Xanpan

Pronounced

"Zan-pan"

What do you get if you cross Kanban with Extreme Programming?

Team Centric Agile

allan kelly

Twitter: @allankellynet - #Xanpan

http://www.softwarestrategy.co.uk

Mix-IT Lyon April 2016



## Allan Kelly...

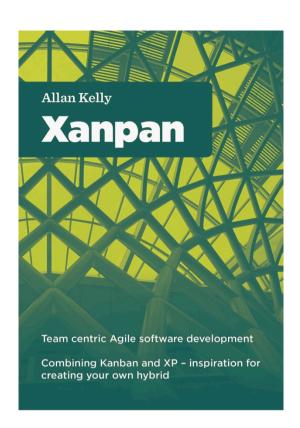
- Consulting on software development & strategy
- > Training for Agile

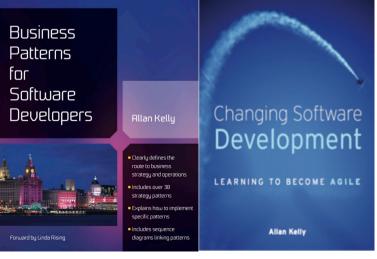
#### **Author**

- Xanpan: Team Centric Agile Software Development
   <a href="https://leanpub.com/xanpan">https://leanpub.com/xanpan</a> (2014-2015)
- Business Patterns for Software Developers (2012)
- Changing Software Development: Learning to be Agile (2008)

#### Chapters in...

Business Analysis and Leadership, Pullan & Archer 2013 97 Things Every Programmer Should Know, Henney, 2010 Context Encapsulation in Pattern Languages of Program Design, vol #5, 2006











The Real Thing

# Choose your Cola

Ken & Jeff's Scrum-Cola 8 out of 10 teams prefer.

Will you take the Kanban challenge?



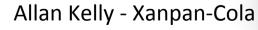
David Anderson Kanban-Cola





High in Caffeine For Real Programmers

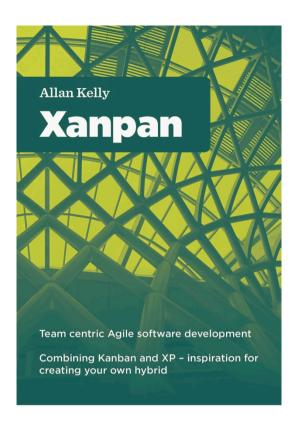






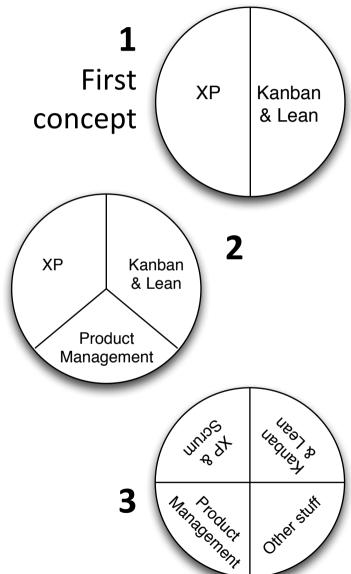
#### Xanpan is...

- A cross between Kanban & XP
- An example
  - Hybrid method
  - Make your own
  - Inspiration to make your own
- Team centric Agile software development
- The way Allan Kelly suggests you do things



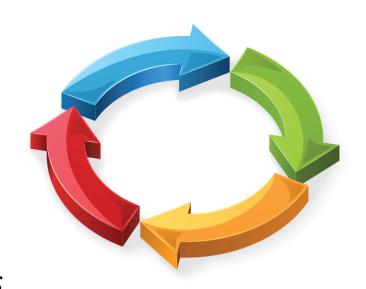
# Where did Xanpan come from?

- Experience (Lean+XP)
  - Blue-White-Red
- Kanban
- XP
- Plus
  - Seeing others
  - Reports of other cross-overs
- Making sense of what I see



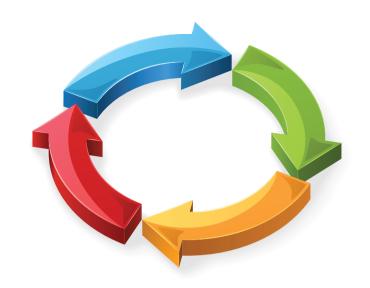
## Principles

- 1. Iteration routine
  - Humans are good at <u>deadlines</u>
- 2. Invest in Quality "Quality is Free"
- 3. Visualize
  - See to learn
- 4. Dis-economies of Scale
  - Small batch size



## Principles

- 5. Emphasize Flow
  - Level, Span, Constrain
- 6. Team Centric
  - Planned & Unplanned work
  - #NoProjects
- 7. Goodhart's Law
- 8. Constructivism learning

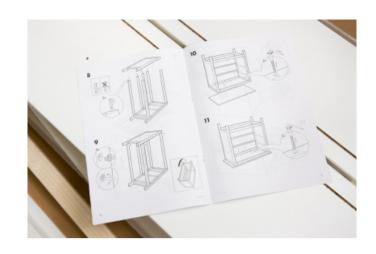


#### **Practice**



- 1. XP Technical practices: TDD, CI, etc.
- 2. Teams can work on more than 1 stream
  - Flow multiple projects/product to 1 team
- 3. Break Stories to Tasks
  - Colour code work
  - Estimate in Points
  - Small is better Think Small!
- 4. Benchmark against self
  - Velocity Not Commitment

#### **Practices**

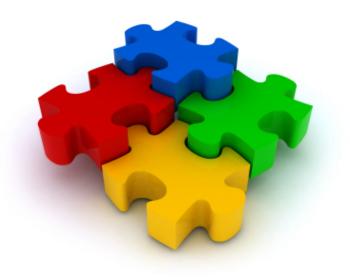


#### 5. Flow

- Use Product "Ownership" (Product Management & Business Analysis) to restrict flow
- Apply WIP limits
- Absolute Prioritization
- 6. Planning levels (horizons)
- 7. Pick'n'Mix
- 8. Action over words

#### **Practices**

- 9. Fit work to the time
  - Deadlines are good
  - Limit WIP
- 10. Evolutionary change
  - Small Bangs are OK
  - but Big Bangs are bad



# Details.



## **Team Centric**





#### **Teams**

- Keep teams together
  - Why break up successful teams?
- Flow the work to the team
- Stable teams
  - Improve performance
  - Velocity/estimation can become predictable

## Sausage Machine

Requirements & Specifications go in

Working Software Comes Out





# Quality

# Quality... makes all things possible

#### "Quality has much in common with sex.

- Everyone is for it. (Under certain conditions of, course.)
- Everyone feels they understand it. (Even though they wouldn't want to explain it.)
- Everyone thinks execution is only a matter of following natural inclinations. (After all, we do get along somehow.)

And, of course, most people feel that all problems in these areas are caused by other people."

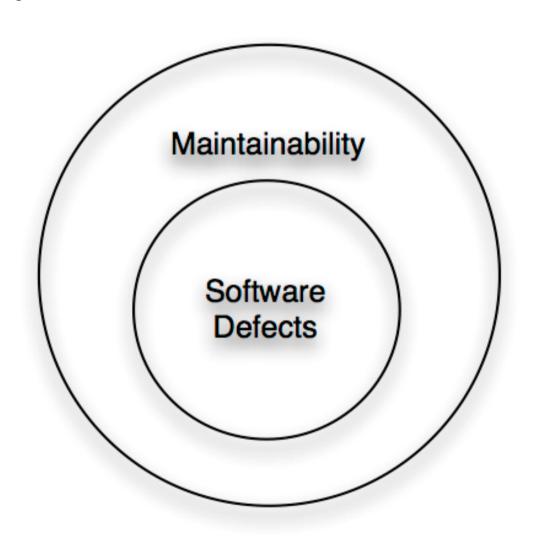
#### Quality -> Quicker

Projects with low defect potentials and high defect removal efficiency also have the shortest schedules, lowest costs and best customer satisfaction levels

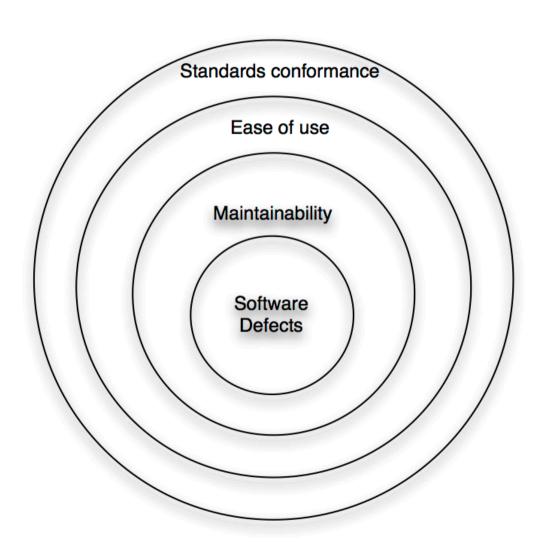
Capers Jones, 2008

Applied Software Measurement

# Quality core



## What qualities are important to you?



How do you improve quality?

TDD
ATDD
BDD

# Visualise



# Light Sabre

Every team must design their own board





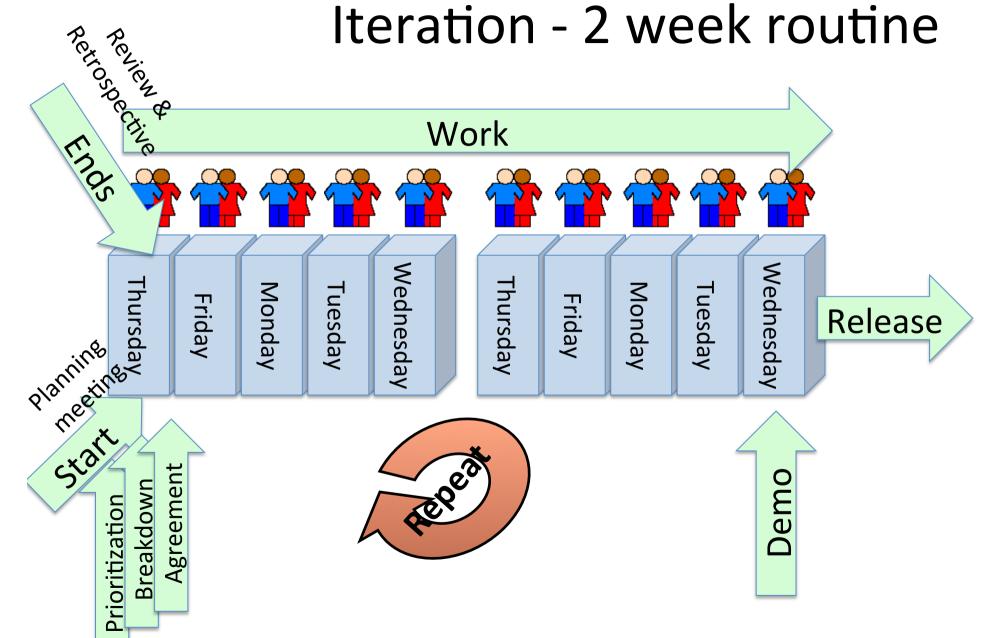
## **Iterations**

#### 2 week routine test process of your Wednesday Wednesday Thursday Monday Tuesday Tuesday Monday Thursday Friday Friday Release

Every 2 weeks you have a shippable product

Whether you ship or not is a marketing decision

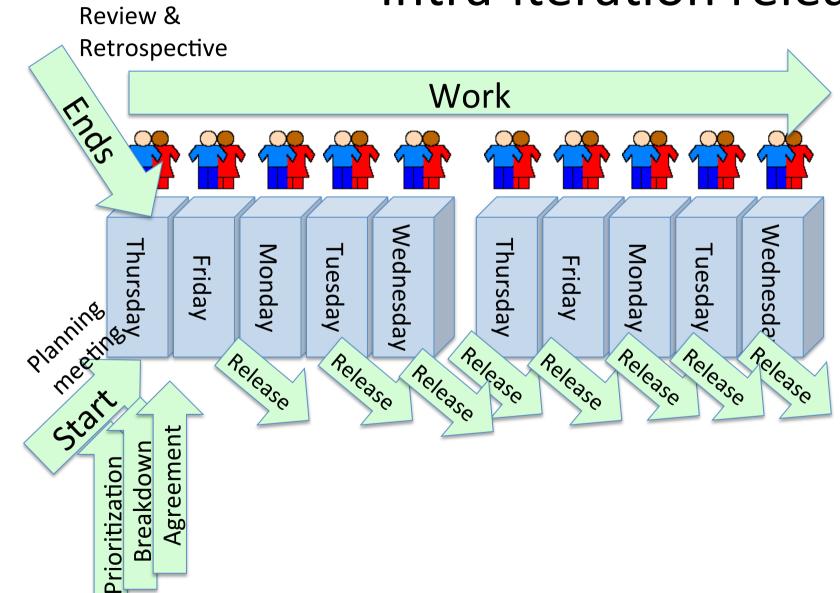
#### Iteration - 2 week routine



# For most teams a release every 2 weeks seems an impossible goal

For the best teams a release every 2 weeks seems an impossibly long time to wait

#### Intra-iteration releases



#### **Iterations & Flow**

Iterations bring structure

#### **But**

- Strict iterations break flow
  - "Story must be finished in sprint"
  - "Story cannot be bigger than a sprint"
  - Sprint tail overwhelmed by finished stories
  - Testers drop standards
- Strict iteration
  - Difficult at first learn to think small



#### **Iterations & Flow**

- Stories spanning sprints <u>levels</u> work
  - Break down stories to tasks
  - Tasks only counted when completed
  - When all tasks done, Story done
- 3 Strikes and you are out!
  - Story span 1 Iteration, OK, it happens
  - Story spans 2 Iterations, umm... Red Flag
  - Story spans 3 Iterations, Out! Story too big

## Deadline are good

- Humans are
  - Very bad at estimating time
  - Very good at meeting deadlines
- So harness deadlines
  - 2-week iteration deadlines
  - Work to the deadline
  - Synchronize on deadlines
  - Flex the work within the deadline



# Unplanned work allowed

- Seek value
- Reflect reality
- Nothing wrong with late work
  - Just because work arrives late does not mean it is less valuable
  - Late breaking work may be more valuable



## Planned & Unplanned work

- Work planned in planning meeting
- Unplanned work allowed at any time
  - Tag it, e.g. Yellow card
  - Retrospective estimation
- At end of the iteration count points unplanned
  - Graph/Track planned v. unplanned
  - Incorporate into planning velocity





#### Breakdown

- In planning meeting
- Part
  - Software Design
  - Requirements elicitation
  - Opportunity to reduce scope
  - Estimation exercise



#### Stories: 2 Golden Rules

1

As a Role or Persona

I want to Do a Something

So that Objective



Story should benefit business (Story should have value \$s & €s)

Bang!

Story should be small – deliverable in days; max 2 weeks

Value but too big to deliver soon

**EPIC** 

Should be business

As a
I want to
So that

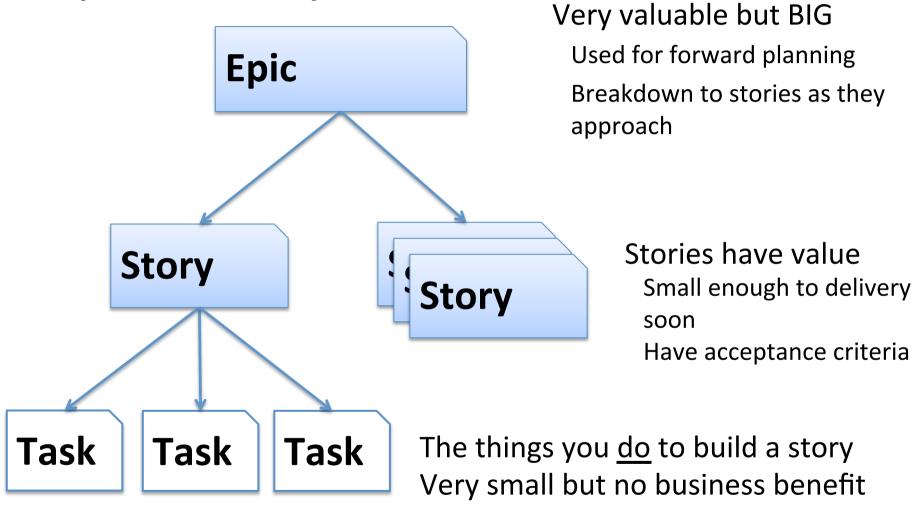
Role or Persona
Do a Something
Objective

puld be mall

**TASK** 

Small enough to deliver really soon but lack business value

# Epic-> Story-> Task





Rule of Thumb

Iteration plan with

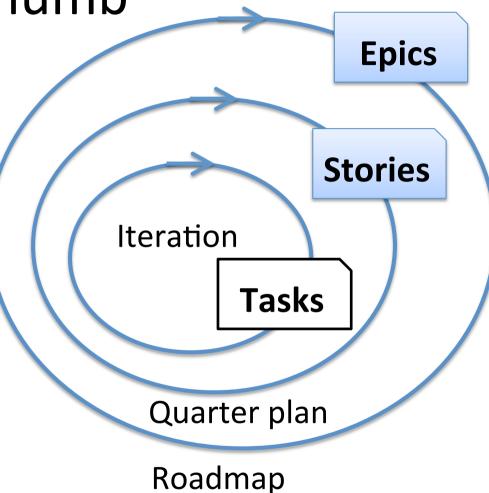
Task level

Quarter / Release

plan with Stories

Roadmap plan with

Epics



#### Focus on Value not The End

Ask not, "When will the software be done?"

But ask: "When will the software deliver value next?"

Think: Stream of Value (which might stop one day)

Not: An end date

#### Reds



#### **Yellows**

**Unplanned work** 

#### Green

Specific to you

#### Goodhart's Law

Any observed statistical regularity will tend to collapse once pressure is placed upon it for control purposes.



Velocity & points break down if abused...

... and so do other measurements

Professor Charles Goodhart, CBE, FBA

# Scaling in 1 slide

Streams not projects (#NoProjects)

Teams over projects

Decouple teams

Independent teams

Technical practices to bind them

Common reporting not common working

# Is Xanpan useful?

- Maybe
  - Take it
  - Use it
- Inspiration
  - Roll your own



Image from Ildar Sagdejev under Creative Commons license http://commons.wikimedia.org/wiki/File:2009-02-15\_Rolling\_a\_cigarette.jpg

# Decide for yourself

#### **EBook**

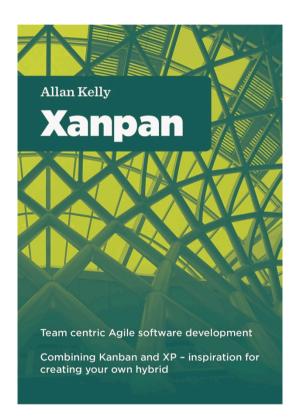
Half price, \$4 until 31 April 2016

http://leanpub.com/xanpan/c/MixIT2016

Discount code: MixIT2016

Printed from Lulu.com

http://tinyurl.com/zf5hke4



Which brand of Cola are you drinking?

allan kelly

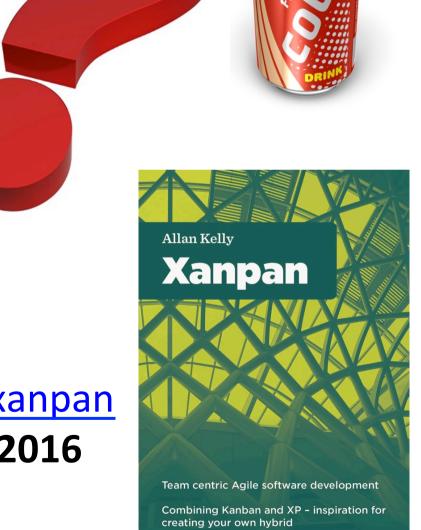
www.allankelly.net

allan@softwarestrategy.co.uk

Twitter: @allankellynet

http://leanpub.com/xanpan

Discount code: MixIT2016



# Appendix



# Look beyond the label

Waterfall



Jonathon's Run Fall, Pennsylvania by Hubert Stoffels (
<a href="http://flickr.com/photos/22195940@N00">http://flickr.com/photos/22195940@N00</a>)

Creative Commons License



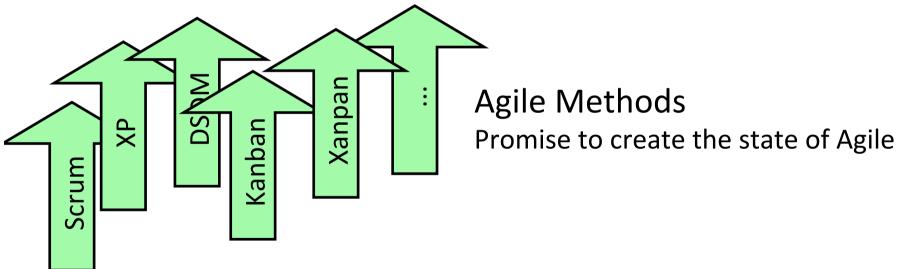
# Agile, Agile methods & the Agile

The State of Agile (our objective) toolkit

•Quick on our feet

Respond to change rapidly

Deliver quickly



The Agile toolkit

- •Test Driven Development, Refactoring
- •Iterations, Time boxing
- •Retrospectives, ....

## Bigger Teams Better

- Less susceptible to variability
- Loosing a member isn't so bad
- Growing team more efficient
- More predictability
- Easier to staff with all the skills
- 4 to 15 people Everyone!
  - Coders, Tester, Analysts (PO) and anyone else needed!



# Yes, Estimation



- Estimate White tasks in planning meeting
  - Ball-park estimate Blues
- Estimates in Points
  - Your currency £ \$ €
  - One currency
  - Forget hours
- Estimation helps design thinking

I've come to like Planning Poker but choose your own poison

#### Estimates are for the team

- How much work to put in next iteration
  - Are we taking on too much?
- Assist breakdown
  - Breakdown is design
- Estimates allow for red-flags



#### Estimation worthwhile?

- For scheduling? Perhaps
  - Some teams report good results
  - Some teams placebo effect
  - Long run average accurate enough
- Provides Developers with safety valve
- Useful input to design process
   (Forget actuals retrospective estimates)

"I can bring a project in to the day"



#### Estimation...

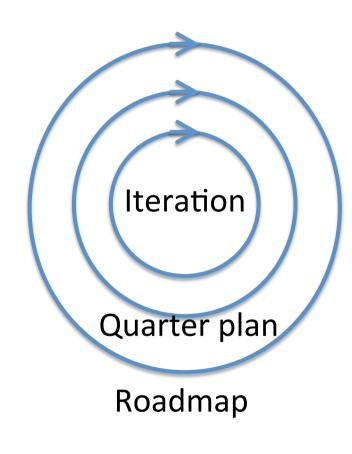
- For work within 3 months can be
  - Generally right
  - Useful in designing & scheduling
- Effort estimates beyond 3 months too variable
- Value estimate beyond 3 months essential

## Estimate value before effort

Close the loop & evaluate afterwards



# 3 Planning Horizons



#### Iteration (Sprint)

- 2-4 weeks ahead

#### Quarter plan (Release)

- Next quarter
- 2-4 releases ahead
- (2-8 Iteration)

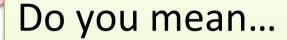
#### Roadmap

- 1-2 years by quarter
- 2-5 year ahead

# Scaling...

How do you scale Xanpan?





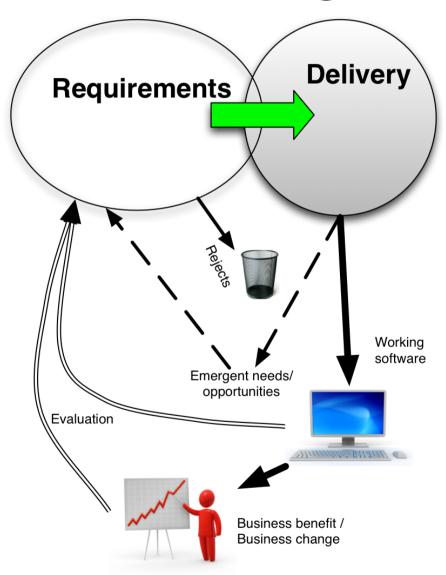
- How to I manage a large team?
- How do I manage multiple teams?
- How do I govern Agile working?

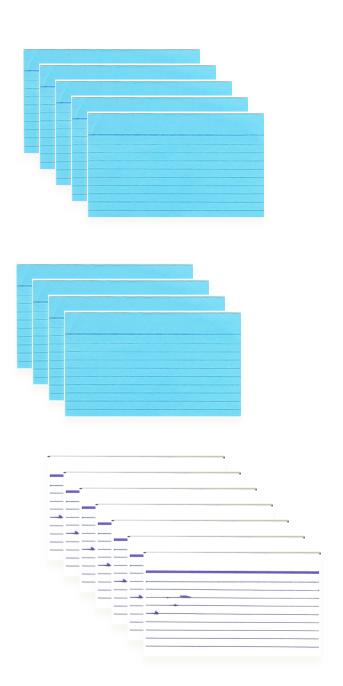
Each question has a different answer, lets do coffee ©



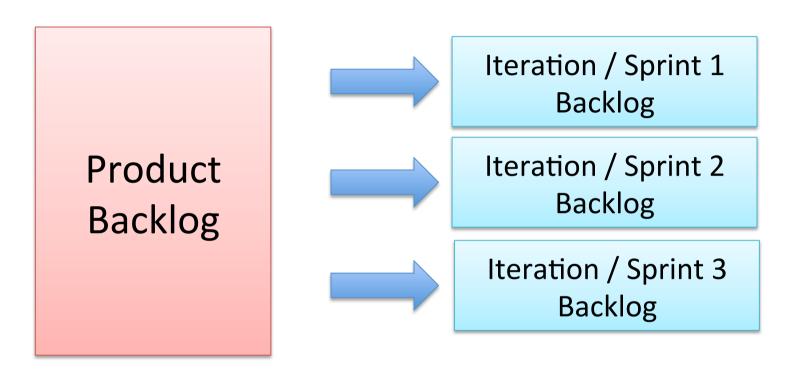


# Three backlogs



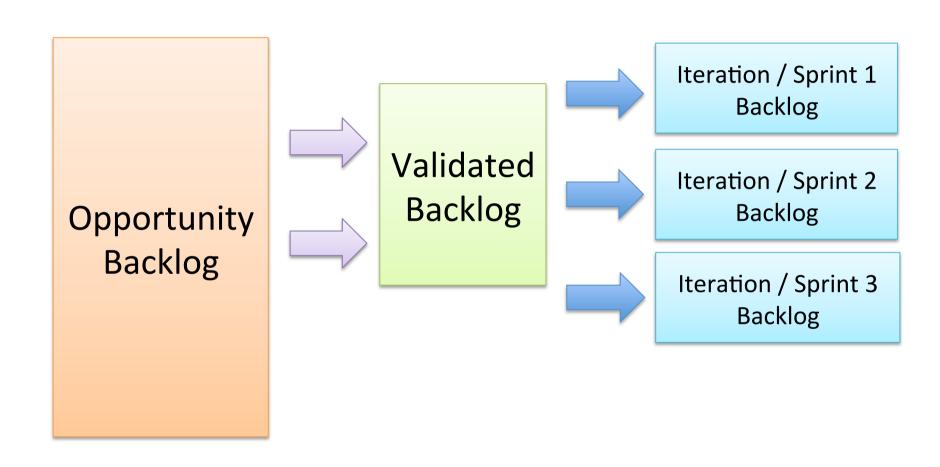


#### Classic Scrum



New stuff gets added

# 3 Backlogs recommended



# Opportunity backlog

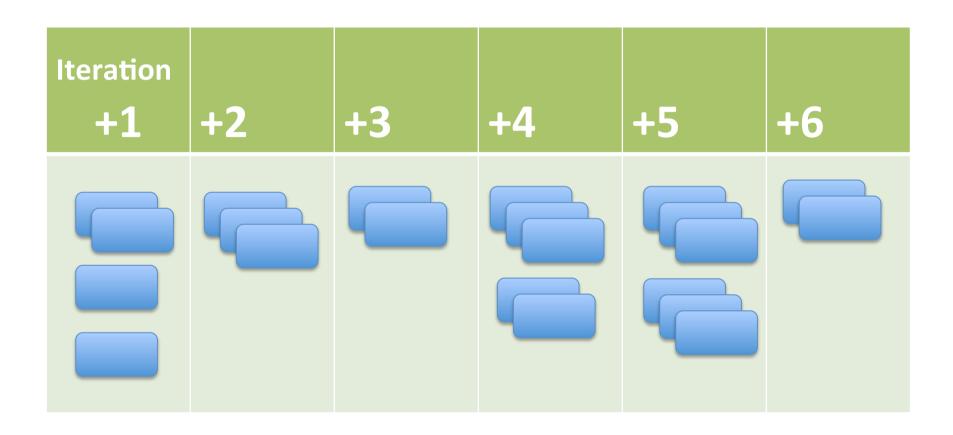
- Can grow as big as you like
- Never pretend it will all be done
- Continually
  - Add new ideas
  - Evaluate existing ideas
  - Trash some
  - Move some to validated backlog

# Validated backlog



- Much smaller than opportunity
  - Limited to N future iterations capacity
  - -1 < N < 6 iterations (@ 2 weeks = 12 weeks)
- Stuff that has been validated
  - Has provable business value
  - Among highest value
- Will be worked on soon
- Review / repopulate every iteration

# Validated backlog is Quarter plan



# Validated backlog



- All cards assigned VALUE on entry to validated backlog
- Ball-park estimates added if needed
- Ball-park estimate & current velocity gives planning horizon
- NOTHING IS CERTAIN