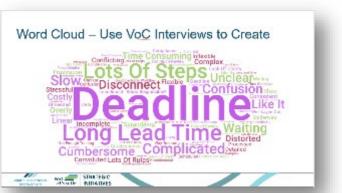


Agile & Lean: It's About Getting Results Respect for People



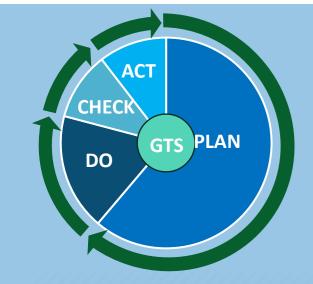


AGENDA: Agile Tools Applied to the PDCA Cycle



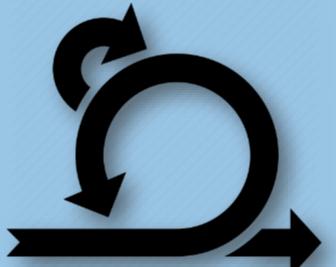
GRASP THE SITUATION

Voice of the Customer



PLAN

Collaboratively work together to identify problems and goals, understand the current state especially from the customer's perspective, formulate theories about root causes, develop solutions, define how to measure improvements, and plan improvements through CPI Workshop[s].



Sprints



Time Box



User Stories



Execute the plan, carry out activities, apply best practices, and manage improvement expectations with people & processes.

TO DO	DOING	DONE
	ш	

Work in Progress (WIP)



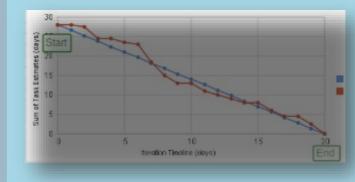
Kanban Boards

CHECK

Work with the improvement team to monitor and measure the improvement efforts, make sure that you check results through an EDI lens.



Definition of Done



Burn Down Charts



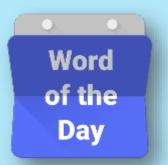
EDI Lens

ACT/ADJUST

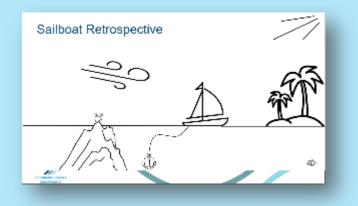
Standardize successful efforts through standard work and visual management, make adjustments when results don't meet expectations, celebrate successes, sustain efforts, and repeat PDCA cycle.



Daily Stand Ups



Word of the Day



Retrospectives

AGILE: It is a Mindset for Improving Teamwork and Performance While Adapting to Customer Changes

Essentially it is an iterative project management methodology initially used for software development:

Individuals and Interactions OVER Processes and Tools

Working Software OVER Comprehensive Documentation

Customer Collaboration OVER Contract Negotiation

Responding to Change OVER Following a Plan



AGILE TODAY

Project Management Institute – changed PMP Certification this year to include AGILE









a disorderly crowd of people or things.

"there was quite a scrum of people at the bar"



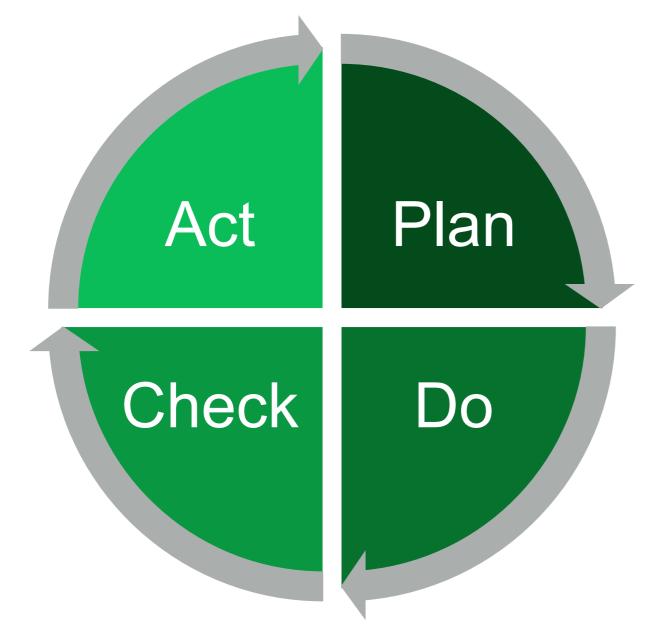
SCRUM = WORKING TOGETHER

PLAN, DO, CHECK, ACT(ADJUST) (PDCA)

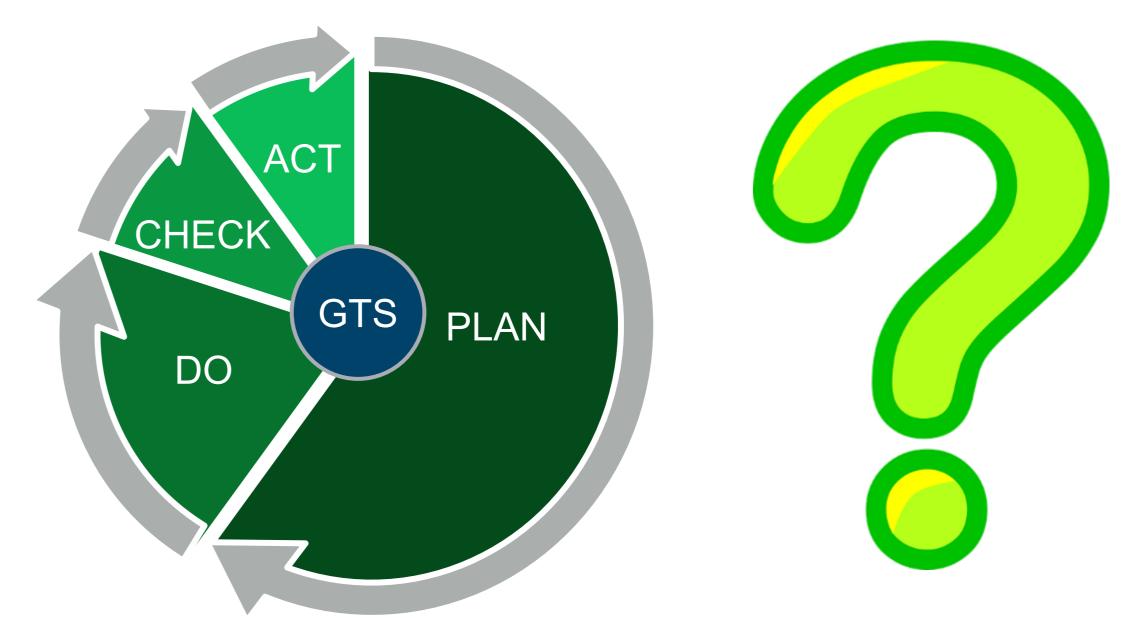
PDCA is a framework that is at the heart of continuous improvement.

The PDCA Cycle helps you in your efforts in continuous improvement.

Typically Shown Like This:



I Want You to Think of it Like This:

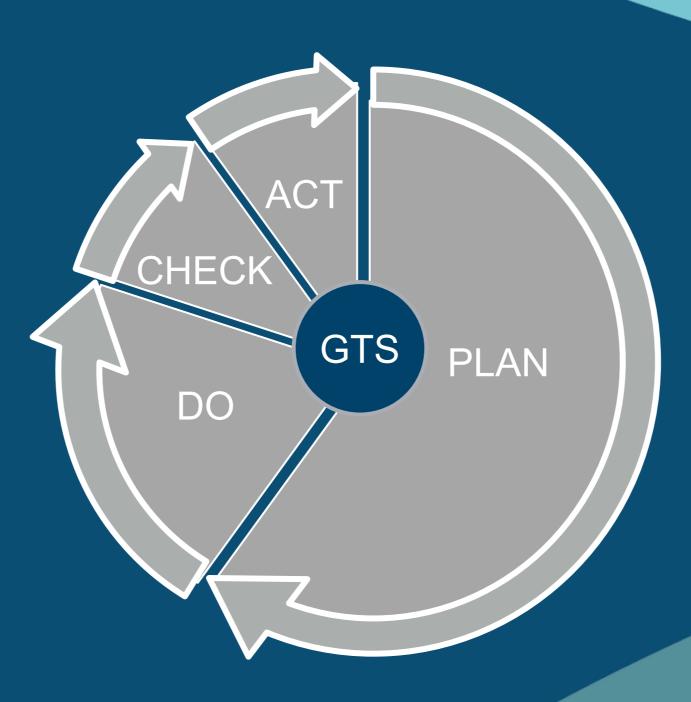


GTS = Grasp the Situation





GRASP THE SITUATION





TOOL: VOICE OF THE CUSTOMER

Voice of the Customer (VoC)

Creating Value for the Customer is at the heart of Agile and Lean.

A Voice of the Customer interview is both an Agile and a Lean tool.

This tool is about reaching out to the customers to understand what they see as value.

We could easily spend an entire day learning how to run a successful VoC.



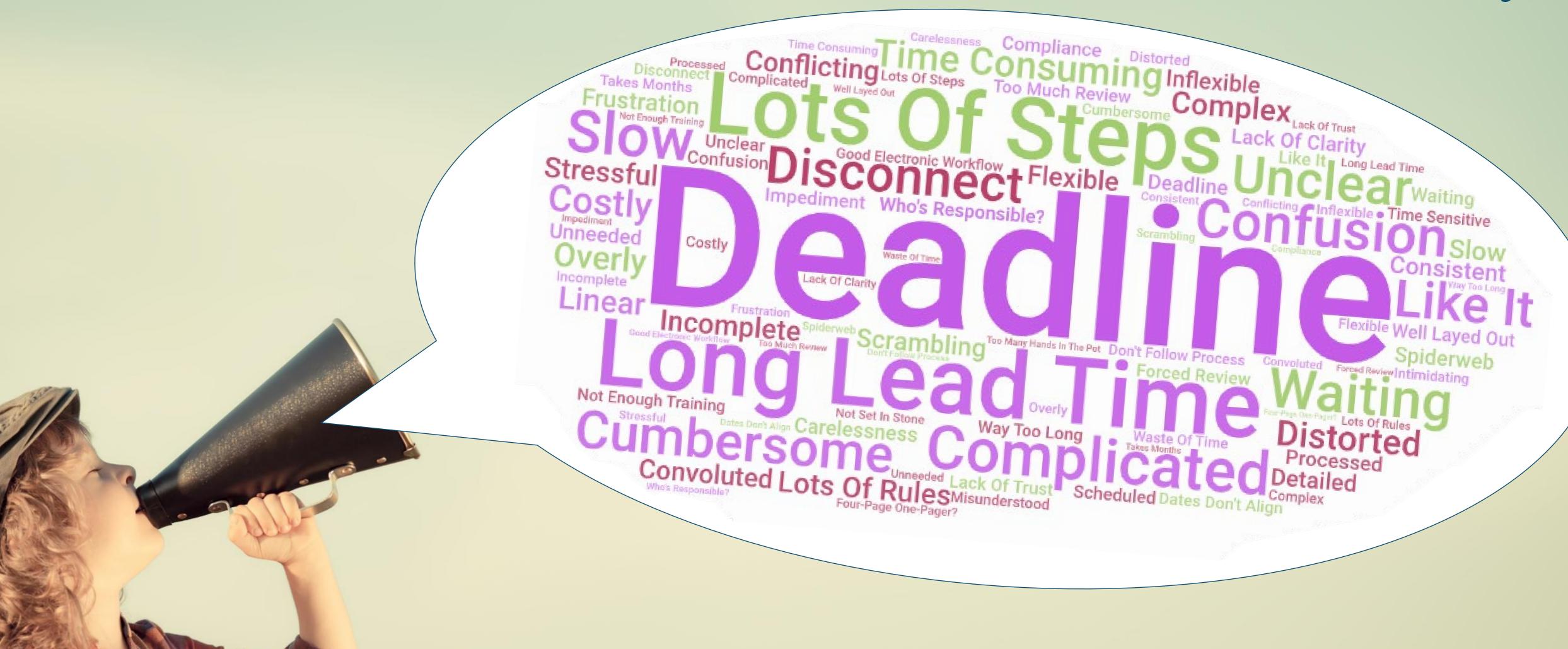
Why Voice of the Customer?

- > Understand and align with what the customer values
- > Keep the focus on providing value to the customer
- > Gain greater understanding of the process
- > Gather information to tell a story
- > Be able to QUANTIFY qualitative data
- Create baseline data for potential Key Performance Indicators (KPIs)
- > You might discover other customers of the process



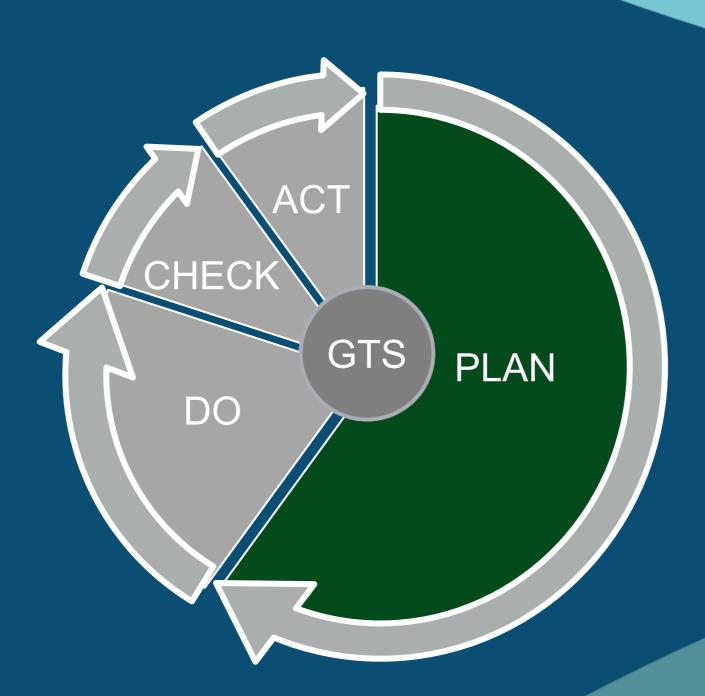


Word Cloud – Use VoC Interviews to Tell the Story





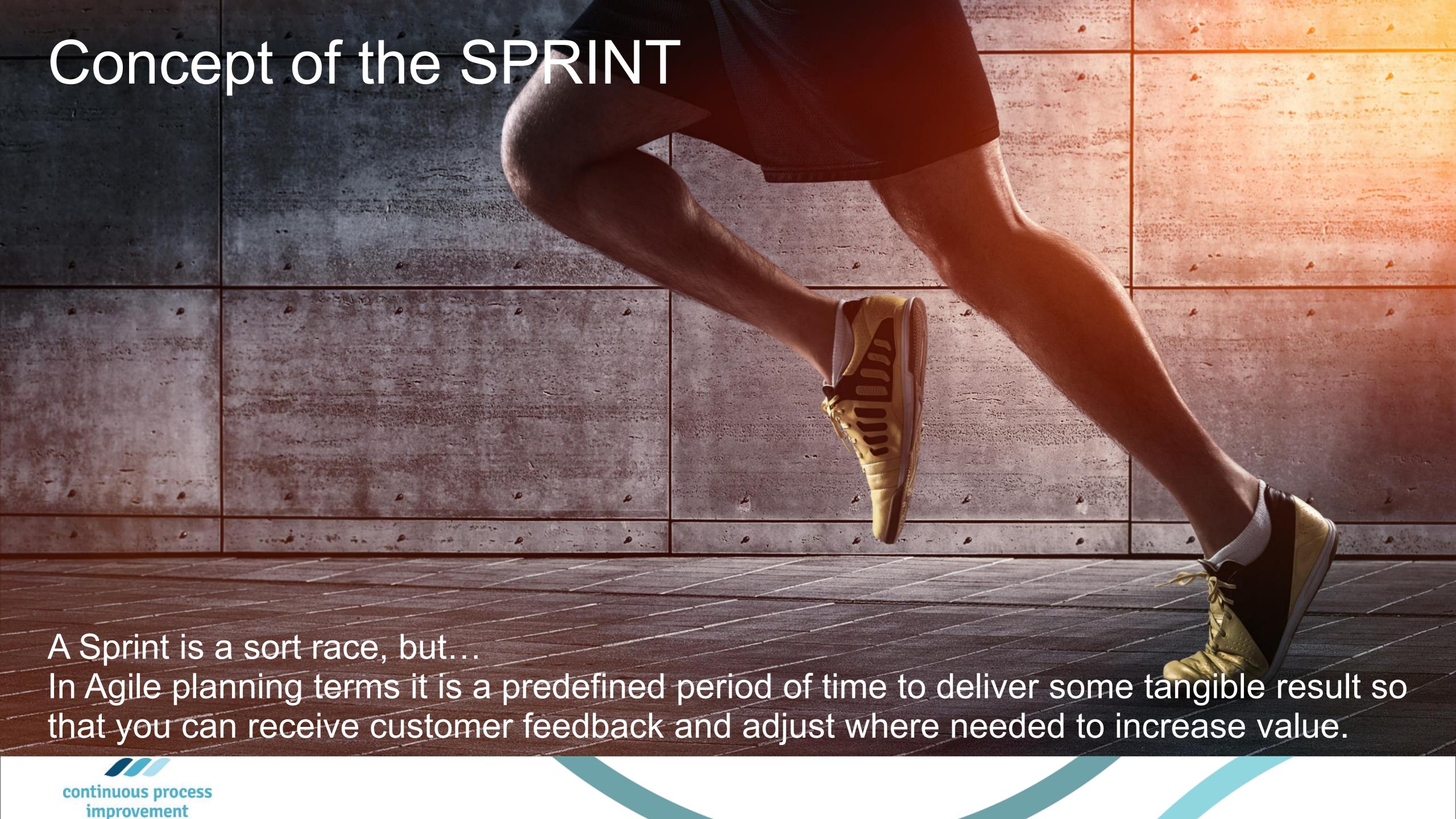
PLAN





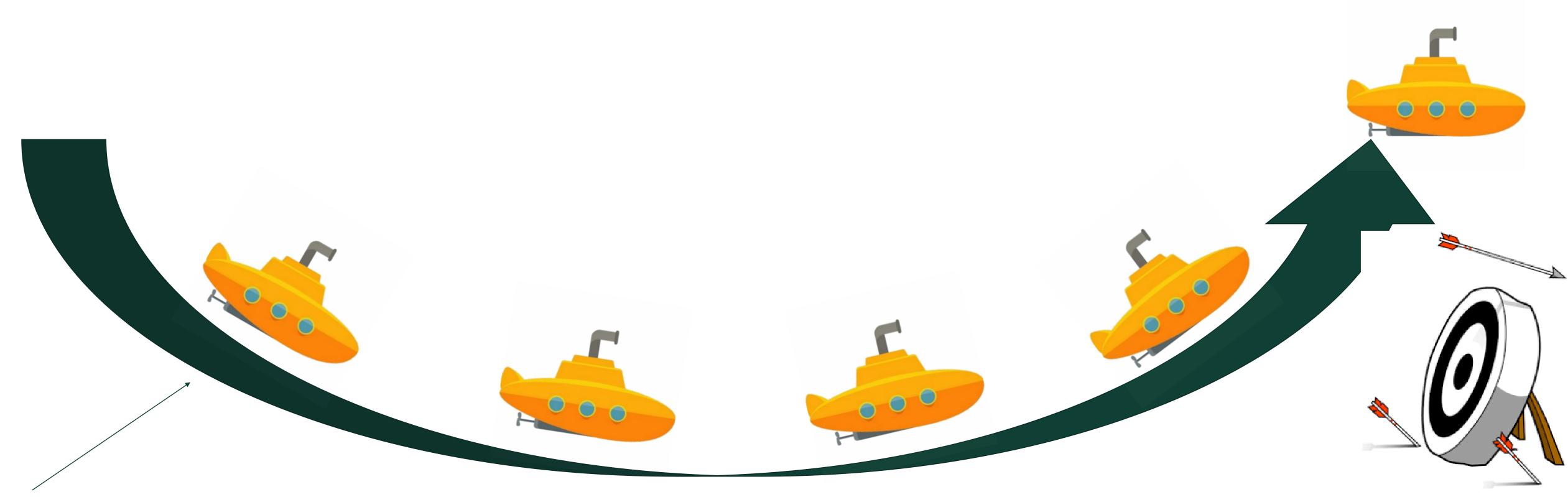


TOOL: SPRINTS



Traditional Project Delivery vs. SPRINT Delivery

Traditional Project Delivery work starts after getting direction and once the work is finished do you then check in to make sure the delivered results are what the customer is looking for.



Typical Project Path: Don't come up for air until done, but you can miss what the customer needs when you do this way.

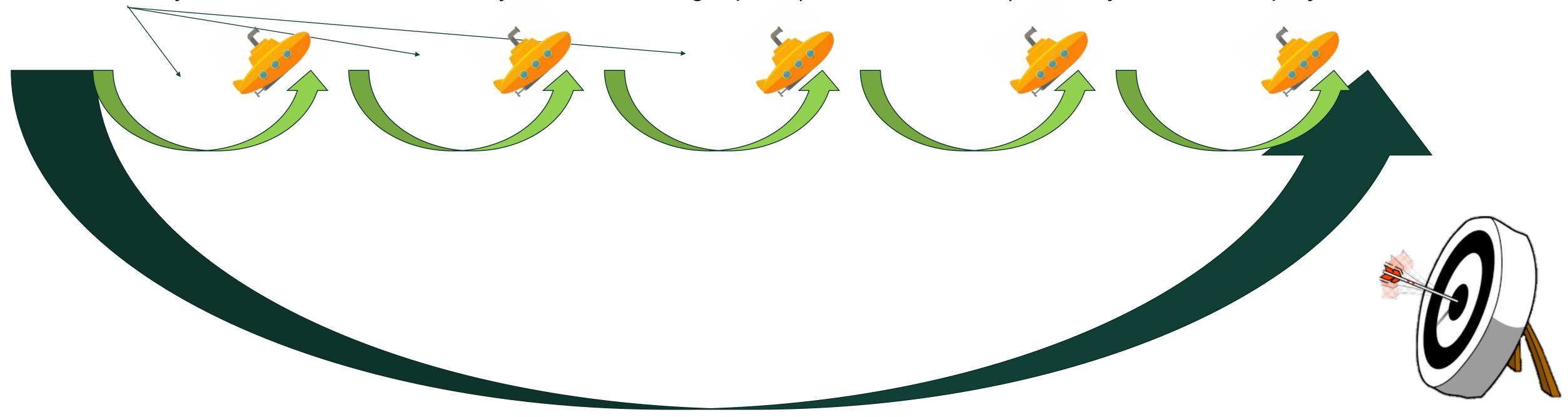


Traditional Project Delivery vs. SPRINT Delivery

An Agile Sprint Delivery starts after getting direction but with each sprint they deliver some element of the project, checking in with the customer to course correct, as necessary.

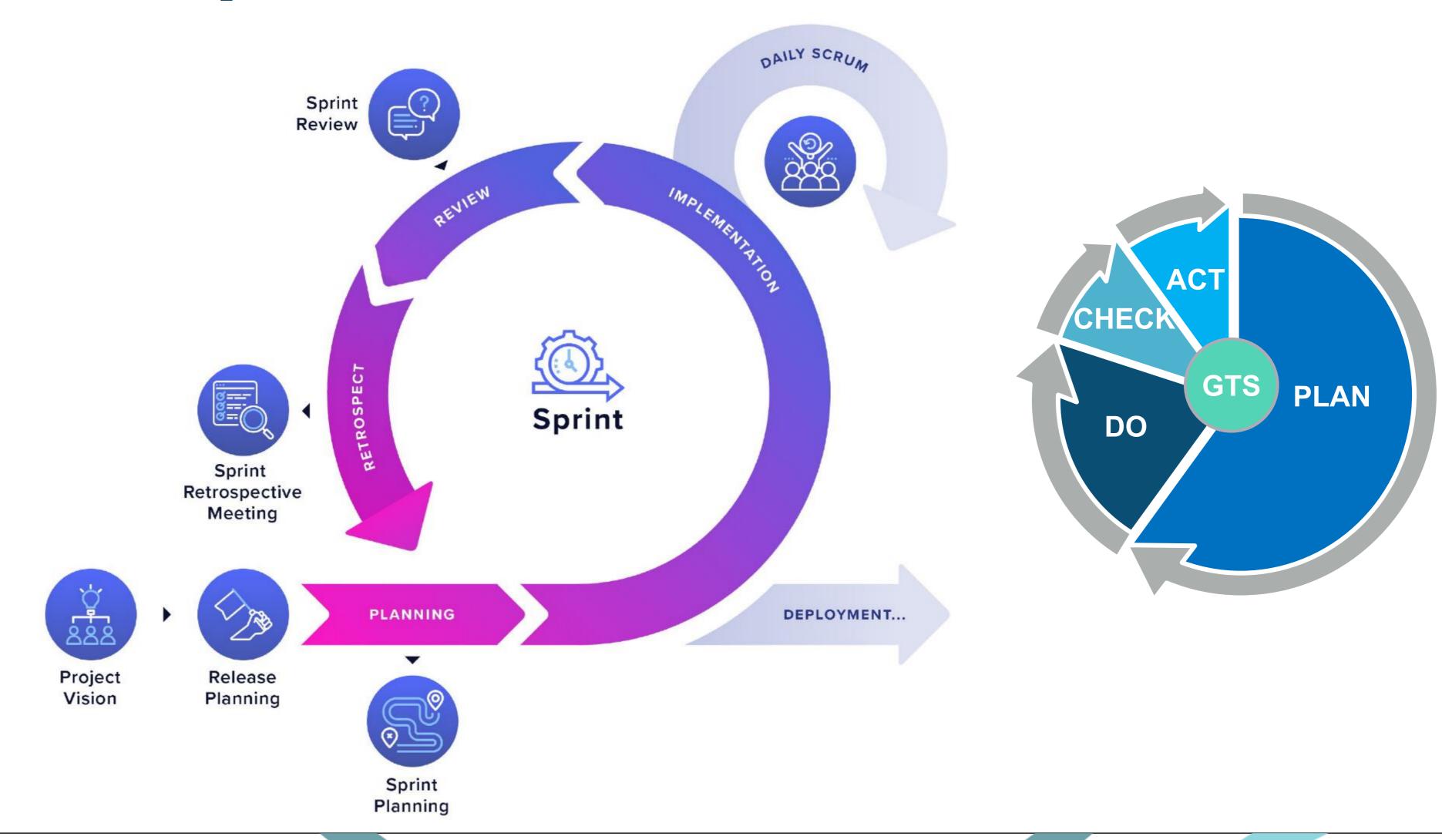
Short Sprints:

Allow you to check in, make sure you are on the right path (course correction) before you finish the project.



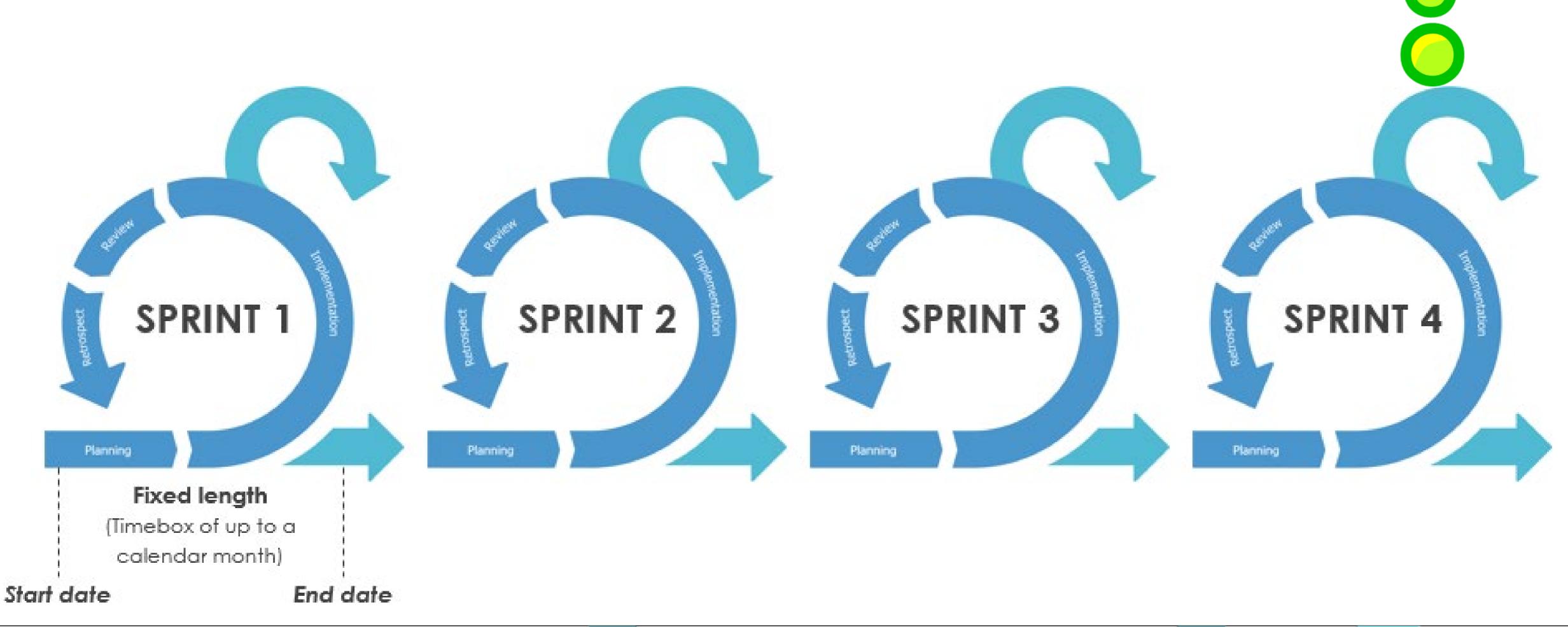


The SPRINT Cycle





SPRINTS: Project Management by Continuous Delivery of Value





TOOL: TIME BOX



Time Boxing





Advantages of the Time Box

Based on Parkinson's Law: "Work expands so as to fill the time available for its completion."

- It's a powerful time management technique
- It helps manage time by creating a <u>predefined</u> time period for an activity
- It forces you to set the time and hold to the deadline
- It encourages better prioritization
- Great tool for procrastinators & perfectionist "I can do it later" or "It's not good enough!"
- A set time forces action





TOOL: USER STORIES

User Stories

A User Story is a short and simple description of a feature (improvement) told from the perspective of the person (customer) who desires the product or service.

How do we do this?

Clarify who wants the feature

Describe what they want the feature to do

Understand *how* they will benefit from the feature



User Stories Can Improve Your Improvements

USER STORIES HELP US:

MAINTAIN OUR FOCUS

UNDERSTAND THE PURPOSE

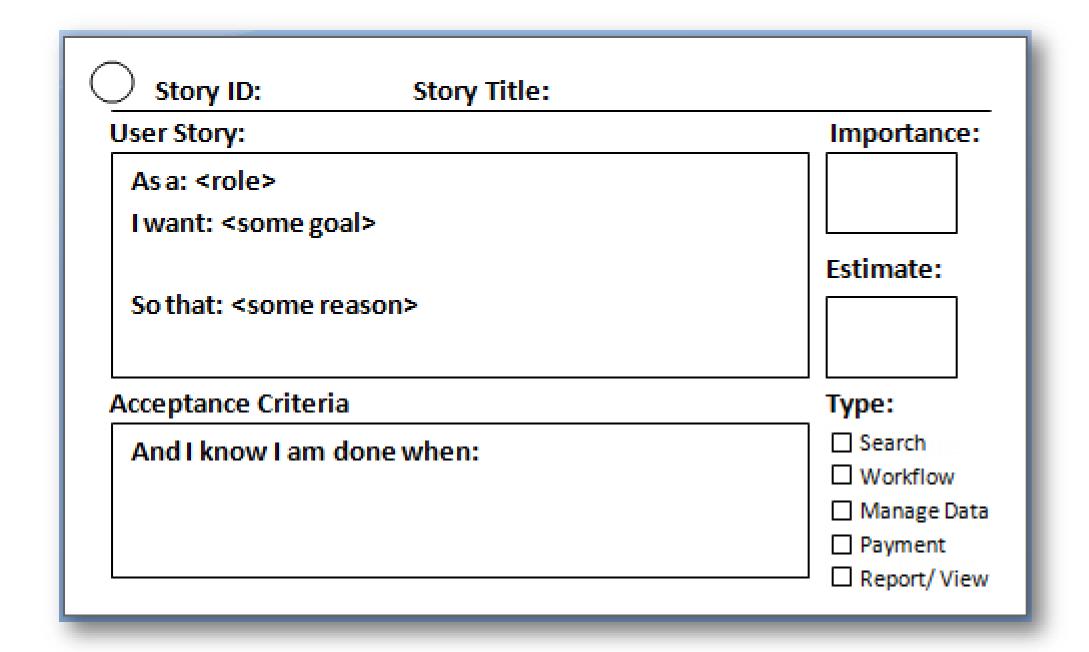
RELATE/EMPATHIZE WITH CUSTOMERS

INFLUENCE OUR ACTIONS

ENABLE PEOPLE TO CREATE CUSTOMER VALUE



How to Write a User Story – A Simple Formula

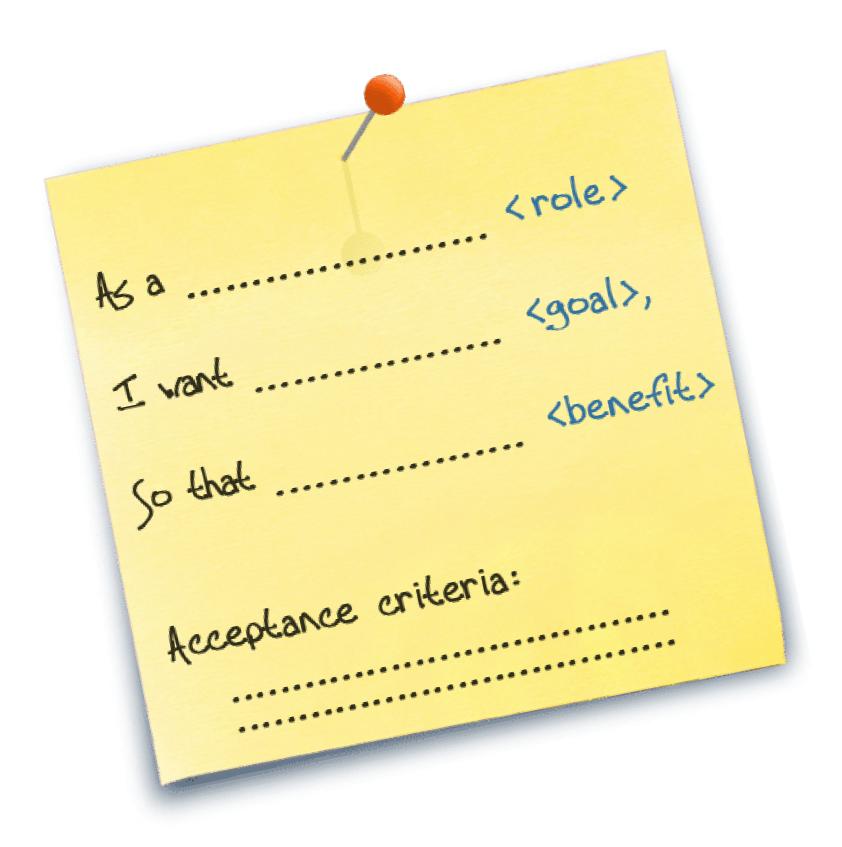


"As a <role>
I want <some goal>
So that <some benefit>

The Acceptance Criteria (Definition of Done) is how you know when you're done



INVEST* in the Characteristics of a Good Story



Independent The user story should be self-contained, in a way that there is no inherent dependency on another user story.

Negotiable User stories, up until they are part of an iteration can always be changed and rewritten.

Valuable A user story must deliver value to the end user.

Estimatable You must always be able to estimate the size of a user story.

Scalable User stories should not be so big as to become impossible to plan/task/prioritize with a certain level of certainty.

Testable The user story or its related description must provide the necessary information to make test development possible.

^{*} The INVEST framework was developed by Bill Wake



Example of Why User Stories Can Be Powerful

Situation: My father had a stroke a number of years ago, and doesn't move around as easily as he use to. He is coming over for a few day's visit.

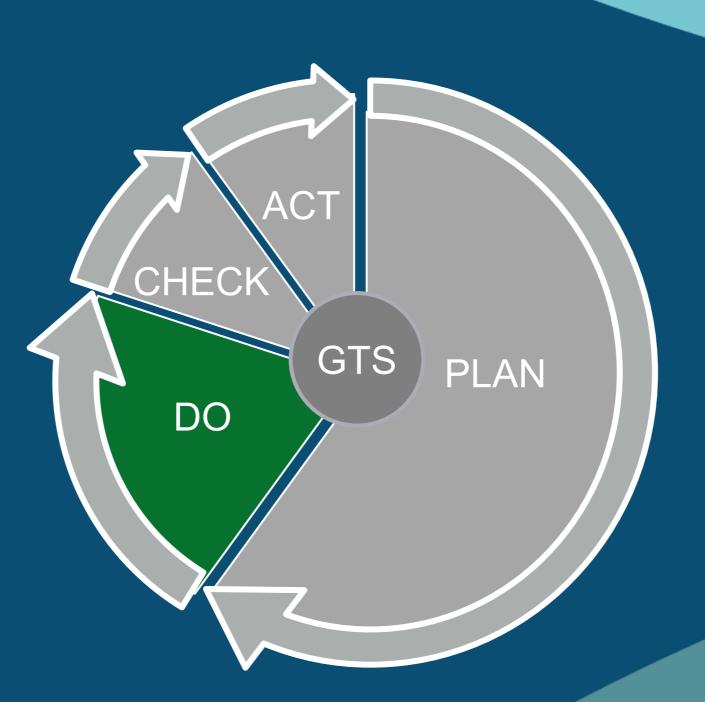
The kids tend to leave their things all over the house (especially the floor), and this could create a tripping hazard.













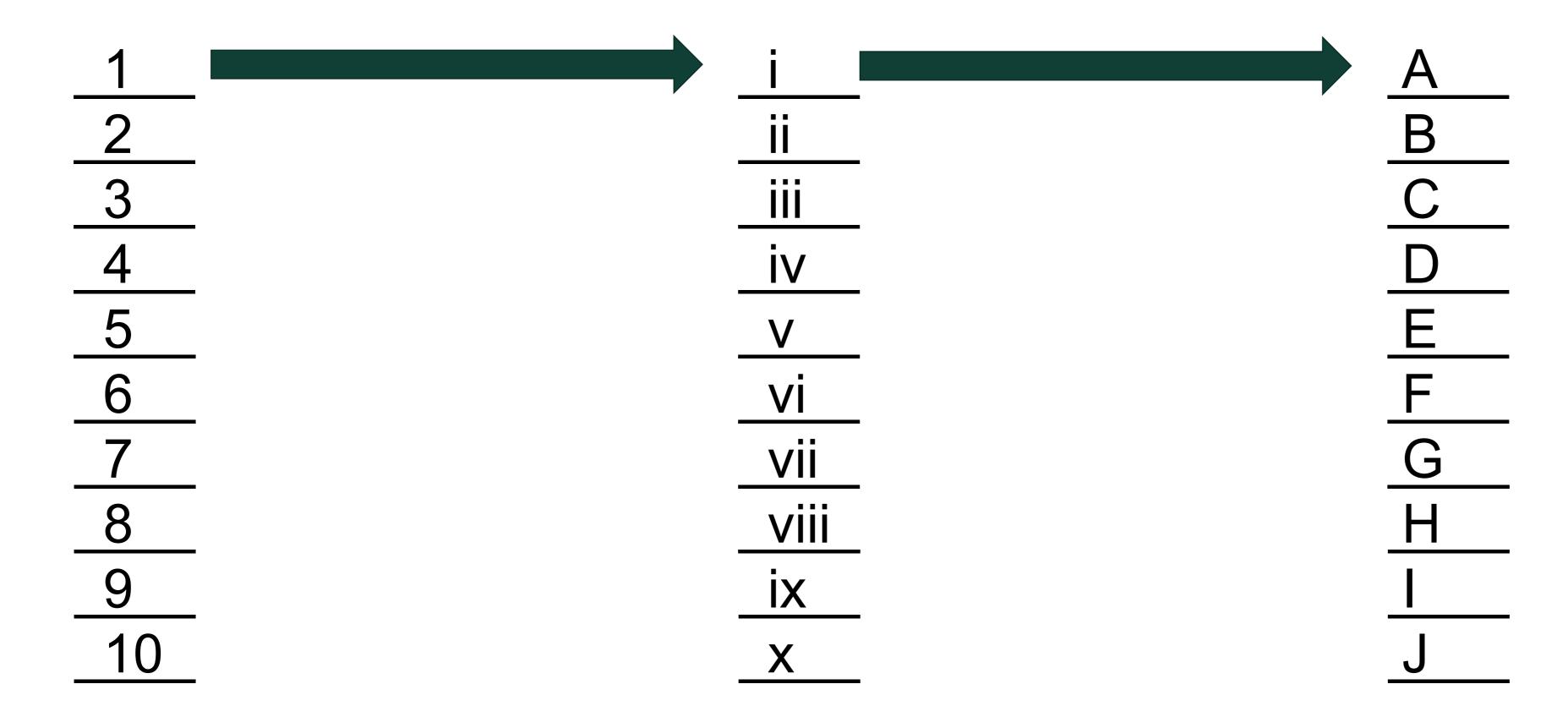
TOOL: WORK IN PROGRESS (WIP)



Multitasking Activity (1/2)

Get out a piece of paper and make three columns like this:

Numbers Roman Numerals Alphabet

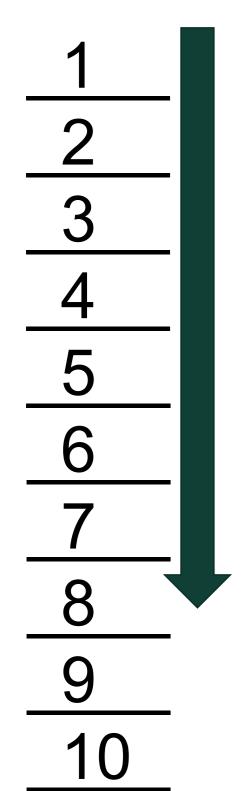




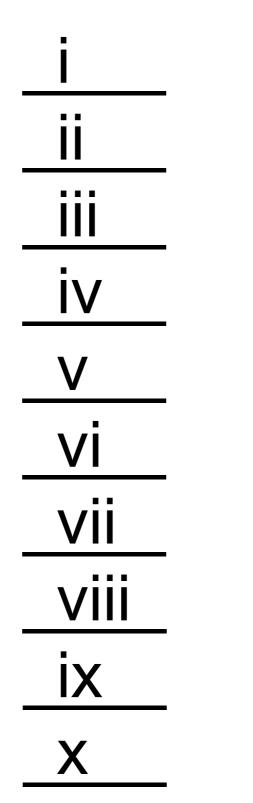
Multitasking Activity (2/2)

Get out a piece of paper and make three columns like this:

Numbers



Roman Numerals



Alphabet

Loss of Time to Context Switching

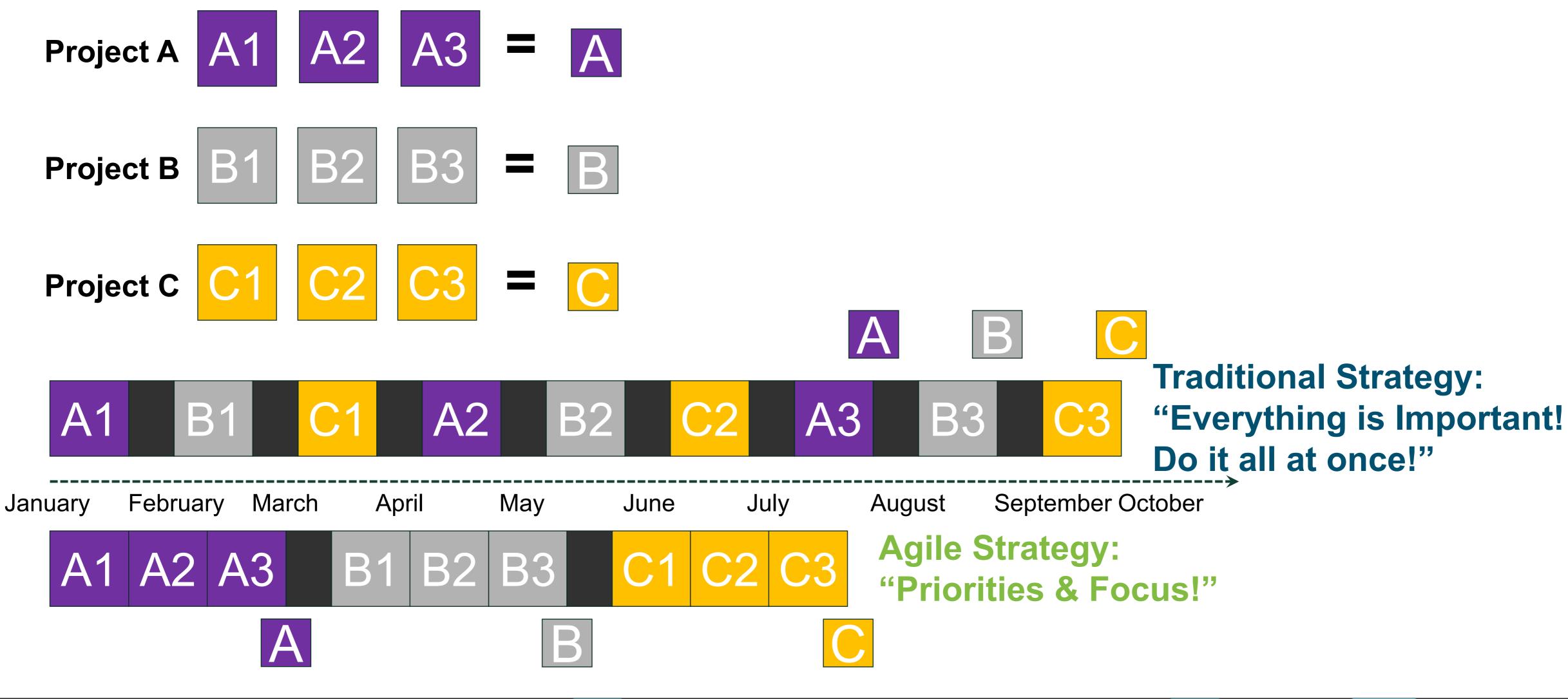
A chart developed by Gerald Weinberg to show this concept:

Number of Simultaneous Projects	Percent of Time Available per Project	Loss of Time to Context Switching
1	100%	0%
2	40%	20%
3	20%	40%
4	10%	60%
5	5%	75%

IT IS CRITICAL TO LIMIT THE WORK IN PROGRESS (WIP)



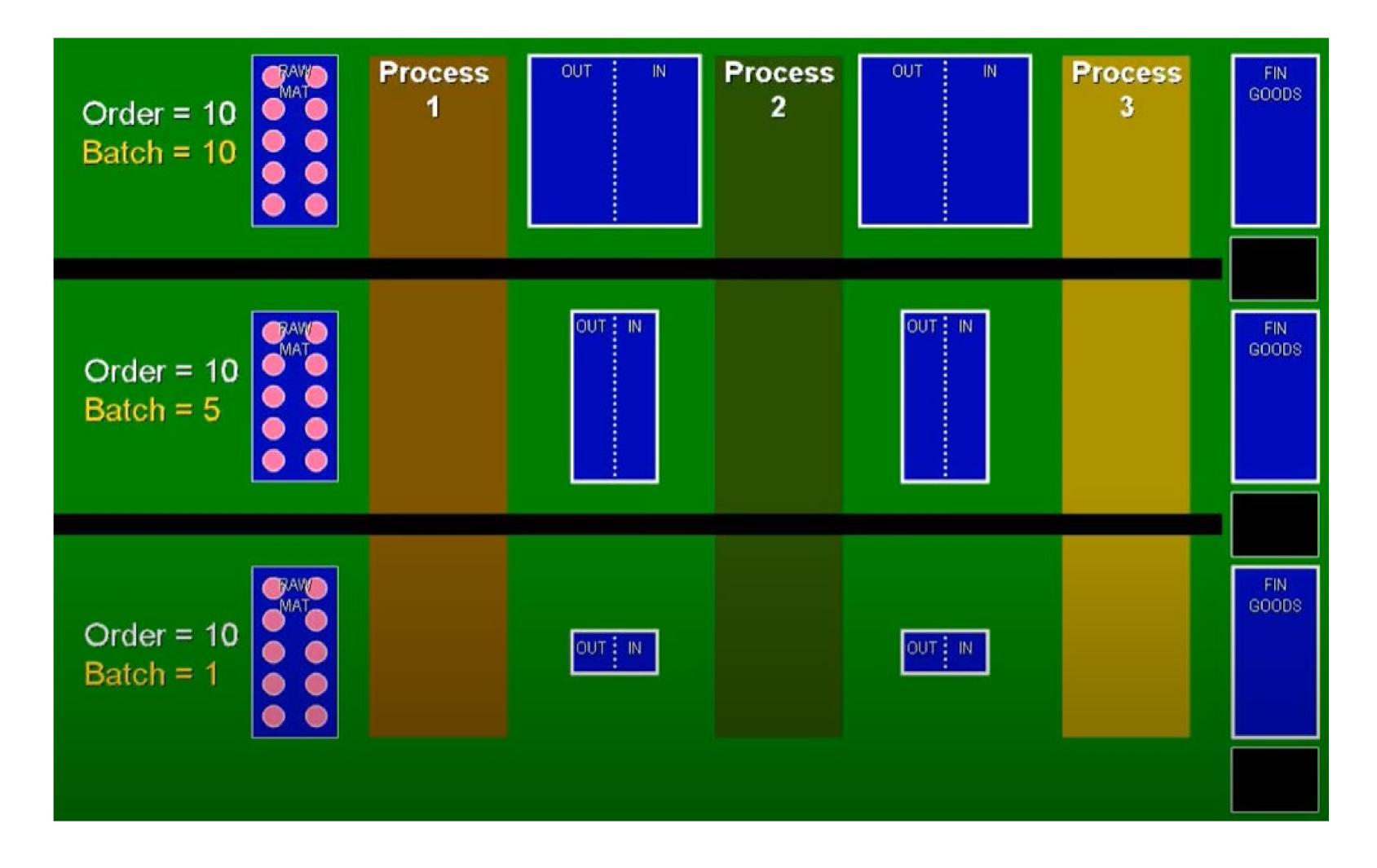
The Advantage of Limiting the Work in Progress





Flow vs. Batching

https://youtu.be/JoLHKSE8sfU



Work in Progress (WIP) – How Many Things?

More of a prerequisite than' a cure-all, WIP helps you to maintain flow. It creates the Goldilock's Zone – Not too much / Not too little – It's "Just Right"

Establish the WIP that is right for you. How many tasks will you focus on? 1, 2, 3, 4, 5?

Remember the loss of time due to Context Switching – Most people focus on 2-3 items.

The idea is to complete your tasks:



TOOL: KANBAN BOARDS

Kanban Boards – A Visual Management Tool

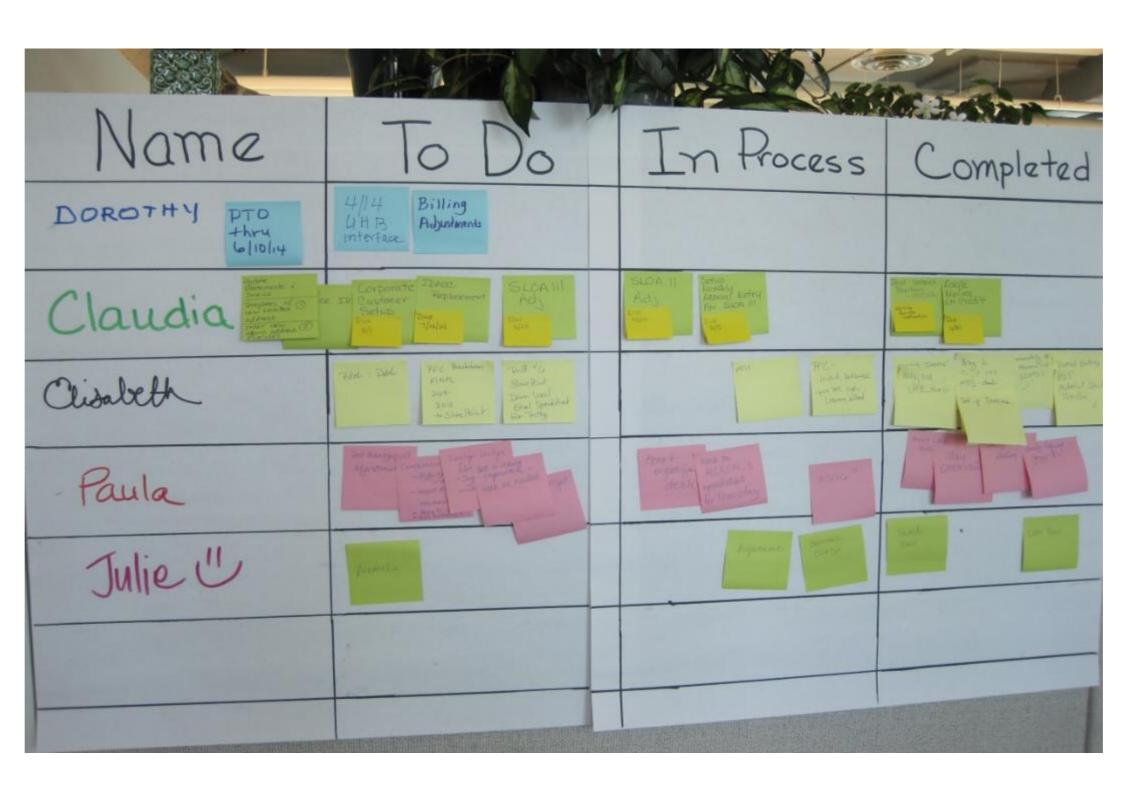
Kanban Boards are a simple, yet powerful visual management tool for performance.

At it Simplest, it is made up of three sections:

TO DO

DOING

DONE





Visual Management System's Key Elements

- > Highly visual and simple
- >Compare target to actual performance
- >Used for what's important or critical
- >Gaps are easily identified
- Can see Normal vs. Abnormal
- >Helps to identify opportunities for improvement



How Many Items Can You Name?

Tool L	ist
98 in. Professional Cutting Guide	3/16 in. x 6 in. Regular Screwdriver
☐ 72 in. Aluminum Straight Edge Ruler	☐ 1/4 x 4 in. Regular Screwdriver
☐ 16 in. Combination Square	☐ 1/4 in. x 6 in. Regular Screwdriver
☐ 5-3/B in. Circular Sew Blade	5/16 in. x 6 in. Regular Screwdriver
☐ 7in. Orbital Air Sander	☐ #0 x2-1/2 in. Phillips Head Screwdriver
	☐ #1 x 3 in. Philips Head Screwdriver
Cordies: Orcular Saw	☐ #2 x 4 in, Philips Head Screwdriver
☐ Variable Speed Orbital Jiz Saw	☐ #2 x 6 in. Philips Head Screwdriver
☐ 1/2 in. Heavy Duty Variable Speed Reversible Ha	3/16 in. nut driver
☐ Sawzall Reciprocatine Saw	☐ 1/4 in. nut driver
20-Volt MAX Lithium-Ion Cordless 1/2 in. Drill/Dr	5/15 in. nut driver
☐ 3/8 In. Variable Speed Drill	☐ 11/32 in, nut driver
20 15 in. SherpTooth Hand Sew	3/8 in. nut driver
26 in. Short-Cut Hand Saw	☐ 7/16 in, rius driver
Z 6' Two Man Crossout Saw	☐ 1/2 in, nut driver
S' Two Man Crossout Saw	☐ Single-Speed Breast Criti
22 4' Two Man Crosscut Saw	☐ Two-Speed Breest Oniii
☐ Canoe Paddles	☐ Variable Speed Breast Drill
☐ Adjustable Hacksaw	☐ Hand Brace
2 in. Pulley with Hock	☐ 18 in. Squere
3/8 in. x 100 ft. Diamond-Braid Poly Rope	☐ 15 In. Square
☐ Snorkeling Firs	☐ 12 in. Square
☐ Yaktrax * Walker	☐ Mitre Square
☐ lice Plick	
☐ Tennis Recquet	⊠ 9/16 x 1/2 in. Flere Nut Wrench
☐ 12 in, High-Tension Hack Saw	☐ 11/16 x 5/8 in. Flare Nut Wrench
☐ Duel-Purpose Hacksaw	9 x 11 mm Flere Nut Wrench
☐ Chainsaw — 24in.	20 x 12 mm Flare Nut Wrench
20 42 in. Bolt Cutter	20 13 x 14 mm Flare Nut Wrench
24 in. Level	☐ 8 in. Needle Nose Pliers
☐ 18 in, Level	☐ 8 in. High Leverage Diagonal Cutters with
□ Cordless Hedge Trimmer — 22in. Blade	8 in. Combination Cutting Pliers
Chainsaw — 42in.	S In. Adjustable Pilers
☐ 10 in. Circular Saw Blade	☐ Pipe Wrench
□ 20 In. Aggressive-Tooth Saw	10 in. 90 Degree Nose Pipe Wrench Pilers
⊠ Roughneck Pick Mettack	12 in Tongue and Groove Pliers
2 18 in. Hand Saw	2 12-3/4 in. Slip Joint Pige Wrench Pilers
☐ 15 in. Compact Sew	3 in. Fremium Face Clamp
☐ 15 in. Saw	∆ 4 in. Fremium Face Clamp
☐ Sanding Disc	S mm Combination Wirench
☐ 16 oz. Pint Capacity Oil Can	☐ 30 mm Combination Wrench
☐ 6 oz. Oil Can Pictol Type	11 mm Combination Wrench
□ 1/8 in. x 2-1/2 in. Regular Screwdriver	☐ 12 mm Combination Wrench
3/16 in. x 4 in. Regular Screwdriver	13 mm Combination Wrench

Tool List		
☐ 14 mm Combination Wrench	☐ Land Rover Defender	
☐ 15 mm Combination Wrench	☐ Ball Peen Hammer	
16 mm Combination Wrench	24 in. Heavy-Duty Bolt Cu	
☐ Metal Gas Canister 5 Gallion	S lbs. Double Bit Ave	
☐ 18 in Grescent Wrench	⊠ 8 lb. Splitting Maul	
☐ 14 in. Grescent Wrench	2 4.5 lb. Single Bit Axe	
☐ 18 in. Crescent Wrench	3.51b. Single Bit Axe	
☐ 24 in. Crescent Wrench	☐ 1-1/4 lb. Camp Ave	
☐ 10 in. Heavy Outy Pipe Wrench	☐ 14 in, Low Angle Jack Plan	
14 in. Heavy Duty Pipe Wrench	22 in, Bailey Bench Plane	
☐ 18 In. Heavy Duty Fipe Wrench	3-3/4 in, Balley Bench Pla	
24 in. Heavy Duty Pipe Wrench	□ 6-1/2 in. Block Plane	
☐ Multi-Purpose Respirator	☐ 12 in, C-Clamp	
□ Folding Earmoff	⊠ 14 in, C-Clamp	
□ Pincers	15 in. C-Clamp	
□ Large Pincers	☐ 4 in. Chipping Hammer	
☐ Breast Drill	☐ 6 in. Chipping Hammer	
☐ Metal Gas Canister 2.5 Gallon	☐ 4 in, C-Clamp	
Invest Gas Canister 2.5 Gallon Breast Drill	□ 6 in. C-Clamp	
☐ 10 in, Wood Rasp	☐ 8 in, C-Clamp	
☐ 10 in. Tepered Round File	☐ 1/4 in. Combination Wres	
20 in. Round File	S/16 in. Combination Wn	
20 30 in. Mill File	☐ 3/8 in. Combination Wre	
⊠ 50 in. Triangular Saw File	☐ 7/15 in. Combination Wis	
☐ 10 in. Half Round Wood Raso	☐ 1/2 in. Combination Wren	
	☐ 9/16 in. Combination Wis	
⊠ Wooden Shovel		
□ Digging Shovel	☐ 5/8 in. Combination Wres	
☑ 28 in. D-Handle Garden Spede	☐ 11/16 in. Combination W	
Spading Fork	3/4 in. Combination Wren	
⊞ Round Lewn Edger □ Kerosene Lentern	☐ 7/8 in. Combination Wres	
24 in. Wrecking Bar		
□ 1.5 lb. GroundStrike Mettock		
22 oz. Smooth-Pace Bricklayer's Hammer		
☐ Milled-Face Hammer		
☐ Mailet		
S oz. Sure Strike Tack Hammer		
☐ 16 lb. Sledge Hammer		
2 12 or, Double-Face Soft Hammer		
3 4 b. Engineer Hammer		
30 oc. Ash Handle Ripping Hammer		
22 oz. Steel Checkered Face Hammer		
Machinist's Hammer Machinist's H		
Wood Mallet		

3 Second Rule



Tool List

98 in. Professional Cutting Guide ☐ 3/16 in. x 6 in. Regular Screwdriver ☐ 1/4 x 4 in. Regular Screwdriver 72 in. Aluminum Straight Edge Ruler ☐ 16 in. Combination Square ☐ 1/4 in. x 6 in. Regular Screwdriver ☐ 5-3/8 in. Circular Saw Blade □ 5/16 in. x 6 in. Regular Screwdriver 7in. Orbital Air Sander ☐ #0 x2-1/2 in. Philips Head Screwdriver #1 x 3 in. Philips Head Screwdriver ☐ #2 x 4 in. Philips Head Screwdriver □ Cordless Circular Saw □ Variable Speed Orbital Jig Saw 1/2 in. Heavy Duty Variable Speed Reversible Ha ☐ 3/16 in. nut driver ☐ 1/4 in. nut driver ☐ Sawzall Reciprocating Saw 20-Volt MAX Lithium-Ion Cordless 1/2 in. Drill/Dr □ 5/16 in. nut driver 3/8 in. Variable Speed Drill ☐ 11/32 in. nut driver 15 in. SharpTooth Hand Saw ☐ 3/8 in. nut driver 26 in. Short-Cut Hand Saw ☐ 7/16 in. nut driver ☐ 1/2 in. nut driver ⊠ 6' Two Man Crosscut Saw Single-Speed Breast Drill ☐ 5' Two Man Crosscut Saw □ 4' Two Man Crosscut Saw ☐ Two-Speed Breast Drill Canoe Paddles □ Variable Speed Breast Drill

How Many Items Can You Name?



Let's Do It Again: 3 Seconds







How Many Items Can You Name This Time?



Kanban Boards Should be Simple

T	O D		DOING	DONE
Task #1	Task #2	Task #3		
Task #4	Task #5	Task #6		
Task #7	Task #8	Task #9		
Task #10	Task #11	Task #12		

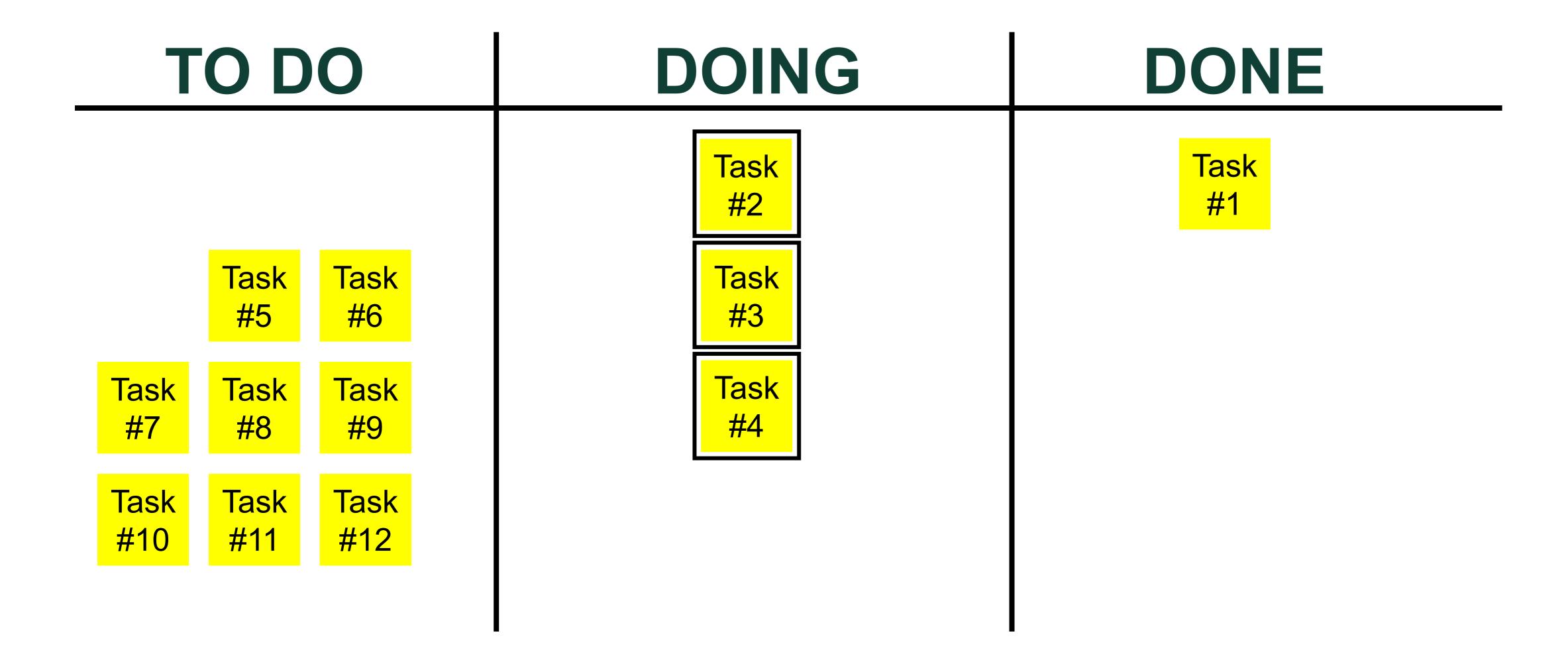


Kanban Boards Should be Simple

TO DO	DOING	DONE
	Task #1	
Task #5 Task #6	Task #2	
Task #7 #8 Task #9	Task #3	
Task #10 #11 #12		

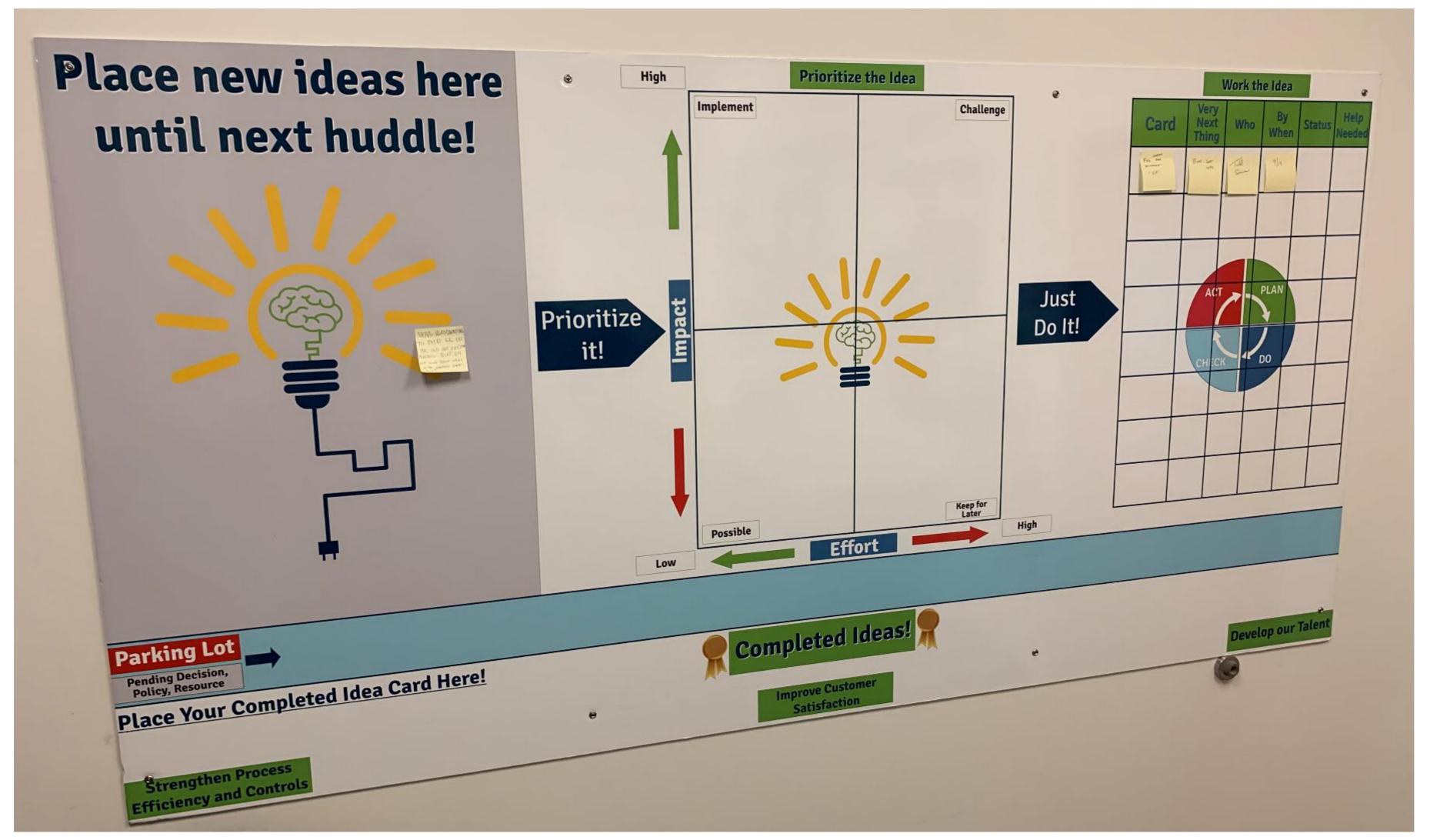


Kanban Boards Should be Simple





Physical Idea Generation Boards a Type of Kanban

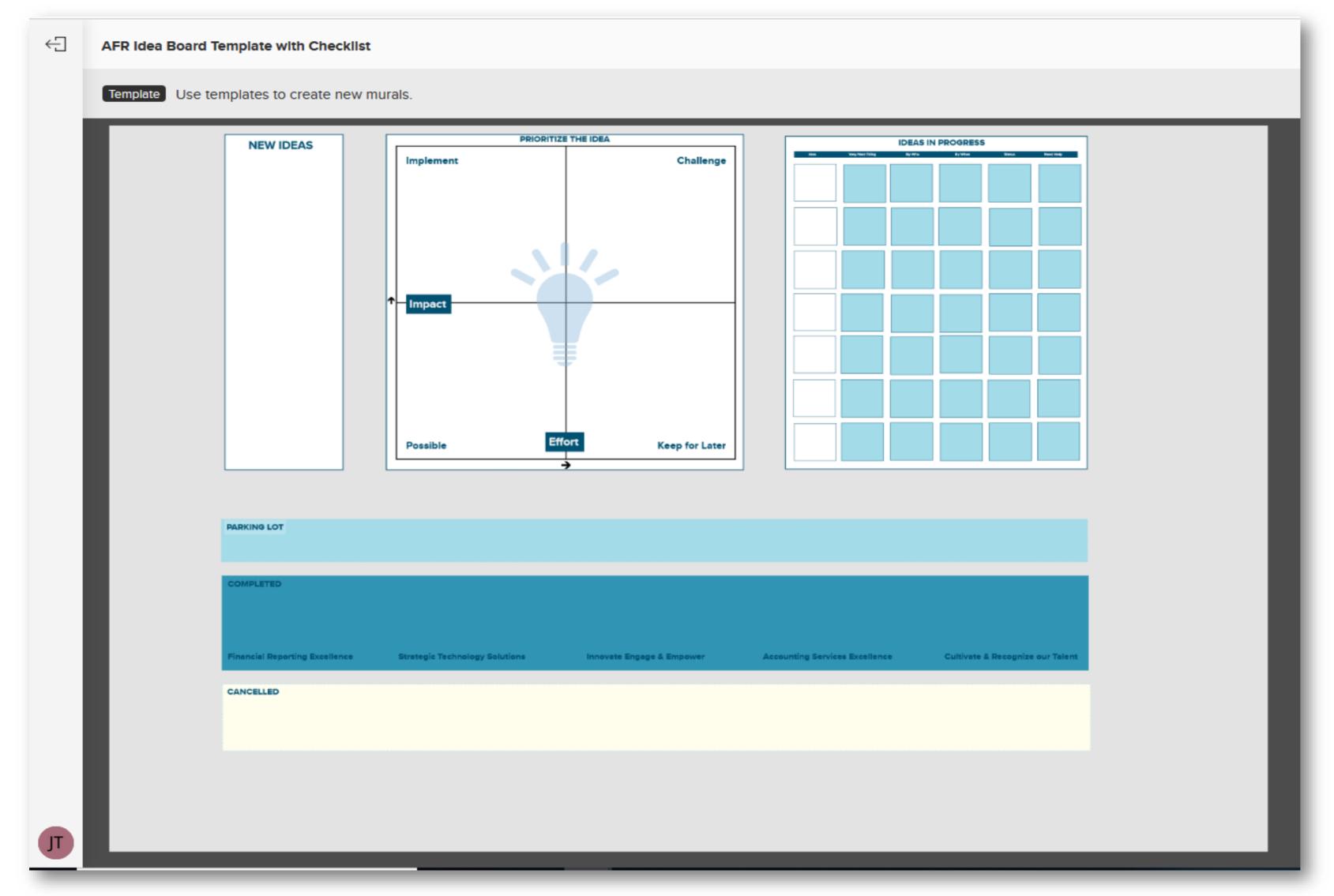






Virtual Idea Generation Boards on Market Programme Progr

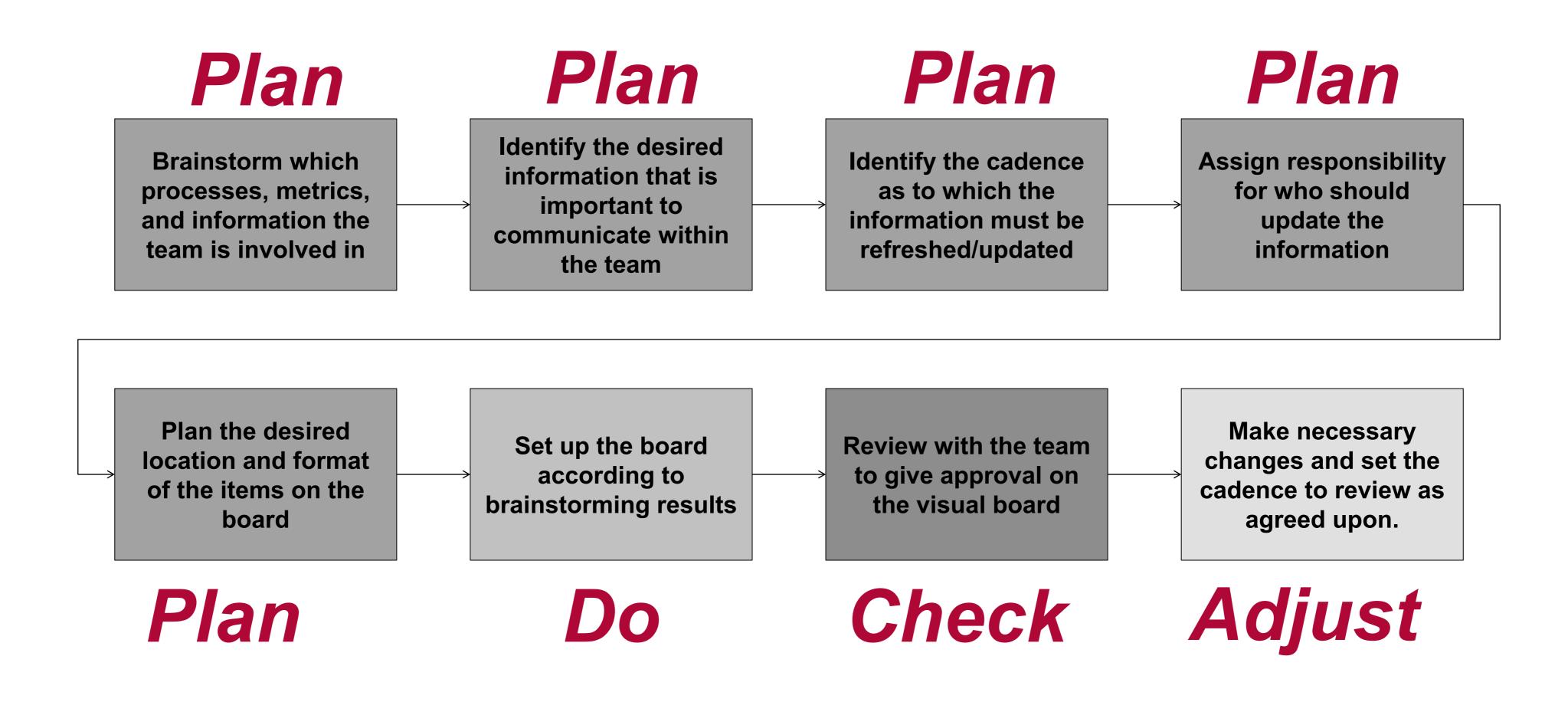








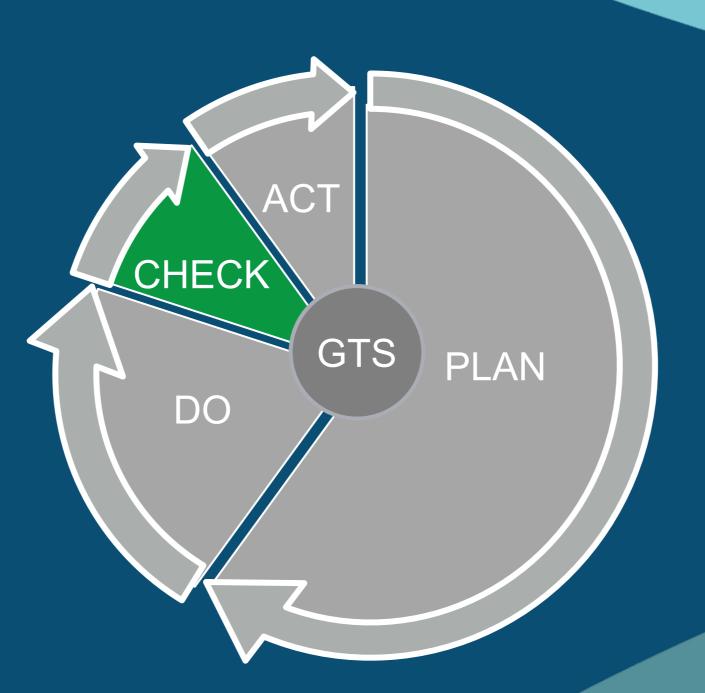
How to Create a Team Board/Kanban Board







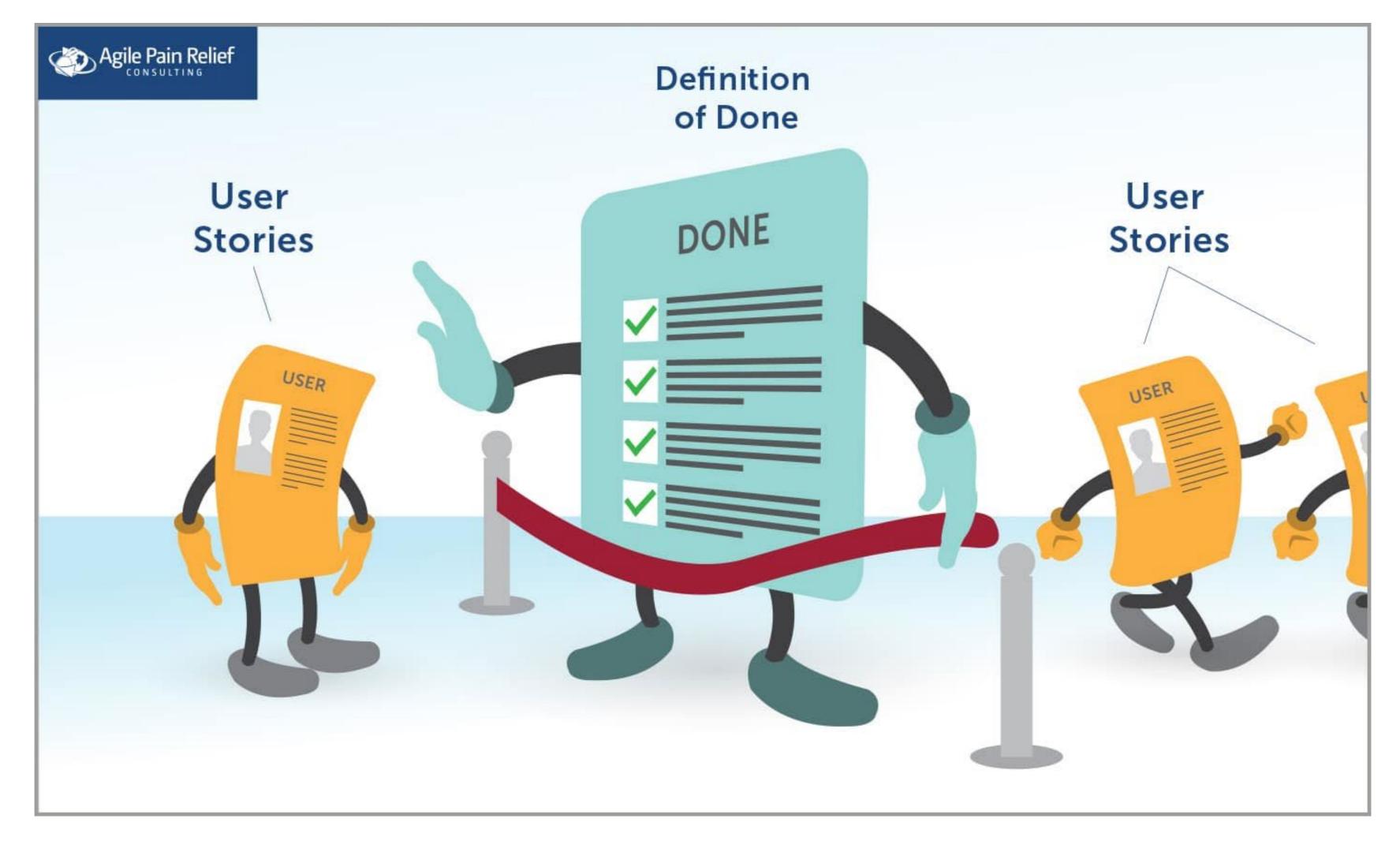
CHECK





TOOL: DEFINITION OF DONE

Definition of Done is a Quality Check





Definition of Done (DoD) – Setting the Standard / Goal

While the DoD is created in the Plan phase, it is used in the Do & Check phase.

- This tool is used to define the standard for improvement deliverables.
- It creates transparency
- There is clarity around the expected results
- It helps to limit scope creep (stay focused on the target)
- It creates the greatest buy-in when the team working with the customer defines it



The Power of Defining the Definition of Done

When I asked the kids to "Do the dishes," it never got done they way I wanted.





The Power of Defining the Definition of Done

The kids were frustrated by the changing definition of what "Doing the dishes" meant.





The Power of Defining the Definition of Done

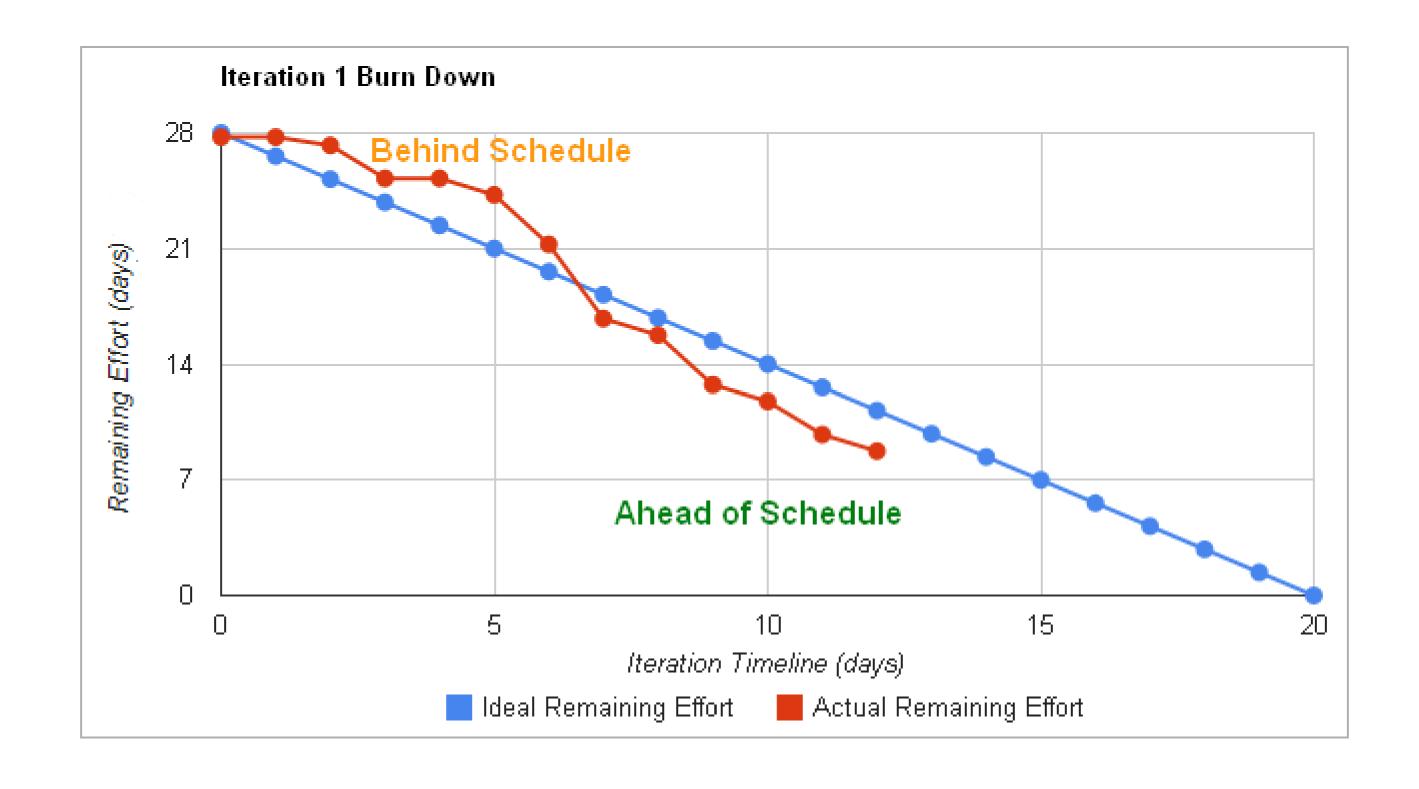
By participating in defining the Definition of Done, they have an ownership in the work.



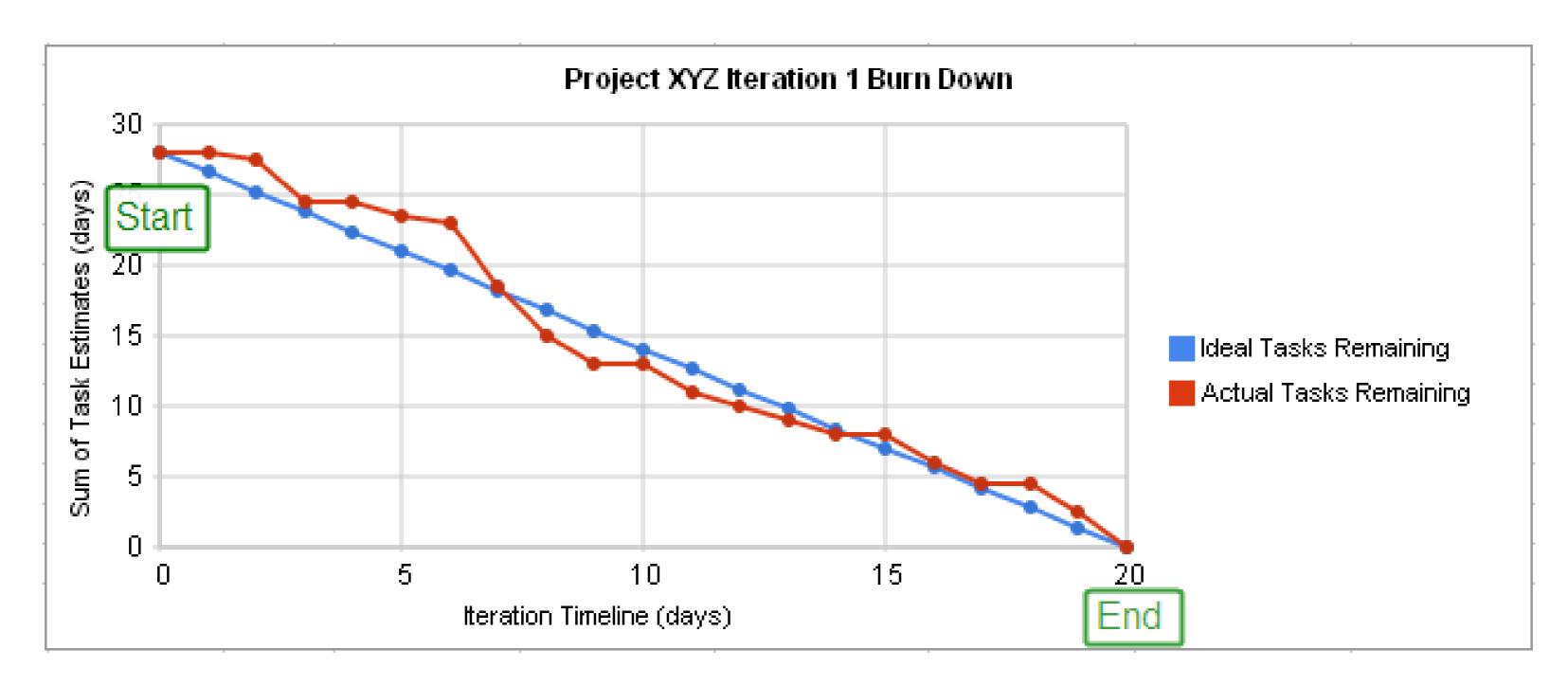


TOOL: BURN DOWN CHARTS

Burn Down Charts



Burn Down Charts



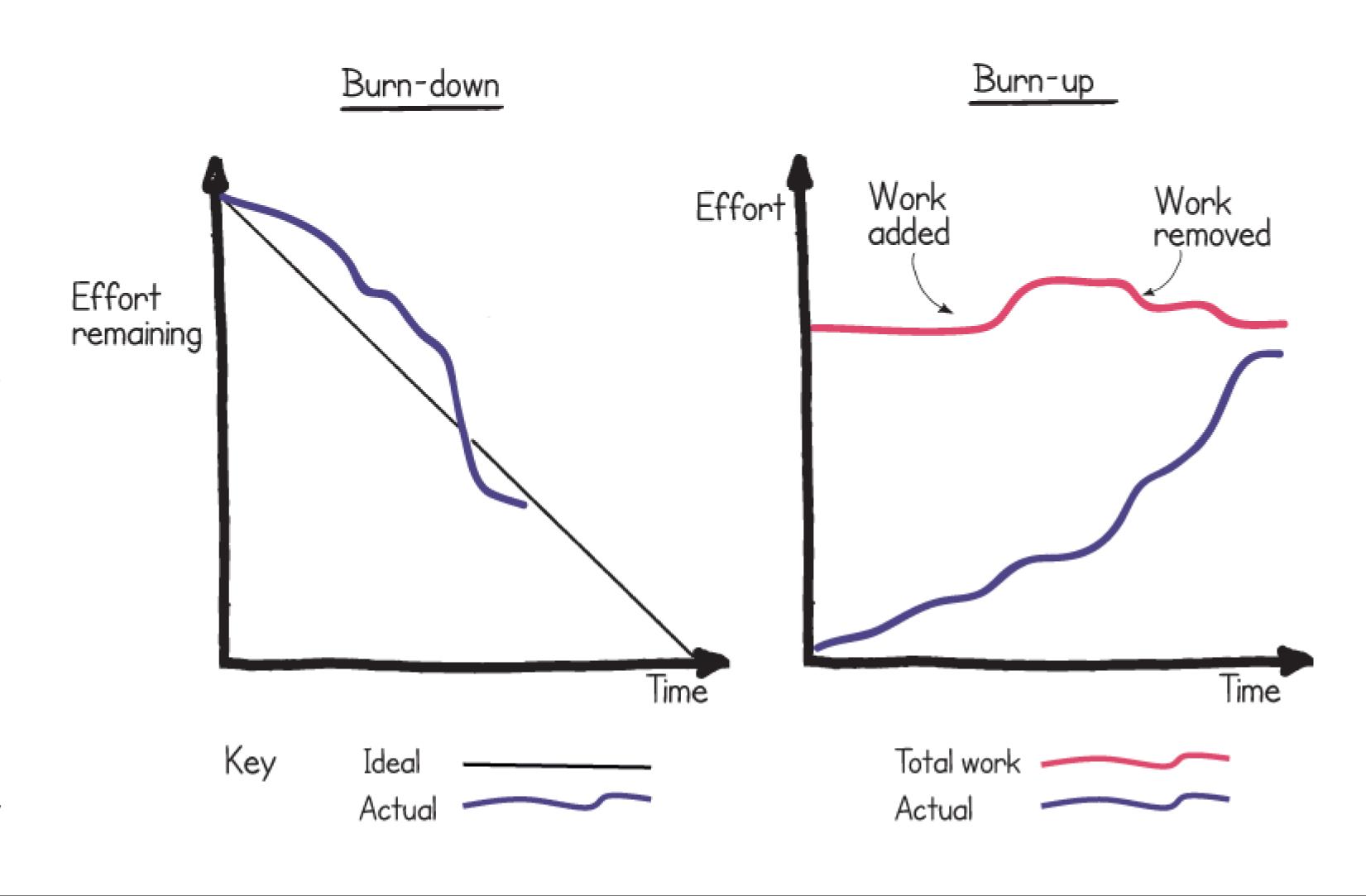
I managed a project where we only had three weeks with the contractor. By clearly defining the work and creating a burn down chart we tracked our progress daily and quickly adjusted if any problems came up. By having a visual idea about how much work we had done and what we had left to do, we were able to ensure we completed the project on time and under budget.



Burn Down or Burn Up Charts

How to Build

- Calculate the effort for the Sprint.
 This could be time or tasks, however the team wants to define effort for the Sprint.
 - Place that on the Y-Axis
- Take the number of days left before the project is due.
 - Place that on the X-Axis
- Every day, mark down (or up) the number of hours or tasks you completed for the Sprint and connect the line to the previous day's efforts.
- There is a little bit more flexibility with a burn up chart to add or remove work





TOOL: EDI LENS

(Equity, Diversity, and Inclusion)

Equity, Diversity, and Inclusion is Respect for People



When my mother-in-law first arrived in the US, she went to see a doctor who basically ignored her, perhaps assuming that she was uneducated. He looked at his chart, spoke to my wife who was interpreting, and spoke loudly to my mother-in-law (like that would help her understand English better), but rarely even looked in her direction.



Equity, Diversity, and Inclusion is Respect for People



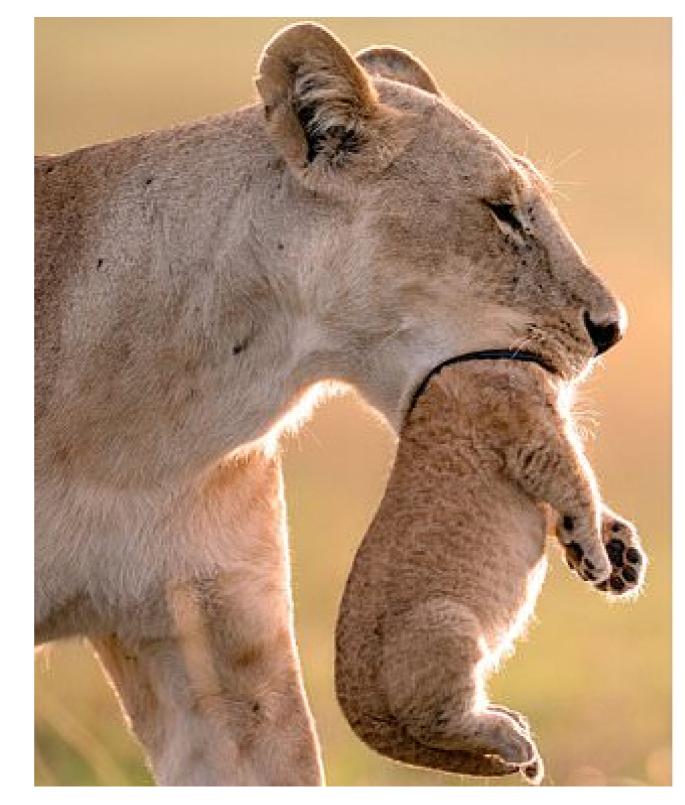
When my wife interpreted some technical medical explanation from her mom, the doctor asked, "How does she know that?" "She's a doctor" my wife explained. Instantly the way the doctor was treating my mother-in-law changed, because his perceptions changed. He sat up straight, looked her in the eye and spoke directly to her.



Perspective Plays an Important Role in Solutions

Just because you develop a solution, doesn't mean that it is the "Right" solution. Because we *Value the Individual*, we need to make sure that we are inclusive in both the development of solutions and in understanding possible unintended consequences of a solution.

- What we think we see is not always a complete picture.
- Always assume the best intention.
- How do we make sure we are seeing a complete picture?

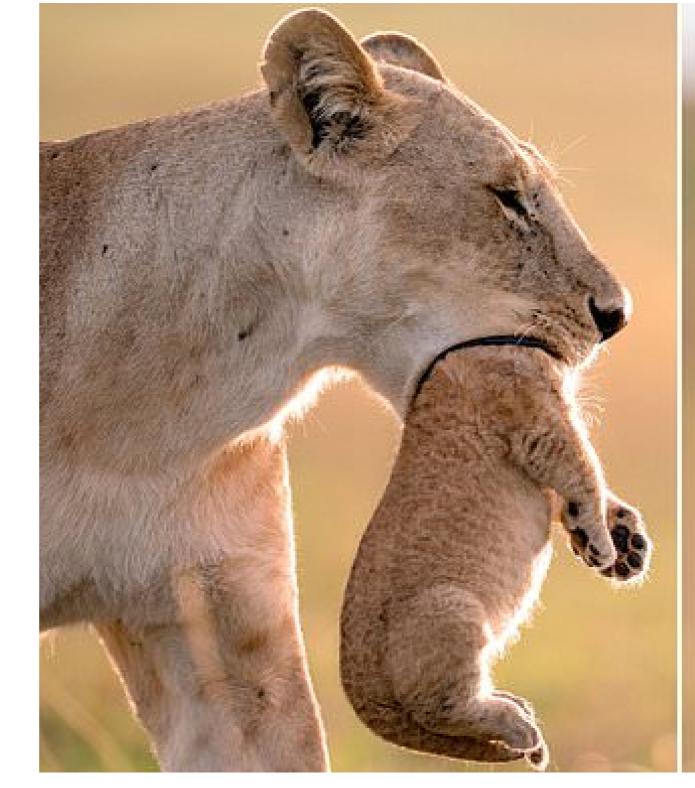




Perspective Plays an Important Role in Solutions

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- What we think we see is not always a complete picture.
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- How do we make sure we are seeing a complete picture?







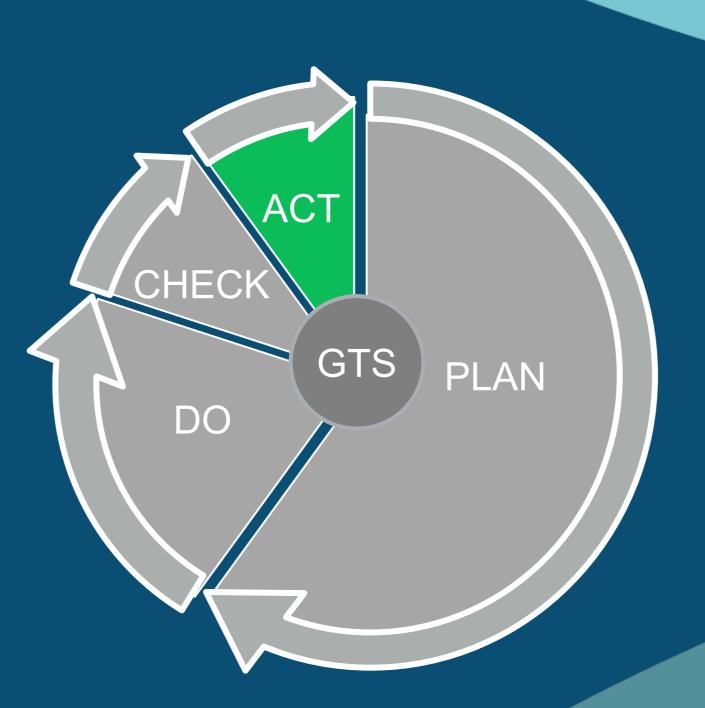
The Port of Seattle Applies an EDI Lens to Our CPI Work

Respect for People means everything. We want to make sure that we are not unintentionally excluding anyone (think power dynamics), both as stakeholders to develop solutions, as well as being sure that there are not any unintended consequences to any of our solutions that might leave someone out.

It Only Takes A Minute
To Ensure That Solutions
Are Fair And Equitable



ACT





TOOL: DAILY STANDUP

Why Hold Daily Stand Up Meetings?

- It improves the focus on customer service
- It is a tool to rapidly communicate information and implement changes
- It creates accountability between team members
- It builds trust, understanding, and strengthens the morale of the team
- It is a tool for improving performance
- It is a visual tool for communicating team targets and results
- It is a planning and scheduling tool
- It is a concise meeting ideally taking no more than 15 minutes



Daily Stand Ups Answer 3 Things:

What I did... "Yesterday I accomplished..."

What I'm doing... "Today I'm going to do..."

What I need help with... "I could use some help with..." or

"I have some bandwidth to help someone from 2-4pm today"

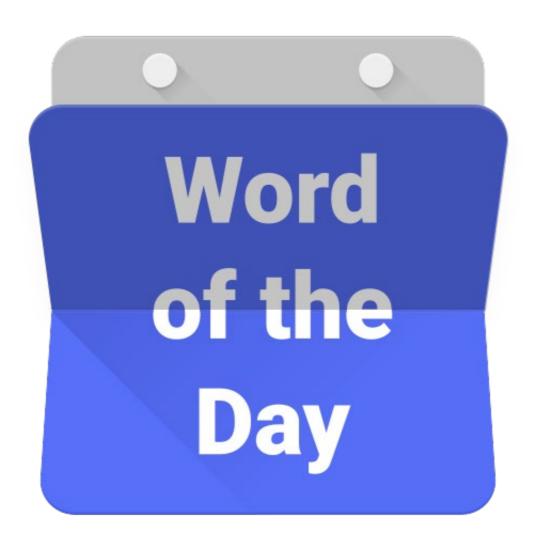


TOOL: WORD OF THE DAY

Word of the Day

This element of a team board can be used as an educational tool OR

It can be a tool to create respect & understanding among team members





Word of the Day – Example of What Not to Do



Busy



Stressed



Uber-Overwhelmed



Llanfairpwllgwyngyllgogerychwyrndrobwllllantysiliogogogoch



Taumtawhakatanghangakoauauotamateaturipukakapikimaungahoronukupokaiwhenuakitanatahu





"A Successful Team Board is One that is Consistently Used and People Care About Each Other."



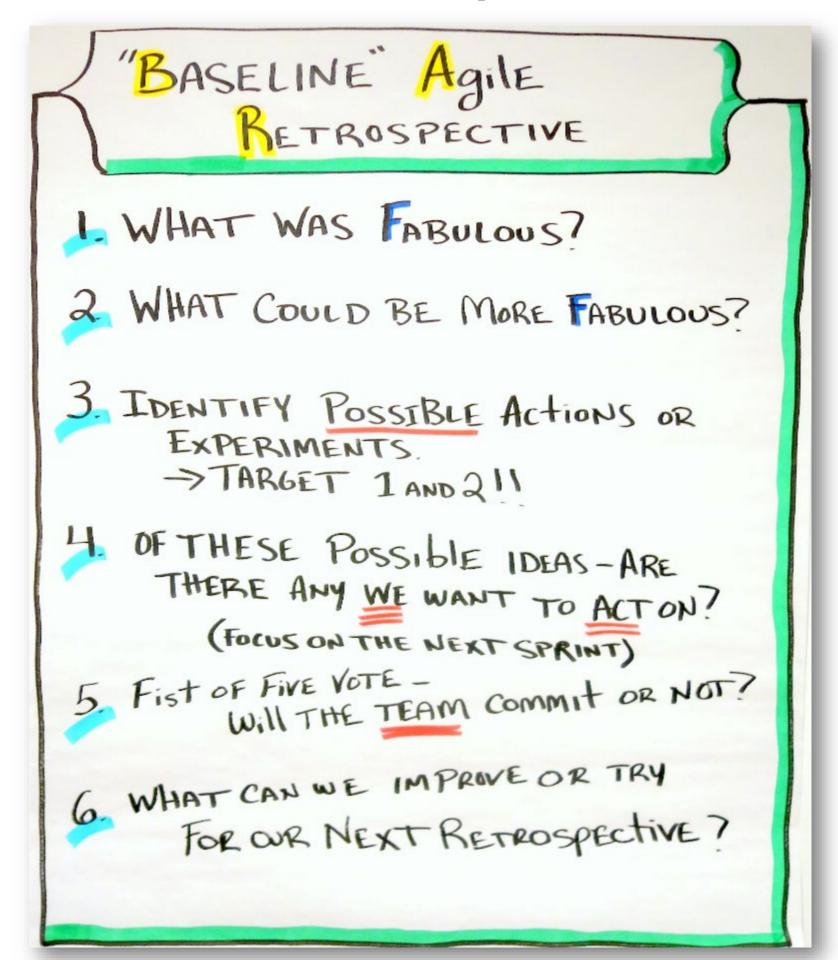
TOOL: RETROSPECTIVE

The Retrospective – Continuous Improvement

Takes place after a Sprint is over but before the next Sprint starts.

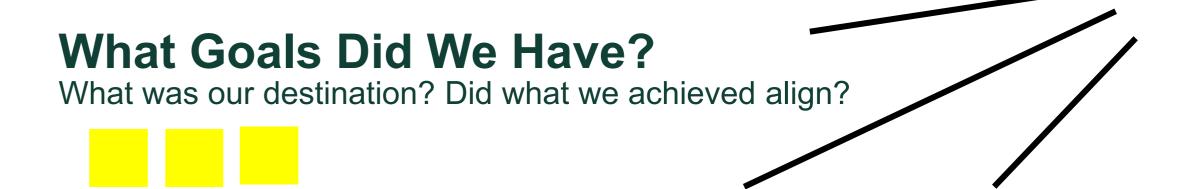
Take time (every time) to improve!

- As a team reflect on what went well,
- What didn't go so well,
- How you can do it better next time,
 (Collaborate on improvement ideas)
- What will you do different next time.





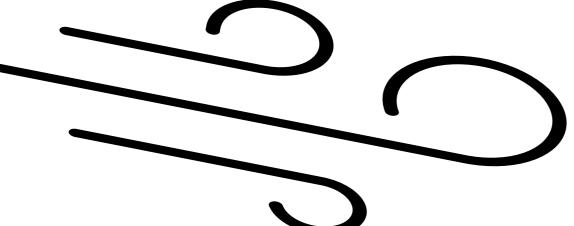
Sailboat Retrospective



What Accelerated Us?

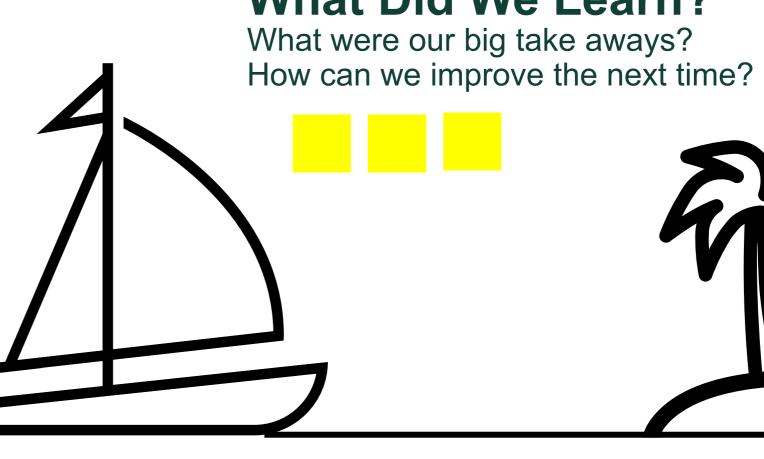
What helped us move forward? What did we do right?







Did we have the right team? Were we set for success?





What Barriers

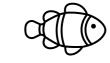
Did We Encounter?

What risks did we need to navigate around? What Impacts did we have?



What Drag Did We Overcome?

What slowed us down? Did we see this or was it hidden from view?

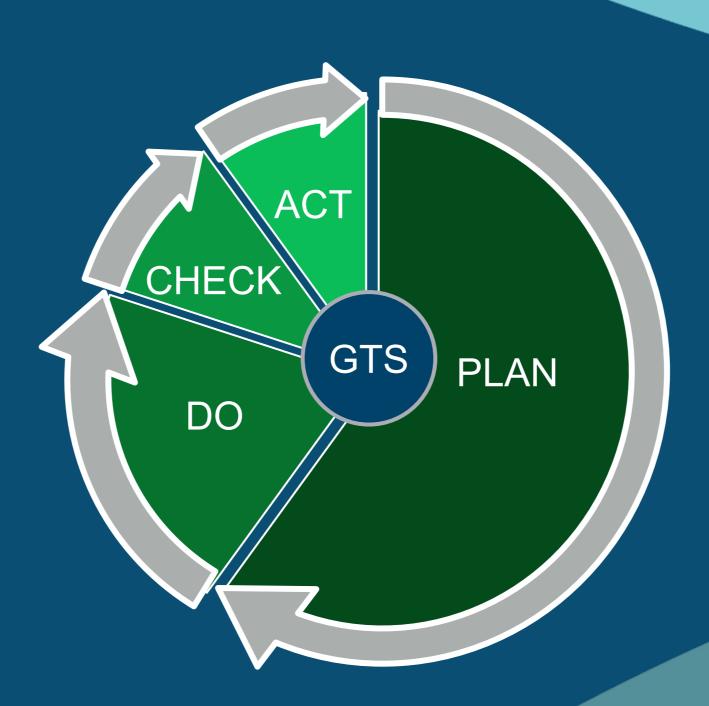








PDCA



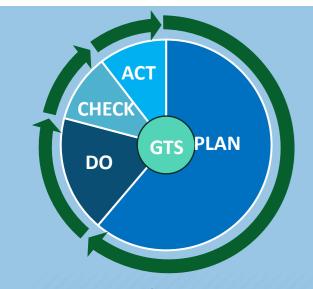


12 Agile Tools Used in Lean Improvements



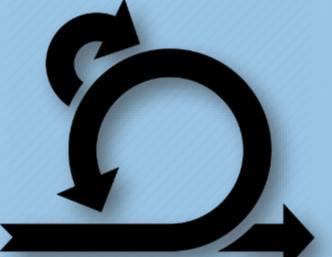
GRASP THE SITUATION

Voice of the Customer



PLAN

Collaboratively work together to identify problems and goals, understand the current state especially from the customer's perspective, formulate theories about root causes, develop solutions, define how to measure improvements, and plan improvements through CPI Workshop[s].



Sprints



Time Box



User Stories

Execute the plan, carry out activities, apply best practices, and manage improvement expectations with people & processes.

TO DO	DOING	DONE
	ш	

Work in Progress (WIP)



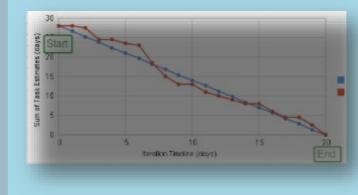
Kanban Boards

CHECK

Work with the improvement team to monitor and measure the improvement efforts, make sure that you check results through an EDI lens.



Definition of Done



Burn Down Charts



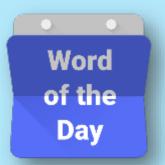
EDI Lens

ACT/ADJUST

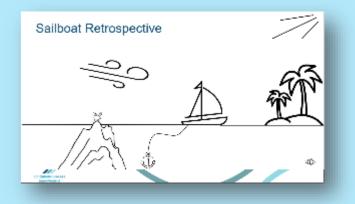
Standardize successful efforts through standard work and visual management, make adjustments when results don't meet expectations, celebrate successes, sustain efforts, and repeat PDCA cycle.



Daily Stand Ups



Word of the Day



Retrospectives



It's About the People







CONCLUSION

Agile & Lean:
It's About
Getting Results
Respect for People



CONCLUSION

Agile & Lean:
It's All About
Respect for People
Which Leads to Results





Thank You!



Contact:

Jared Thatcher
CPI Program Manager
Port of Seattle
thatcher.j@portseattle.org
206-519-9785