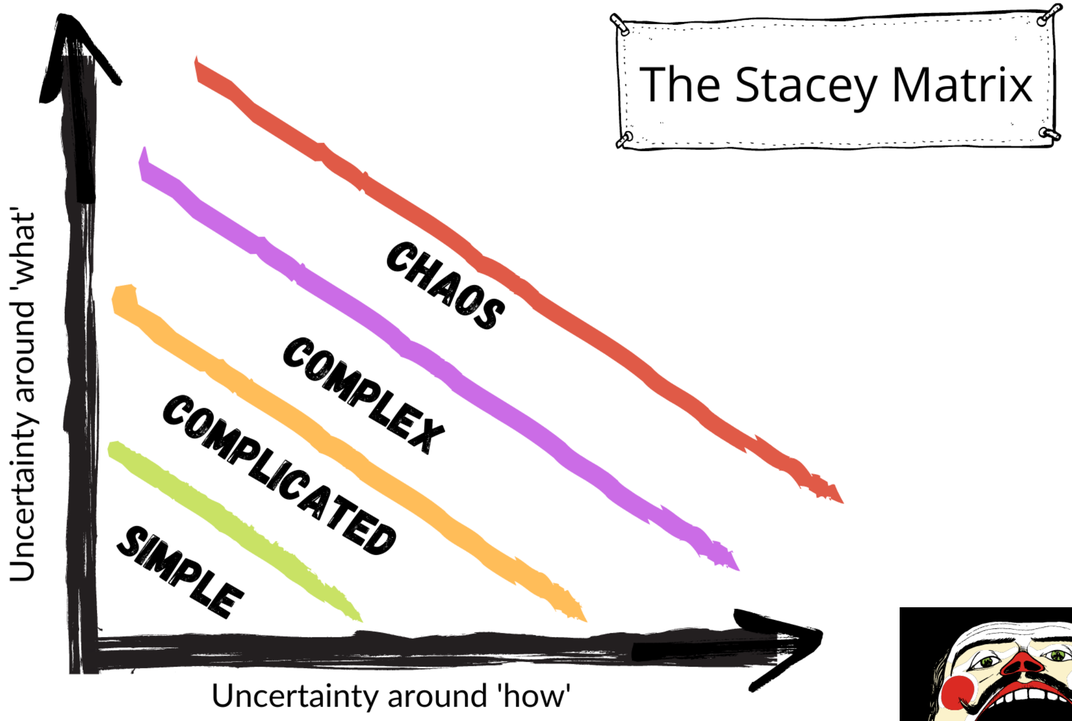
Where does innovation live?

PRODUCT

AN ATHLETE



A TEAM



Innovation comes from people
who take joy in their work.
W. Edwards Deming
quotefancy

Topics Covered

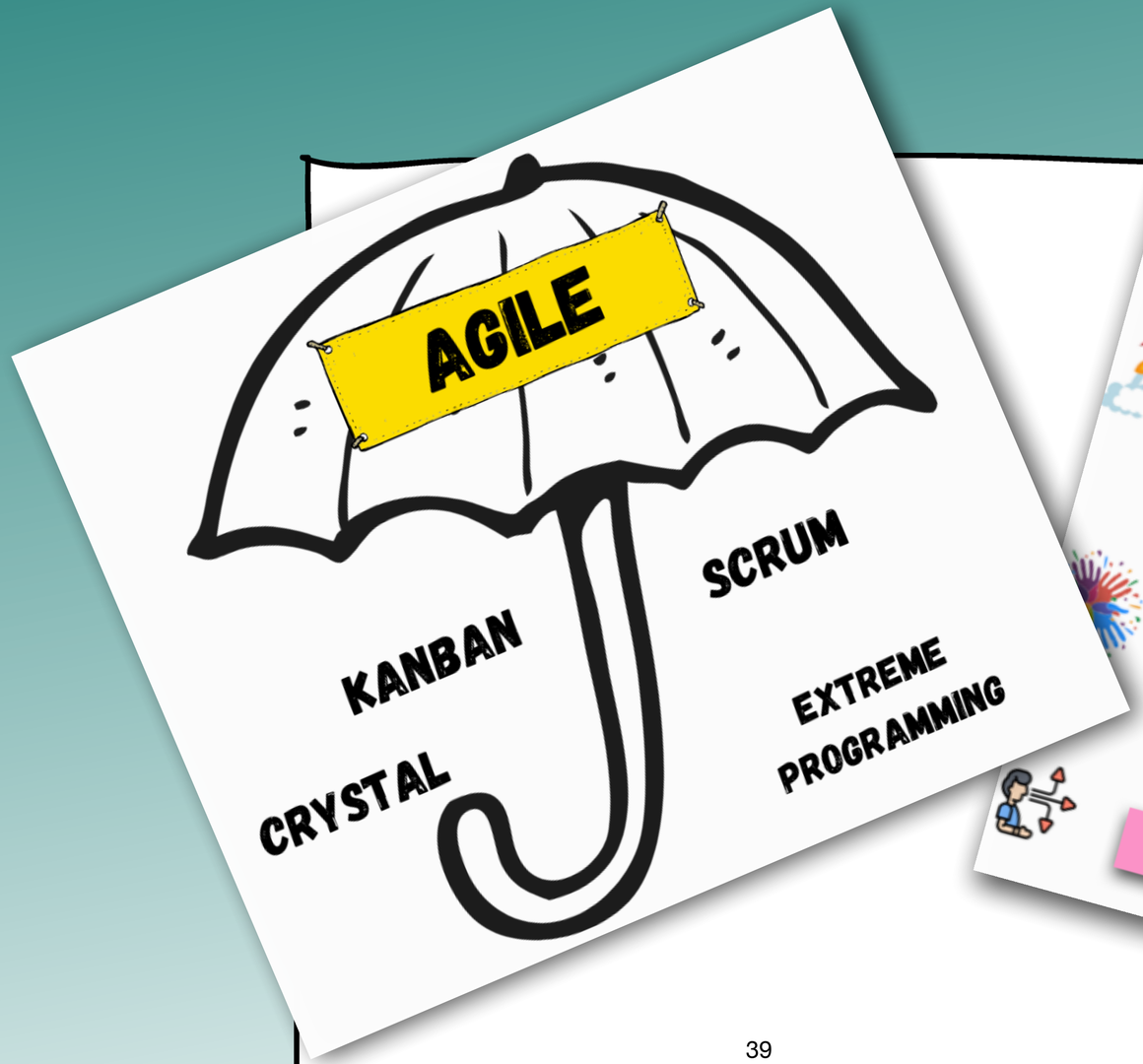
Team Dynamics

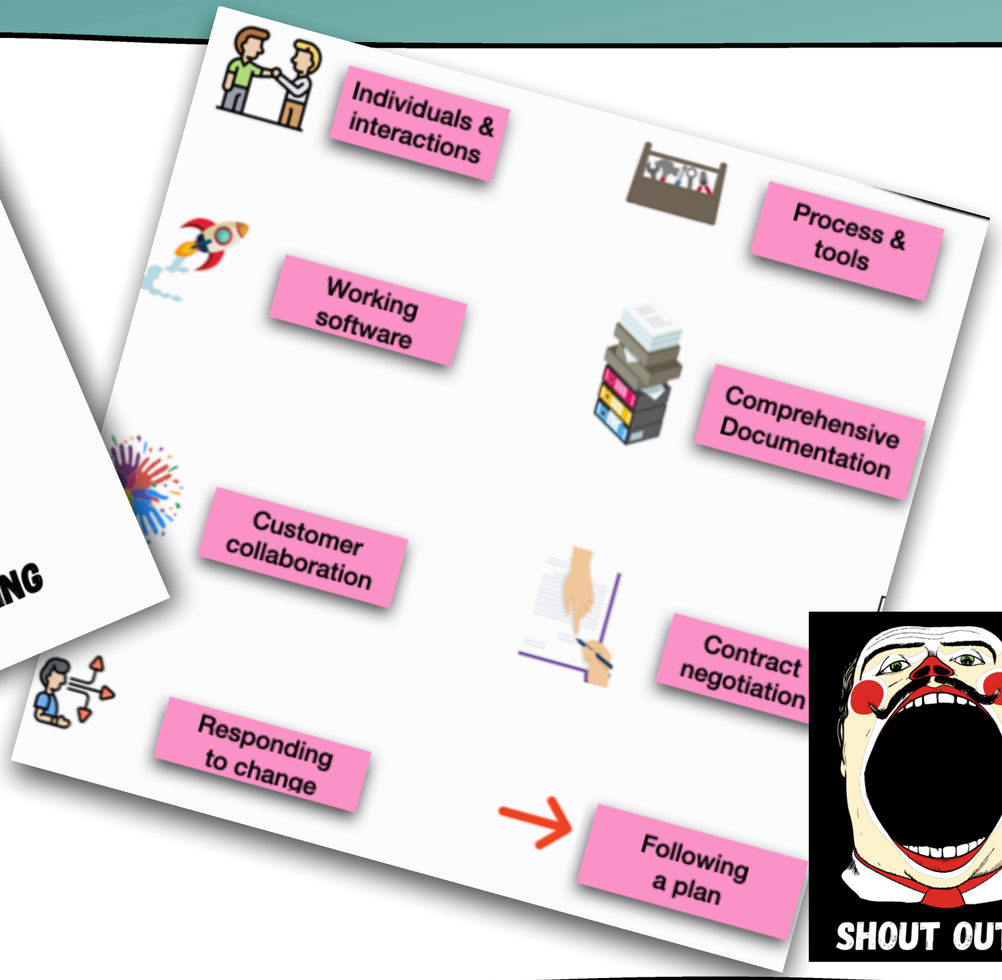
Making sense of challenges

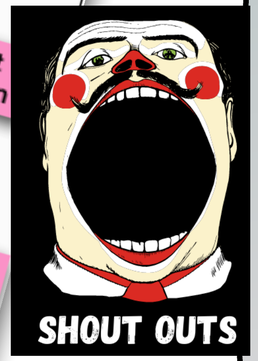
Agile & Waterfall

Intrinsic motivatiors

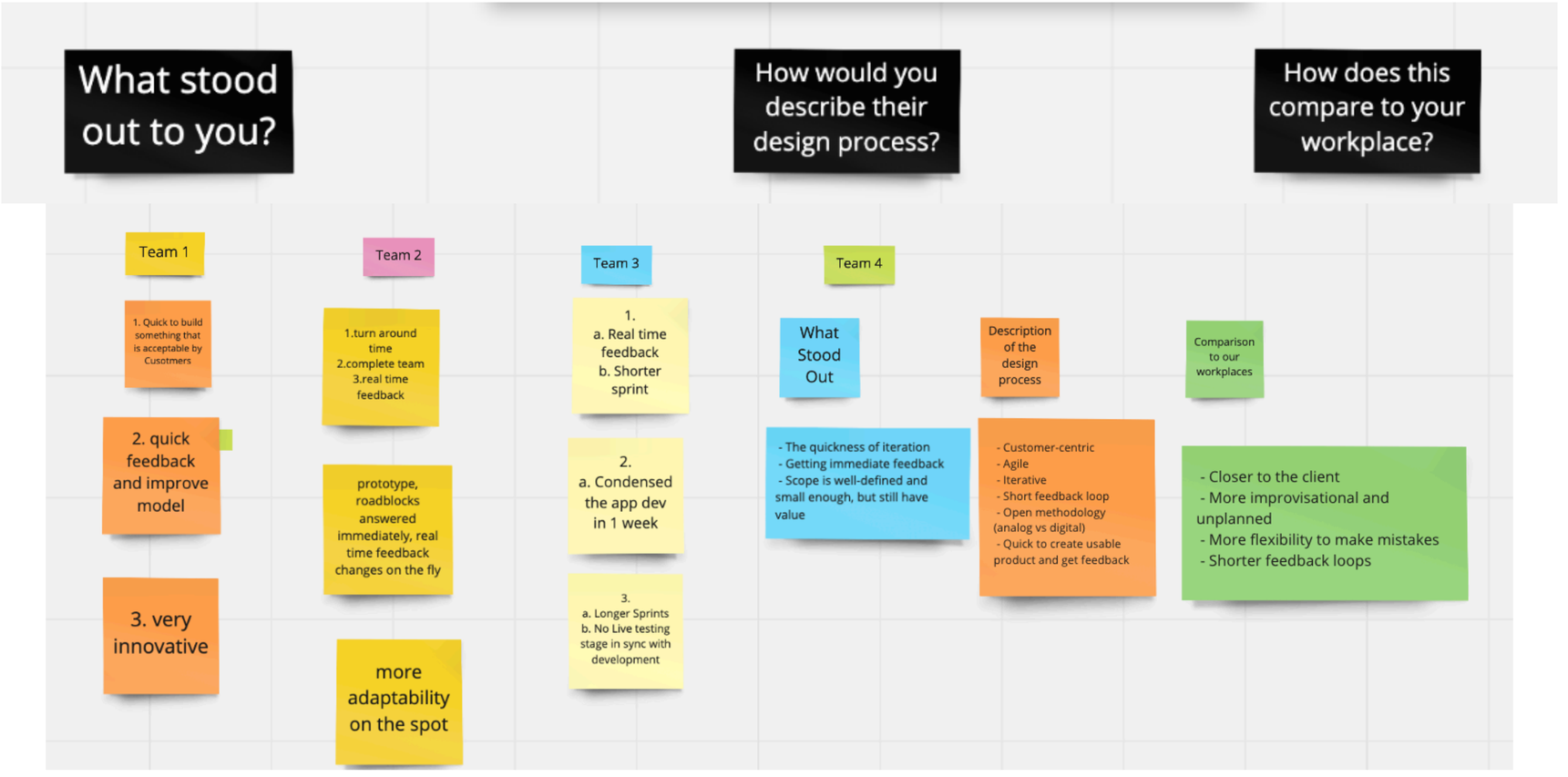
Agile 101


AGILE
SCRUM
KANBAN
EXTREME PROGRAMMING
CRYSTAL


Individuals & interactions
Process & tools
Working software
Comprehensive Documentation
Customer collaboration
Contract negotiation
Responding to change
Following a plan


SHOUT OUTS

Nordstorm innovation labs


What stood out to you?
How would you describe their design process?
How does this compare to your workplace?
Team 1
1. Quick to build something that is acceptable by Cusotmers
2. quick feedback and improve model
3. very innovative
Team 2
1.turn around time
2.complete team
3.real time feedback
prototype, roadblocks answered immediately, real time feedback changes on the fly
more adaptability on the spot
Team 3
1.
a. Real time feedback
b. Shorter sprint
2.
a. Condensed the app dev in 1 week
3.
a. Longer Sprints
b. No Live testing stage in sync with development
Team 4
What Stood Out
- The quickness of iteration
- Getting immediate feedback
- Scope is well-defined and small enough, but still have value
Description of the design process
- Customer-centric
- Agile
- Iterative
- Short feedback loop
- Open methodology (analog vs digital)
- Quick to create usable product and get feedback
Comparison to our workplaces
- Closer to the client
- More improvisational and unplanned
- More flexibility to make mistakes
- Shorter feedback loops

Think back to a project you remember working on.

One which left you with positive memories because of the work that was done.

Individuals & interactions

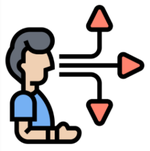
Process & tools

Working software

Comprehensive Documentation

Customer collaboration

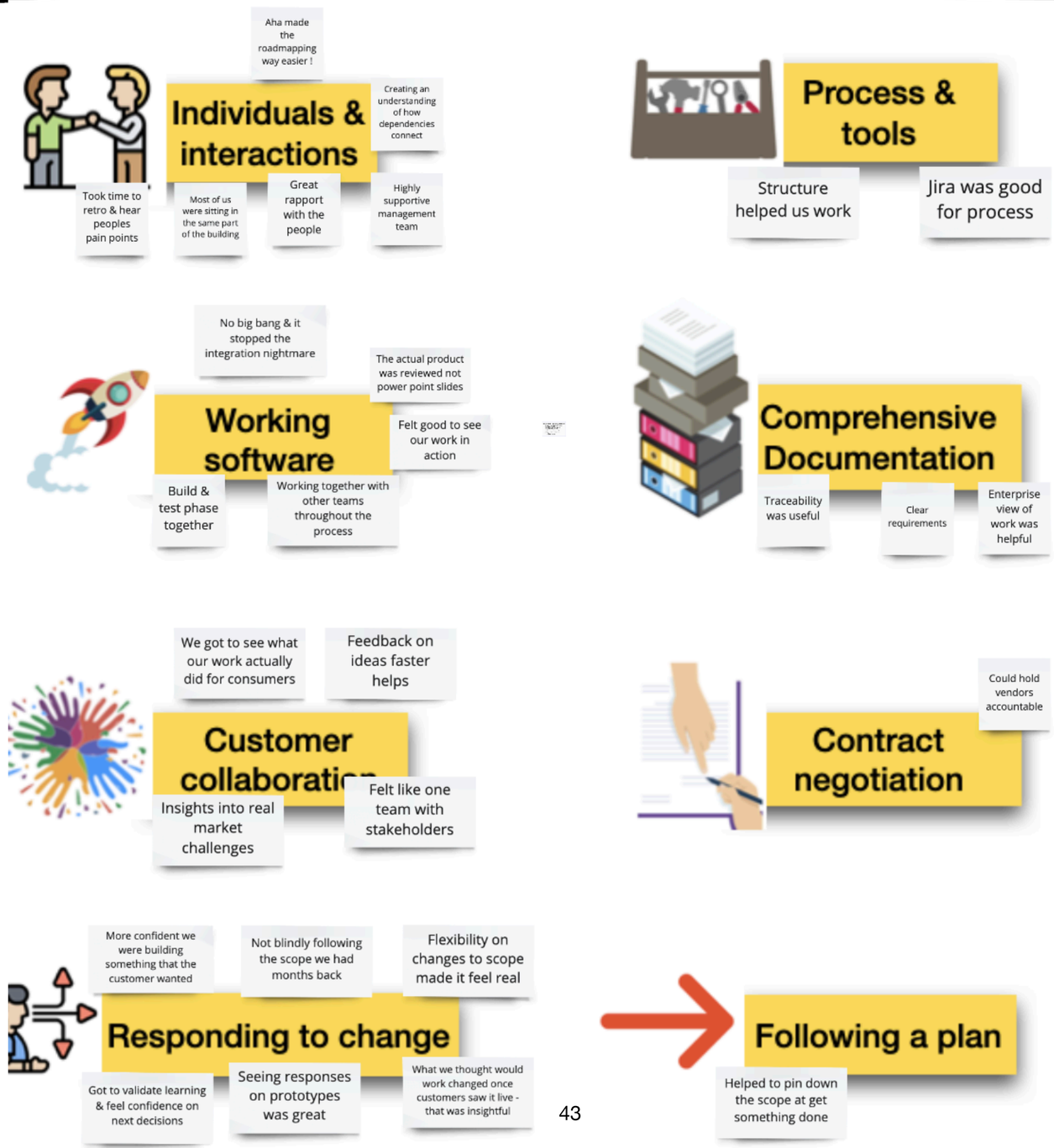
Contract negotiation



Responding to change

Following a plan

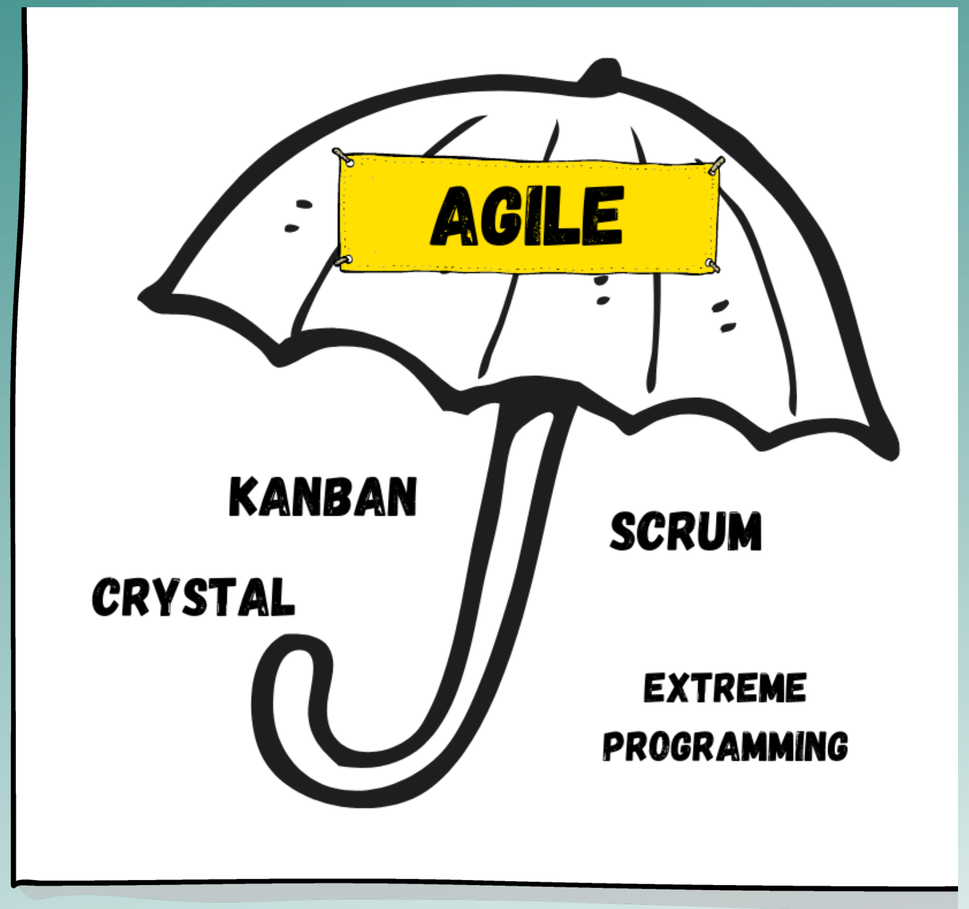
Example answer

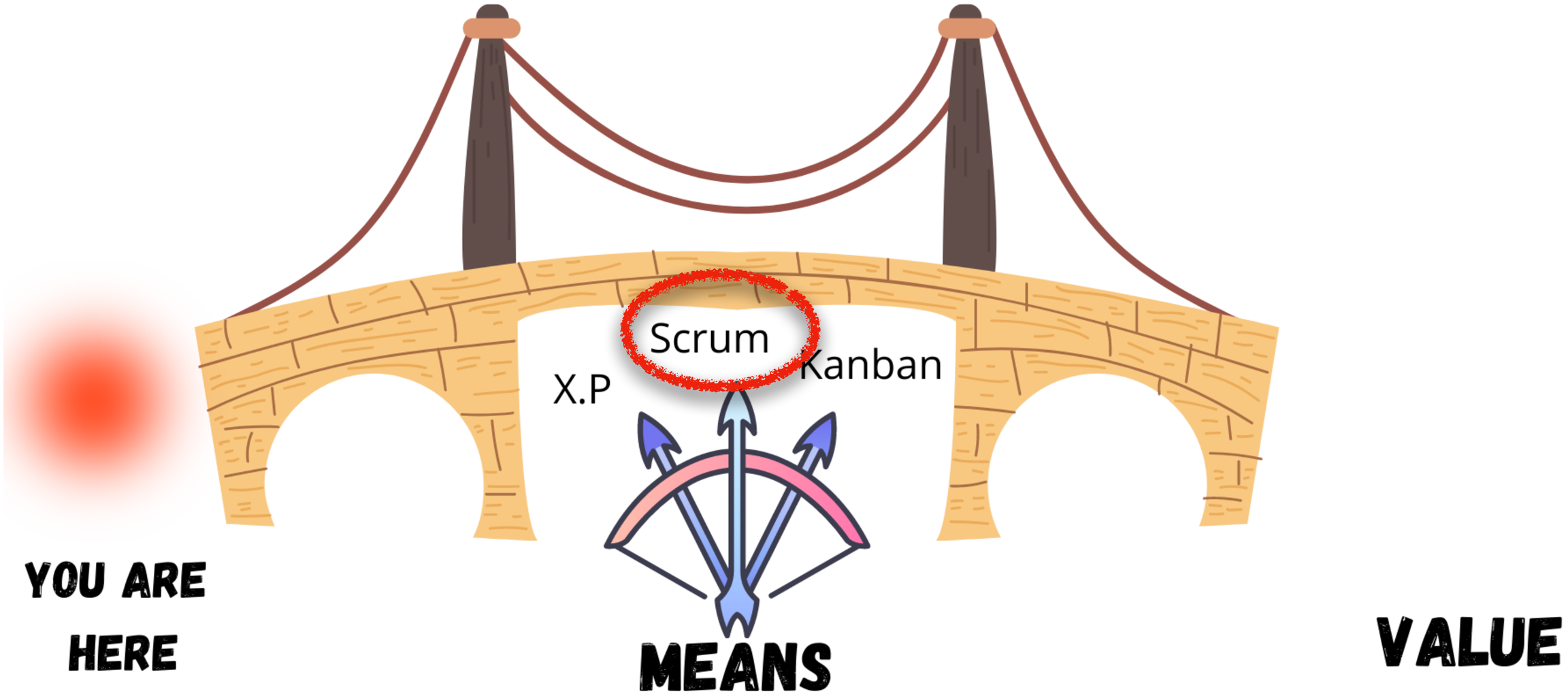


Agile has 4 values

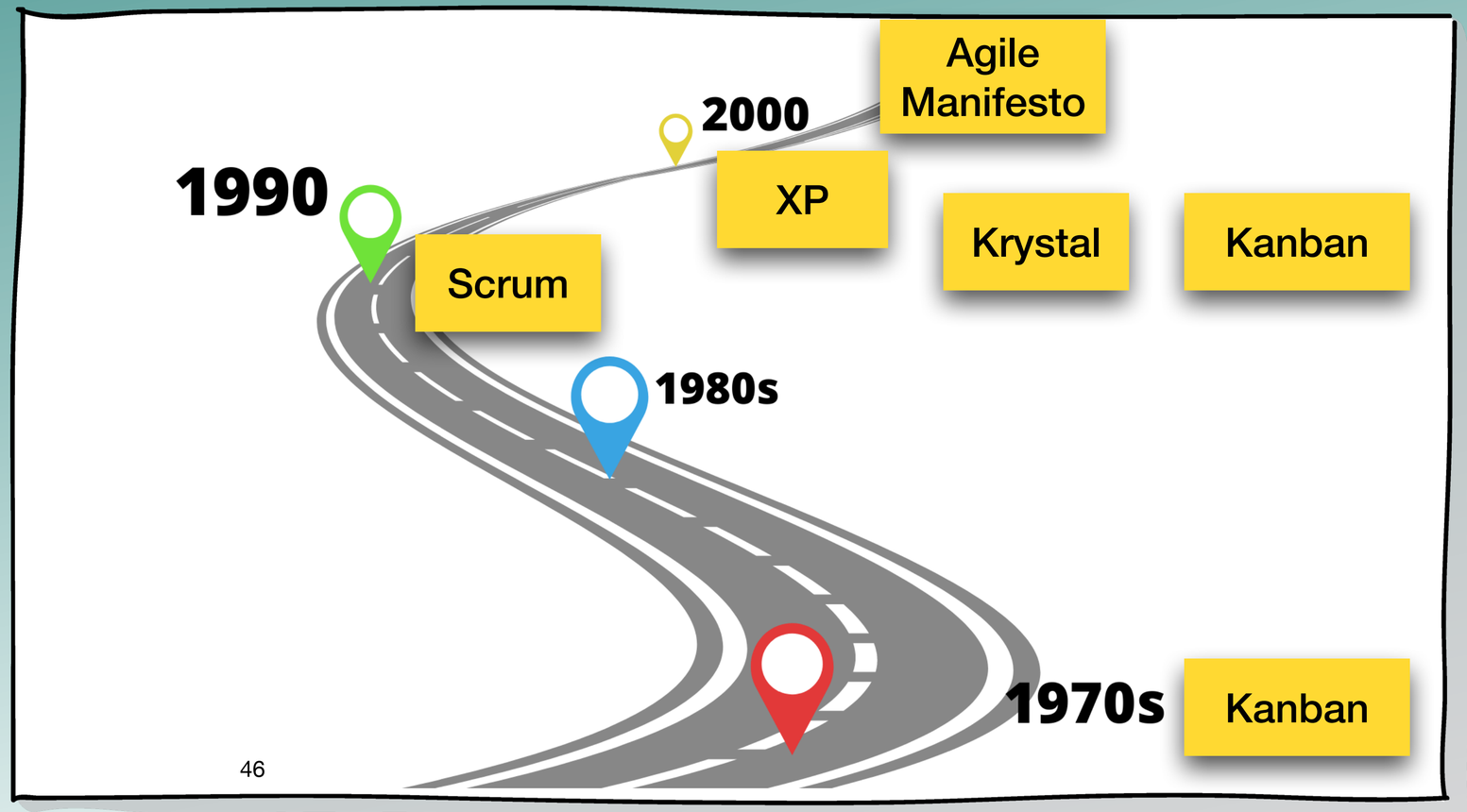
& 12 Principles.

Scrum is one way of bringing Agile to life. We'll see this later.




Scrum
Kanban
X.P
YOU ARE HERE
MEANS
VALUE

What came first, Agile or Scrum?



12 Principles of Agile Software Development

1. Satisfy the customer through early and continuous delivery.
2. Welcome changing requirements, even late in development.
3. Deliver working software frequently
4. Business people and developers work together daily
5. Build projects around motivated individuals.
6. Convey information via face-to-face conversation.
7. Working software is the primary measure of progress.
8. Maintain a constant pace indefinitely.
9. Give continuous attention to technical excellence
10. Simplify: maximizing the amount of work not done
11. Teams self-organize.
12. Teams retrospect and tune behavior

Example answer

Commentary:
Learners example answers from Miro. The aim is to help learners absorb the essence of the Agile principles.

3 WORDS TO DESCRIBE EACH PRINCIPAL

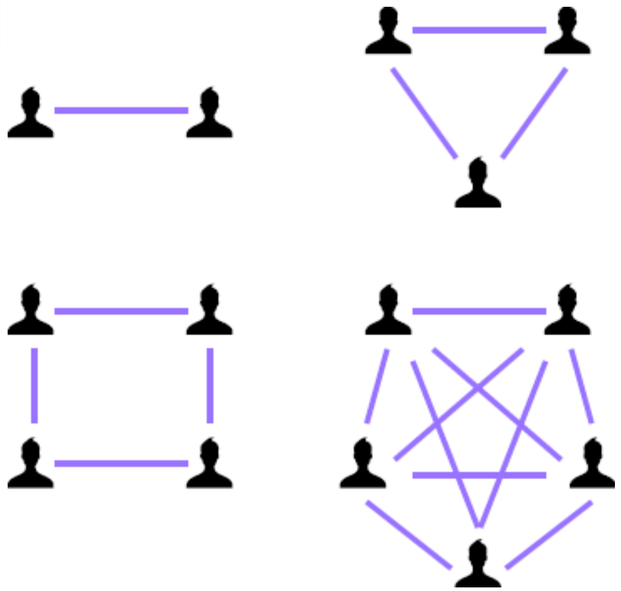
Team A

1	2	3	4	5	6
Speed, feedback, learn	Adapt, heat guided missile, dynamic	Iterative, regular, cadence	Cross-functional, collaboration, silo-free	Energy, purpose, belief	Human, connection, direct

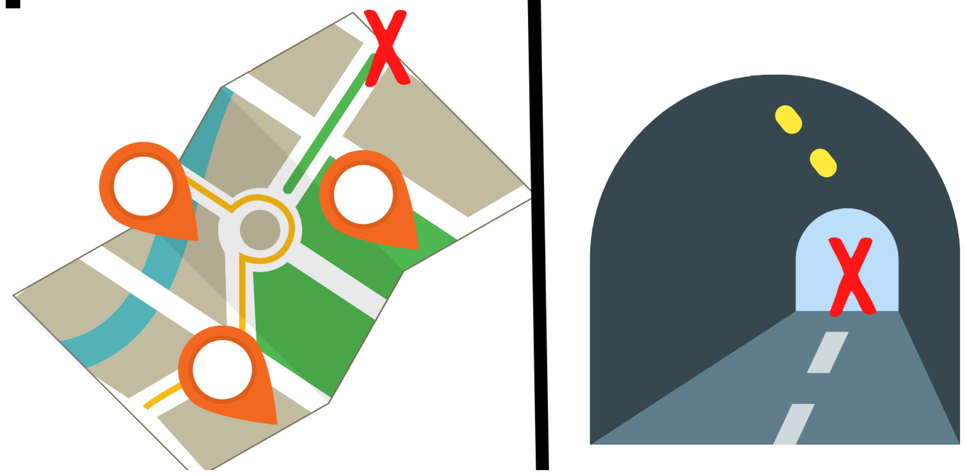
Team B

7	8	9	10	11	12
Empiricism, contact, test & learn	Rhythm, cadence, timebox	Quality, scale, long term	Pick punches, impact, progress not motion	Empowered, proactive, owner ship	Learning, slack time, recover

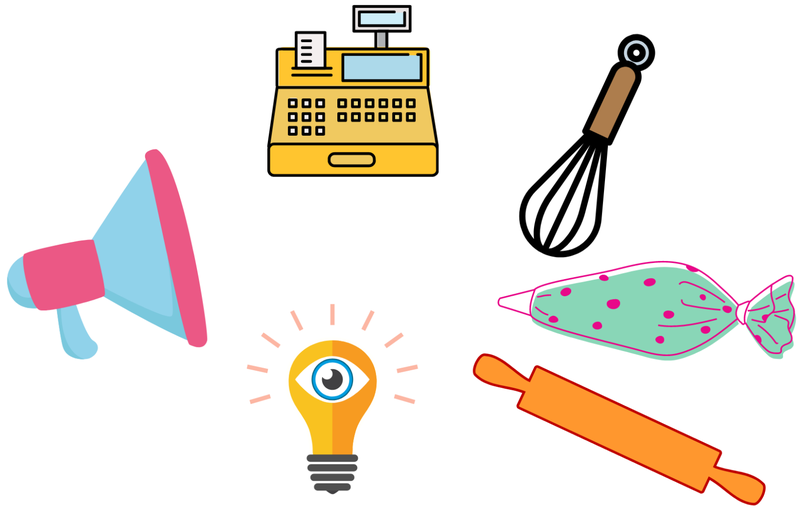
Small



Adaptive

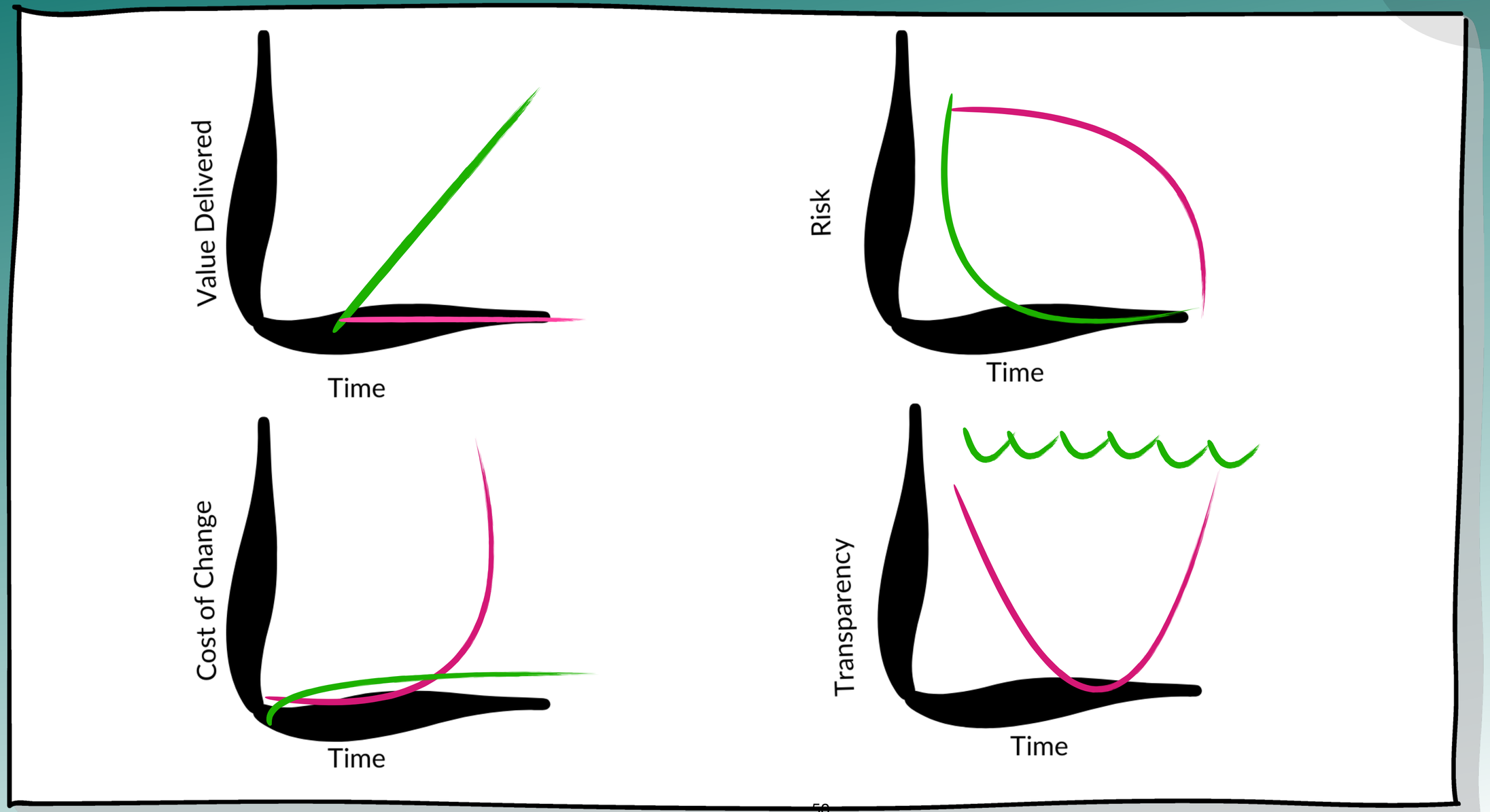


Cross-functional



Self-organising

Why Agile?


Agile
Traditional
Value Delivered
Time
Risk
Time
Cost of Change
Time
Transparency
Time

Why Agile - What do you see?

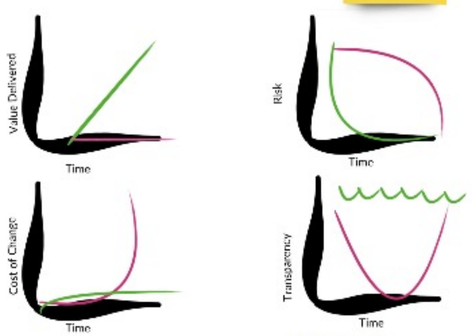
Below the Green Line represents an adaptive, Agile approach. The purple line represents a traditional, predictive approach. What benefits do you see for an adaptive approach? And if any, from a traditional approach?

Team 1

Total amount of risk is less for agile

1. continuous delivery, relevant software, quick delivery

cost of change is less likely to change with Agile approach



Transparency is maintained at certain level due to many feedbacks

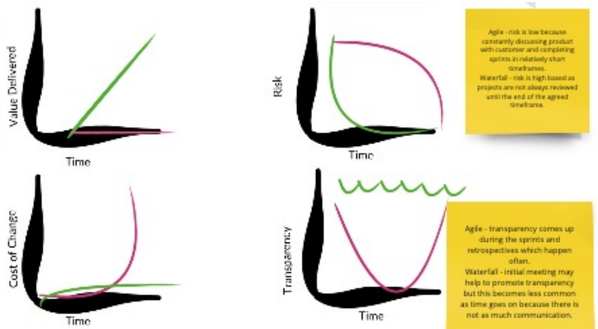
Why Agile - What do you see?

Below the Green Line represents an adaptive, Agile approach. The purple line represents a traditional, predictive approach. What benefits do you see for an adaptive approach? And if any, from a traditional approach?

Team 2

Agile - continual improvement so value increases with time. Iterative nature of agile allows the customer to feedback on the product continually. Waterfall - predictive so changes are more difficult.

Agile - due to constant conversations the cost of change is low. Waterfall - implementing changes is expensive due to there being an expectation that things wont change.



Agile - risk is low because constantly discussing product with customer and completing sprints in relatively short timeframes. Waterfall - risk is high based as projects are not always reviewed until the end of the agreed timeframe.

Agile - transparency comes up during the sprints and retrospectives which happen often. Waterfall - initial meeting may help to promote transparency but this becomes less common as time goes on because there is not as much communication.

Why Agile - What do you see?

Below the Green Line represents an adaptive, Agile approach. The purple line represents a traditional, predictive approach. What benefits do you see for an adaptive approach? And if any, from a traditional approach?

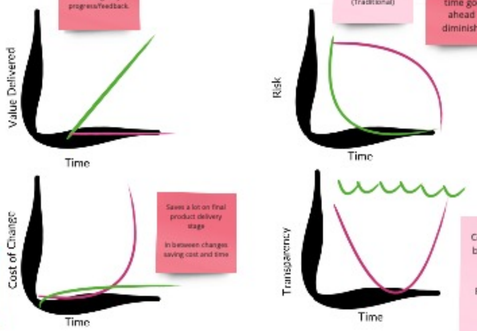
Team 3

Value Added increases with time.

Tracking daily progress/feedback.

More Time = Less Risk(Agile) vs. More Time = More Risk Overall (Traditional)

Risk reduces with time as time goes ahead it diminishes



Saves a lot on final product delivery stage

In between changes saving cost and time

The cost of changes is low because of the open-ended process frameworks

Consistent Relationship between Transparency and Time(Agile) vs Inconsistent Relationship between Transparency and Time(Traditional)

Why Agile - What do you see?

Below the Green Line represents an adaptive, Agile approach. The purple line represents a traditional, predictive approach. What benefits do you see for an adaptive approach? And if any, from a traditional approach?

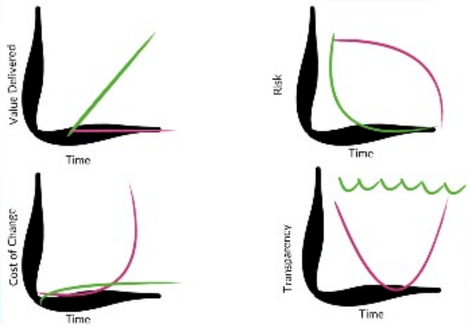
Team 4

Agile: Satisfy the customer through early delivery. Value increases steadily. Constant improvement.

Waterfall: you don't get value until the end. Hope the value delivered at the end

Agile: You make small changes steadily over time and change is anticipated and planned for. So the cost remains relatively constant throughout the project.

Waterfall: Cost of change increases over time as more and more is locked in. Whole product was developed, so even small changes is very costly.



Agile: With continuous, small feedback loops, you steadily eliminate your unknowns and they become known. So your risk drops off quickly.

Waterfall: Risk stays high until the end, because there is no delivery. A single feedback loop means that it's difficult to eliminate risk until the very end.

Agile: Feedback loops are continuous throughout the project. The regular team check-ins lead to a higher baseline level of transparency.

Waterfall: A single feedback loop. Proximity to the client and customer is not emphasized throughout the project; you engage with the client at the beginning to gather requirements and again to deliver the product.

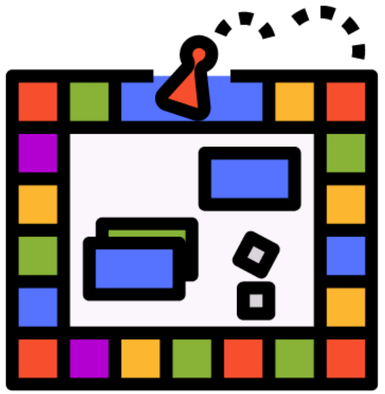
TELLING A BEGINNER TO

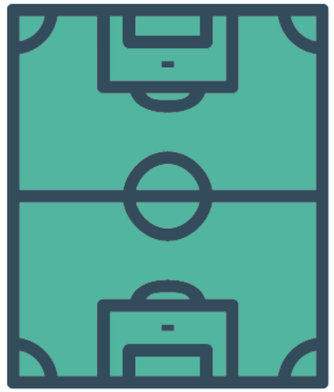
"YOU JUST NEED AN AGILE MINDSET"

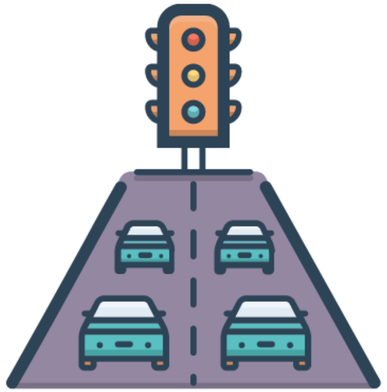
IS LIKE TELLING A NEW MARTIAL ARTIST :
"DON'T WORRY ABOUT PRACTICES OR METHODS,
JUST BE AGILE DUDEEEE"

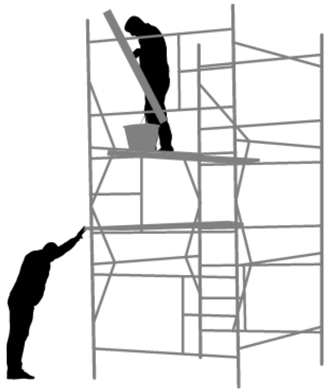
THIS OFTEN RESULTS IN POOR FORM,
INJURY & CONFUSION.
(THIS IS NOT JUST TO THE PRACTITIONER)

How frameworks can give us structure.

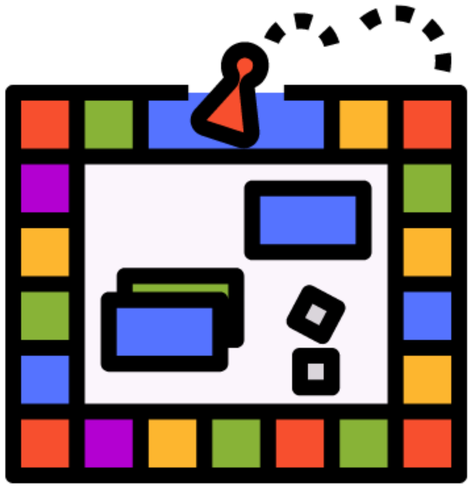




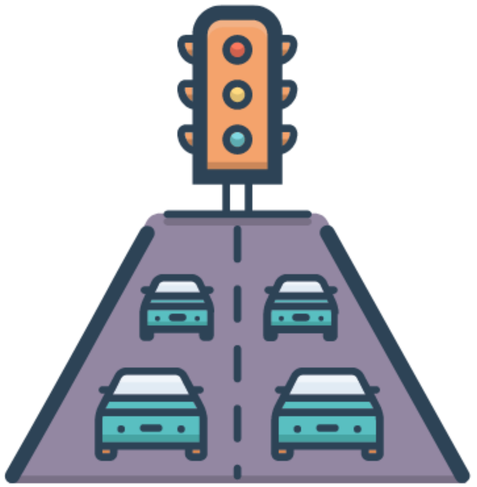




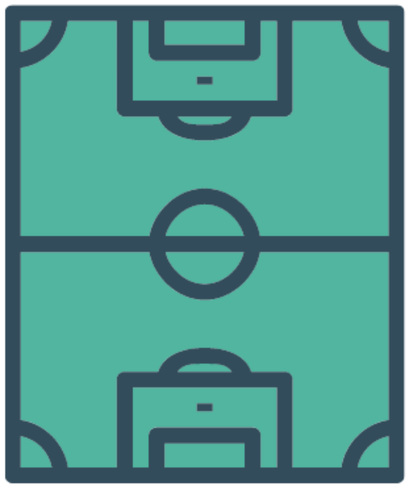
ROLES



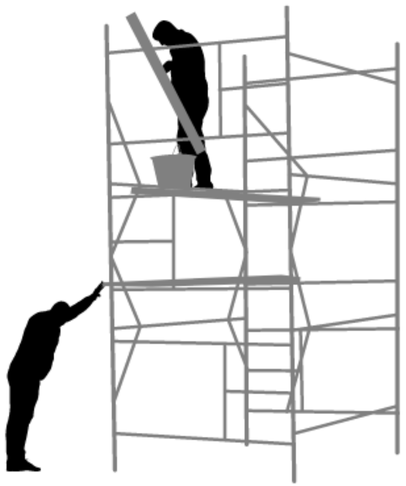
BOUNDARIES



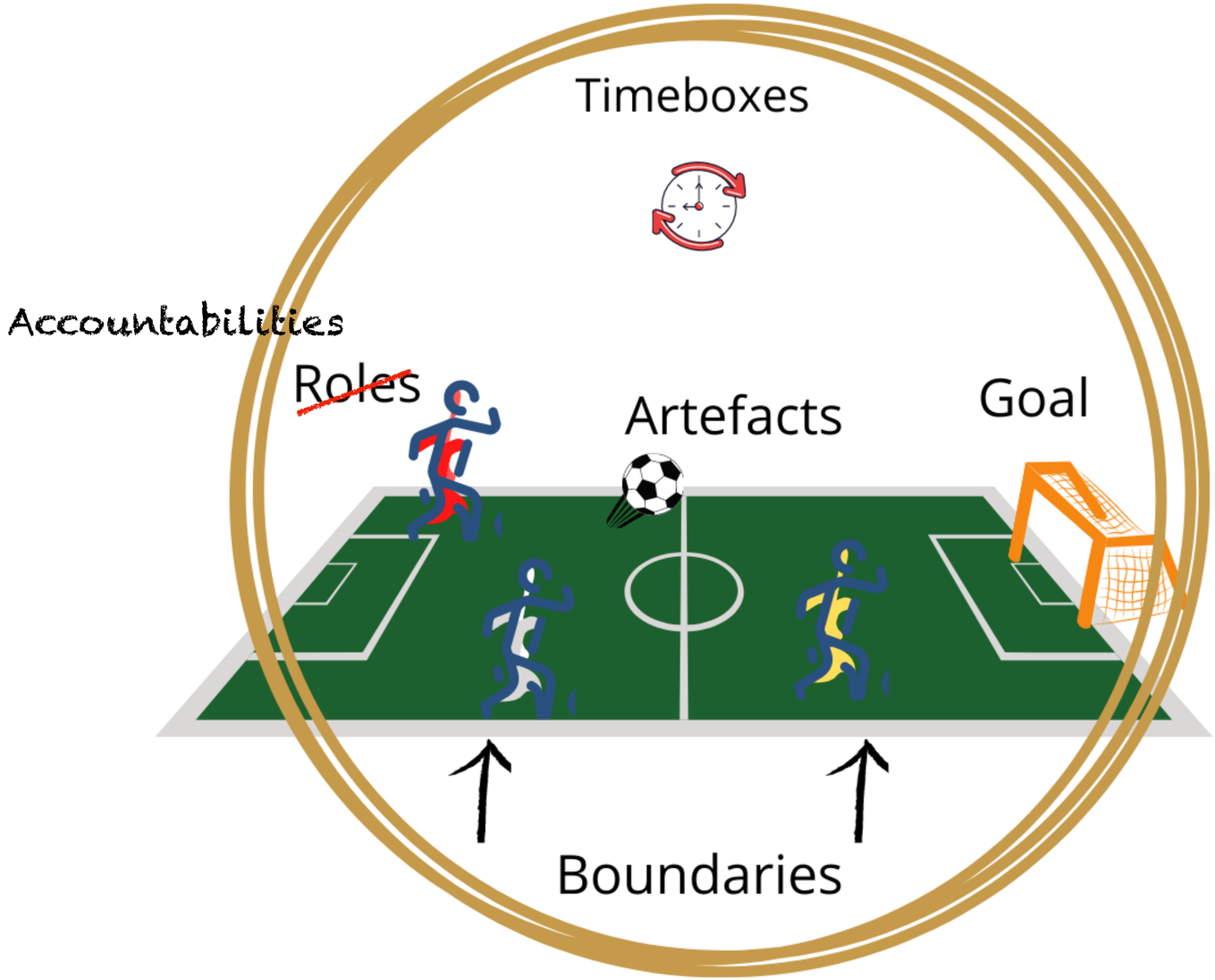
GOALS



STRUCTURE



RULES


Timeboxes
Accountabilities
Roles
Artefacts
Goal
Boundaries

SHOUT OUTS

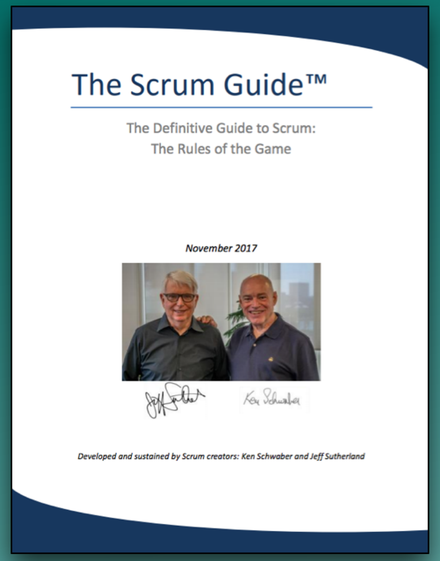
Scrum 101

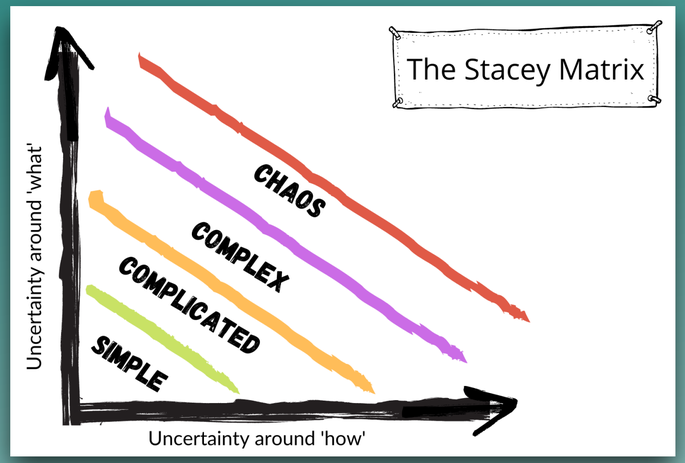
Small

Adaptive

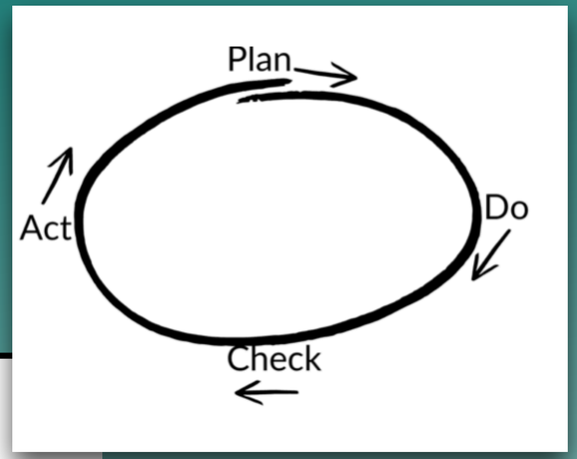
Self-organising

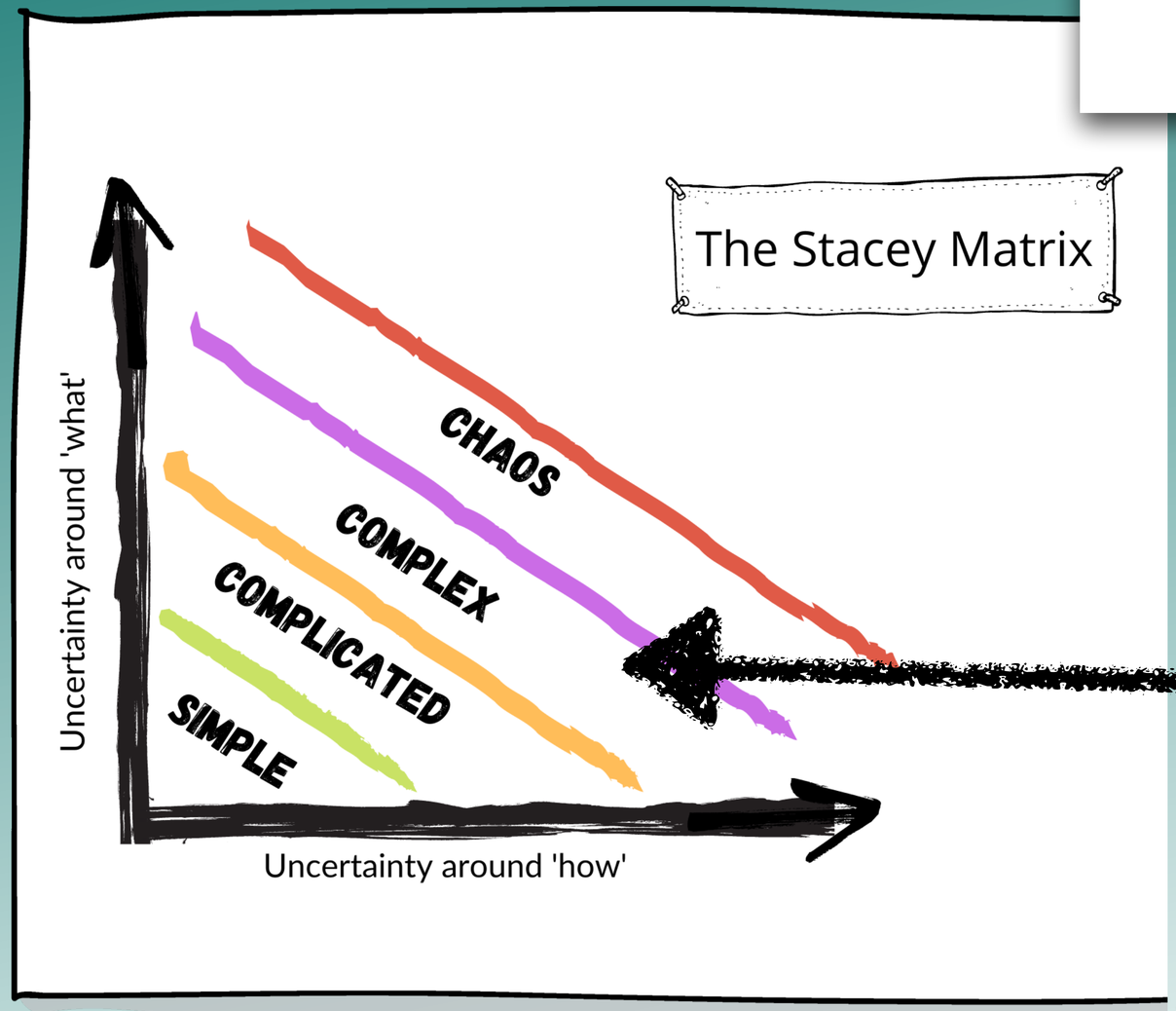
Cross-functional

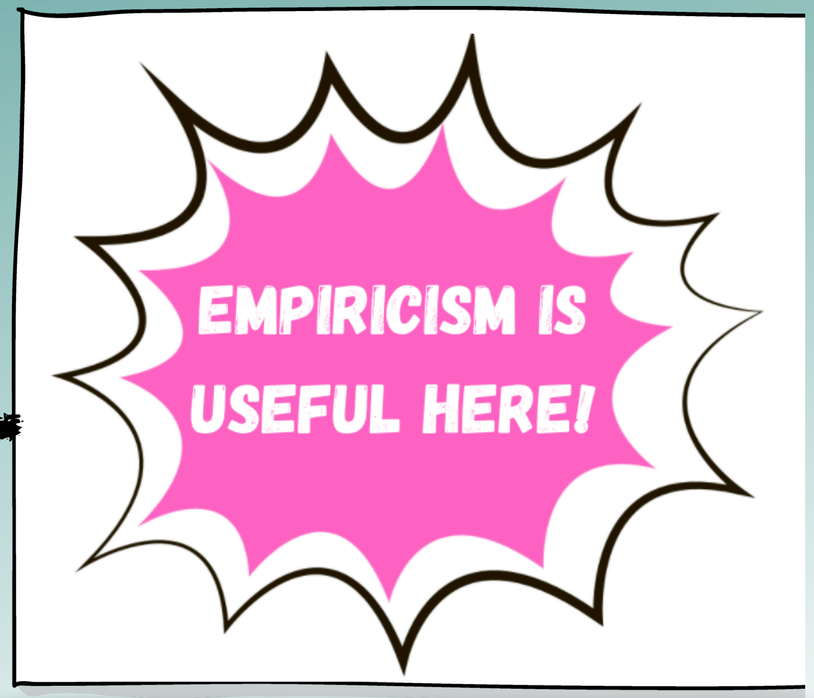


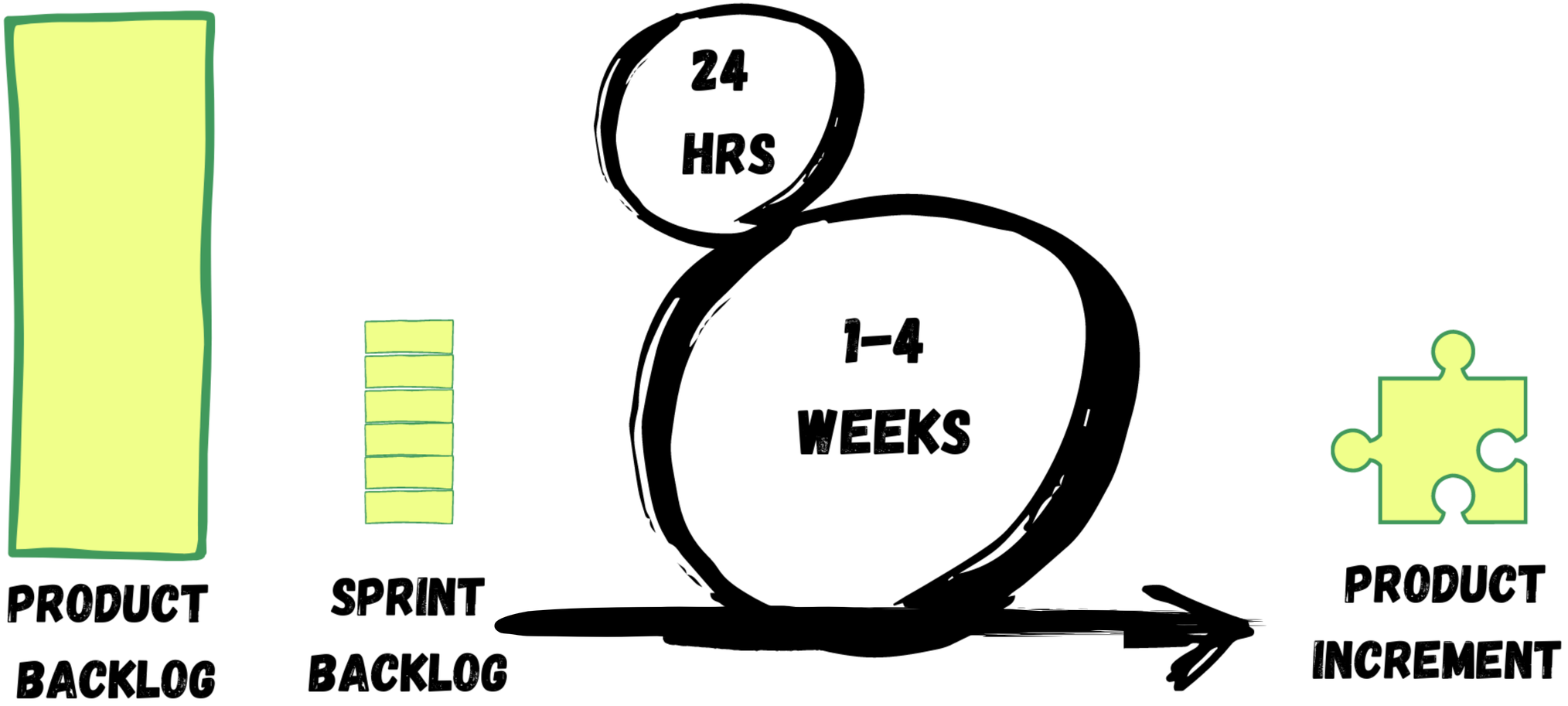


“Scrum is a **framework** within whch people can address **complex** adaptive problems. While productively & proactively delivering products of the highest possible value”


Plan
Do
Check
Act


The Stacey Matrix
CHAOS
COMPLEX
COMPLICATED
SIMPLE
Uncertainty around 'what'
Uncertainty around 'how'


EMPIRICISM IS
USEFUL HERE!


24
HRS
1-4
WEEKS
PRODUCT
BACKLOG
SPRINT
BACKLOG
PRODUCT
INCREMENT

Getting Married.

PRODUCT OWNER

SCRUM MASTER

DEVELOPMENT TEAM

OVERALL VISION LIVES HERE

PRODUCT BACKLOG

ALL THE THINGS POSSIBLE TO GET DONE IN A WEEK!

SPRINT BACKLOG

24 HRS

CATCH UP DAILY

1 WEEK

SOMETHING WHICH WAS COMPLETED, CONTRIBUTING TO THE VISION!

PRODUCT INCREMENT

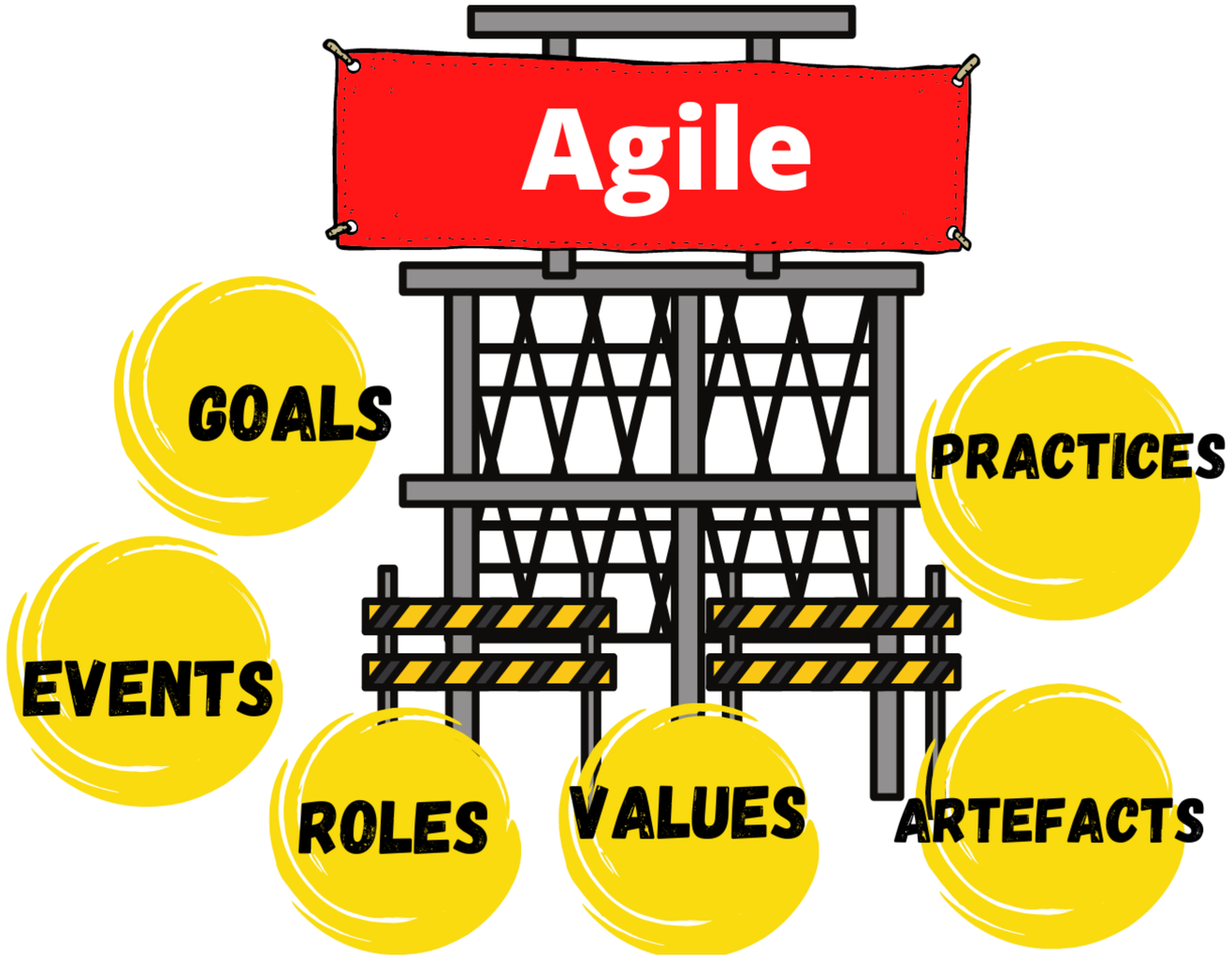
E M P I R I C I S M

“Using evidence to make decisions”

Transparency

Inspection

Adaptation


Agile
GOALS
PRACTICES
EVENTS
ROLES
VALUES
ARTEFACTS

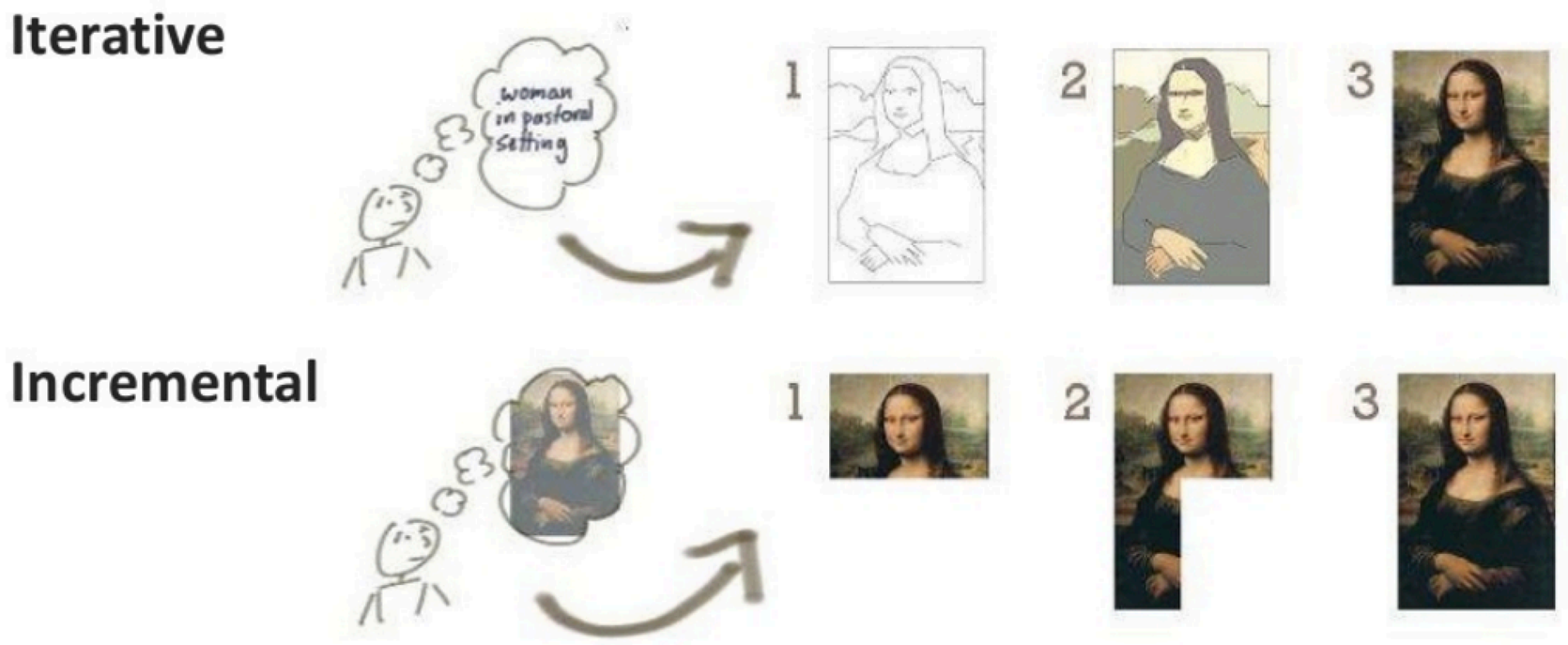
Iterative & Incremental

What is better?

Iterative

Incremental

Benefits to both!



Example answers

What would be the benefits of delivering this work iteratively?

We get to see an outline quickly.

Can decide if shape is what we want early on.

Could be faster as doesn't need high detail.

What could be the benefits of delivering this incrementally

Can see a detailed section of picture early

Can let us understand if fabric & choice of colour is ok

Could be fast as we don't need to wait on entire picture.

Baking a cake in two ways…

SKILL & KNOWLEDGE REQUIRED TO CREATE VALUE

Option 1

Feature teams

TEAM GREY

Option 2

component teams

Team 1

What are the benefits & disadvantages of these approaches?

Below we see two different approaches to deliver value - which we have playfully displayed as a victoria sponge cake! What are the pros & cons to these options? How would you set up your bakery? Is there a case for Option 2 to be the better choice? If so, why? Is there a case for option 1 to be a better choice?

Option 1

Feature teams

TEAM GREY

Pros

1. Work will be completed if even one of the Team member is not available
2. everyone understand the vision

Cons

1. Scheduling everyone at the same time is challenging

Option 2

component teams

Pros

1. specific skills sets leads to higher quality
2.

Cons

1. Work is dependent on every Team player
2. segmented - lack of visibility

Team 3

What are the benefits & disadvantages of these approaches?

Below we see two different approaches to deliver value - which we have playfully displayed as a victoria sponge cake! What are the pros & cons to these options? How would you set up your bakery? Is there a case for Option 2 to be the better choice? If so, why? Is there a case for option 1 to be a better choice?

Option 1

feature teams

TEAM GREY

Pros

Adaptive

Each team can help the other as needed because they have the skills to do so

Each team is self sufficient

Easier to iterate new features and run experiemtns end to end

Cons

All team members need to have same, various skills

Inter dependent

Skiv'd knowledge, if one person doesn't know how to do something its harder to get help

Option 2

component teams

Pros

will make it less time consuming
will have things prepared before time, expectation is already set
immediate feedback or correction

Clear goal defination

All experts on a topic working together. Easier to overcome problems

Cons

inequitable work distribution issues on how segmented components are

If your experiment or features needs work from another specialty, it's slower

may not have expertise in all stages
lesser knowledge
no exposure to everyone's idea

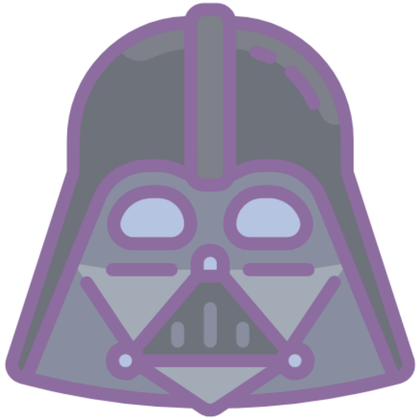
not self sufficient

Dependence & more

Leadership styles

SERVANT LEADERSHIP

COMMAND & CONTROL



Both want to

Realise value!

Self organising vs closely managed

SERVANT LEADERSHIP

COMMAND & CONTROL

LEFT TO SELF-ORGANISE

- The vision & 'why' is clear to all team
- Work can be picked up without waiting
- Autonomous decision making
- Balance between delivery & team growth

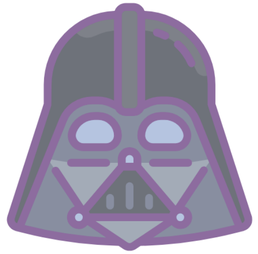
CLOSELY MANAGED

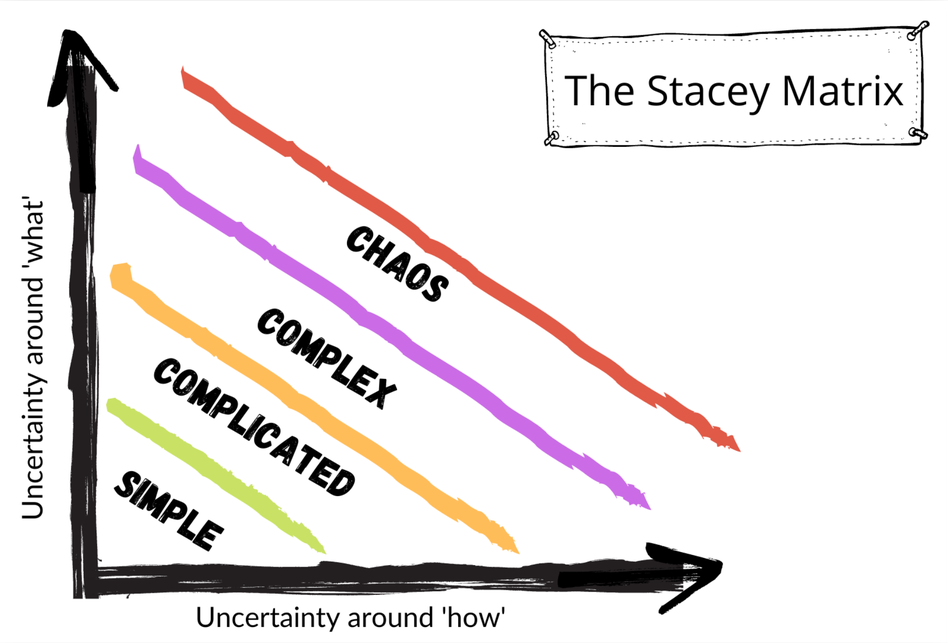
- The vision & 'why' is mostly clear to a select few
- Work is often allocated
- Centralised decision making
- Focus is to deliver more

Complexity & leadership styles…

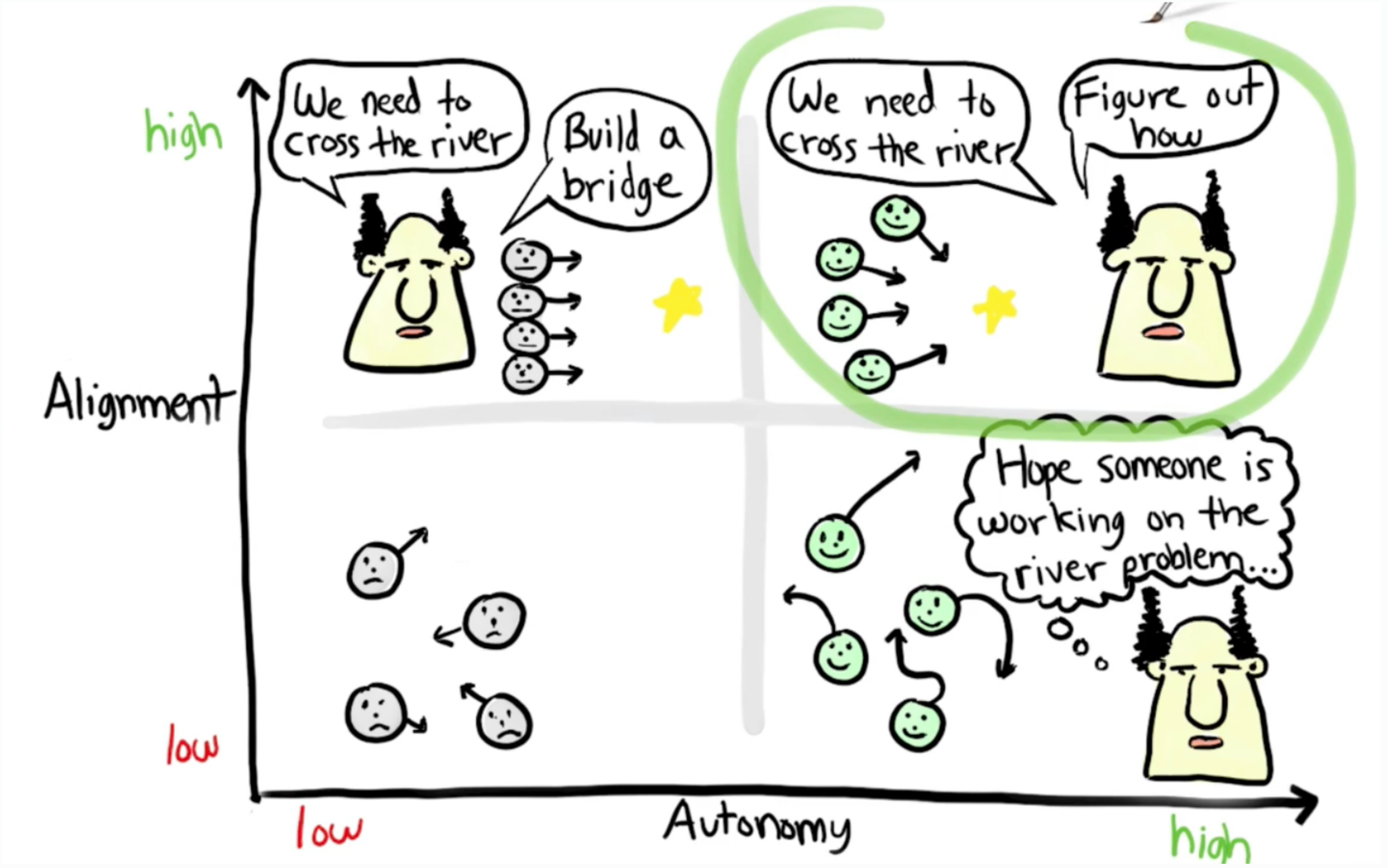
SERVANT LEADERSHIP

COMMAND & CONTROL





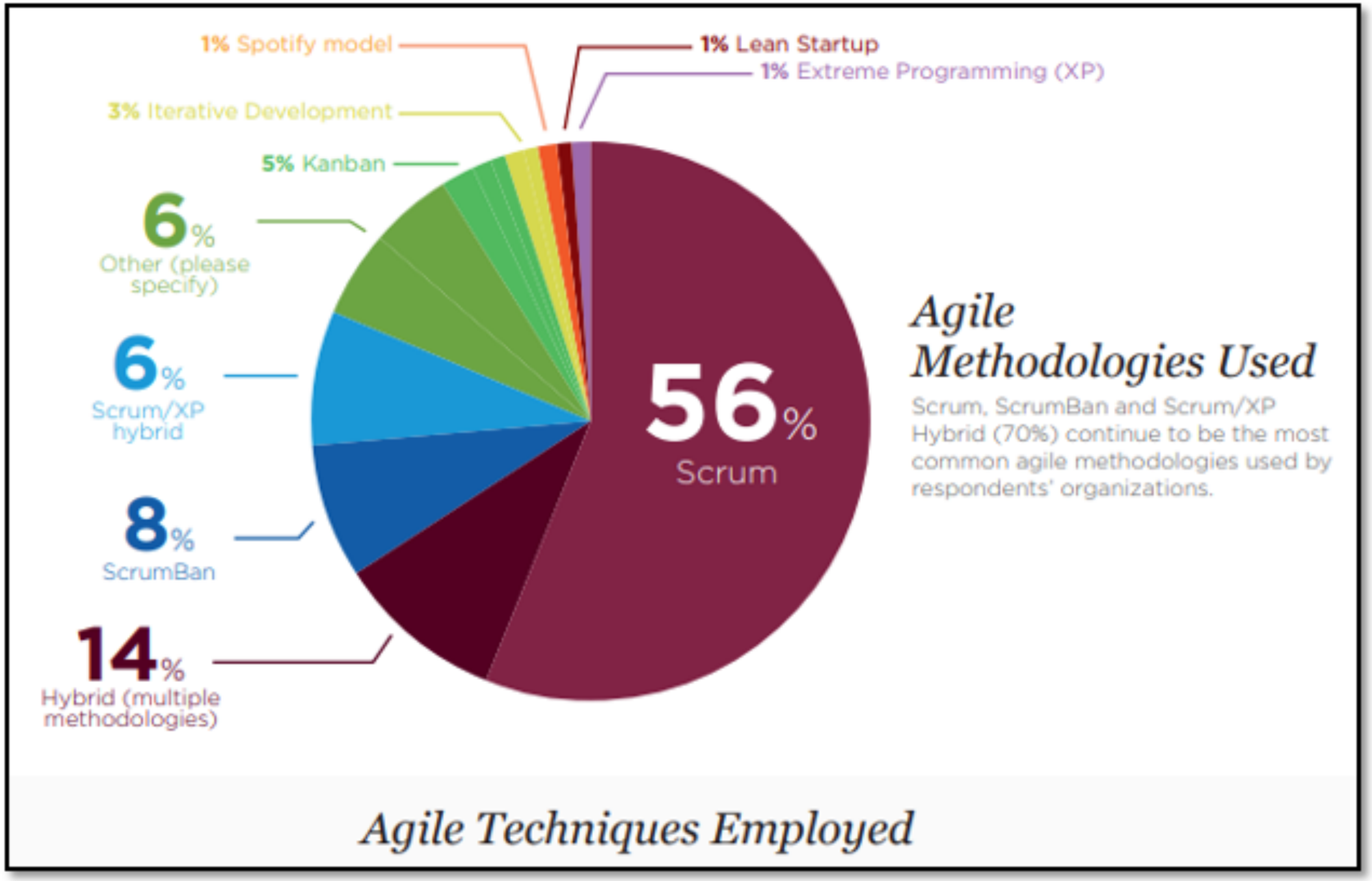
Why self organisation goes wrong

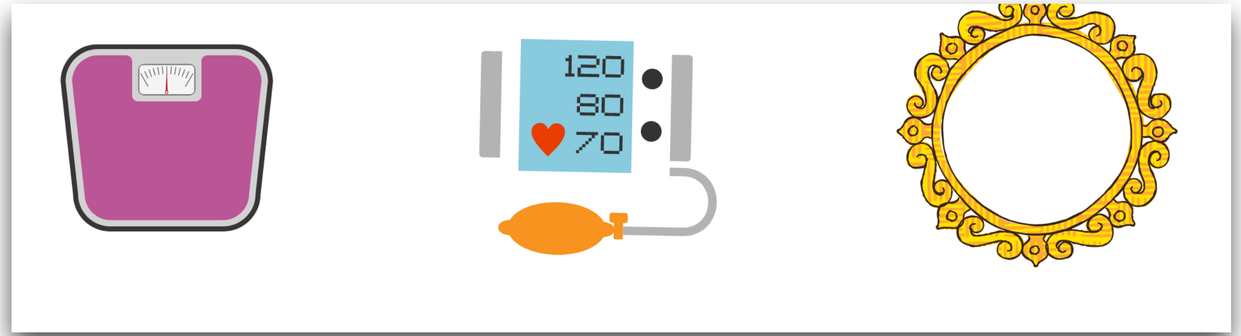


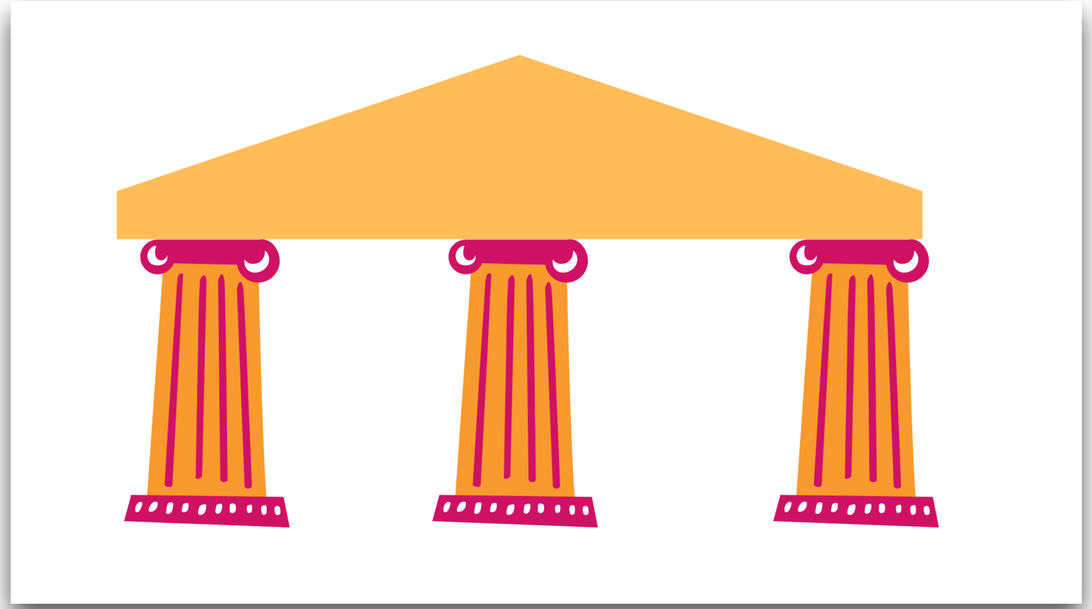
Hat tip

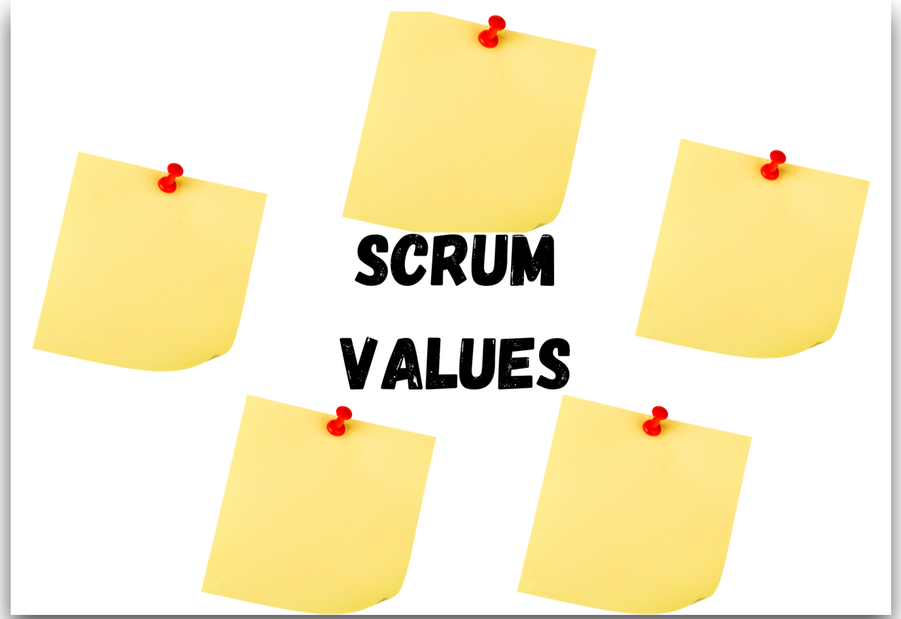
Henrik Kniberg

Scrum a powerful starting point & then some…



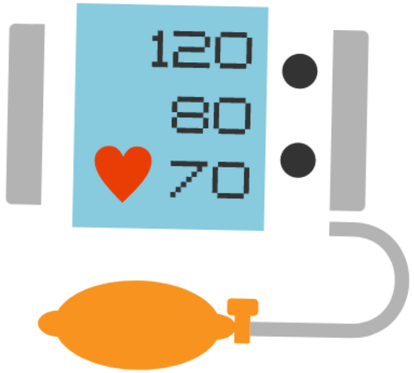

120
80
70

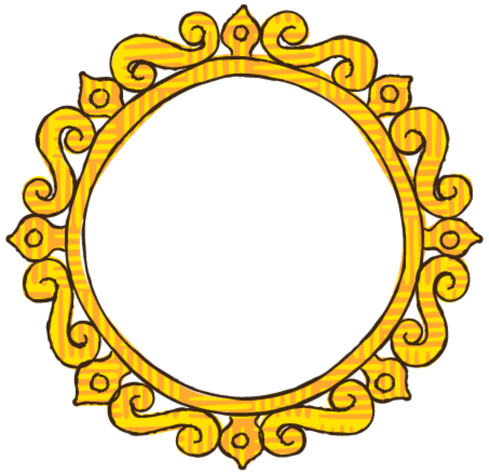



SCRUM
VALUES

LIKE SCRUM ,

NONE OF THESE FIX ANYTHING.





THEY ONLY HELP YOU SEE WHERE YOU ARE.

SCRUM VALUES

Acting in the face of fear

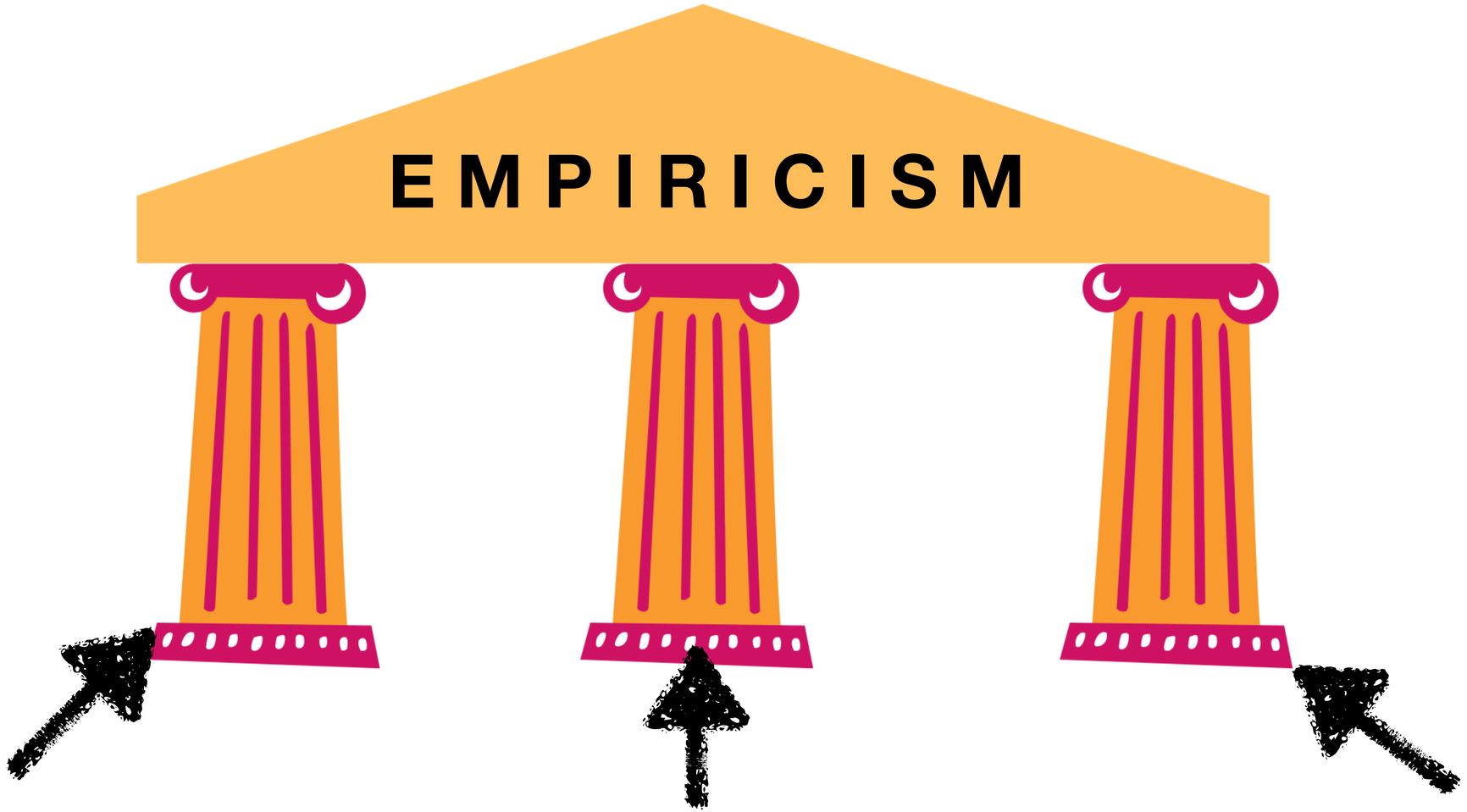
Accepting new ideas or people

Dedicated to a cause

Due regard to the feelings of others

Attention in one Place

Scrum Theory



If we can see it, we can do something about it

We can now look closely at it to assess x

Taking new action based on our learning

E M P I R I C I S M

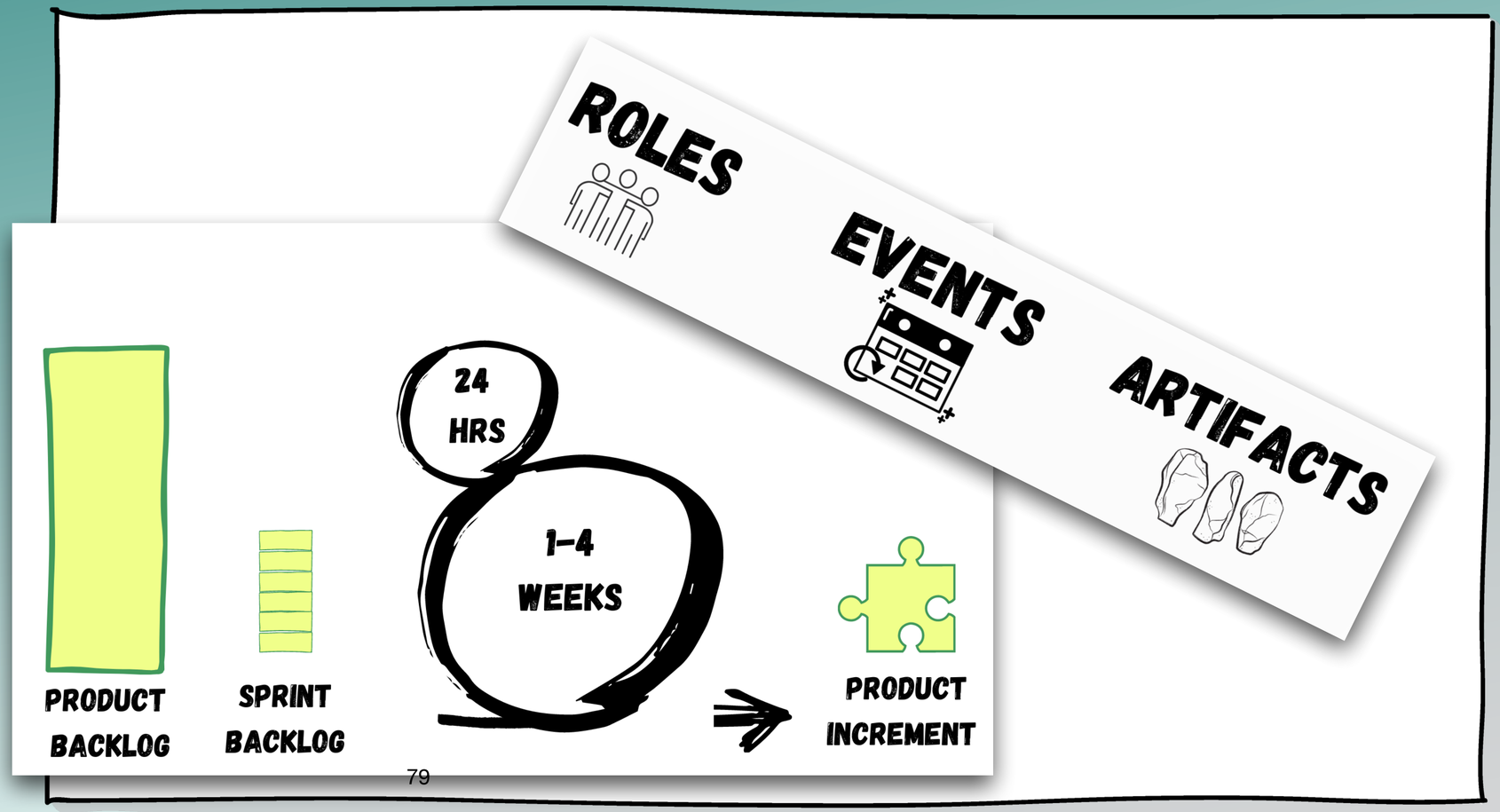
“Using evidence to make decisions”

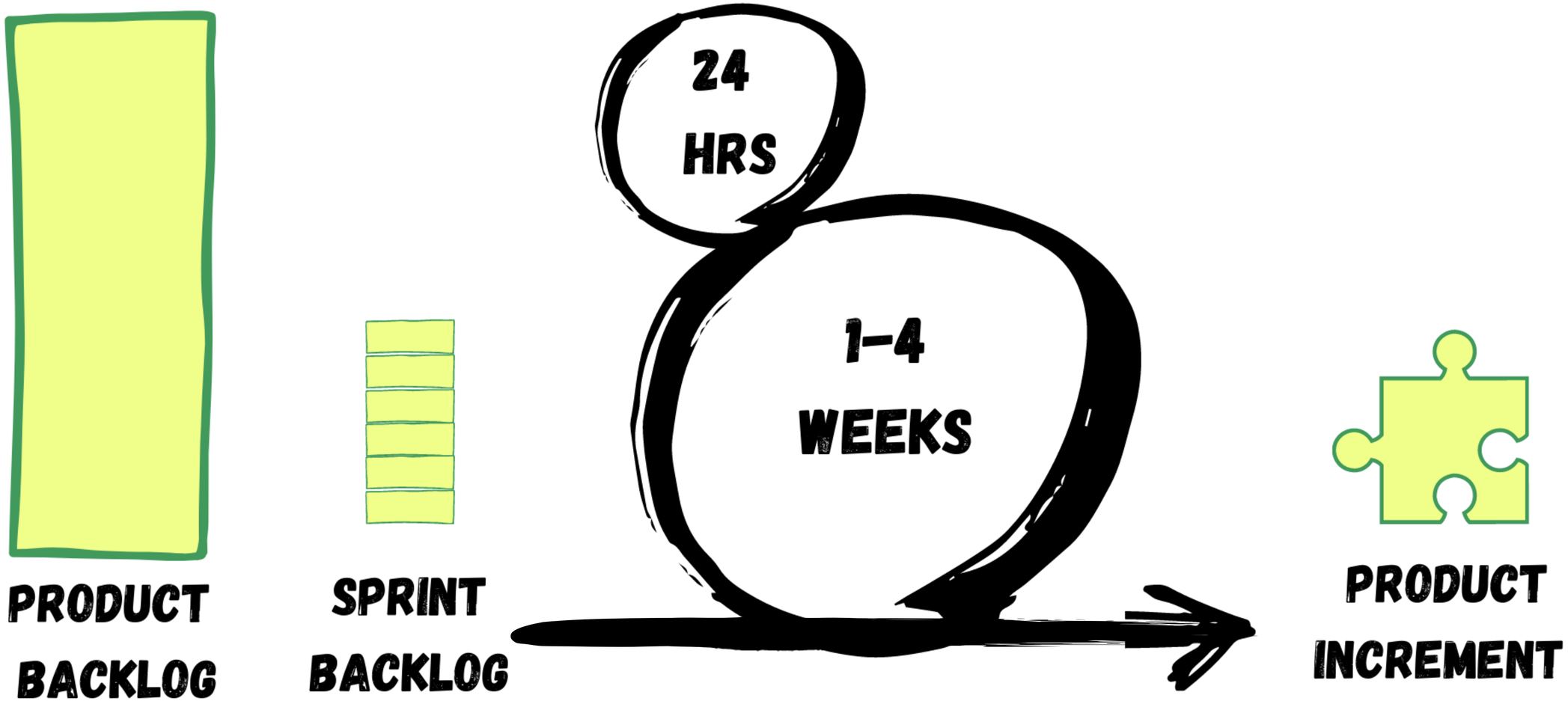
Transparency

Inspection

Adaptation

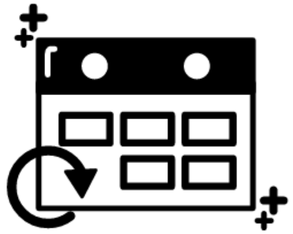
Deeper Dive: Scrum



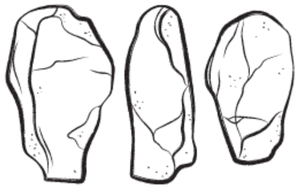

24
HRS
1-4
WEEKS
PRODUCT
BACKLOG
SPRINT
BACKLOG
PRODUCT
INCREMENT

ROLES

EVENTS



ARTIFACTS

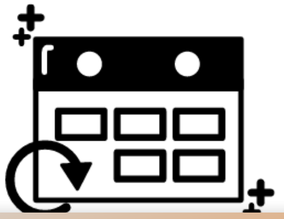


Example answer:

ROLES

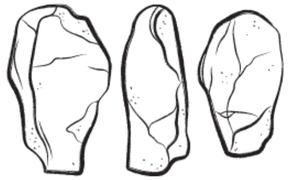
- Development Team
- Product Owner
- ScrumMaster

EVENTS



- Sprint Planning Meeting
- Daily Scrum
- Sprint Review
- Sprint Retrospective

ARTIFACTS



- Product Backlog
- Sprint Backlog
- Product Increment

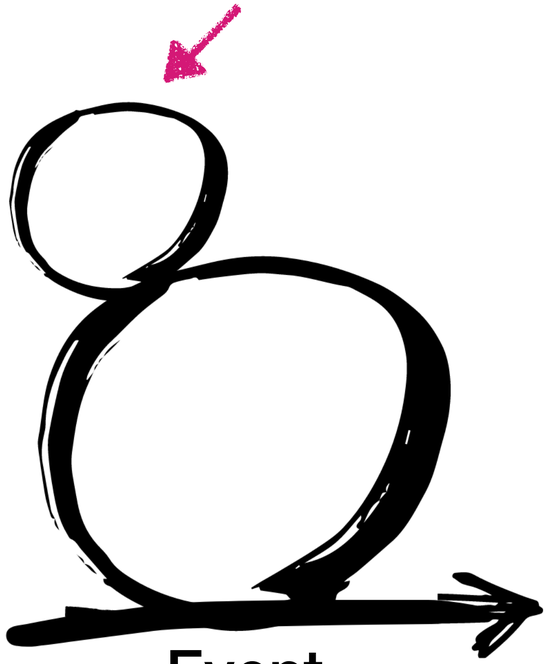
Event

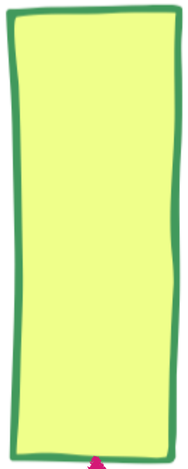
Role

Role

Role

Event





Event

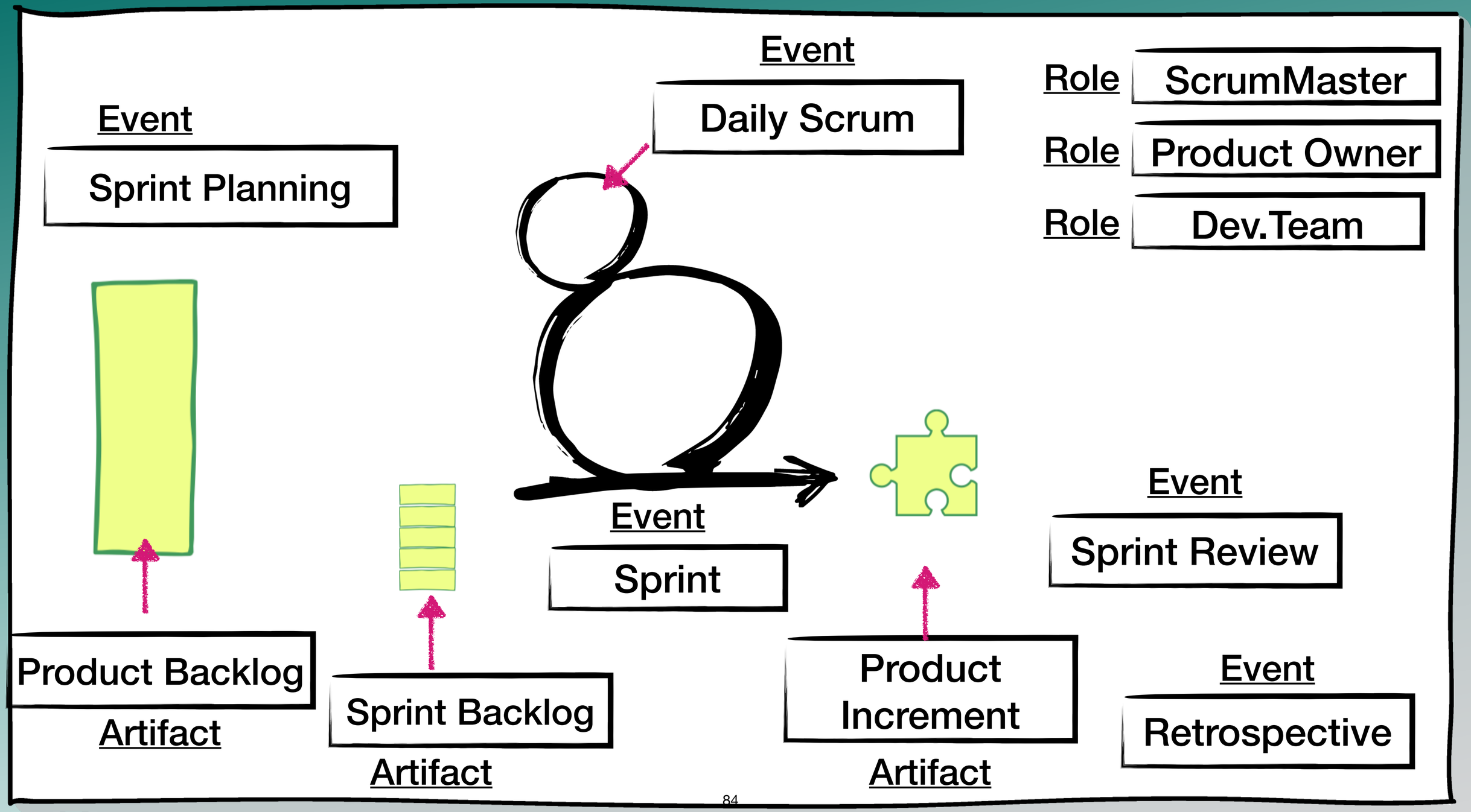
Event

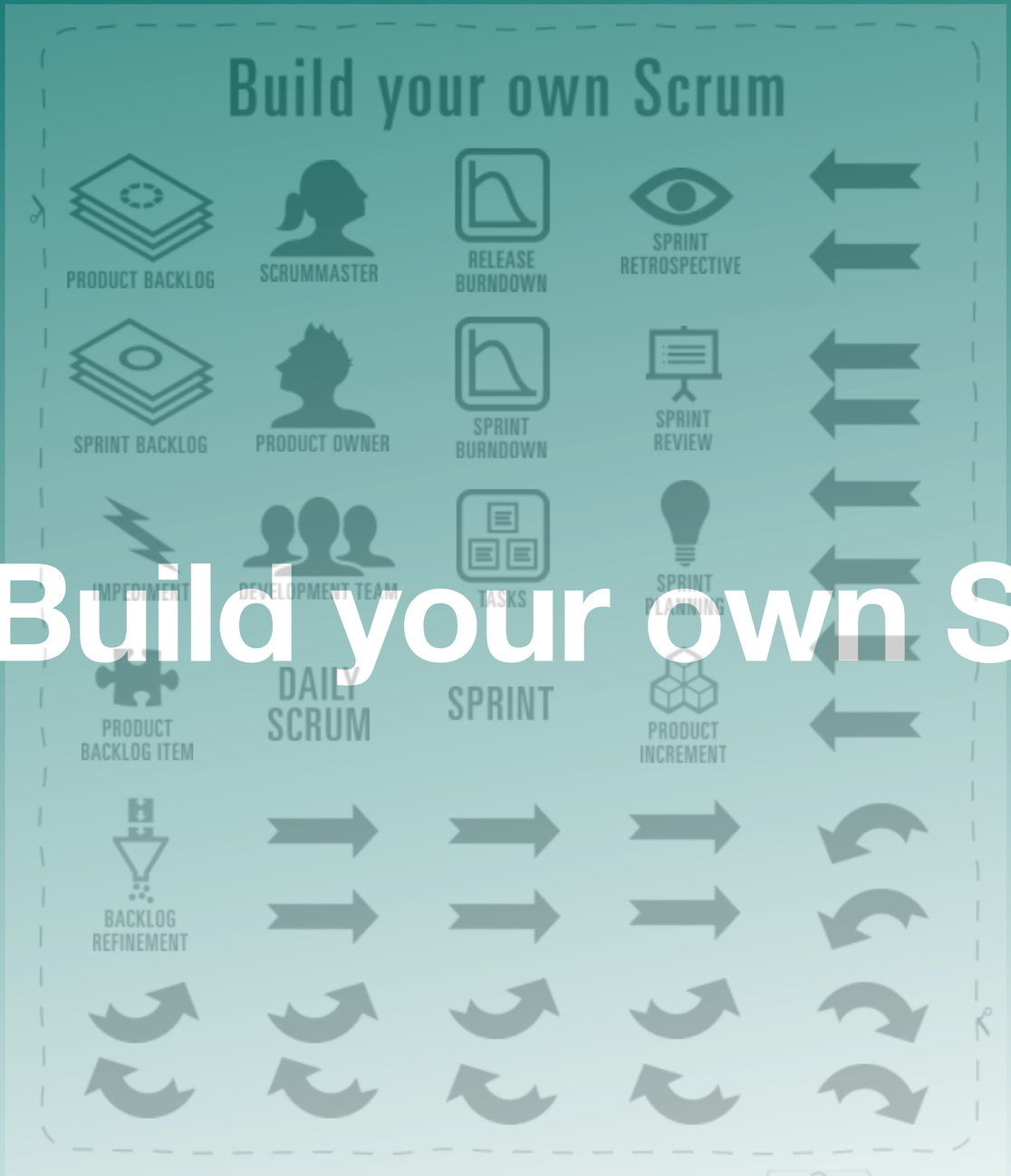
Artifact

Artifact

Artifact

Event

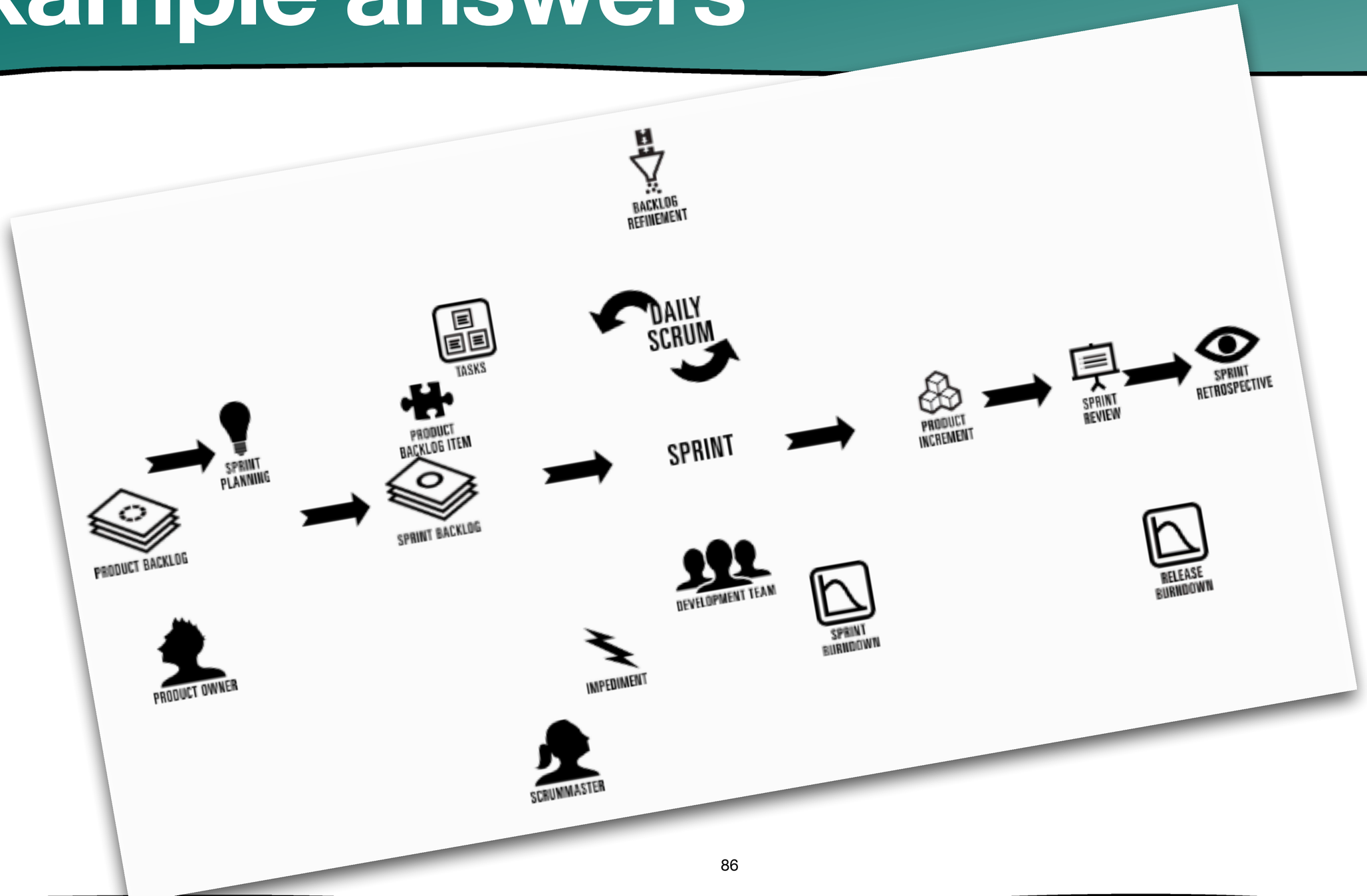

Event
Daily Scrum
Role
ScrumMaster
Role
Product Owner
Role
Dev.Team
Event
Sprint Planning
Event
Sprint
Event
Sprint Review
Product Backlog
Artifact
Sprint Backlog
Artifact
Product Increment
Artifact
Event
Retrospective



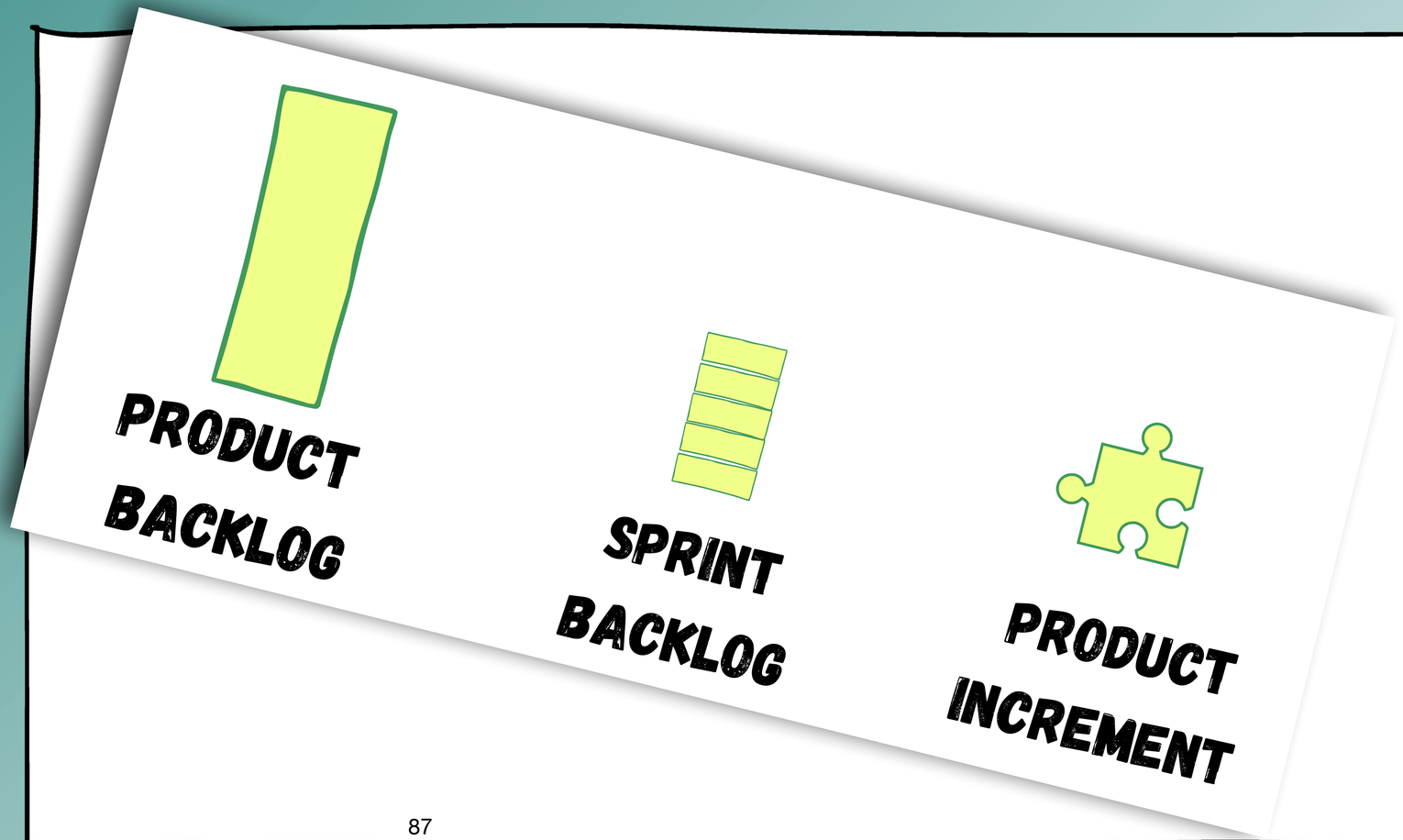
Build your own Scrum

Adam Weisbart

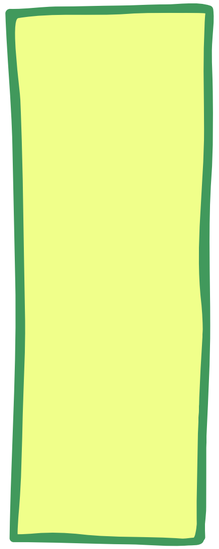
Example answers



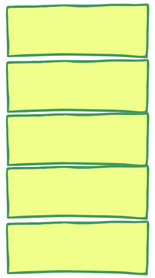
Scrum Artefacts



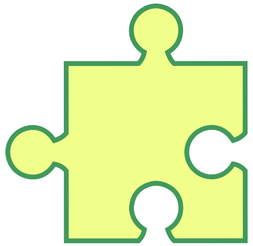
3 Artefacts



PRODUCT BACKLOG



SPRINT BACKLOG



PRODUCT INCREMENT

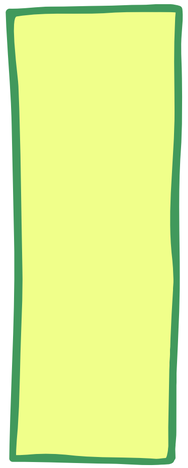
Example answers

3 Artefacts

Where requirements live

Product Owner puts together with team

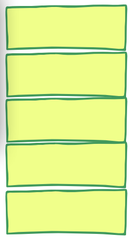
It is like a roadmap for the product



PRODUCT BACKLOG

The team decide on what they can do in Sprint

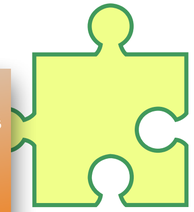
The plan for the Sprint



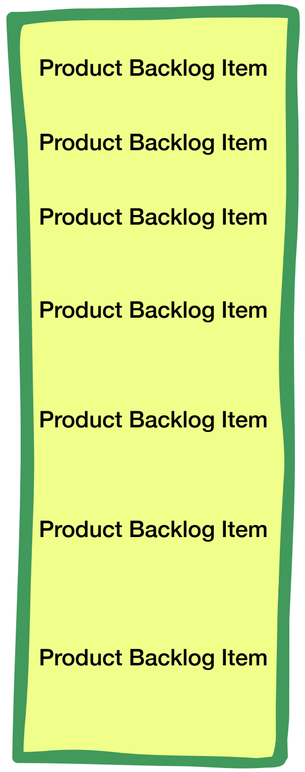
SPRINT BACKLOG

The work which meet D.O.D

What we show in Sprint Review

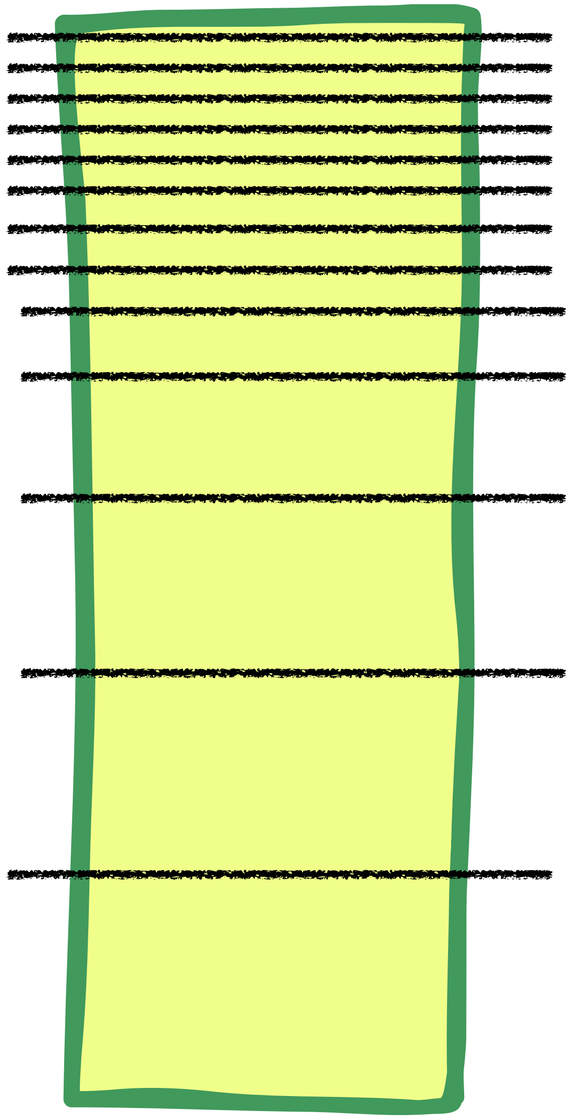


PRODUCT INCREMENT



PRODUCT BACKLOG

- An ordered list of everything that is known to be needed in the product
- Single source of requirements for any changes to be made to the product
- Product Owner responsible for managing the backlog



D_t_iled _ppro_riately

The right level of detail at the right time

Em_r_ent

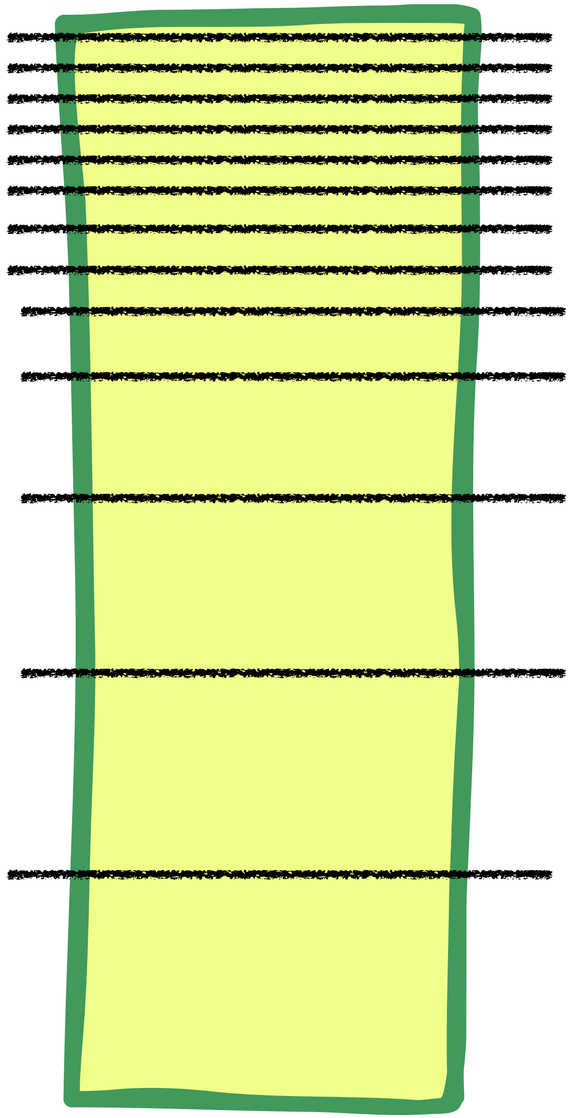
The process of becoming, appearing

_sti_ated

A jugdgement on the size of something

_rd_red

Carefully arranged in a certain way



Detailled **a**ppropriately

The right level of detail at the right time

Emergent

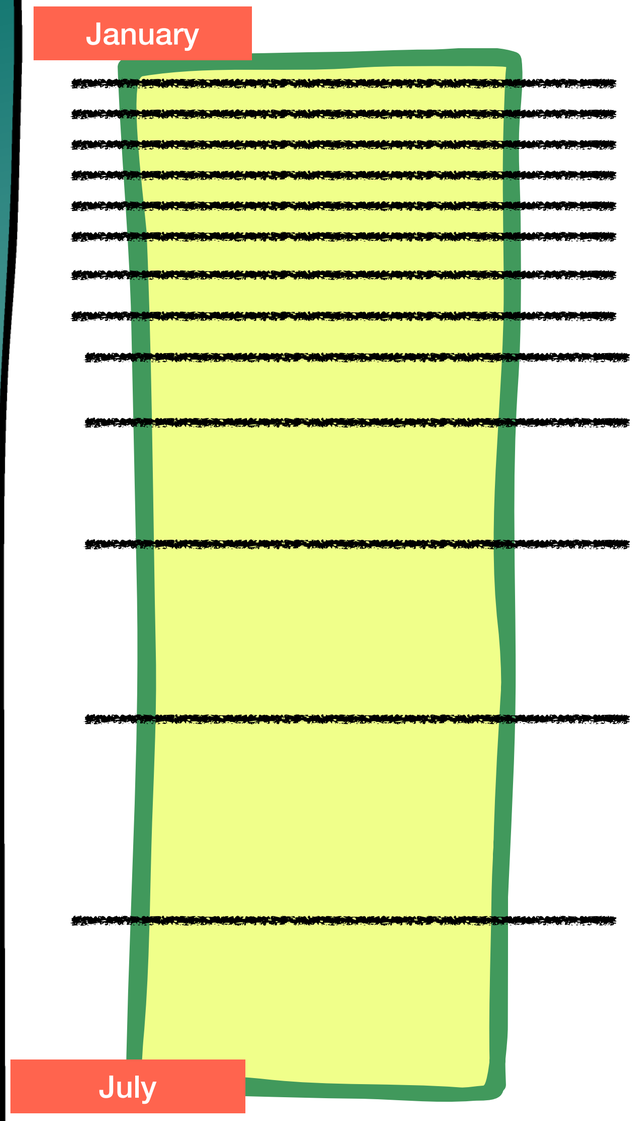
The process of becoming, appearing

Estimated

A jugdgement on the size of something

Ordered

Carefully arranged in a certain way



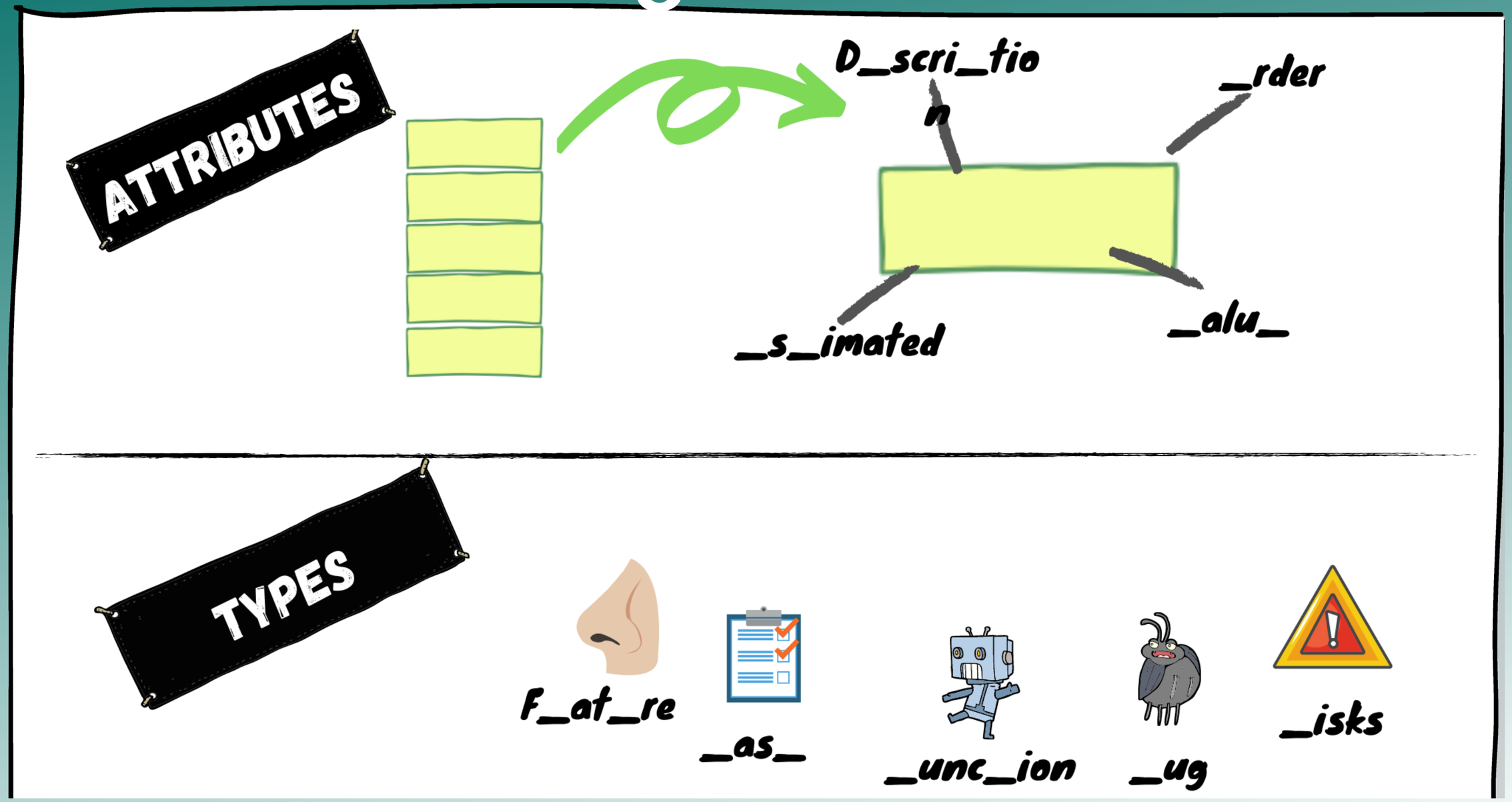
It is January and you have been asked to map out (in pretty low level) detail the requirements for a project all the way up to July.

1. What type of requirements could be risky to detail many months ahead?

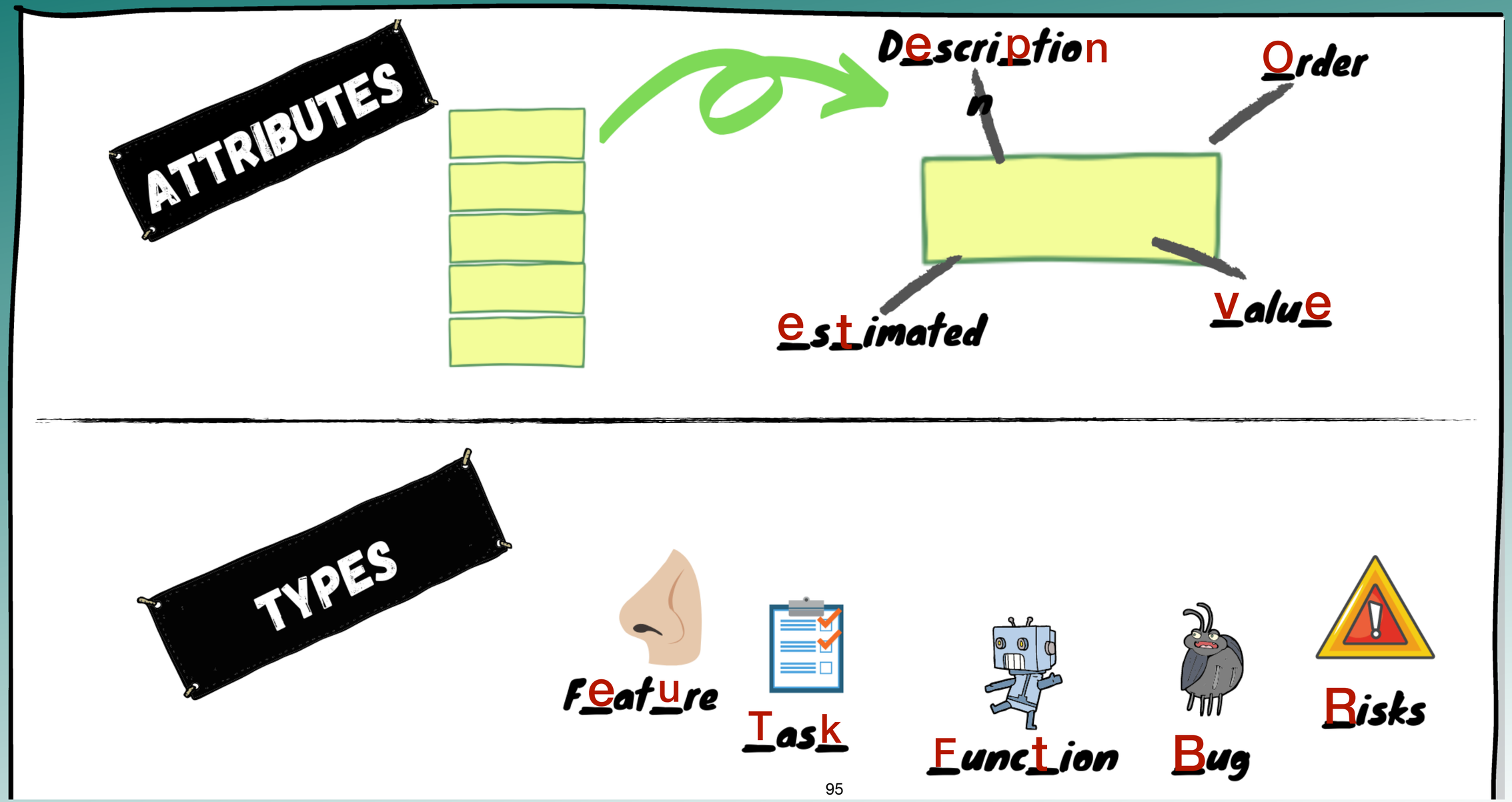
2. If we can't detail such requirements what could we offer to our manager?

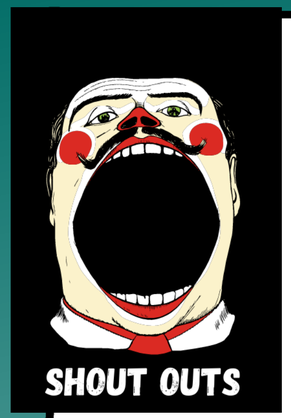
3. What type of requirements could we be more comfortable with detailing a little further in to the future?

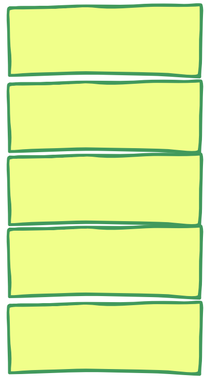
Product Backlog Items



Example answers







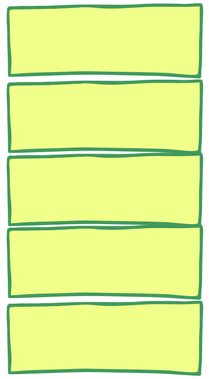
SPRINT BACKLOG

- The team's _lan to turn the selected _roduct _ac_log Items into a _otentially _eleasable _ncrement by the end of the sprint

- Managed by ?

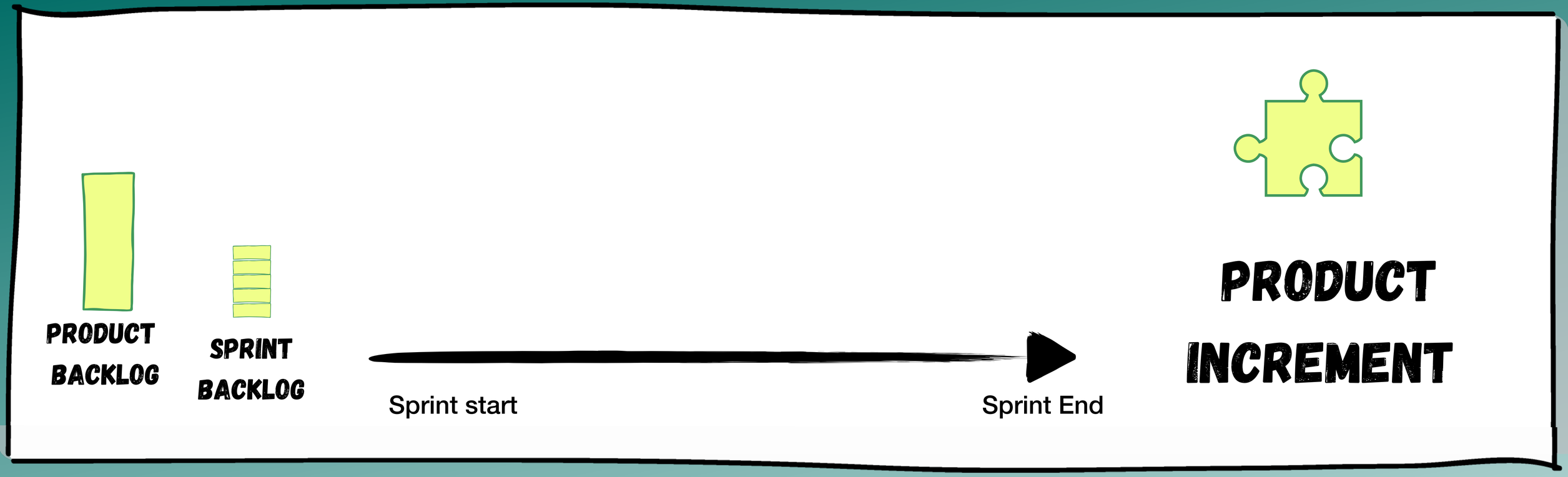
- Gives _i_i_ility to the work which needs to be completed to deliver _print _oal

- It contains one improvement item from the retrospective to be completed in the sprint
  -True or false?



SPRINT BACKLOG

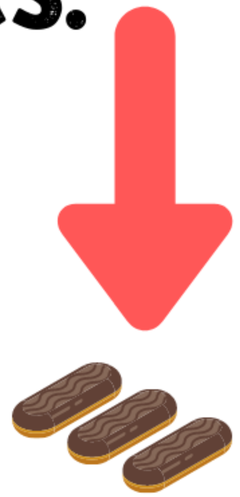
- The team's plan to turn the selected product backlog Items into a potentially releasable increment by the end of the sprint
- Managed by the Development Team
- Gives visibility to the work which needs to be completed to deliver Sprint Goal
- It contains one improvement item from the retrospective to be completed in the sprint



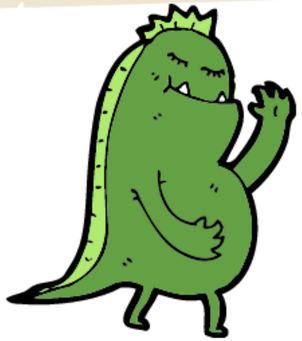
- The sum of the Product Backlog Items delivered in the Sprint
- The increment must be ‘Done’
- It is potentially releaseable regardless of whether the Product Owner decides to release it or not

POTENTIALLY RELEASABLE ECLAIRS.

ARE THEY GOOD TO GO OR NO?

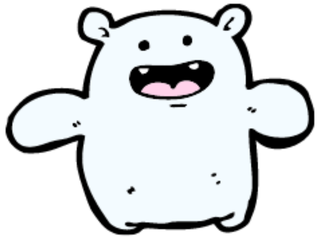


"Relax...the pastry is baking,
we can add the other bits LATER-
when the customer arrives...".



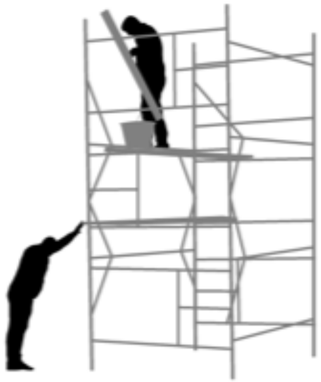
**we are here **

"But we gotta let the pastry cool
and THEN add the cream and THEN
add the chocolate & THEN let it set...
it's NOT good to go!"



JemJelly.com

- What makes Scrum a framework ?
  - Hint: If Scrum contained engineering practices would it still be a framework?

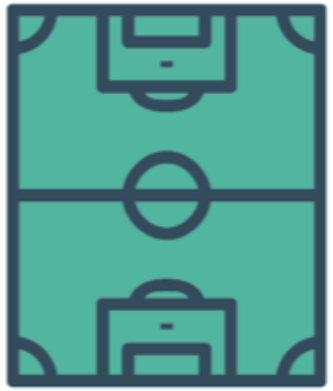


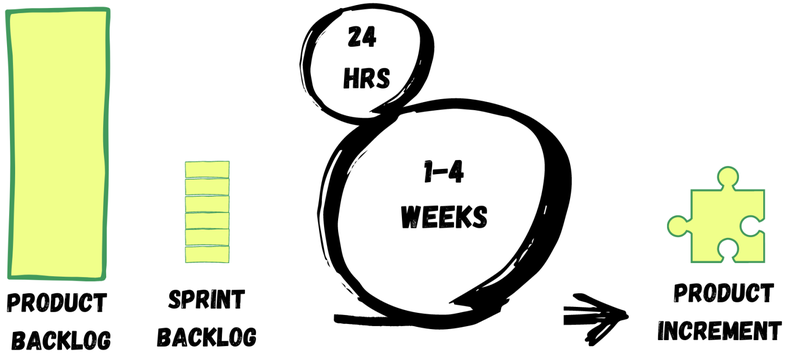
- It is made up of elements which give it structure
  - name some elements!

- Within the framework there is a process
  - what is this process?

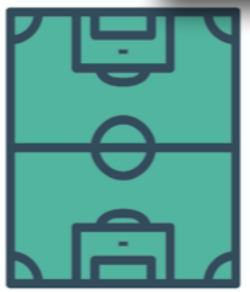
- This process brings empiricism to life
  - how, any examples?

- Where are the feedbacks loops in Scrum?





Methodology	Framework
A set of principles, tools and practices to achieve a goal	A loose structure that leaves room for other practices and tools to be included
Prescriptive	Framework considers empirical findings
Tells us what steps to take, in what order and how to perform them	Scrum leaves room for teams to choose their own technical processes, development roles, etc.



Borrowed from the work of Maria Materali

Build your own Scrum

Time-boxing

Product Backlog Items

Product Increment

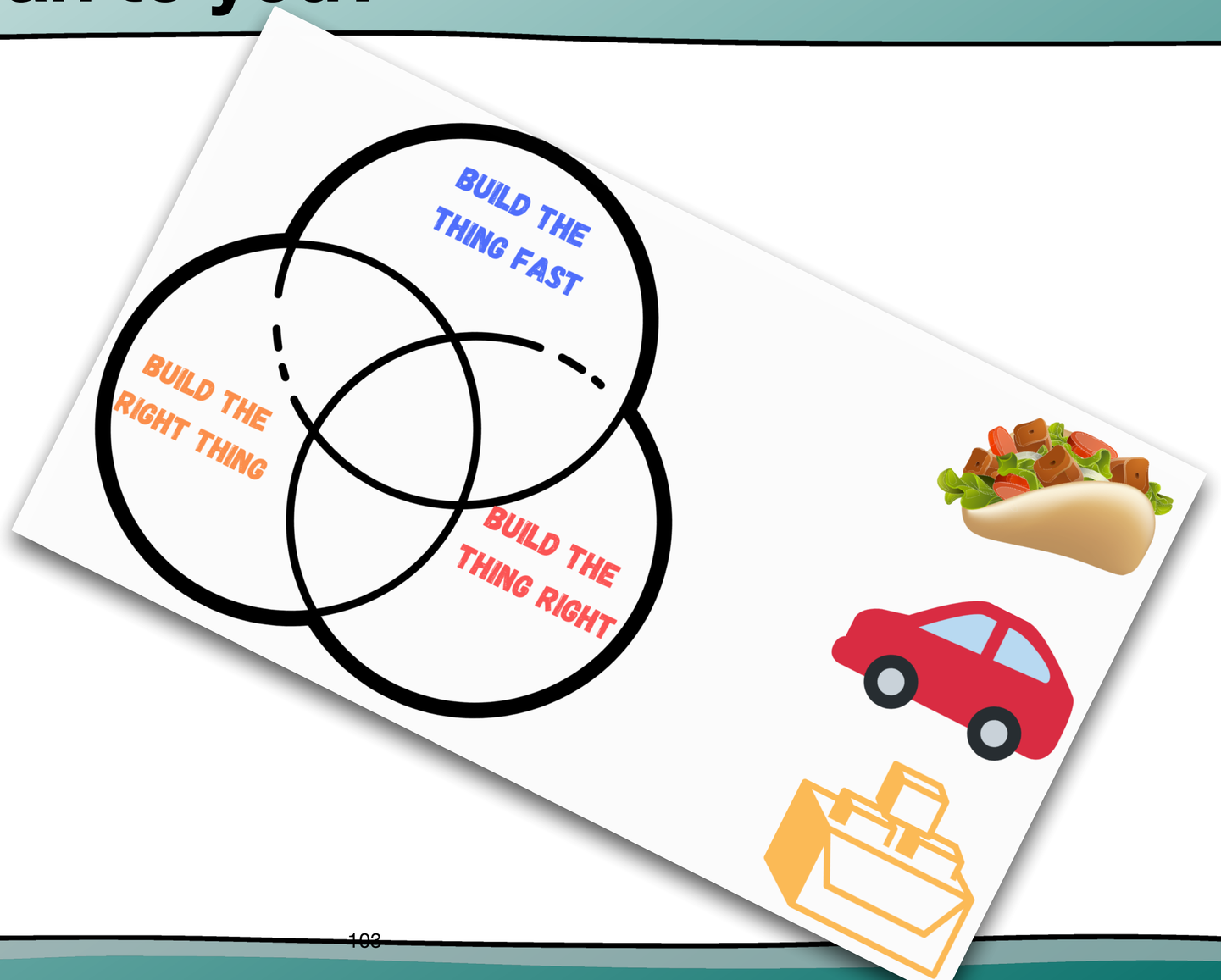
Sprint Backlog

Potentially releasable

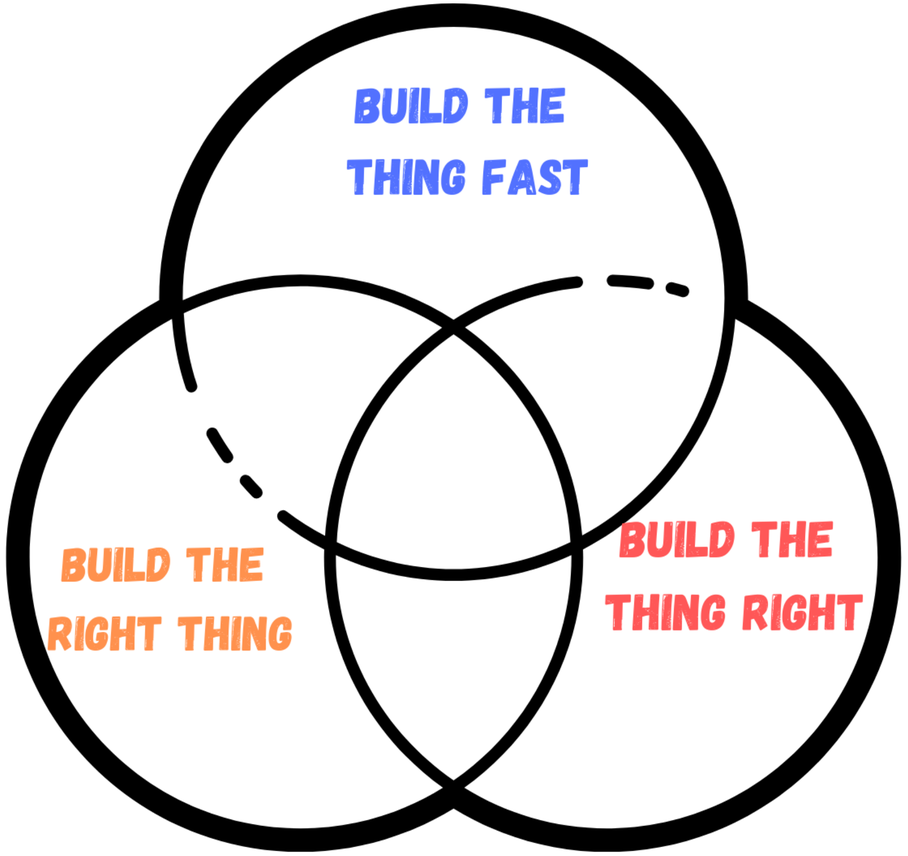
Scrum Vallues

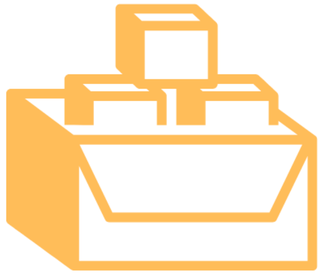
Definition of Done

What does this mean to you?

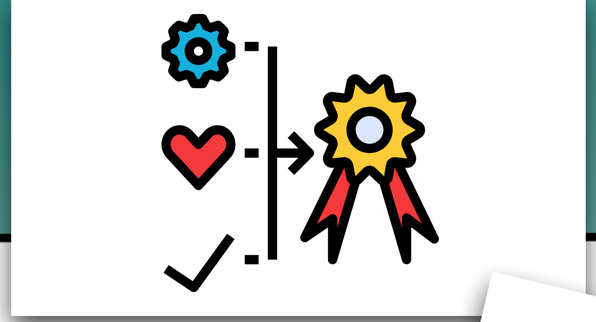


How do you know as a customer you're receiving the desired product?





Definition



- Provides a means to know when Product Backlog Items are complete.
- Confirms if what we have built during the Sprint output is **Potentially releasable Product Increment**
- Typically applied to each Product Backlog Item
- Helps prevent quality conerns later such technical debt
- Important for many teams working on one product

BUILD THE RIGHT THING

2 Chicken skewers

Tomatoes & Onions

Garlic Sauce

Double pitta bread

BUILD THE THING RIGHT

Gluten free bread

Washed salad

Cooked chicken!

Dairy free garlic sauce

BUILD THE RIGHT THING

Able to search for products

Order products

Show images for products

Send confirmation for purchase

BUILD THE THING RIGHT

Refactoring

Response time of x

SOLID Principles

Security related work

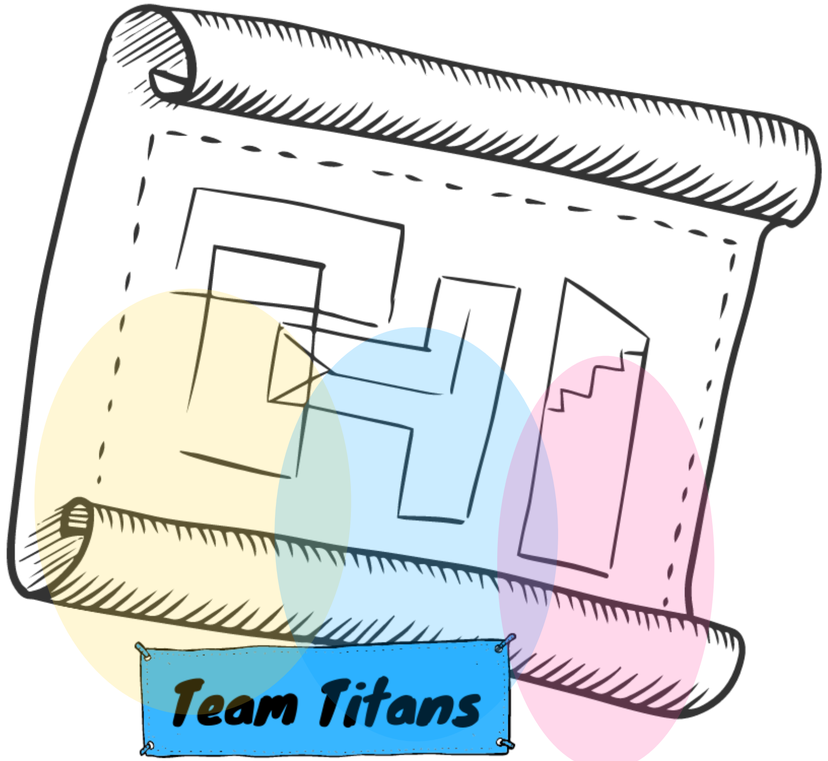
- Code commented, checked in and builds without errors against current version in source control
- Peer reviewed/pair programming and meeting development standards
- Refactored if required
- Unit tests written and passing
- Deployed to System Test environment and passed system tests
- Passes acceptance tests in System Test environment
- Automated regression tests completed
- Performance tested
- Security standards met
- Any build/deployment/configuration changes implemented & documented
- Relevant documentation/diagrams produced and/or updated

D.O.D scaled

Team Rabbit

WE'RE FOCUSED ON PRODUCT INCREMENT 1

“A scenic place to socialise with options to eat”



Team Titans

WE'RE FOCUSED ON PRODUCT INCREMENT 2

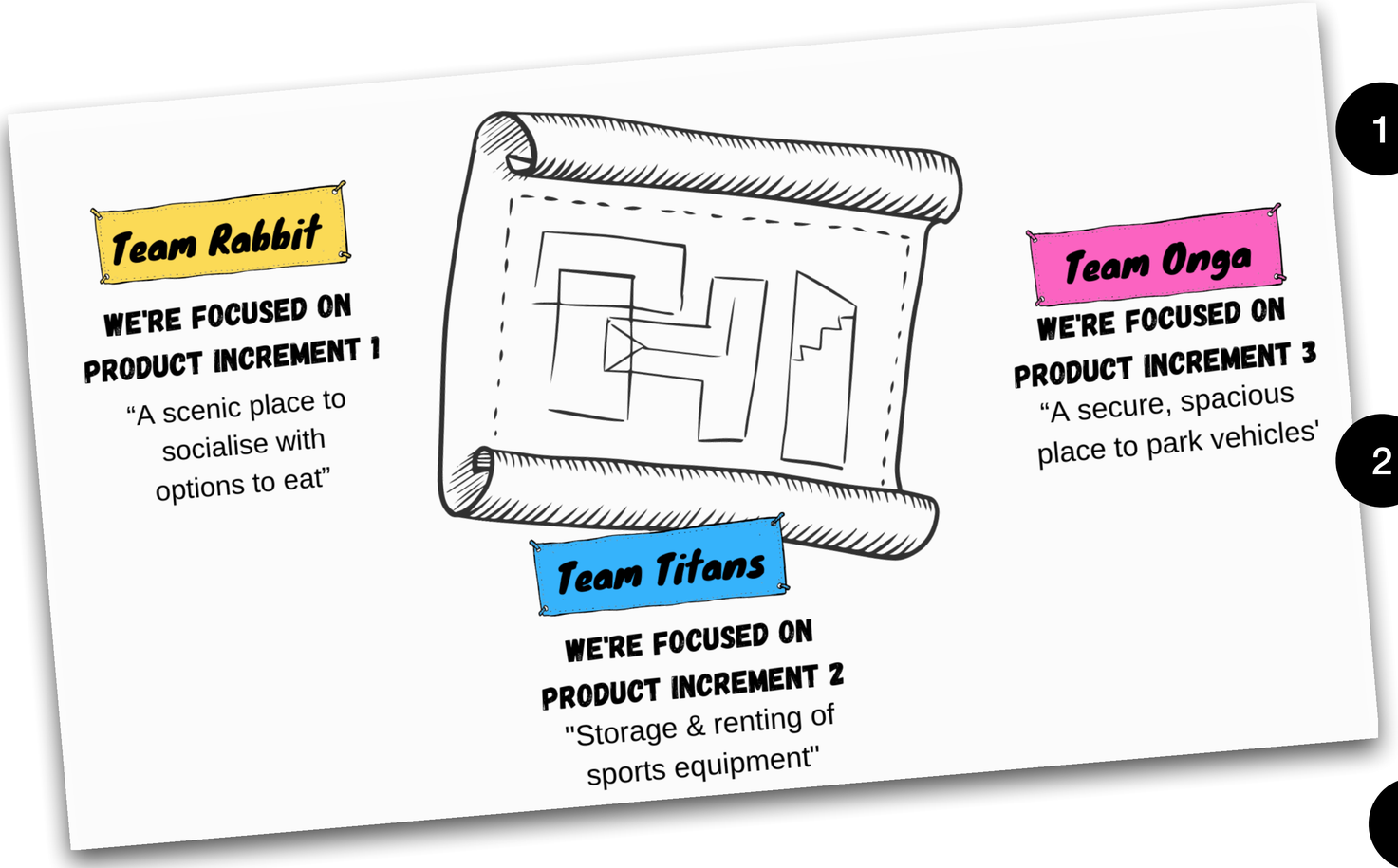
"Storage & renting of sports equipment"

Team Onga

WE'RE FOCUSED ON PRODUCT INCREMENT 3

“A secure, spacious place to park vehicles'

D.O.D at Scale quiz



1 **What could happen if the D.O.D is not met by a team?**

(a.) Consider the effect of one team's increment not meeting the D.O.D & the effect on the overall Product

2 **3 Teams working on one Product should have an shared understanding of each others D.O.D**

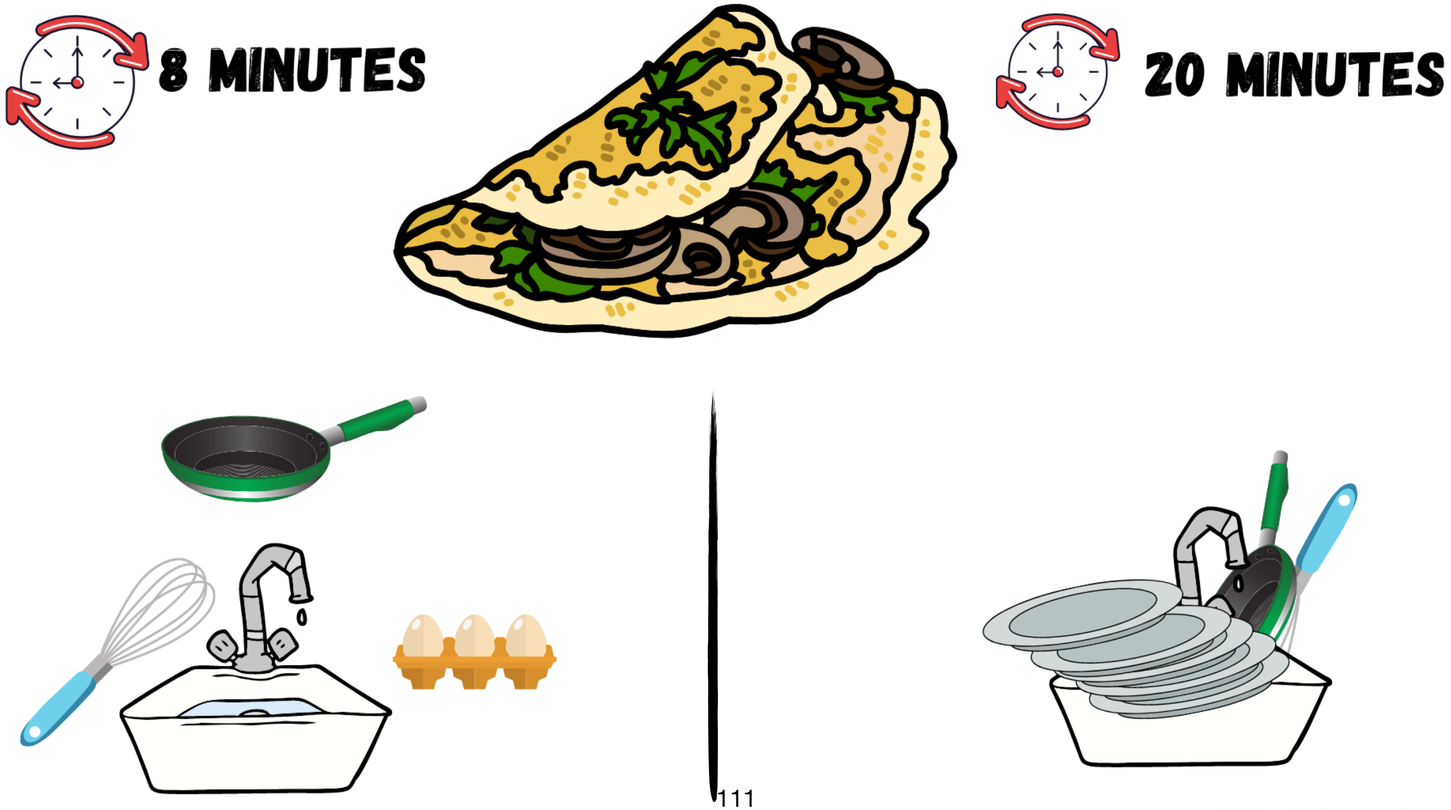
(a.) Explore why this is important?
(b.What would be the impact of a poor understanding of D.O.D across teams:?

3 **How does D.O.D do the following:**

(a.) Validate learning earlier
(b) Mitigate integration risk
(c.) Create transparenc
(d.) Aims to satify customers

Technical Debt

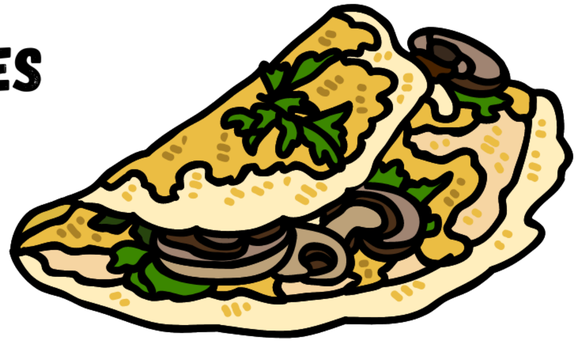
Technical debt is the work you do tomorrow because you had opted to go faster today…



Technical Debt

Technical debt is the work you do tomorrow because you had opted to go faster today…

8 MINUTES

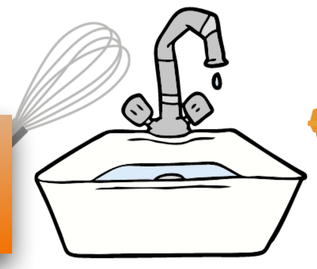


20 MINUTES

Keeping surfaces clean

Utencils available

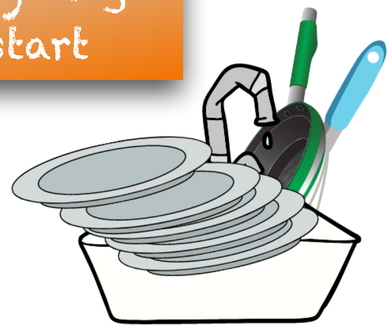
Optimise time taken to cook!



Not cleaning as you go …

Might help you go fast at start

More dishes!



Takes longer to create same dish later

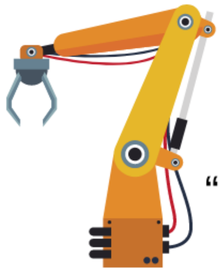
Practies to protect quality

REFACTORING

“Refactoring is when you change the structure of something without changing it’s function”.

UNIT TESTING

“Unit testing can be used as a safety mechanism to spot problems earlier which could be more difficult to fix later”



AUTOMATION

“ Taking repeatable processes and manual steps to have them automatically performed by a machine - saving time & reducing human error”

CONTINUOUS INTEGRATION

“Where a team are delivering a shared goal & are ensuring that their individual pieces of work all fit together”

Technical Debt

What could be the impact of technical debt goinig unchecked?

"Takes Far longer to implement requriements"

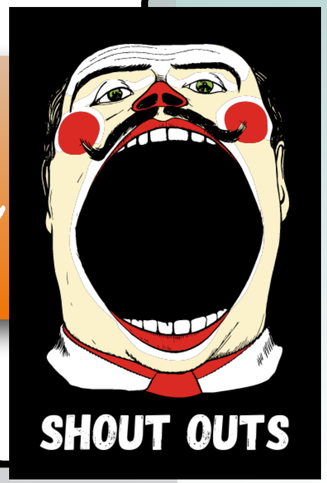
"A re-write!

"Loss of trust from the business people - i.e things are too slow with tech

"Slowing down the release of features"

"Demotivated workers - who wants to work with messy code!"

"Predictability greatly impacted"



Topics Covered

Definition of Done

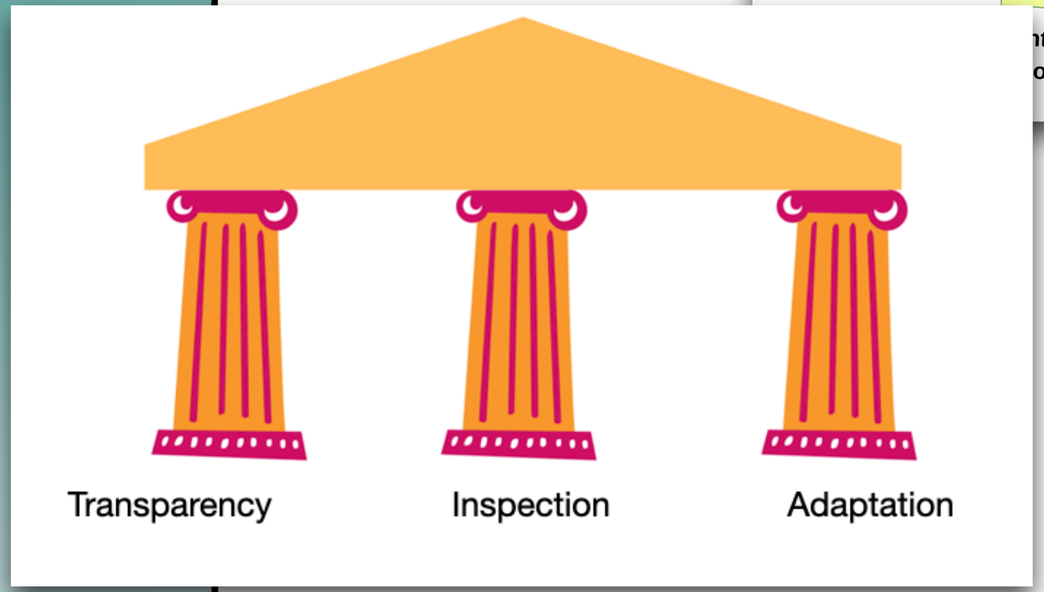
Technical Debt

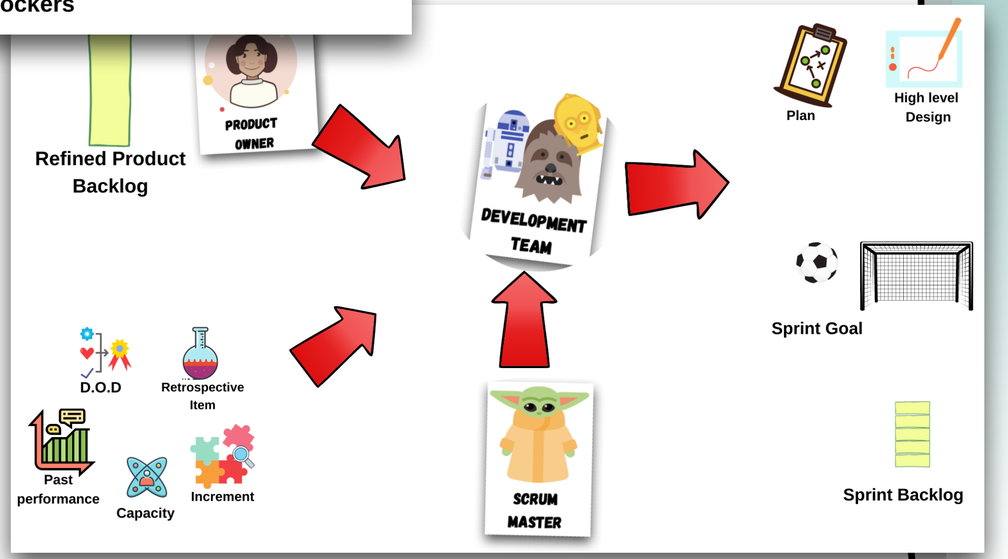
Scrum slightly scaled

Scrum artefacts

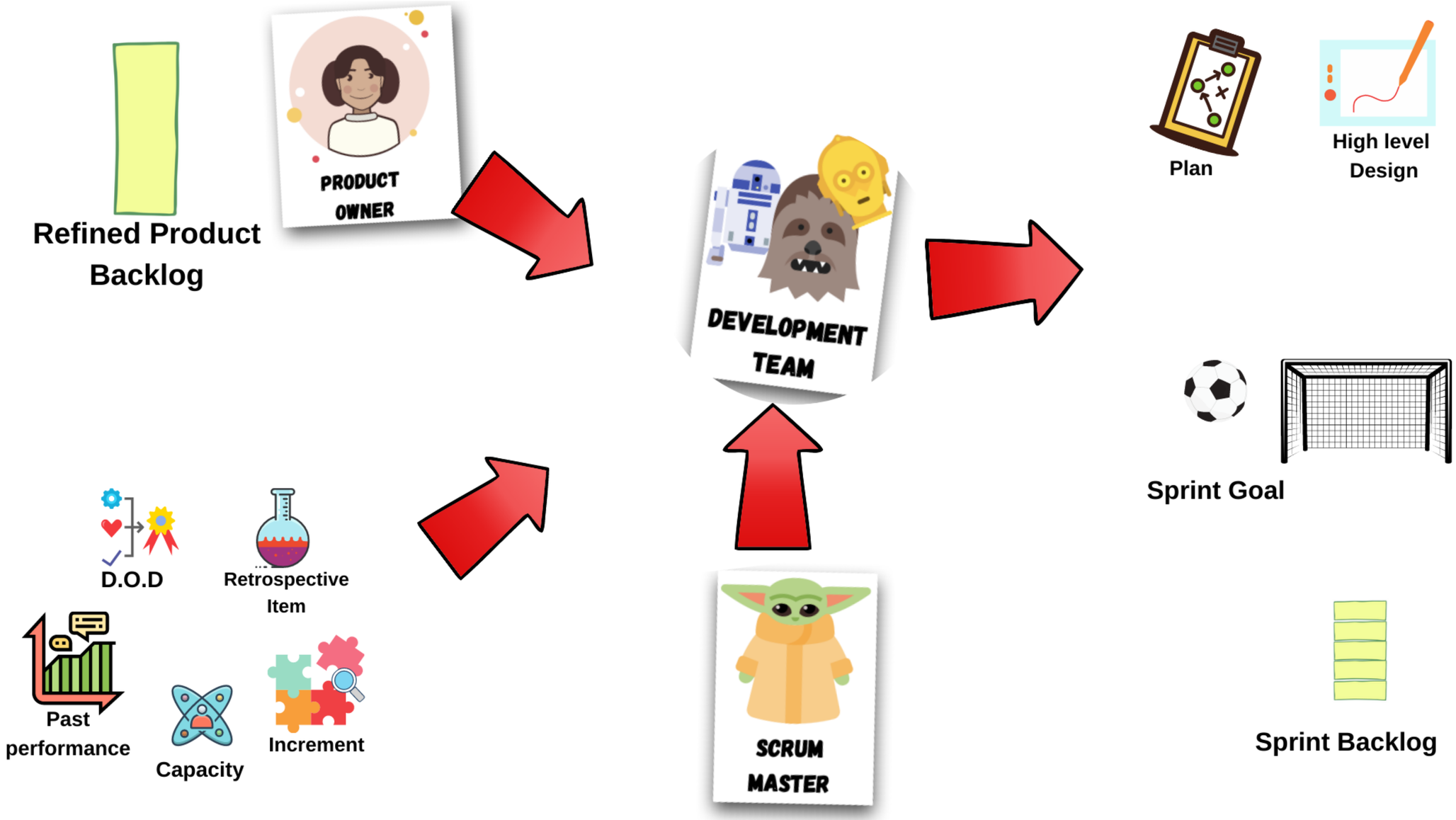
Quality ‘best’ practices

Scrum Events

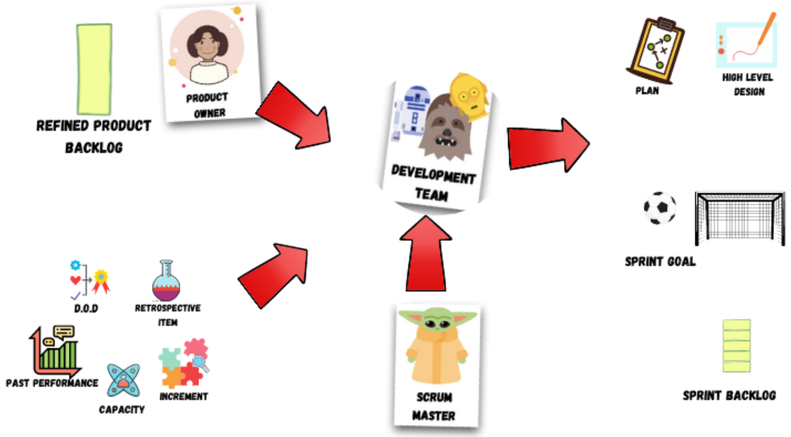




Sprint Planning



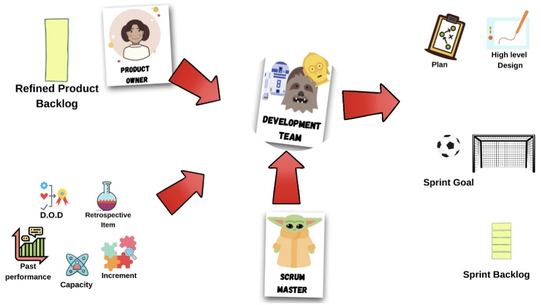
Additional topic for Sprint planning

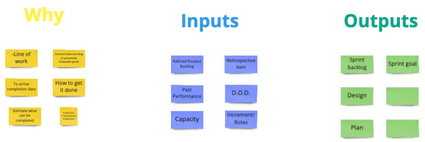


TOPIC #1	TOPIC #2	TOPIC #3
WHY IS THIS SPRINT VALUABLE?	WHAT CAN BE DONE THIS SPRINT?	HOW WILL THE CHOSEN WORK GET DONE?

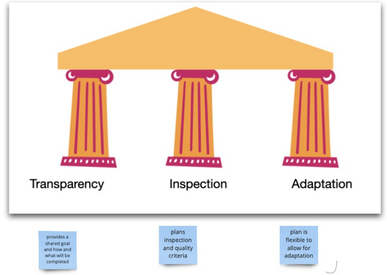
Team 1

Sprint Planning





How does this event bring empiricism to life?

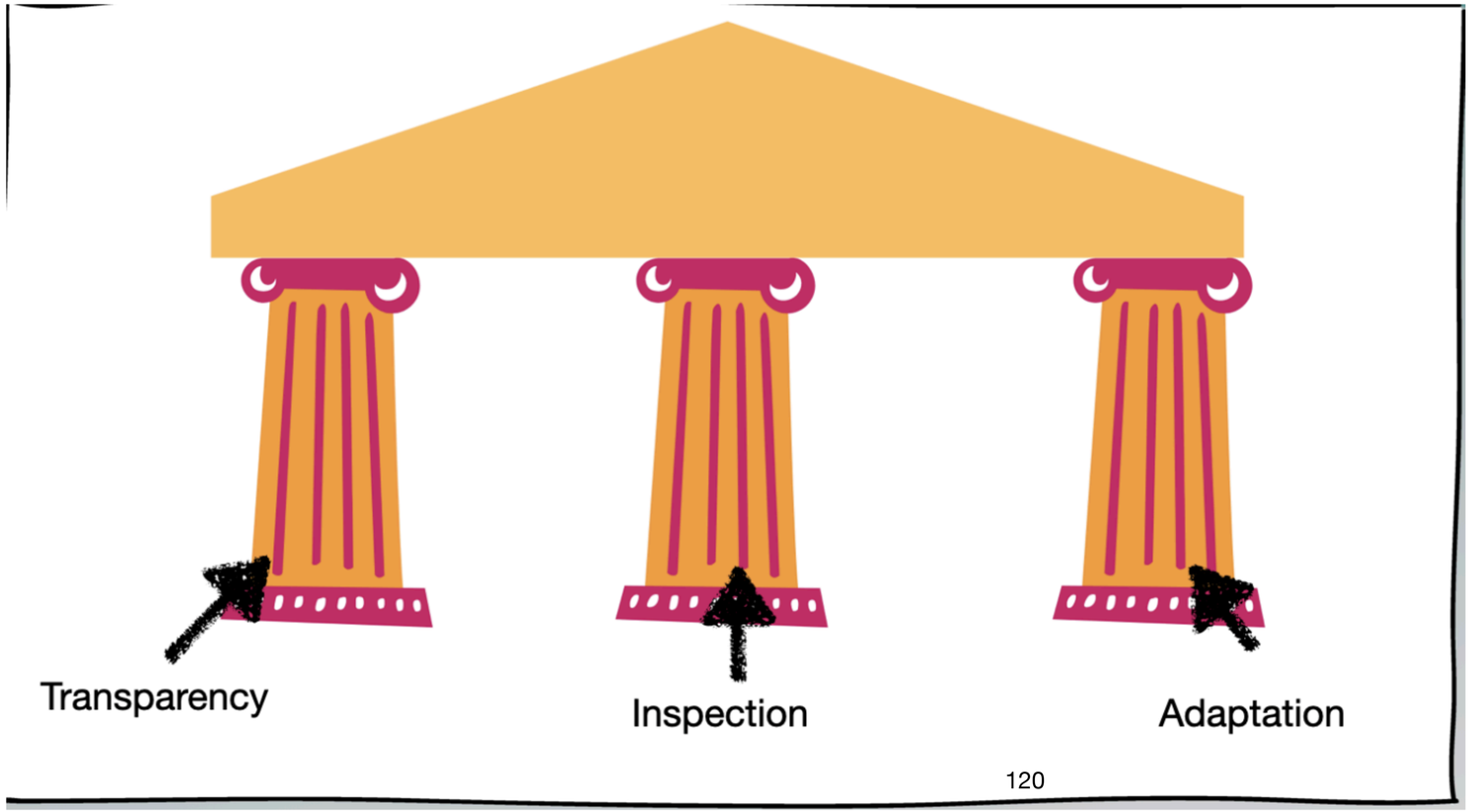


Exercise answers

How does the Sprint Planning Meeting bring empiricism to life?

Example answers below.

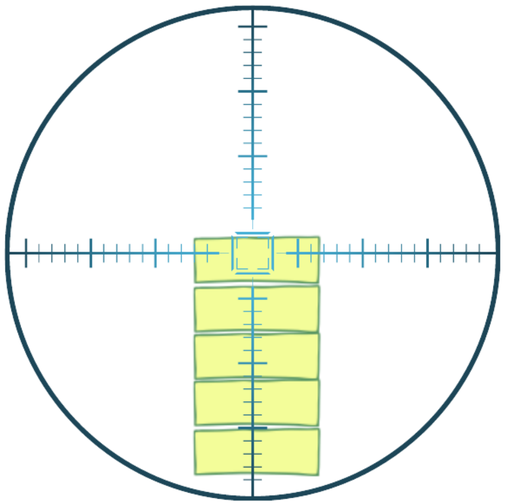
(Remember Empiricism is the 'Inspect & Adapt' motto)



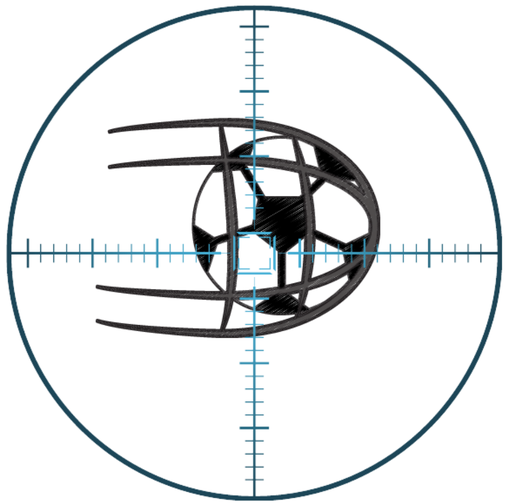
Use stickies to create examples

- Transparency in business objective
- Inspecting & adapting what is possible based on team capacity
- Transparency on what ~& how the dev team aim to deliver sprint goal
- Transparency into the challenges the dev team see in turning PBL into Potentially releasable increment
- Full team transparency on what it takes to get PBI done
- Inspecting & adapting to scenarios introduced into acceptance criteria
- Transparency from domain experts identifying challenges & opportunities with dev team
- Transparency from ScumMaster to help team find sweet spot on forecast for sprint

Zoom in: Sprint Planning Outcomes

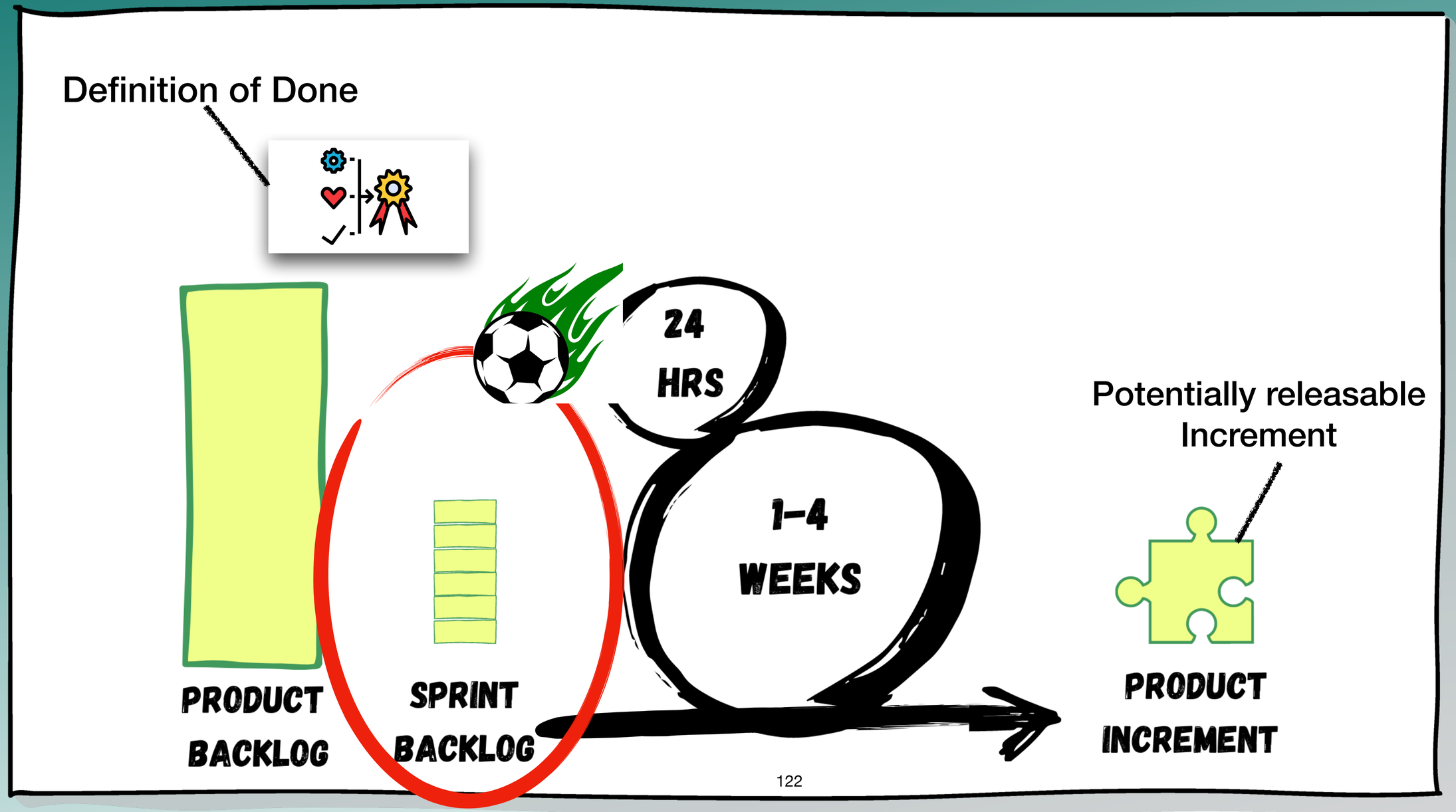


SPRINT BACKLOG

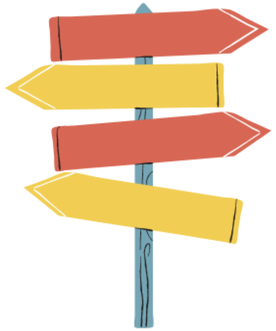


SPRINT GOAL

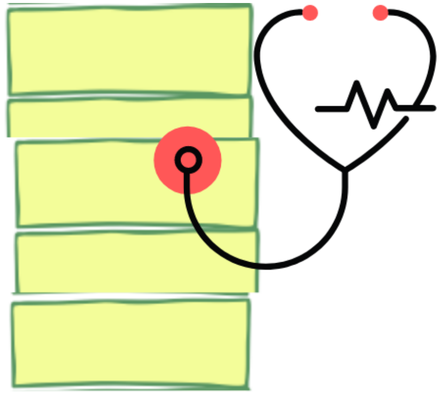
Quick Refresher



Signs of a healthy Backlog



SIGNS OF A HEALTHY SPRINT BACKLOG

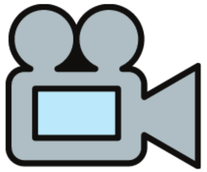


Adaptive plan

Sprint Goal

Visible

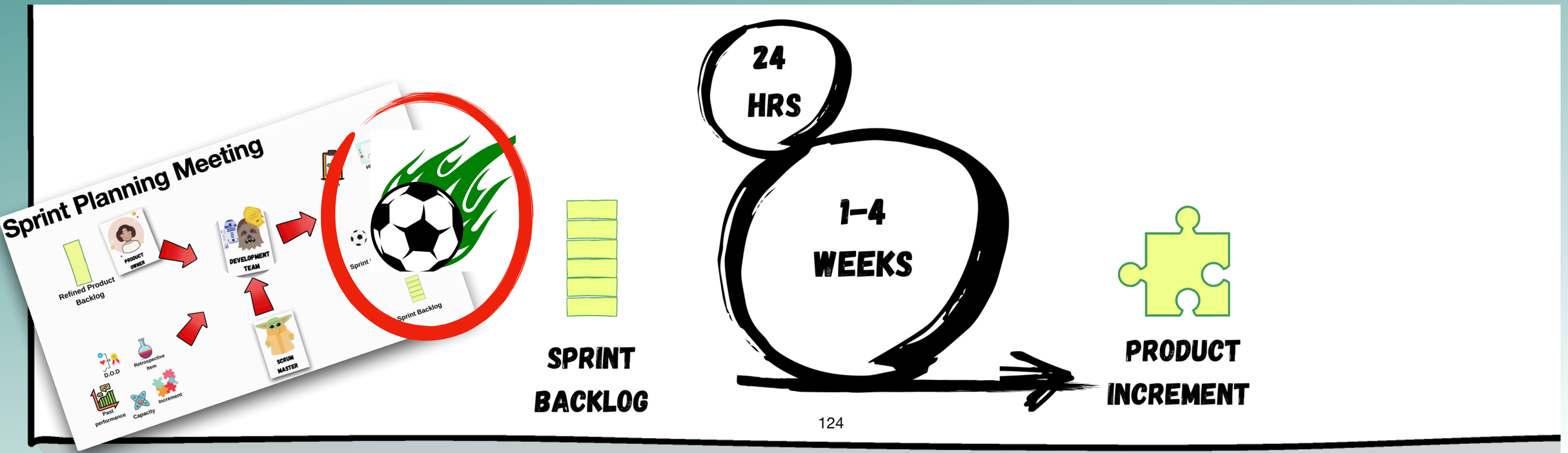
Shared Goal



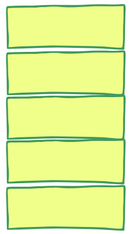
Updated in Real time

The Sprint Goal

- The Sprint Goal stays the same during the Sprint
- The delivered Increment must be potentially releaseable
- This means meeting the Definition of Done (DOD)



Creating a Sprint Goal



SPRINT BACKLOG

Option #1

Option #2

Option #3

Our focus is on <Outcome>
We believe it delivers <Impact> to <Customers>
This will be confirmed when <Outcome is observed>

Example answers

Creating a clear goal through:

Having a focus
(what is the outcome desired?)

What do you believe it will achieve?
(The impact to you or customers)

How will you know it has been achieved?
(What outcome can be observed)

Write out a goal that you have (work or personal) which you'd like to achieve in a month or less using the template above.

Improve sleep hygiene, to improve daily performance at work, verifiable by amount of work I get done in a day!

Increase my deadlift, to improve my ability to perform, I will know if i am 20% up by end of month

To get married in a beautiful venue, wonderful memories for us, by the photos & feedback :D

More software savy, better service to dev team, by the blockers I can now remove

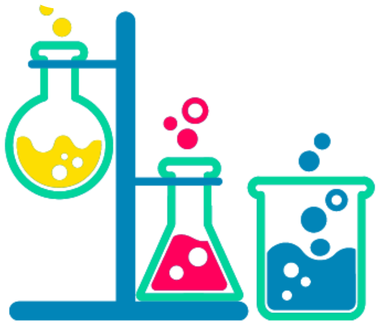
Changing the SprintBacklog

THE GOAL

Improve our cardiovascular health in 4 weeks

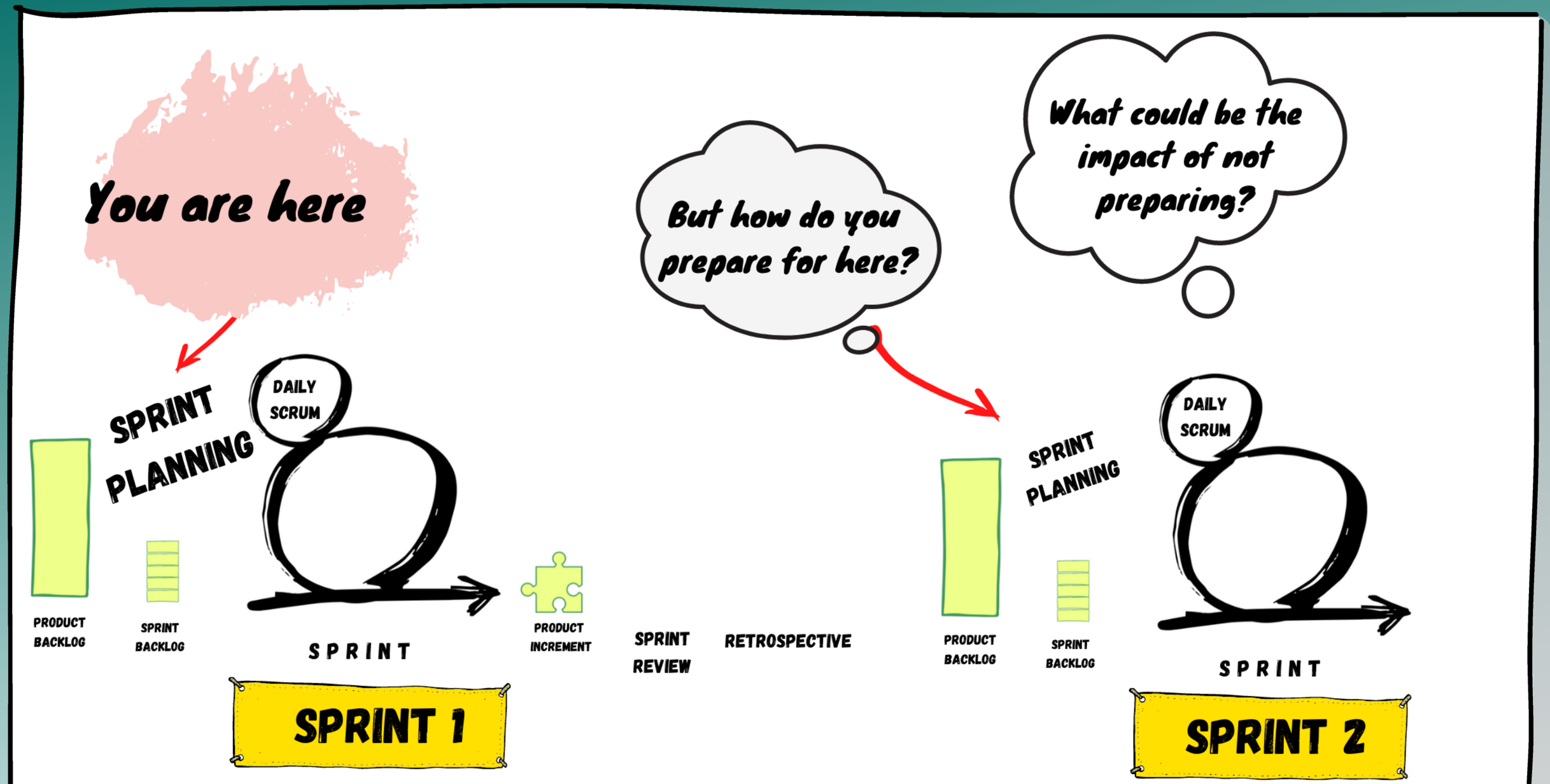
Exercise, Diet, Relaxation techniques

Blood pressure, cholesterol, heart rate, V02 Max

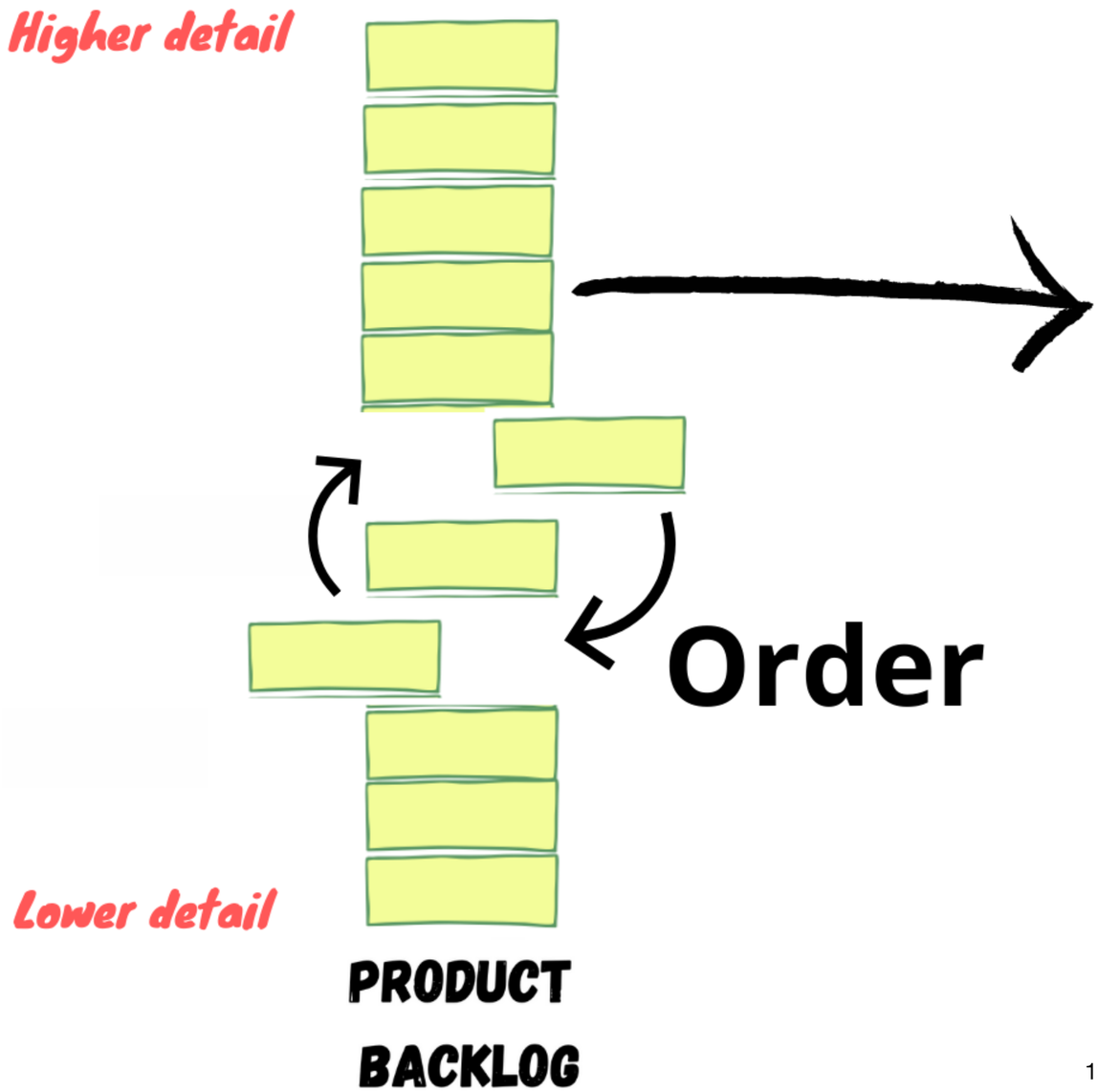


SPRINT BACKLOG	SPRINT BEGINS	NEW OPTIONS (SPRINT GOAL PROTECTED)
48 hour fasts	"Too hard to do!"	16 hour fast
Eat white fish	"Tastes awful : ("	Lean chicken
1 hour meditation	"Boring..."	Yoga

Refinement

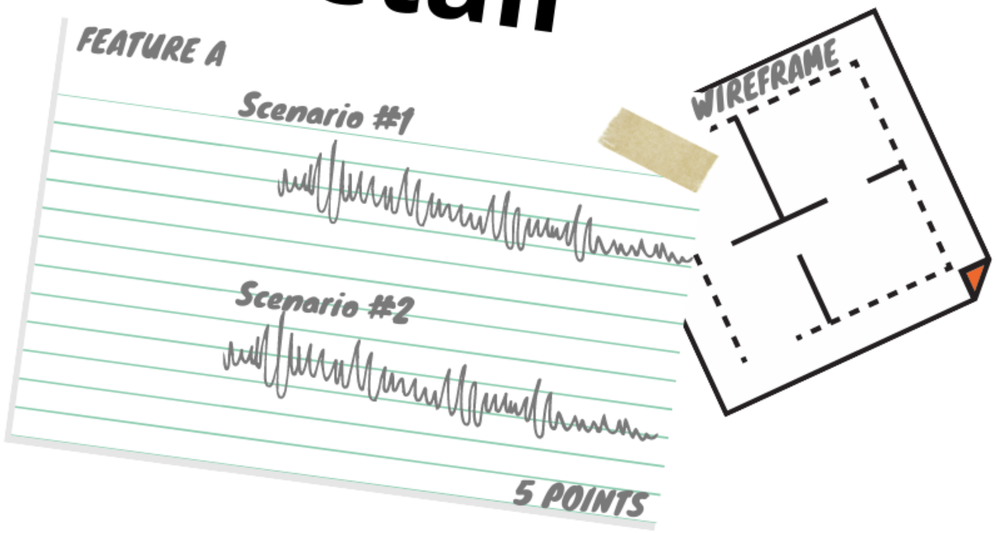

You are here
But how do you prepare for here?
What could be the impact of not preparing?
SPRINT PLANNING
DAILY SCRUM
PRODUCT BACKLOG
SPRINT BACKLOG
SPRINT
PRODUCT INCREMENT
SPRINT REVIEW
RETROSPECTIVE
SPRINT PLANNING
DAILY SCRUM
PRODUCT BACKLOG
SPRINT BACKLOG
SPRINT
SPRINT 1
SPRINT 2

Refinement Activities



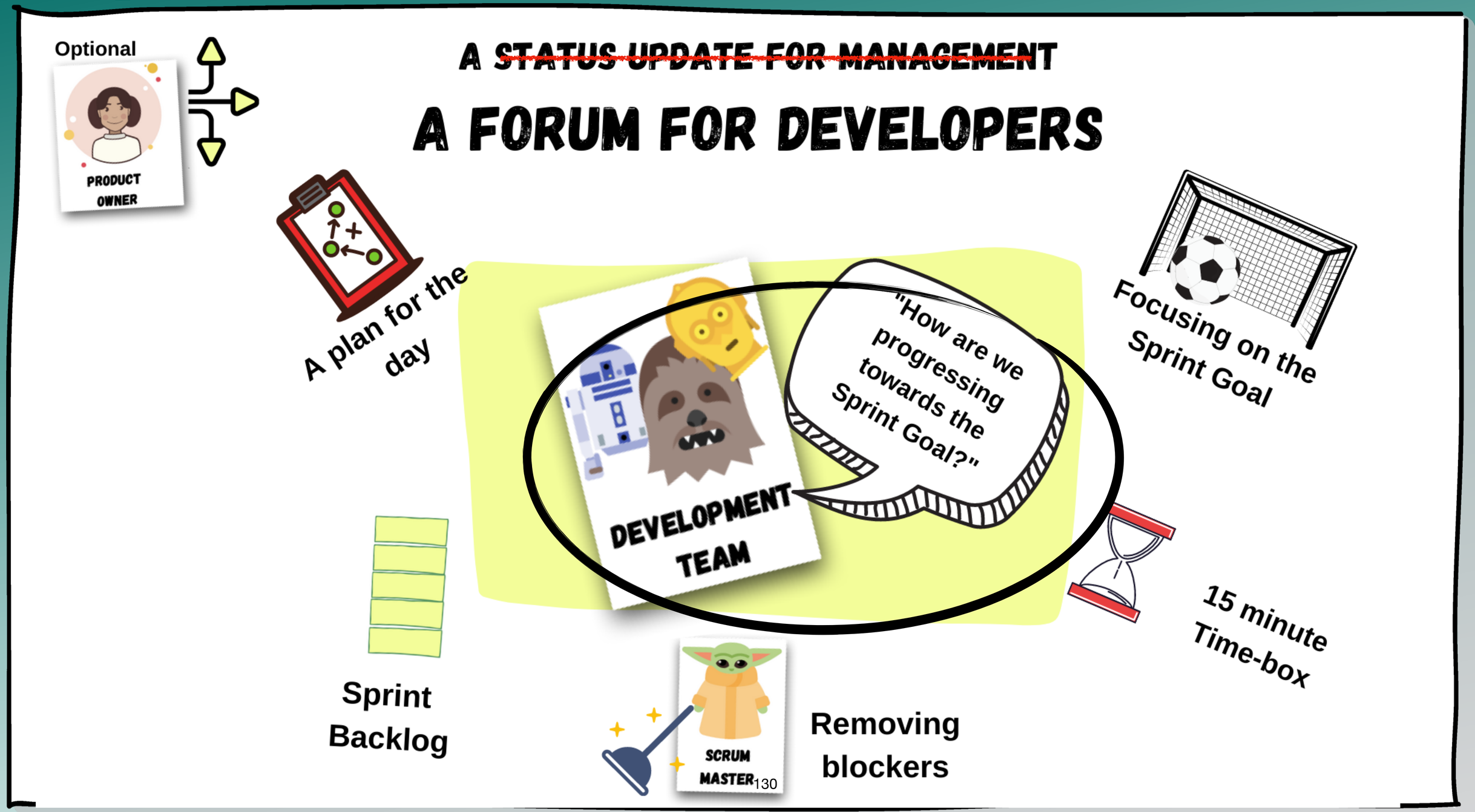
Order

Detail

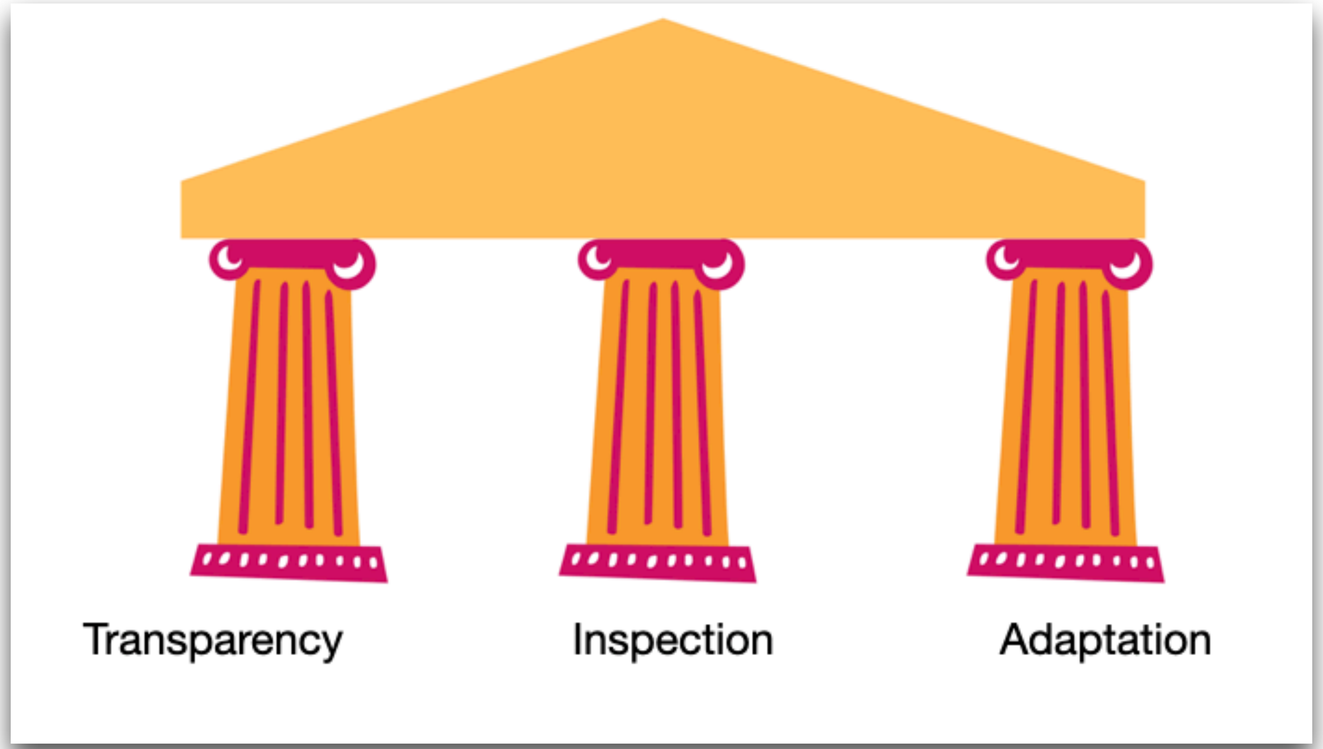


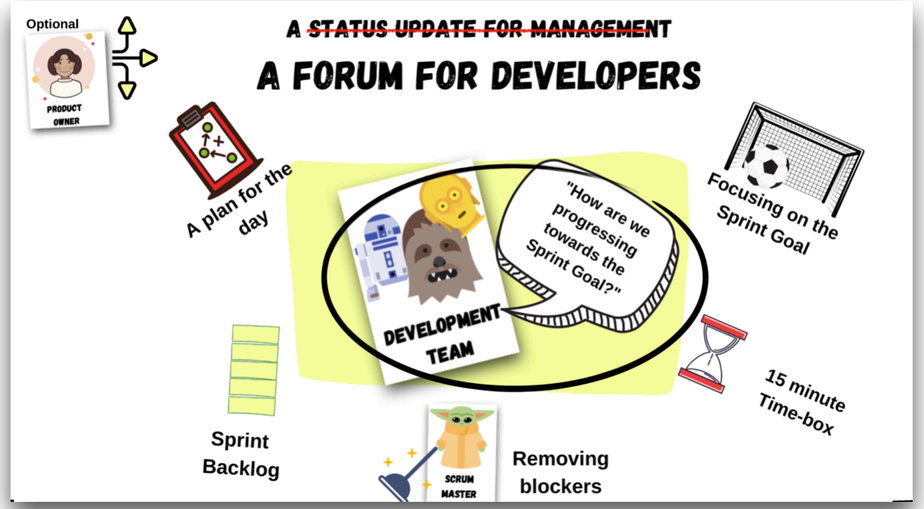
Estimates

Daily Scrum


Optional
PRODUCT OWNER
A ~~STATUS UPDATE FOR MANAGEMENT~~
A FORUM FOR DEVELOPERS
A plan for the day
"How are we progressing towards the Sprint Goal?"
DEVELOPMENT TEAM
Focusing on the Sprint Goal
15 minute Time-box
Sprint Backlog
SCRUM MASTER
Removing blockers

How does this event bring empiricism to life?





What is the purpose of the Daily Scrum?

- regroup
- communication
- remove blockers/ faciliatate
- accountability
- assess goals

What should be discussed?

- progression
- blockers
- today agenda
- future agenda
- Any parking lot conversations?
- remove blockers/ faciliatate

Who should attend?

- scrum master
- developers
- po (optional)

What is the timebox for this event?

- daily
- 15 min

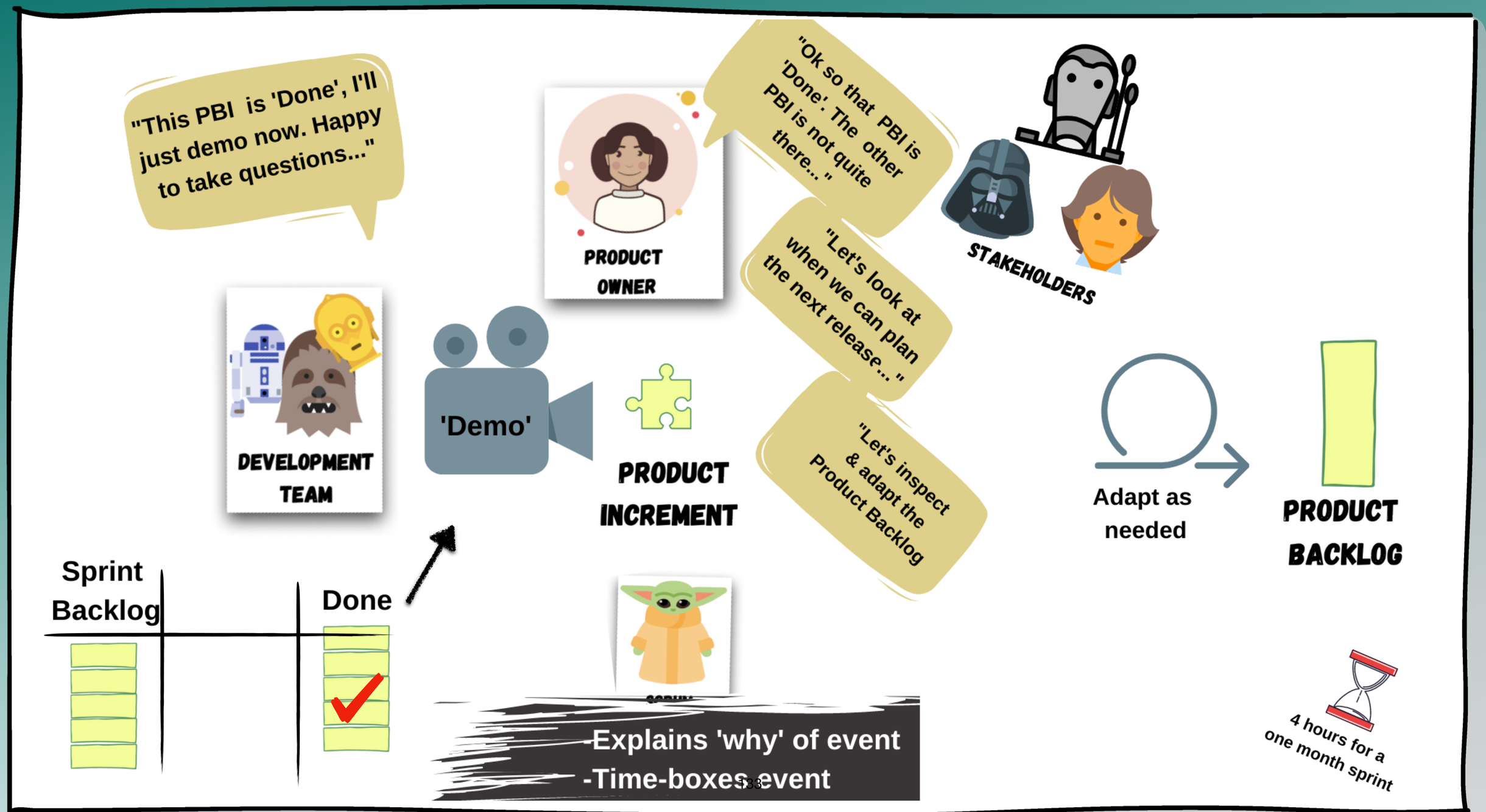
What is the outcome of this event?

- communicate/ status update
- remove blockers to continue

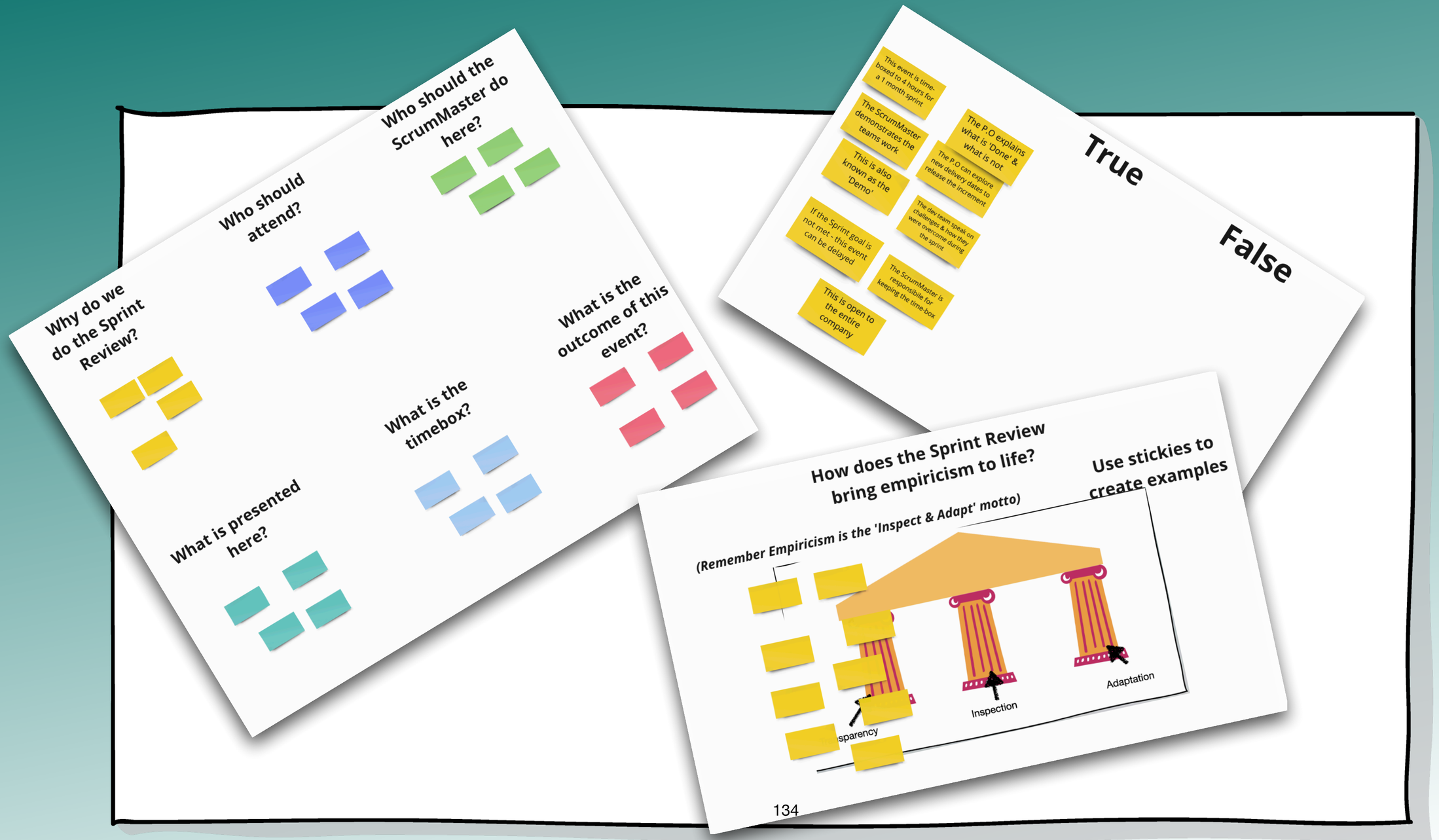
What kind of impediments would a ScrumMaster help with?

- facilitate communication/re balance workload
- keep targets on track
- solve tech issues
- internal conflict

Sprint Review



Exercise time!



Why do we do the Sprint Review?

- To inspect the outcome of the Sprint
- To determine what to do next (ex: new items that might go into the backlog or items moved from Product Backlog to Sprint Backlog)
- To showcase what was accomplished to the Product Owner & Stakeholders

Who should attend?

- Product Owner
- SCRUM Master
- Developers
- Stakeholders
- End Users

What should the ScrumMaster do here?

- Clear impediments
- Help the Product Owner and Stakeholders convert their feedback to new backlog items

Name some of activities that occur during this event?

- Inspection of the Product Increment
- Adapt the Product Backlog
- Gathering Feedback on the Product Increment

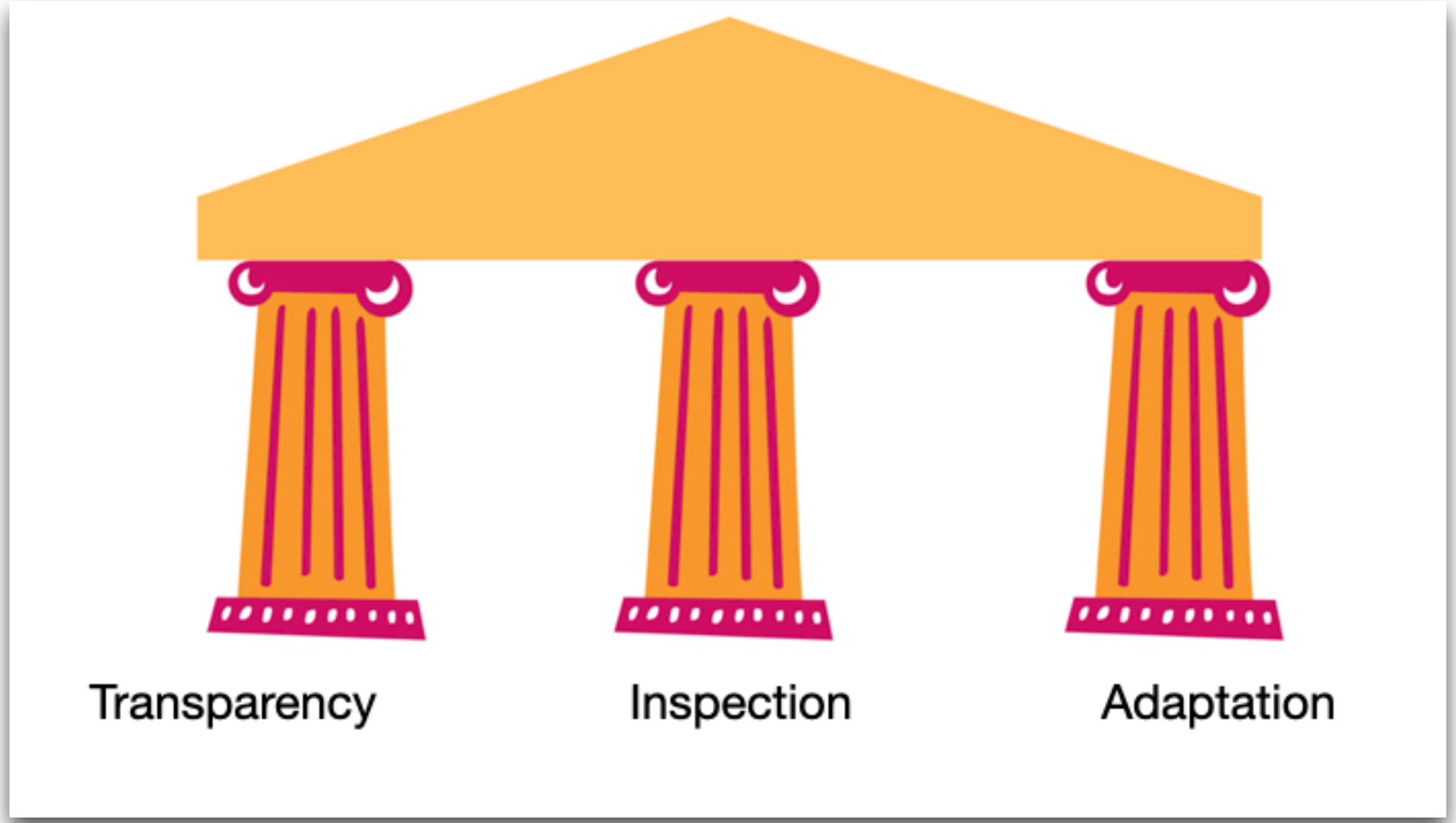
What is the timebox?

- 4 hours for a 1 month sprint
- 2 hours for a 2 week sprint

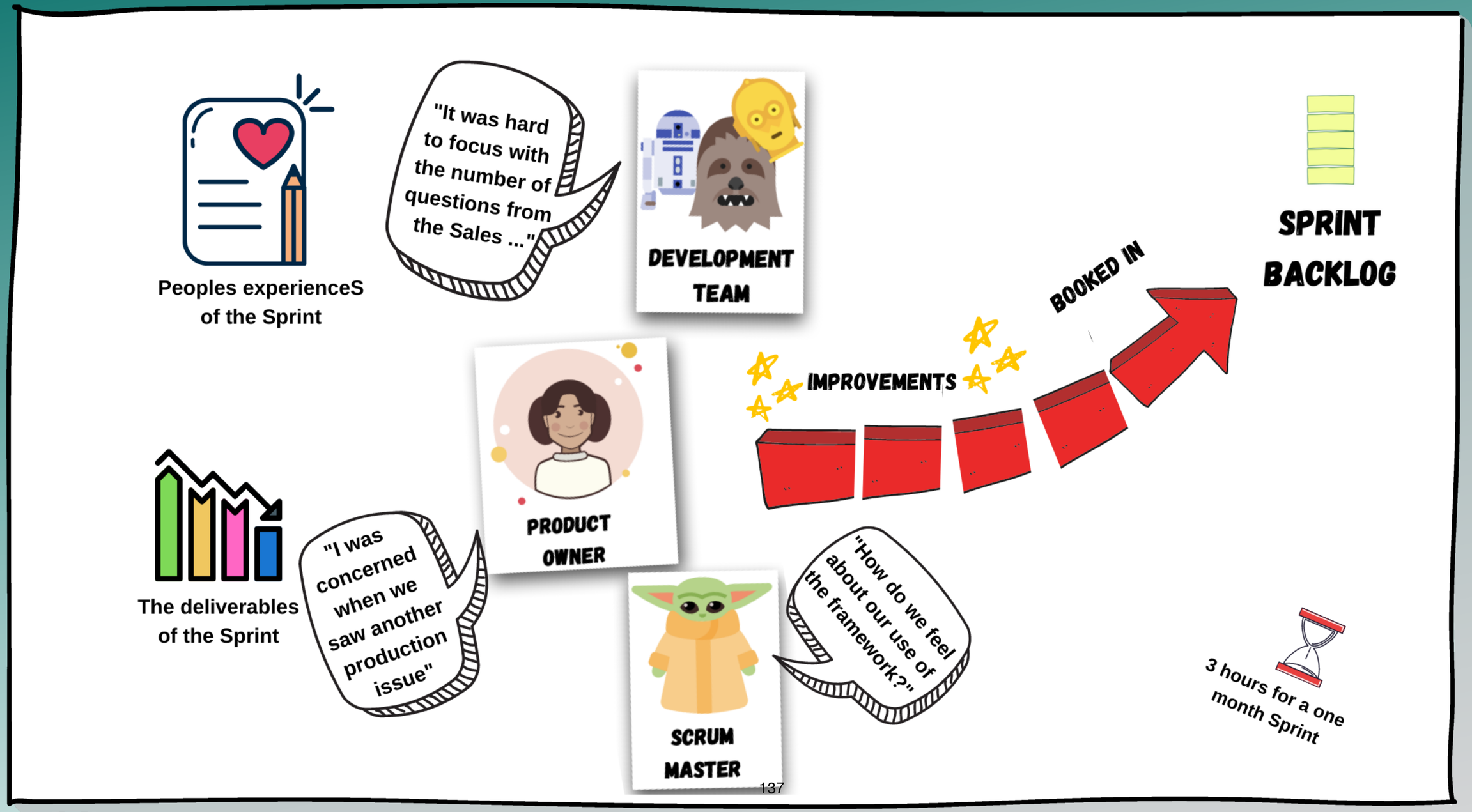
What are the possible outcomes of this event?

- New items on the Backlog
- Better visualization of scope
- Discarding PBIs that are shown to be not needed

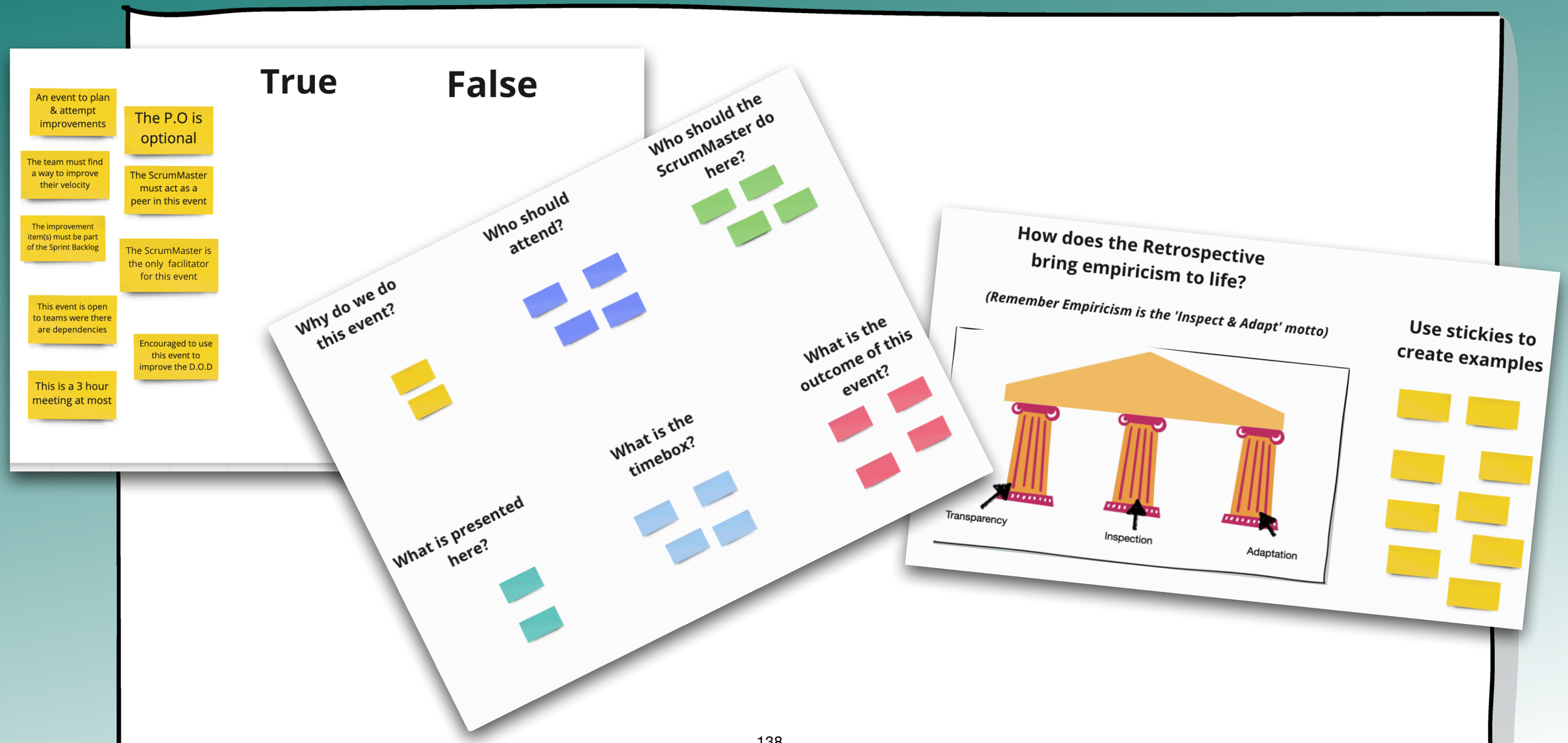
How does this event bring empiricism to life?



Sprint Retrospective



Exercise time!



Why do we do this event?

-To understand What went bad in this Sprint

-To understand What went good

To improve the effectiveness in future Sprint

to check technical debt

in order to imrpove in future events

to weigh risk involved

Who should attend?

everyone who is involved in the sprint

Product Owner

Scrum Master

Dev Team

What should the ScrumMaster do here?

scrum master will act as a leader and discuss the good and bad pioints happened in the sprint

Encourage the team in listing all good things in Sprint

Encourage team in pointing out things that went bad

Adjusting future sprints in accordance to the short comings if any

What is presented here?

good and bad points about the work that has been done during the sprint

task done so far , time taken to get task done, what went well , what can be done better

What is the timebox?

1 week to 4 weeks

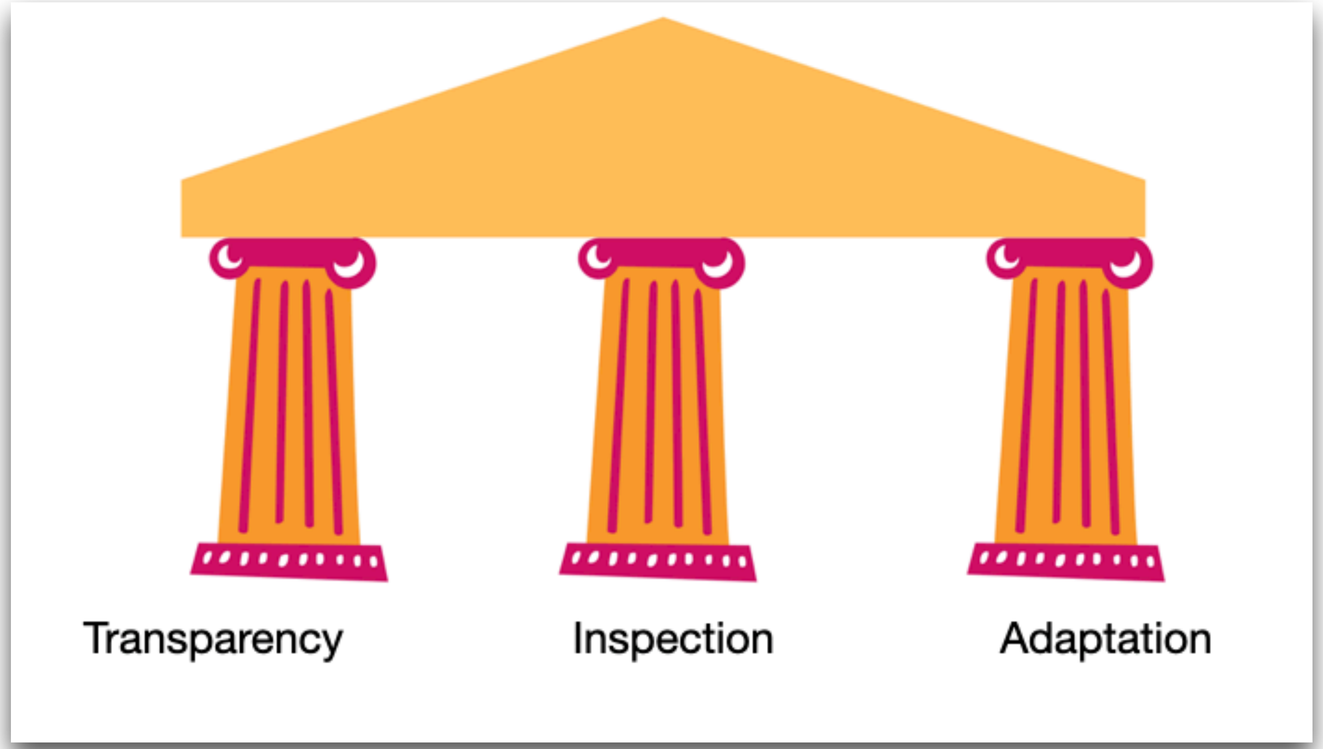
2 hrs for a 2 week Sprint.

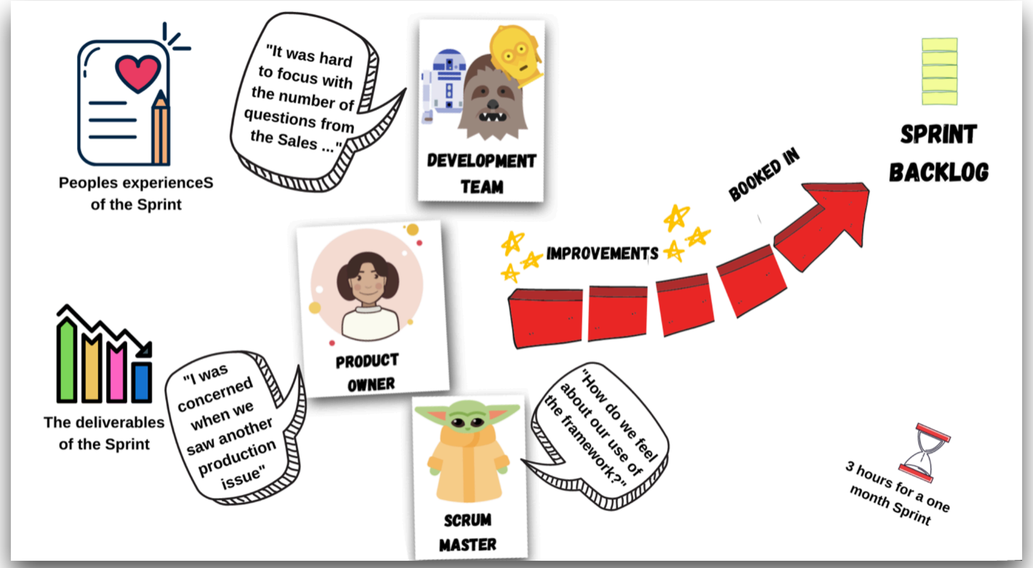
May be

What is the outcome of this event?

to imrpove in the future sprint based on the learning from the current sprint

How does this event bring empiricism to life?



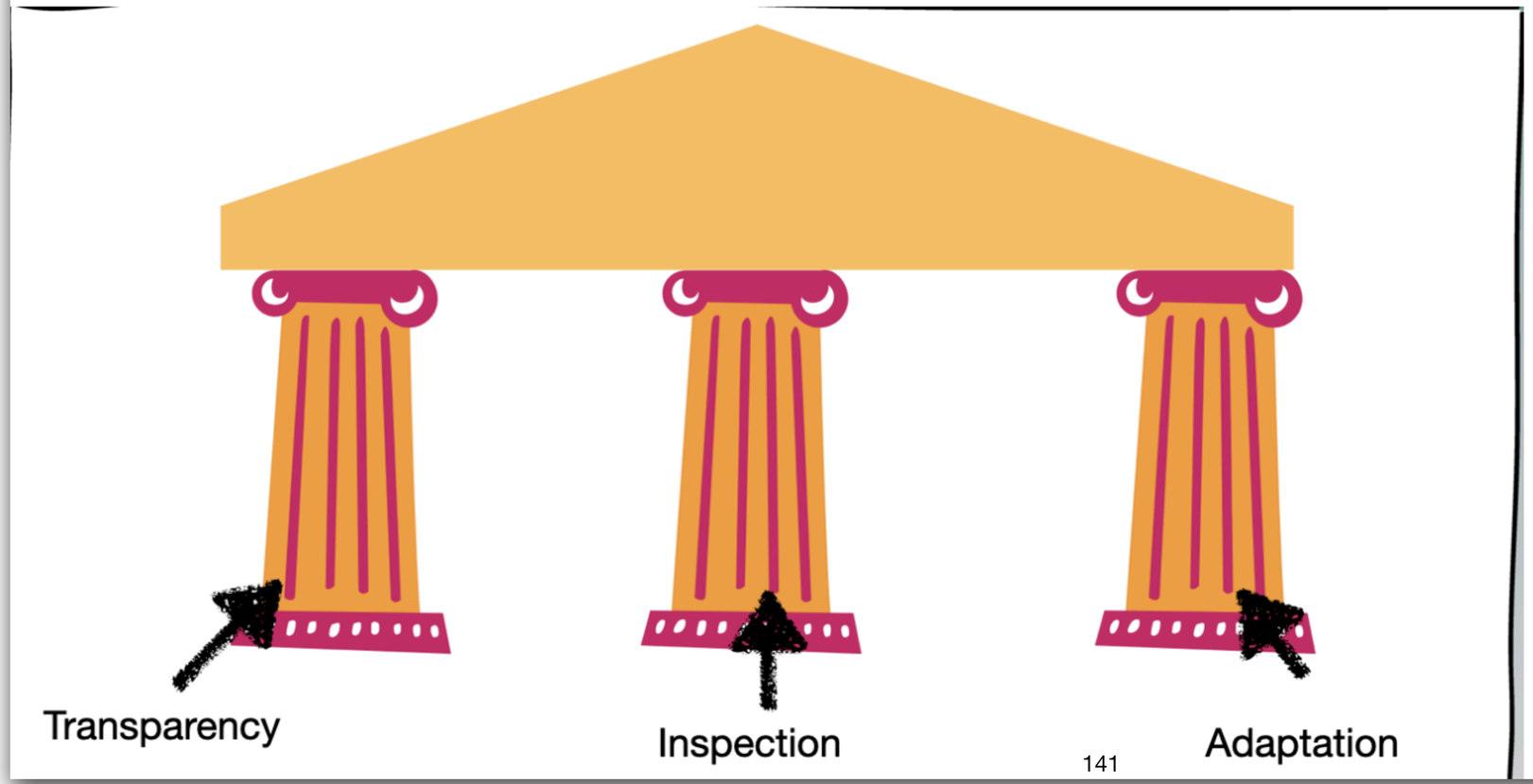


Example answers

How does the Retrospective bring empiricism to life?

Example answers below.

(Remember Empiricism is the 'Inspect & Adapt' motto)

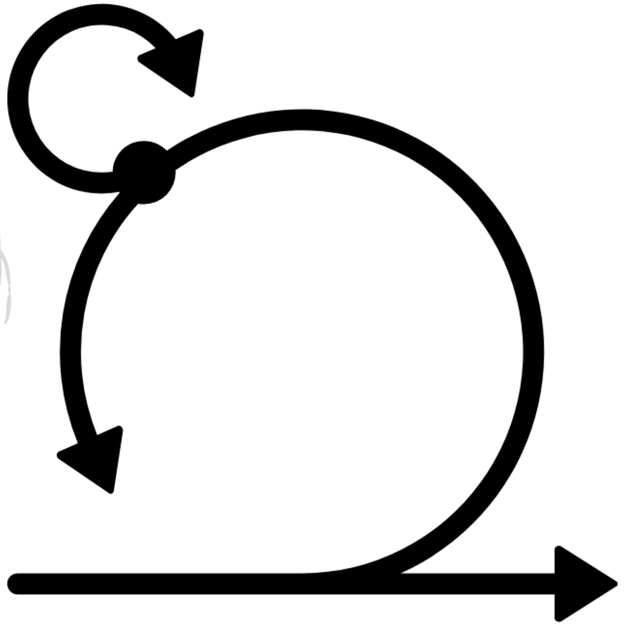


Use stickies to create examples

- Transparency on Sprint goal being met
- Transparency on teams feelings on sprint gone
- Inspecting & adapting the D.O.D
- Inspecting & adapting how the process serves the team
- Using data to identify improvement opportunities
- Inspecting & adapting the agreed way for external peers to contact the team
- Inspecting & adapting team effectiveness of Scrum framework

Sprint described as fixed-length event not timebox

A time-box comes to an end once you complete the goal/objective.



A Sprint does not change length when you have delivered the. Sprint Goal.

So the Sprint is not a time-box, instead it is a fixed length event.

Self manging, not self organising

Scrum Team

Development Team

SELF-ORGANISING

Scrum Team

The 2020 update explicitly states
the Scrum Team decides "what"
and "when" work gets done

SELF-MANAGING

Topics Covered

Sprint Planning Meeting

Daily Scrum

Sprint Review

Sprint Backlog

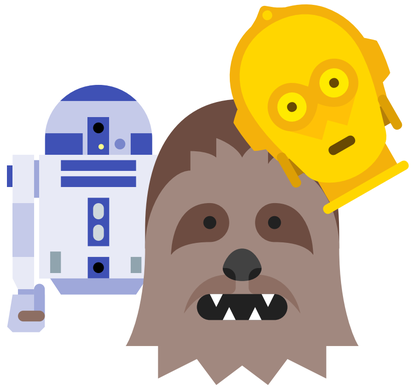
Sprint Retrospective

Sprint Goal

Scrum Roles

SCRUM MASTER

PRODUCT OWNER



DEVELOPMENT TEAM

Example answers

"Sports coach"

"Theo Paphitis"

"Artist"

"Dungeon Master"

"Luke Skywalker"

"Builders"

SCRUM MASTER

PRODUCT OWNER

DEVELOPMENT TEAM

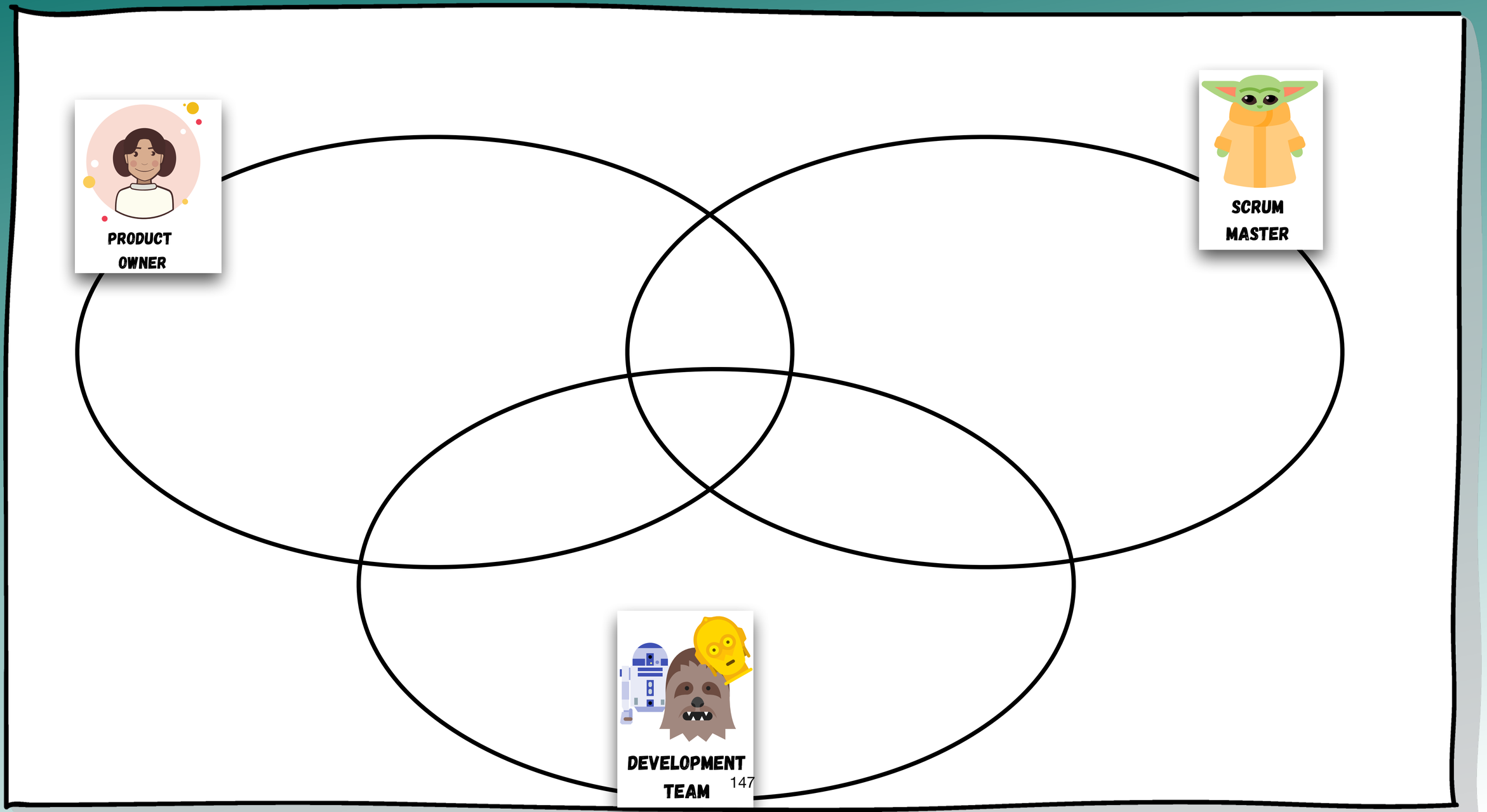
"Referee of the game"

"Captain of ship"

"Football team"

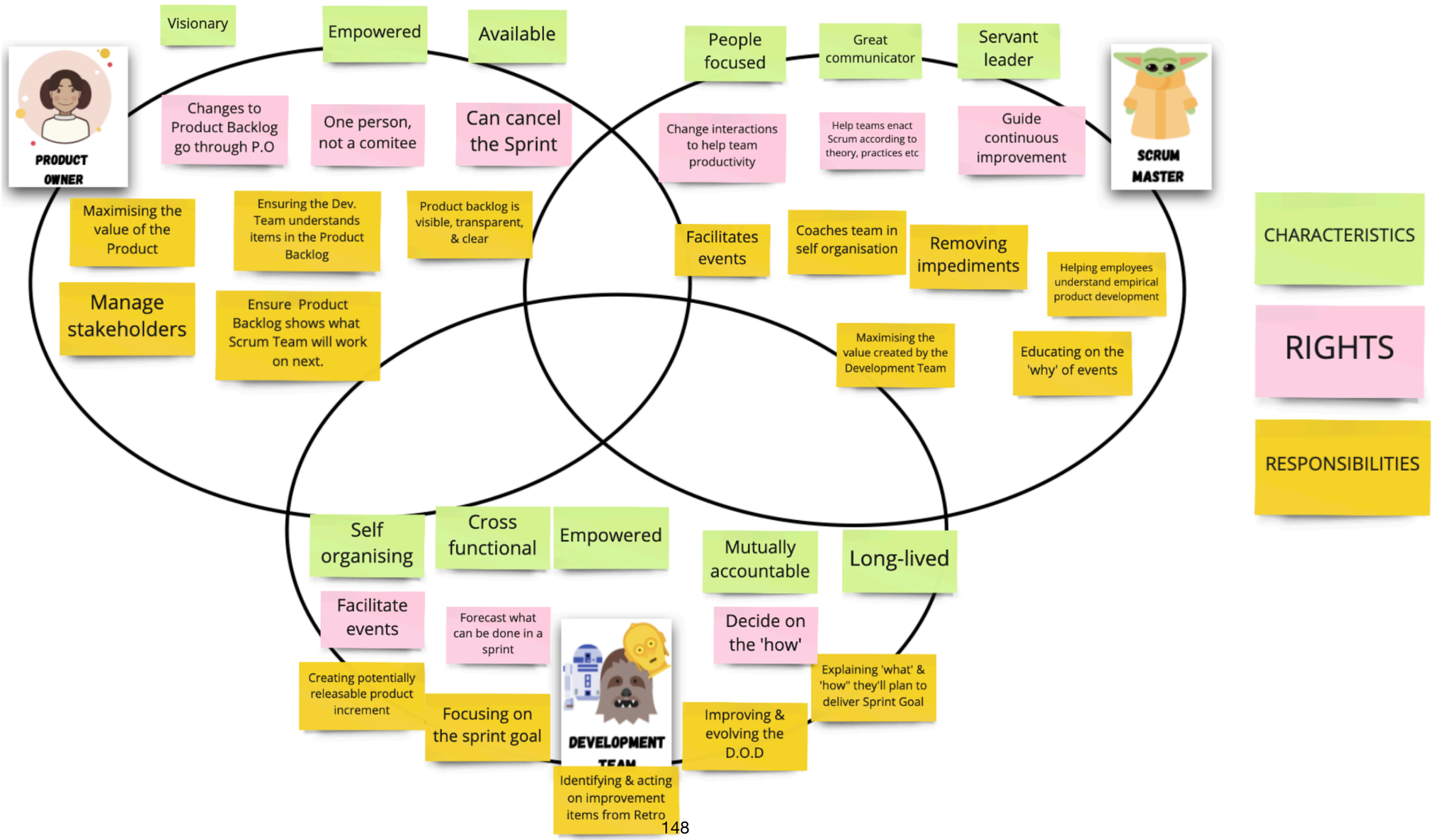
"Nanny Mcphee"

Roles & responsibilities



Example answer

Commentary: Learners example answers as per below:

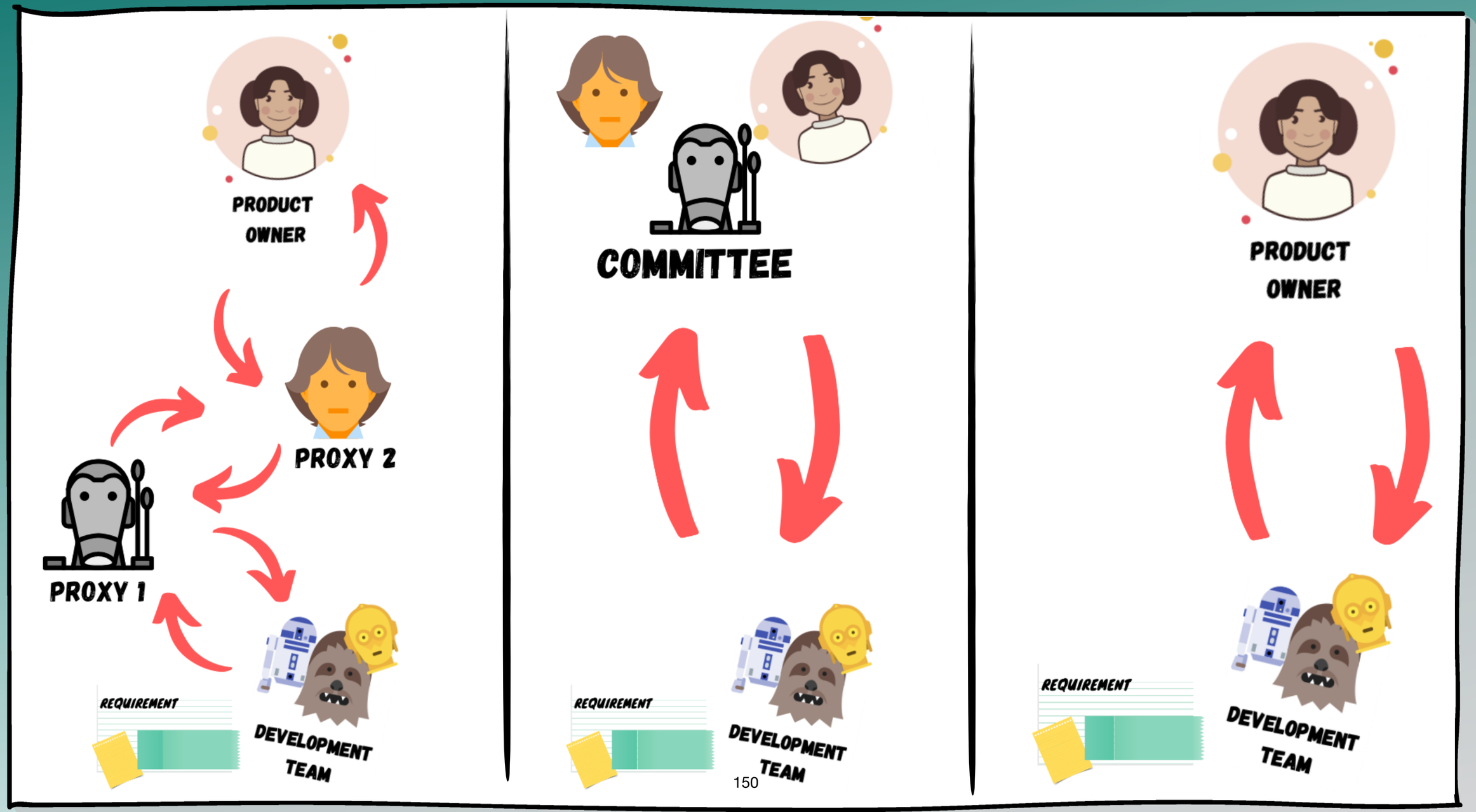


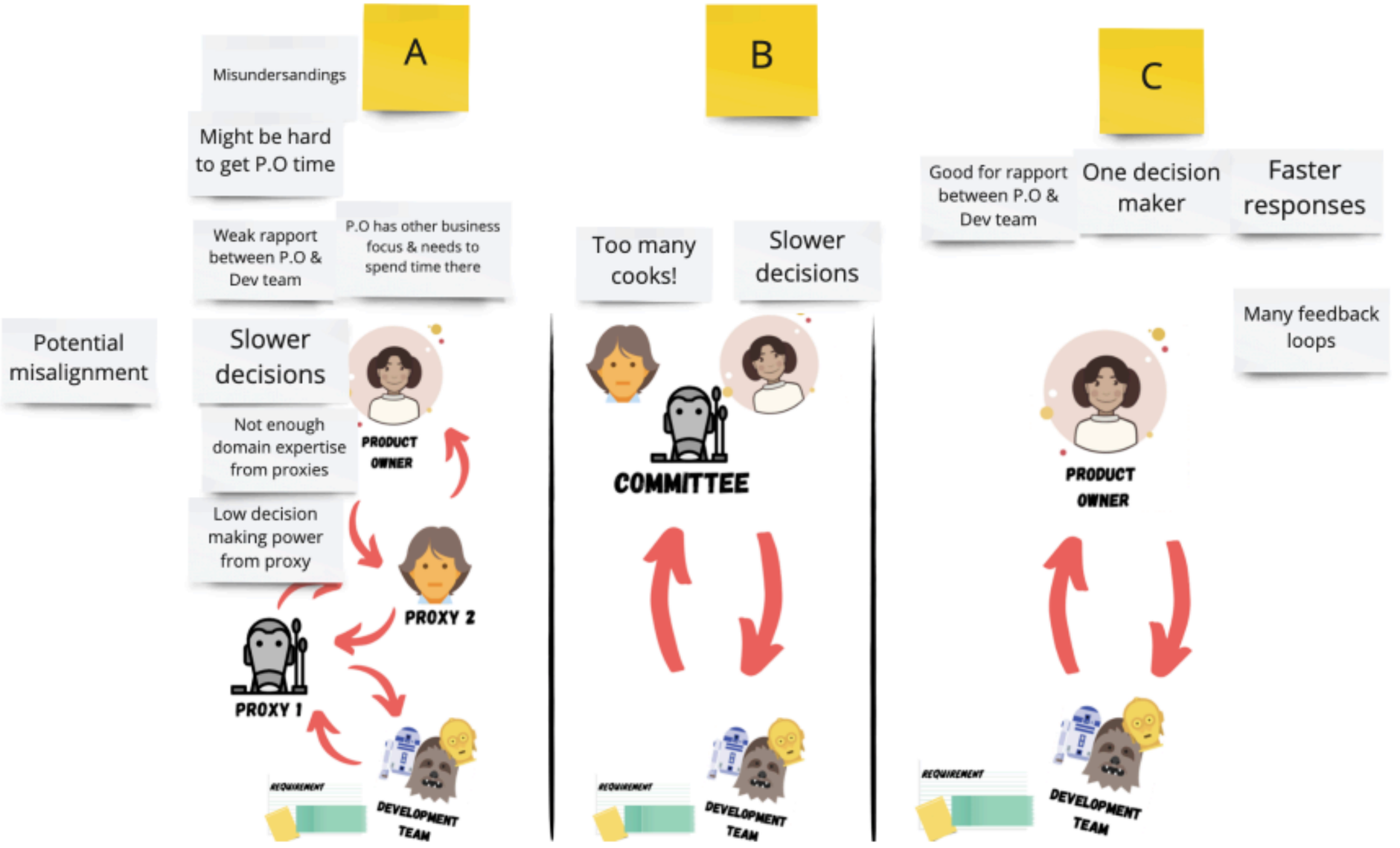
Roles? More so accountabilities!

"The Product Owner is **accountable** for maximizing the value of the product resulting from the work of the Scrum Team.

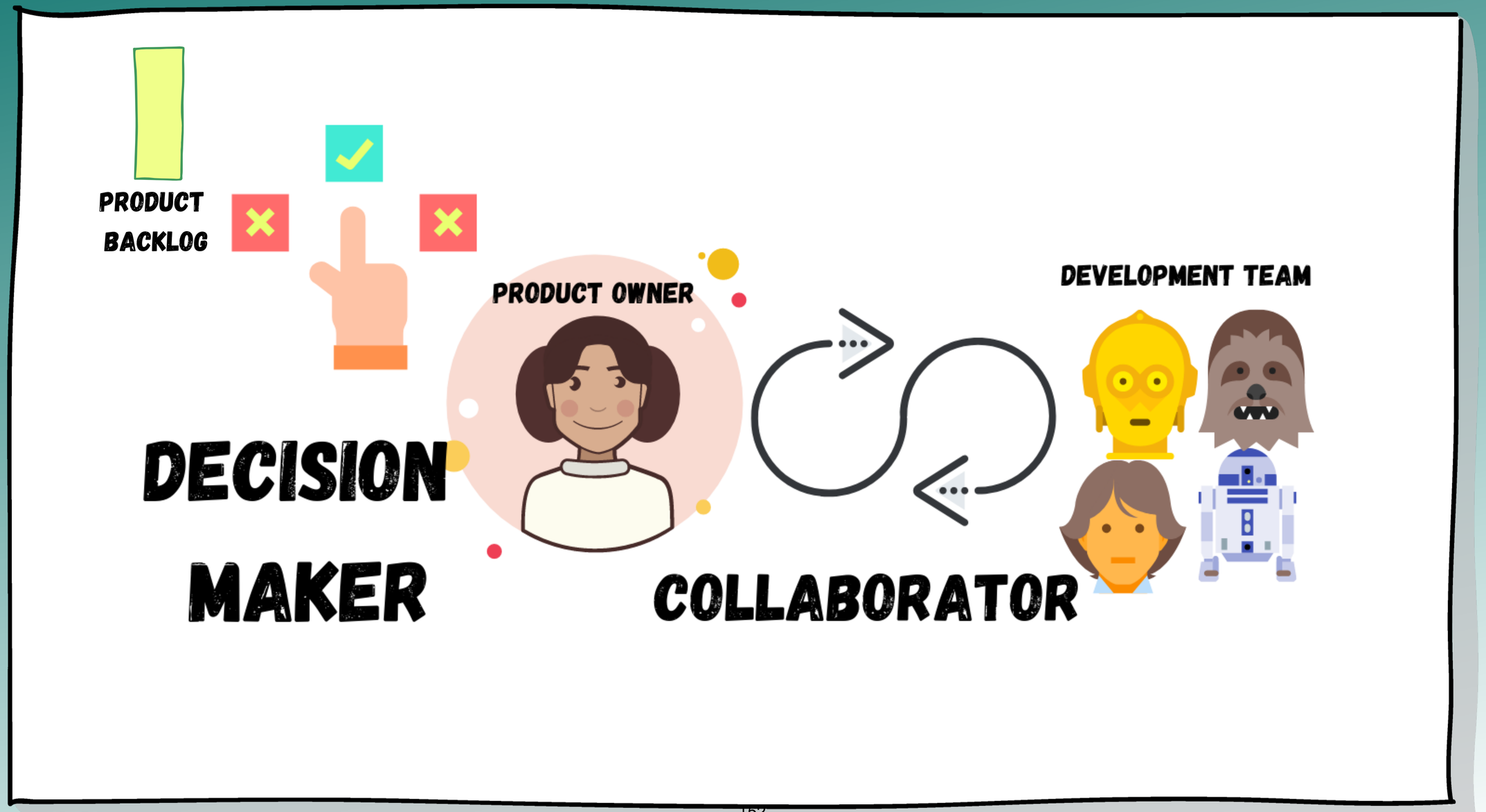
"They may do the above work or may delegate the **responsibility** to others. Regardless, the Product Owner remains accountable".

Zoom in: Product Owner is one role




A
Misundersandings
Might be hard to get P.O time
Weak rapport between P.O & Dev team
P.O has other business focus & needs to spend time there
Potential misalignment
Slower decisions
Not enough domain expertise from proxies
Low decision making power from proxy
PRODUCT OWNER
PROXY 2
PROXY 1
REQUIREMENT
DEVELOPMENT TEAM
B
Too many cooks!
Slower decisions
COMMITTEE
REQUIREMENT
DEVELOPMENT TEAM
C
Good for rapport between P.O & Dev team
One decision maker
Faster responses
Many feedback loops
PRODUCT OWNER
REQUIREMENT
DEVELOPMENT TEAM

Authority over product not people



Product Owner

PRODUCT OWNER

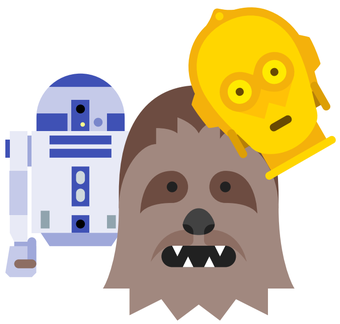
- Represents the voice of the customer
- Focal point for stakeholders
- Responsible for managing the Product Backlog
- Responsible for maximising the value of the product
- Sole decision maker on the order of Backlog
- Collaborator & clarifier of requirements
- Optimises the value of work delivered by Dev Team

Scrum Master

SCRUM MASTER

- Servant leader for the team
- Helps change interactions outside of team to optimise Team focus & productivity
- Coaches team to self organise & become cross-functional
- Responsible for removing impediments
- Helps team work at a sustainable pace
- Coaches the Product Owner on Scrum & Agility
- Facilitates Team events as required
- Organisational change agent

Development Team

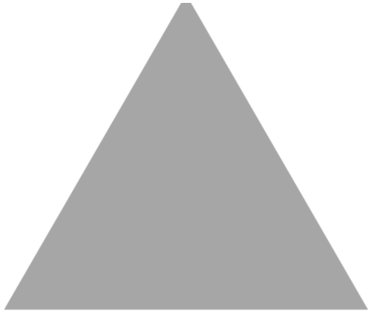


DEVELOPMENT TEAM

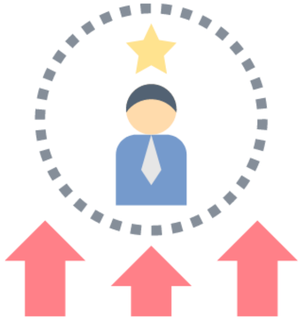
- Self-organising & cross-functional team
- Dev teams are ideally the size of 3-9 players
- No sub-teams such as Operations, Architecture, Testing
- Responsible for delivering the Product Increment
- Whole team accountable for Sprint Goal
- Responsible for managing the Sprint Backlog
- Autonomous & supported to make their own decisions
- Responsible for the Definition of Done

What happens to the Project Manager role?

Owns delivery



Fixed scope



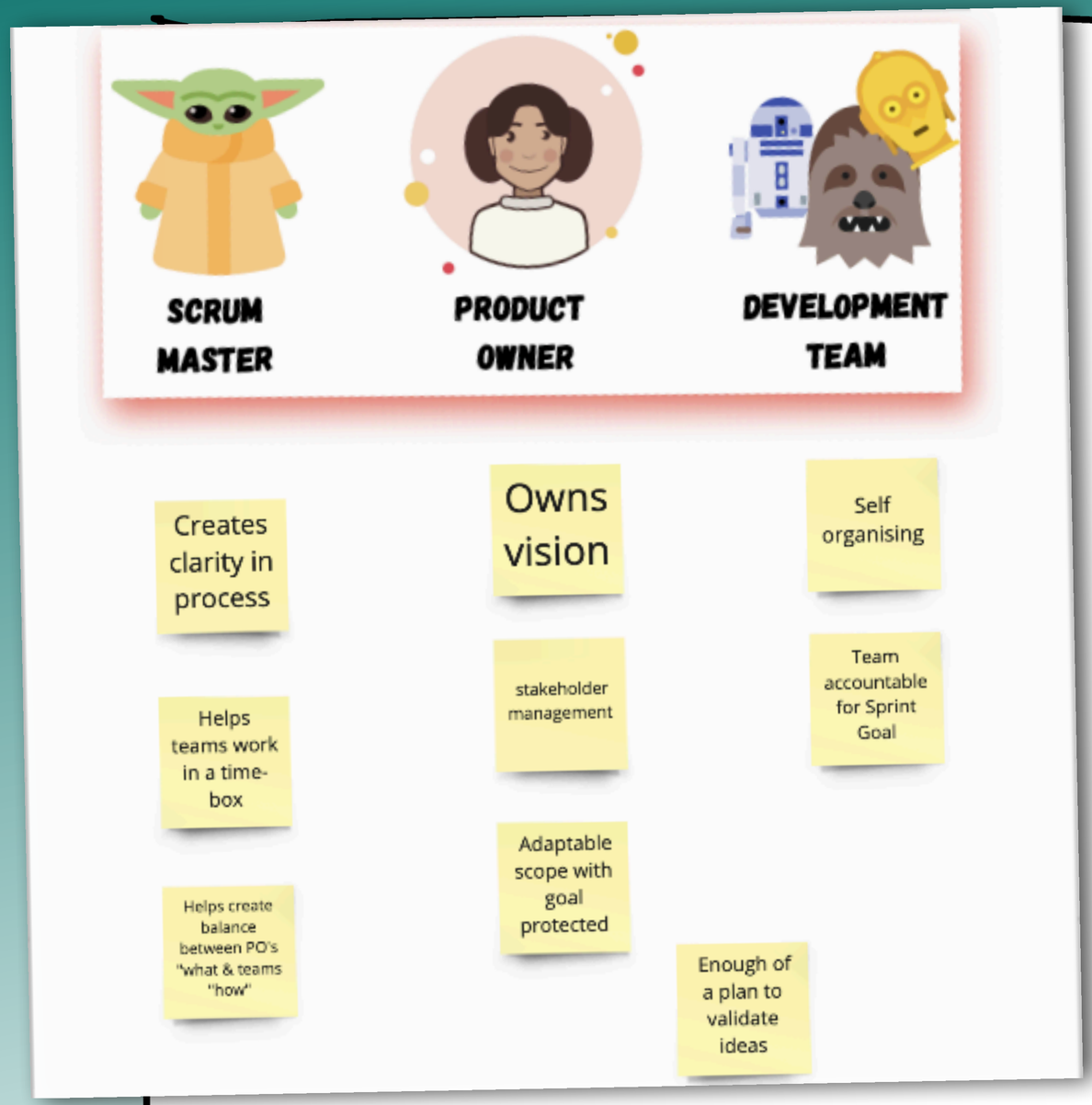
Own solutions

Assigning work

Detailed plans

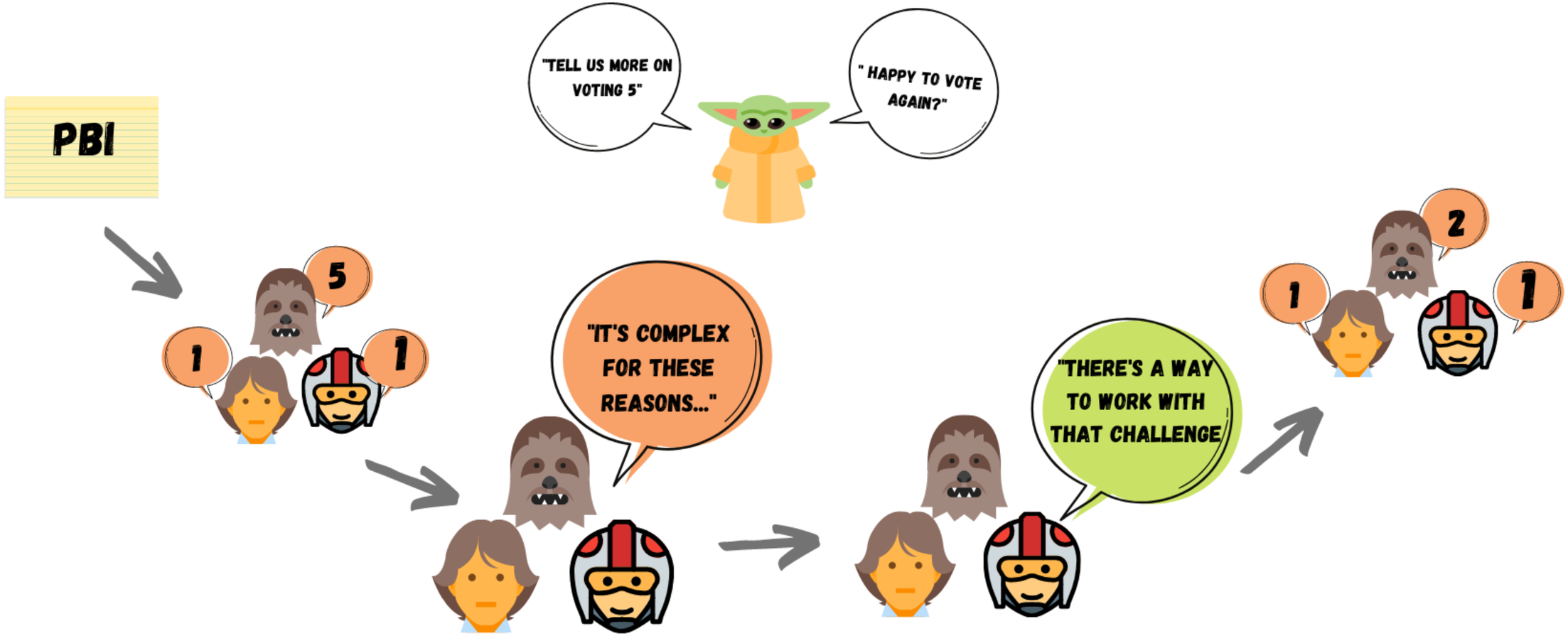
Assigning work

Debrief

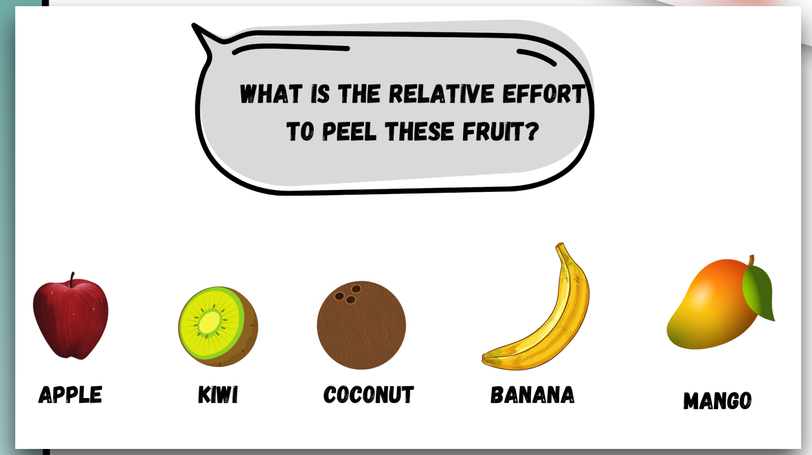


- The Project Manager role does not exist in Scrum
- Some of the responsibilities are spread out amongst the Scrum team
- Other responsibilities are not relevant (a scope which does not change for example)
- Accountability of delivery is owned by the team
- The Product Owner owns the ‘What’
- The Development owns the ‘How’
- The ScrumMasters helps the team use the Scrum Framework to improve & deliver value

PLANNING POKER

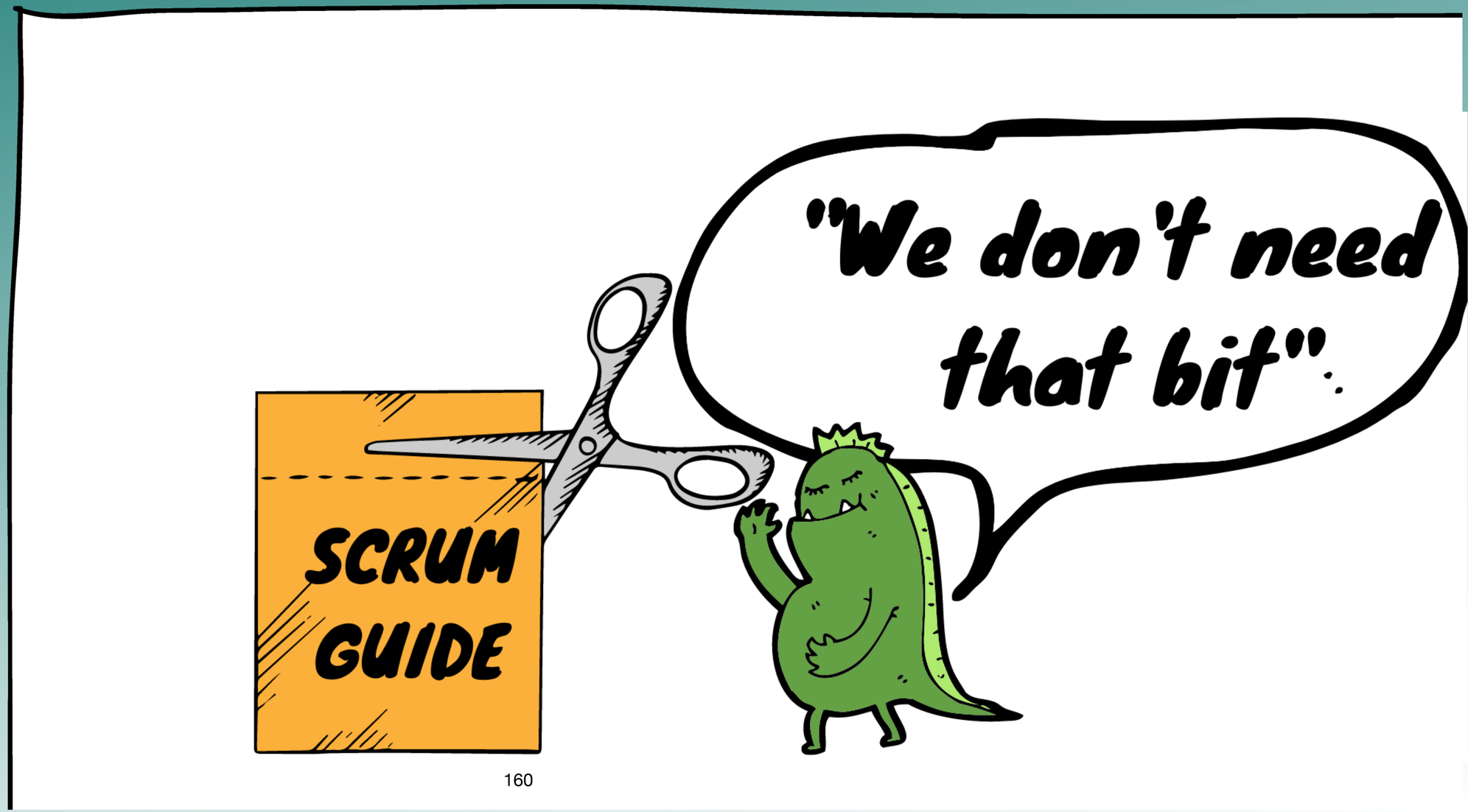


Debrief

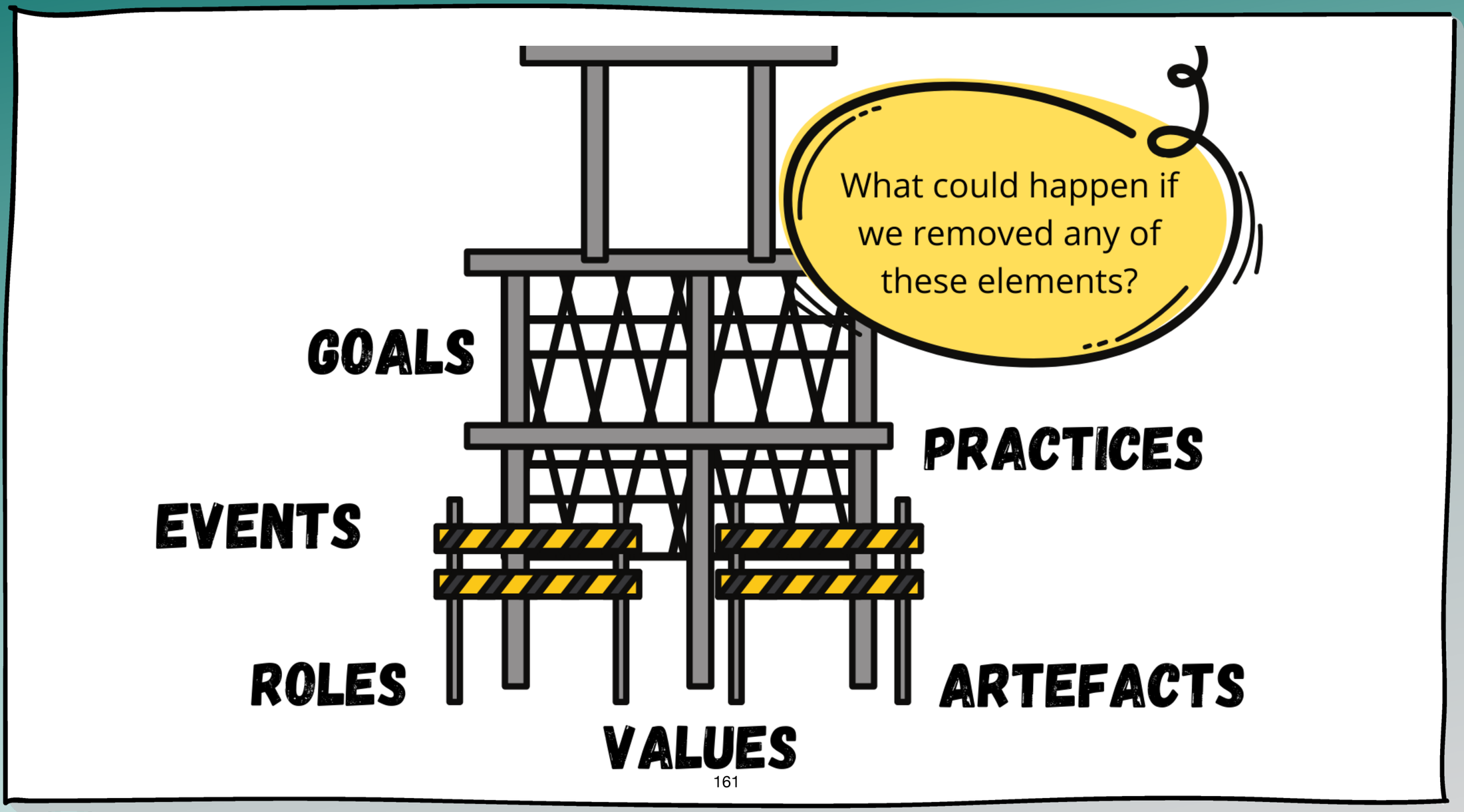


- Relative sizing is one way to estimate
- Breaking work down into smaller pieces of work can reduce risk
- Planning poker is a useful tool to facilitate estimation discussions with teams
- Estimation points are arbitary for new teams & develop meaning as teams mature
- The ScrumMasters helps creatre a shared understanding of work & invites equal voice to estimation discussions

The Impact of Half Scrum

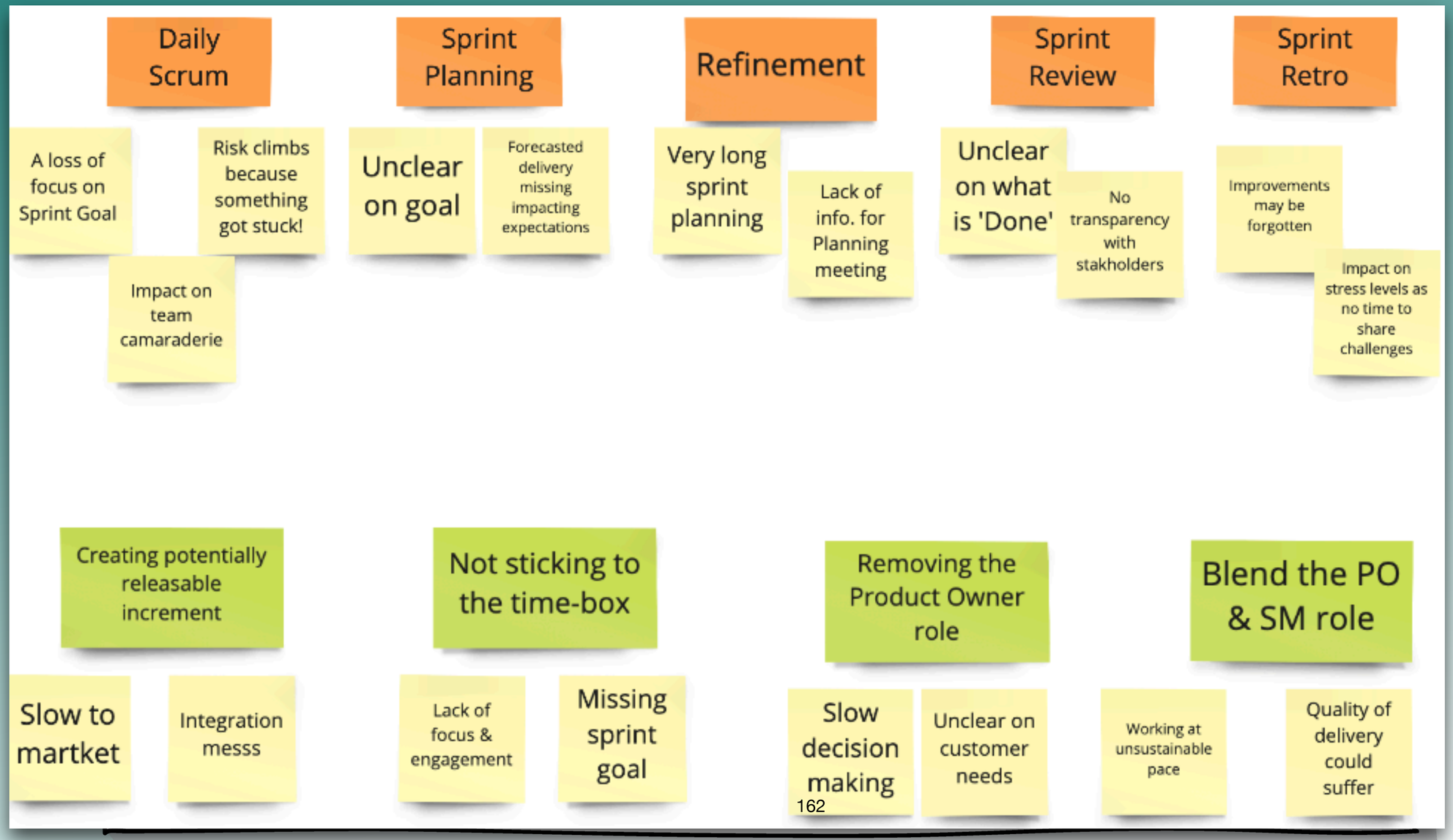


Half Scrum exercise



Example answers

Commentary:
Learners would have shared their answers in Miro. We would expect to see answers such as those in below image. I want to see learners demonstrate an understanding of the impact of not using Scrum in it's entirety.



Topics Covered

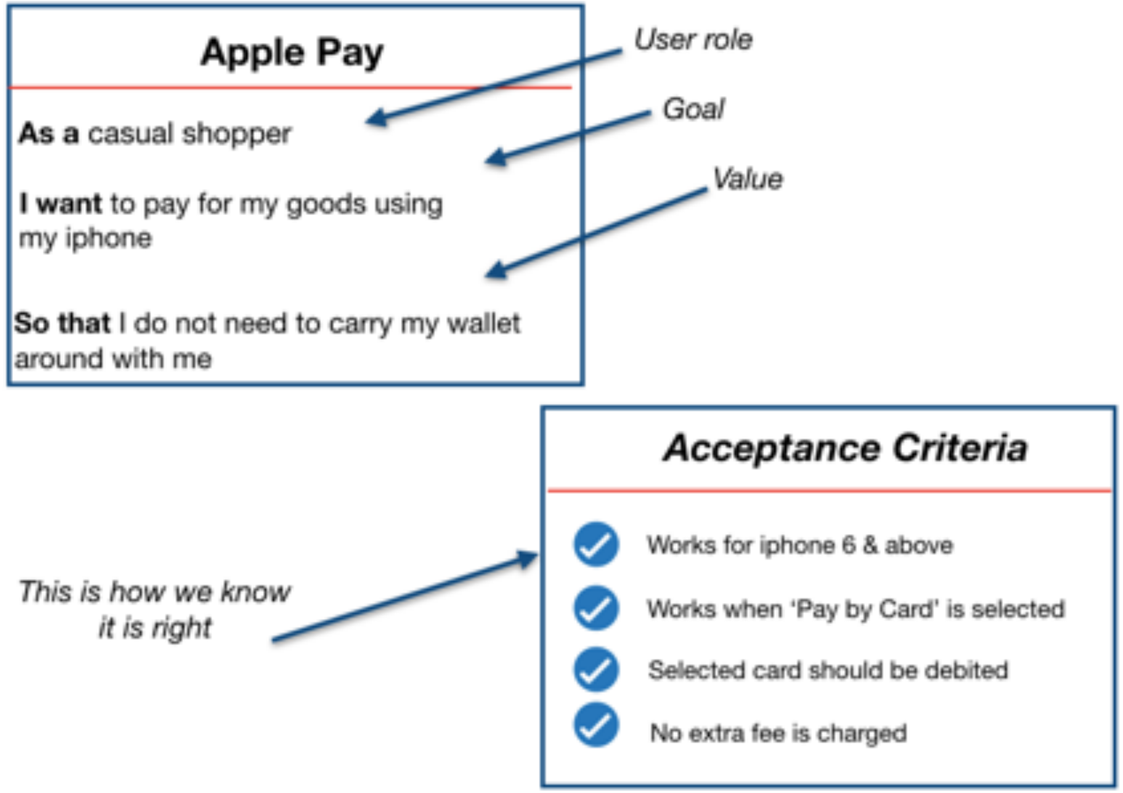
Scrum Roles deep dive

Role Anti-patterns

Project Management

Half Scrum Impact

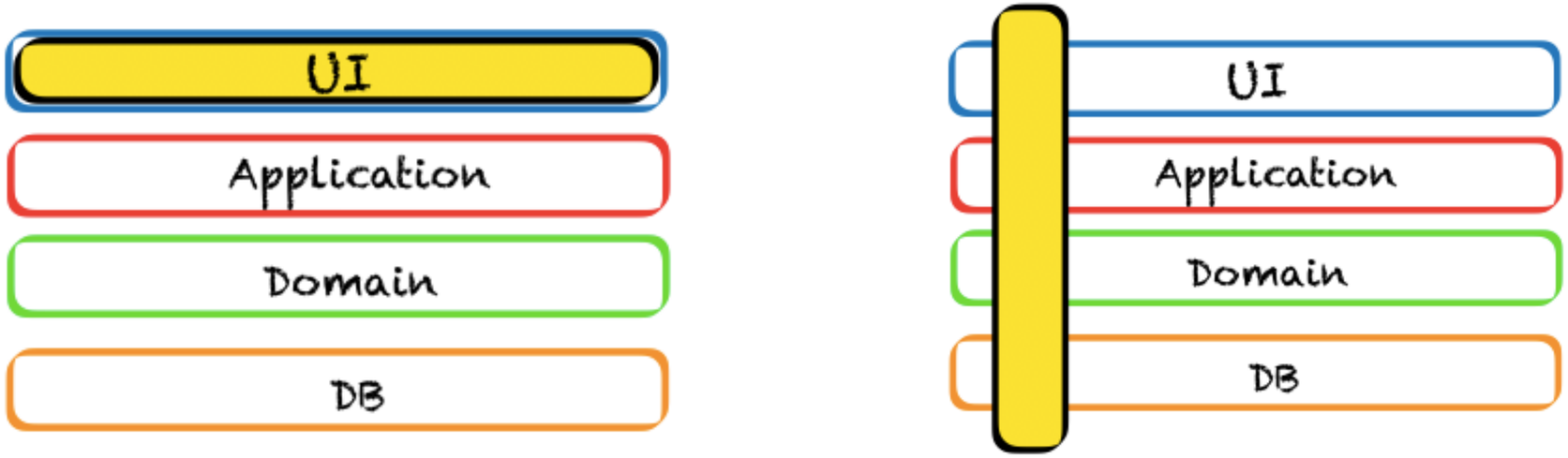
User Stories



How big?

- Big enough to provide value within a sprint
- Typically a story should be sized to get ‘Done’ within 1-3 days
- Smaller stories can help reduce uncertainty
- Larger stories can hide details & result in estimates being way off

Splitting stories

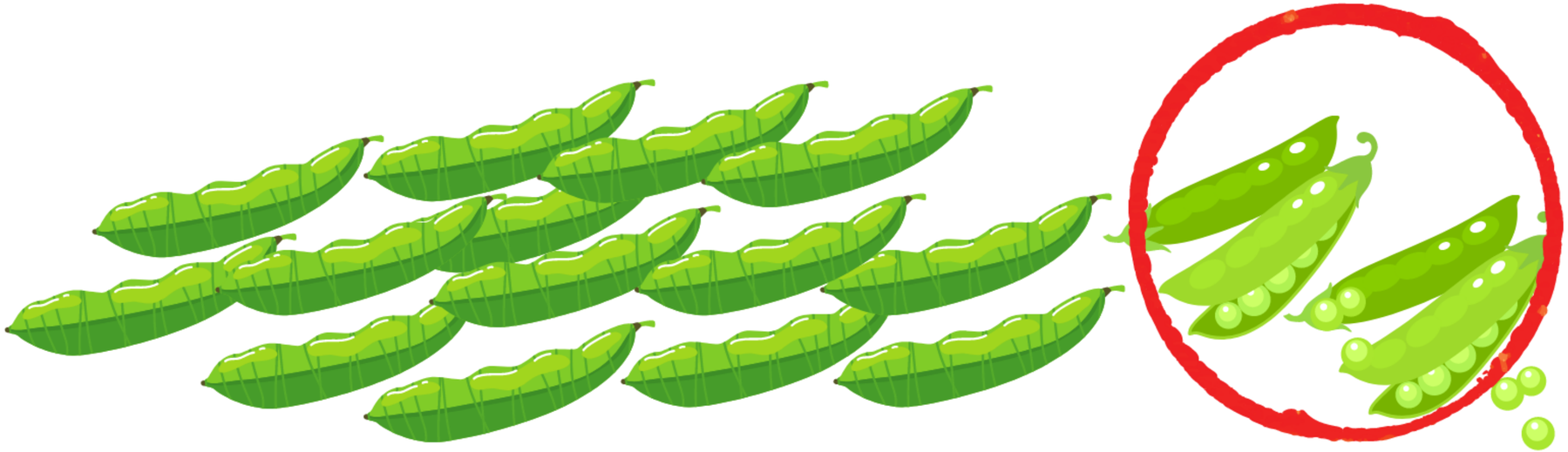


- We can split horizontally or vertically
- If we split horizontally we are delivering one layer at a time - which has risks to consider
- If we splity vertically we likely gain benefits for our delivery- team &/or organisational change likely needed

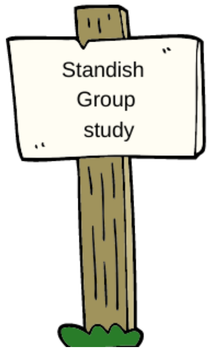
Pareto Principle

The 80/20 Rule

According to legend, Pareto, an economist, noticed 20% of the pea pods in his garden provided 80% of the peas.

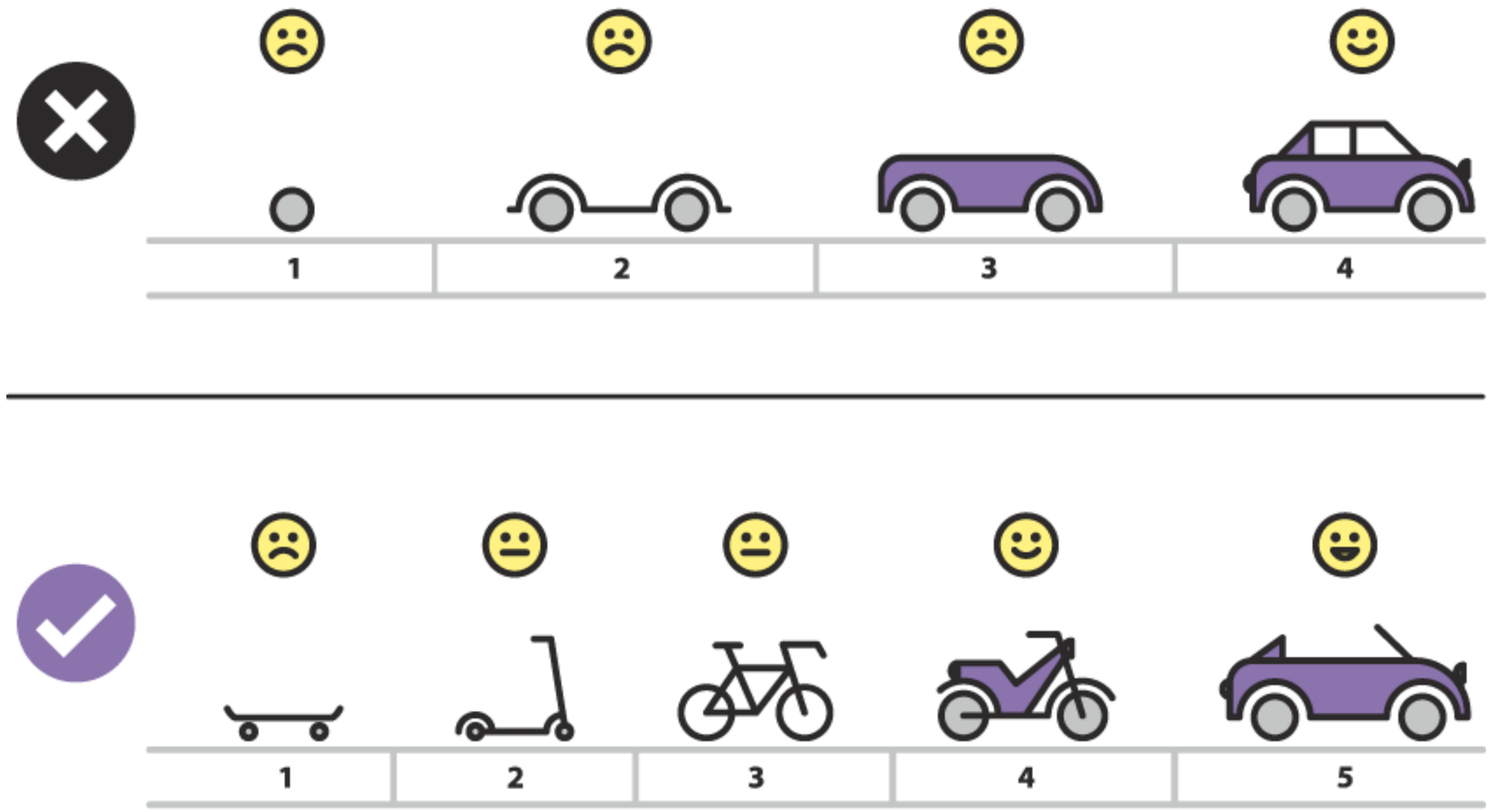


80% of value comes from 20% of the features



- 45% of features were never used;
- 19% used rarely;
- 16% sometimes;
- only 20% were used frequently or always.

Minimum Viable Product



The hats of a ScrumMaster

MENTORING

Using real life experiences to listen, guide & direct people to improve.

COACHING

Asking powerful questions to help people find answers to their own challenges/opportunities.

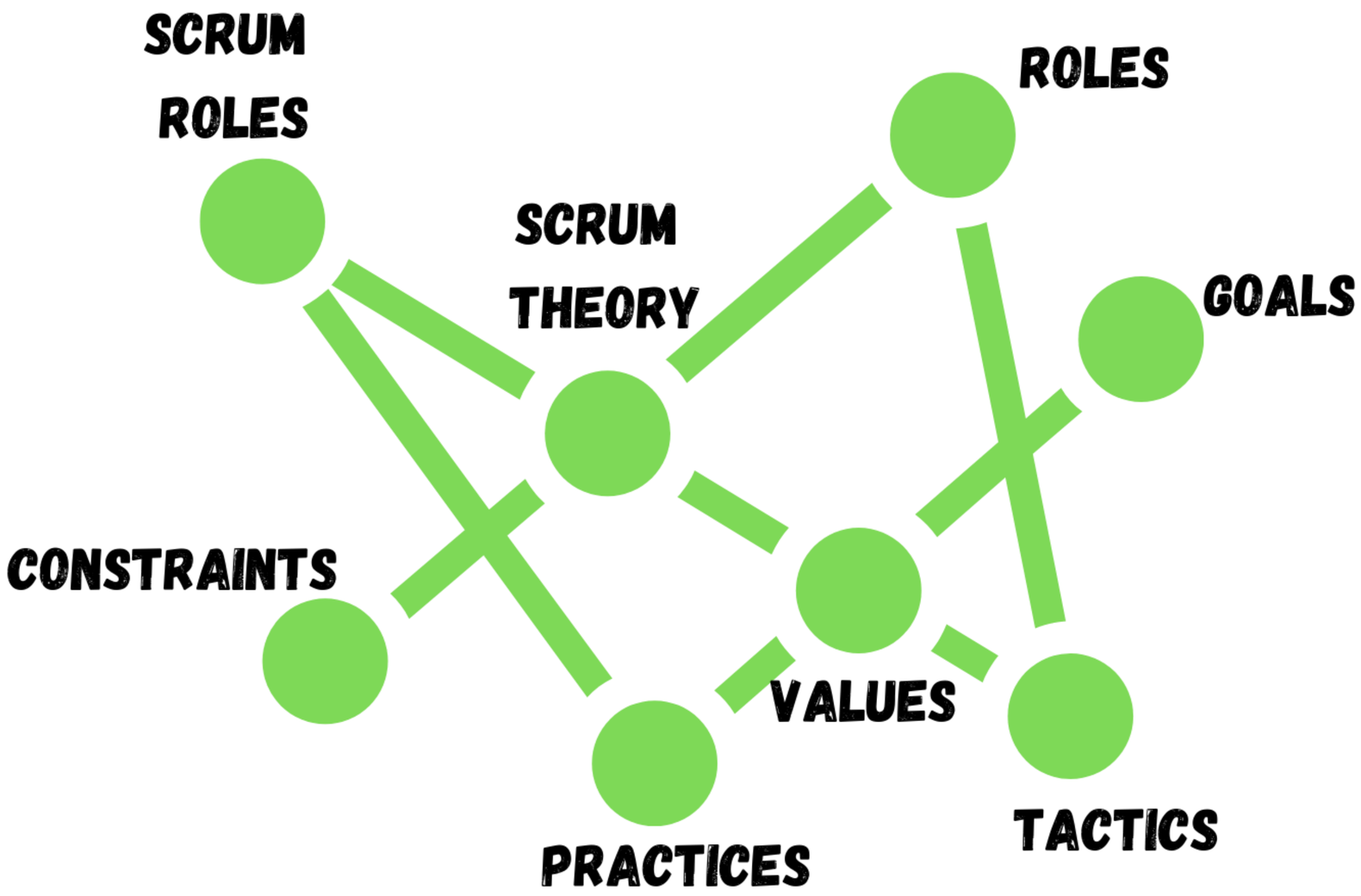
FACILITATING

Holding the space & ensuring equal voice for teams & guiding them towards tangible outcomes.

TEACHING

Imparting knowledge & theory.

Connecting it all.



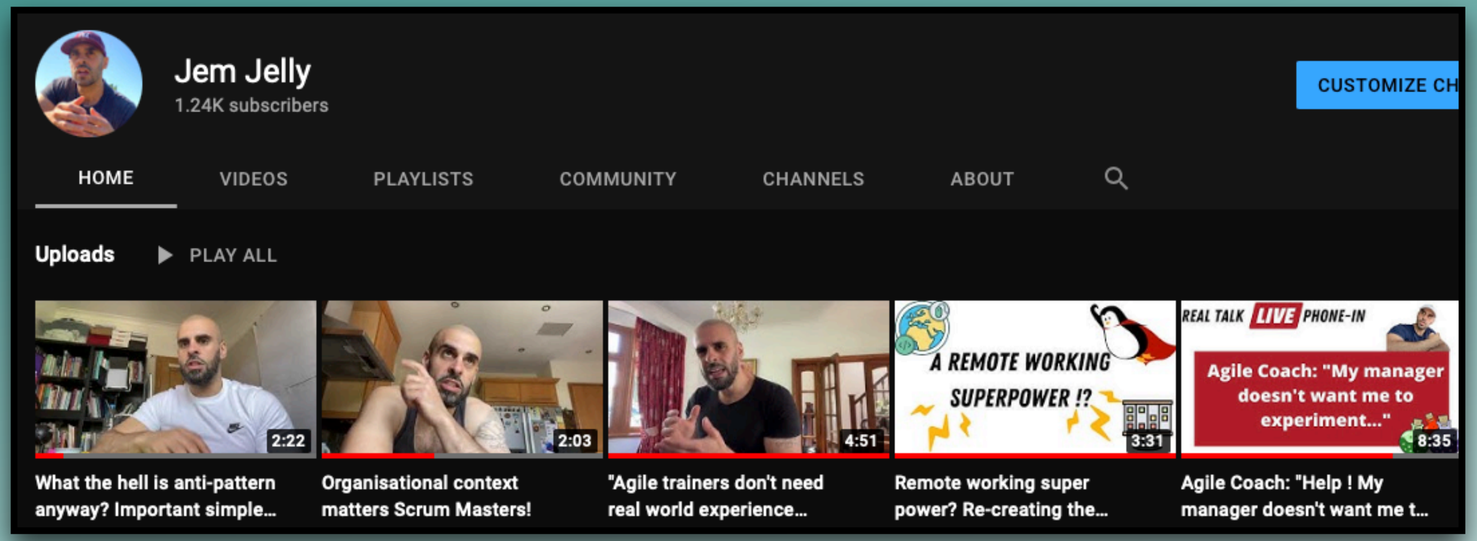
Reading List

- Twice The Work In Half The Time - Sutherland
- Scrum A Smart Travel Companion - Verheyen
- The People’s Scrum - Mayer
- Impact Mapping - Adzic
- 5 Dsyfunctions of a team - Lencioni
- Large Scale Scrum: More with LeSS - Larman, Vodde

Staying in touch

www.linkedin.com/coachjem

www.youtube.com/coachjemjelly



www.jemjelly.com