



Be the
Change

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Project Management Conference

24 - 26 September 2019

Te Papa, Wellington, New Zealand

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#NZPMC19



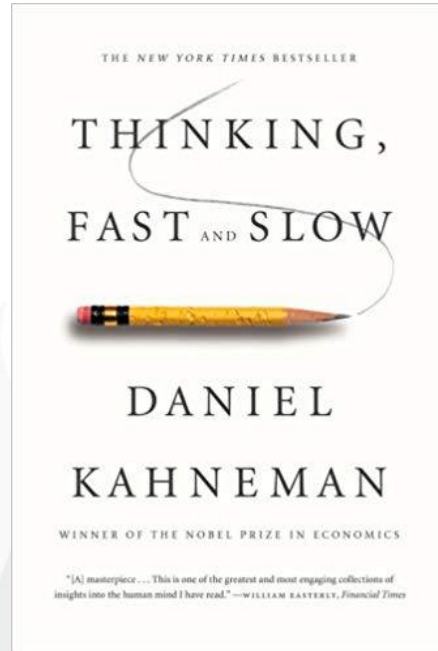
USING LEAN THINKING

TO FOCUS ON THE END TO END FLOW OF VALUE, INCREASE DELIVERY SPEED, AND DRIVE CONTINUOUS IMPROVEMENT.

A rough agenda

- A BIT ABOUT ME
- THE NATURE OF CARBON-BASED CHANGE
- MODELS OF ORGANISATION AND IMPACTS ON SPEED AND FLOW
- USING LEAN PRINCIPLES AND KANBAN PRACTICES TO IMPROVE DELIVERY

Making change is difficult



“SYSTEM 1” OPERATING

- CENTRED IN THE AMYGDALA (REPTILIAN BRAIN)
- WORKS ON PATTERN RECOGNITION & HABIT
- WORKS FAST, LEARNS SLOW
- LEARNS BY DOING, SEEING, TOUCHING

“SYSTEM 2” OPERATING

- CENTRED IN THE PRE-FRONTAL CORTEX
- HOME OF LOGIC AND REASONING
- WORKS SLOW, LEARNS FAST
- VERY ENERGY INTENSIVE

A quick 'system test'

VERY QUICKLY, WHAT'S THE ANSWER TO THIS QUESTION?

- A BAT AND A BALL COST \$1.10
- THE BAT COSTS ONE DOLLAR MORE THAN THE BALL
- HOW MUCH DOES THE BALL COST?

OVER 50% OF STUDENTS FROM HARVARD, MIT AND PRINCETON GET THIS WRONG

Daniel Kahneman – Thinking, Fast and Slow

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Please keep this in mind

YOUR **SYSTEM 1** BRAIN IS GOING TO
REACT STRONGLY TO LOTS OF THINGS I
SAY TODAY.

You Keep Using That Word LEAN

I Don't Think It Means What You Think It Means

Screenshot

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We're not talking about manufacturing



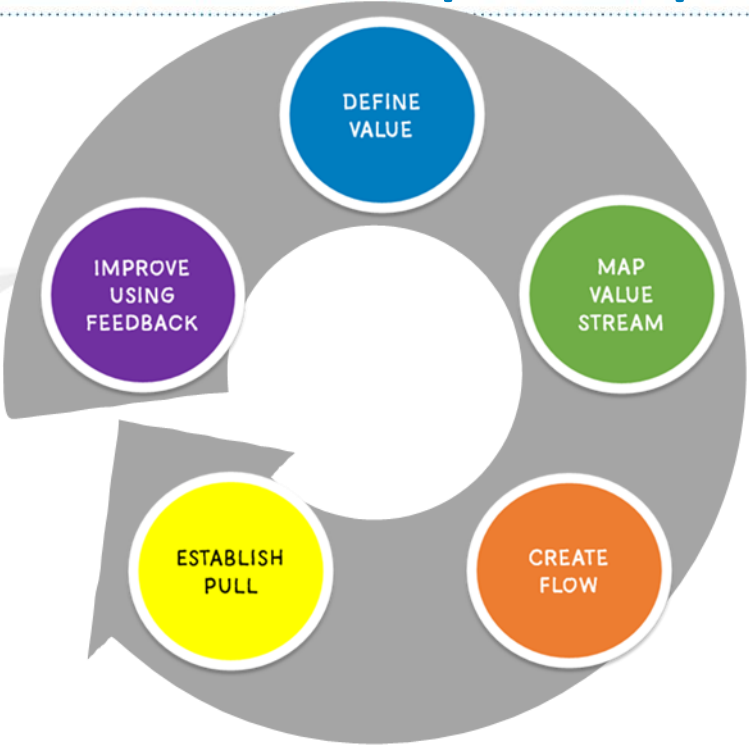
Unsplash – Lenny Kuhne

KNOWLEDGE WORK IS NOT
'STANDARD WORK'

OFTEN WE WANT VARIATION
BECAUSE WE ARE TRYING TO
INNOVATE

OTHER TIMES WE HAVE TO
ACCEPT VARIATION BECAUSE
OF HOW WE SET UP TEAMS
AND PROJECTS

But the general Lean principles apply



What are your customers willing to pay for?

HAVE A QUICK CHAT
AT YOUR TABLE AND
BE READY TO
SUMMARISE BACK FOR
THE GROUP

DEFINE
VALUE

How important has delivery speed become?

Unsplash.com – Sharon McCutcheon

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The typical orgⁿ model focuses on utilisation



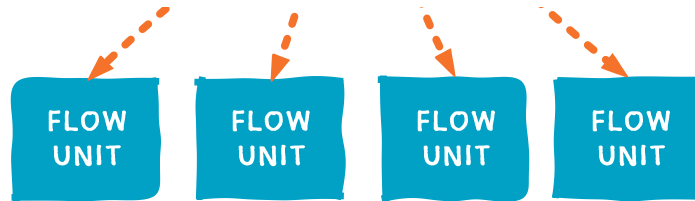
VINTAGE: 1930s

RESOURCE EFFICIENCY

(FOCUS ON A SINGLE RESOURCE)



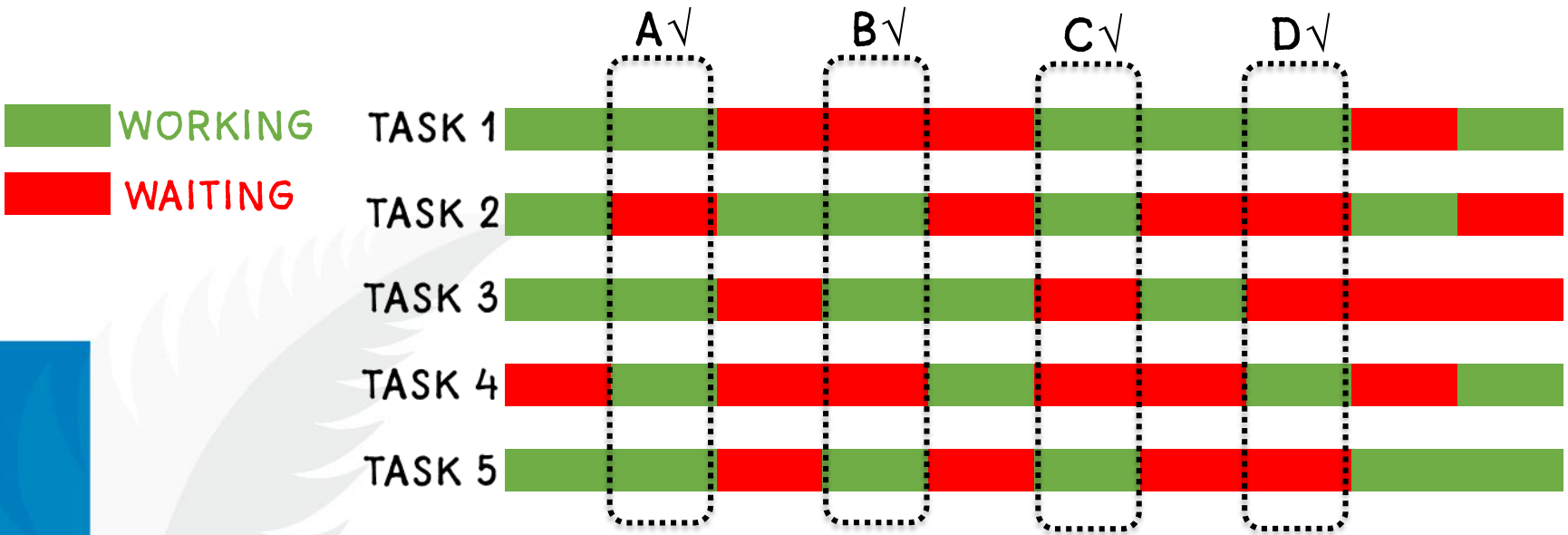
MAXIMISING VALUE-ADDING TIME



“MANAGE THE RESOURCE”

Niklas Modig & Par Ahlstrom “This is Lean. Resolving the Efficiency Paradox”

So we focus on looking busy



I'M BUSY, BUT THE CRITICAL ISSUE IS THAT EACH TASK TAKES MUCH LONGER BECAUSE OF ALL THE 'DEAD' TIME

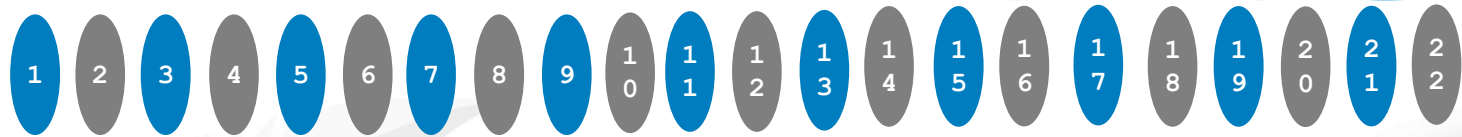
And it's actually obvious if we can get past 'System 1' programming

3 TASKS
5 DAYS
5 DAYS
5 DAYS



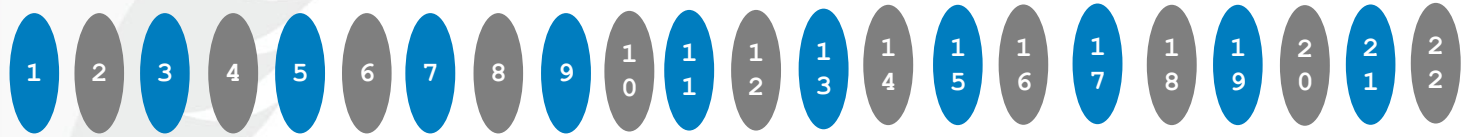
Your brain on multi-tasking

S W I T C H - T A S K I N G I S A T H I E F



ACTIVITY

S W I T C H - T A S K I N G I S A T H I E F



THIS IS WHAT MANY ORGANISATIONS DO WITH PROJECTS!

There is another orgⁿ model

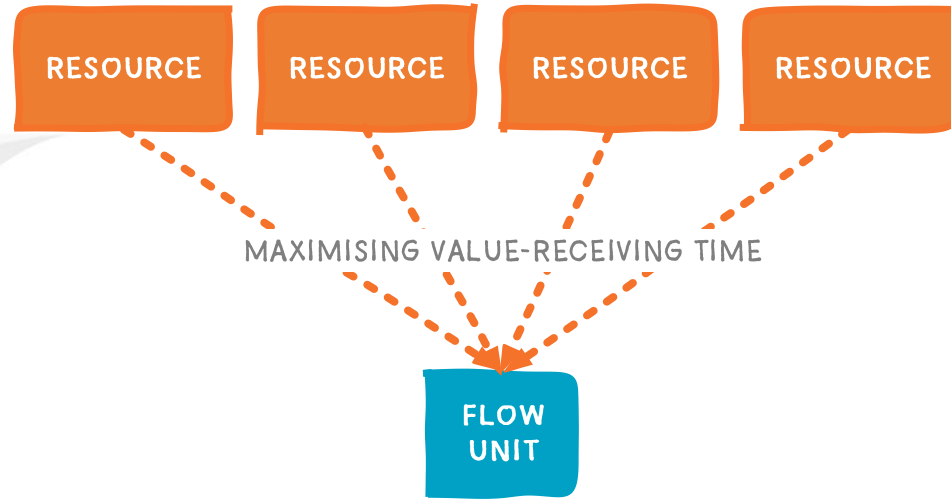


TOYOTA

VINTAGE: 1940s

FLOW EFFICIENCY

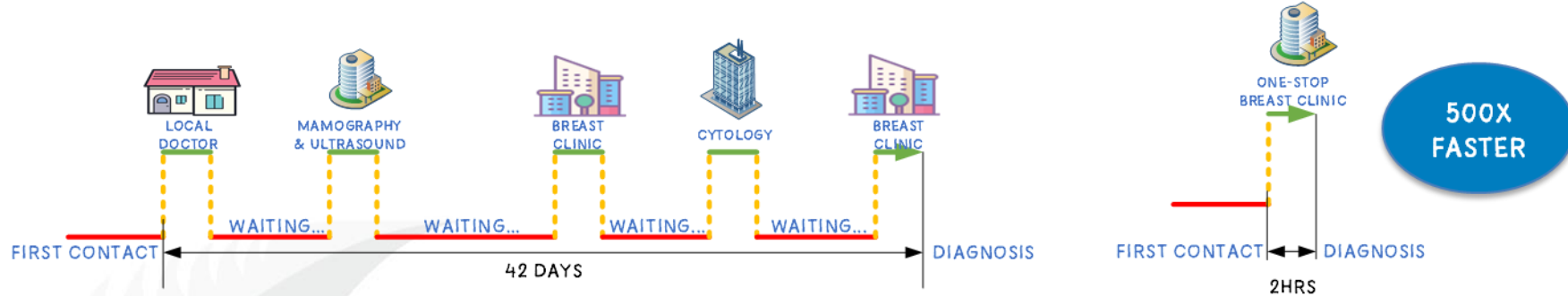
(FOCUS ON A SINGLE FLOW UNIT)



“MANAGE THE WORK”

Niklas Modig & Par Ahlstrom “This is Lean. Resolving the Efficiency Paradox”

Your model impacts customer experience



	TRADITIONAL	ONE-STOP CLINIC
ORGANISATIONAL FOCUS	RESOURCES	NEEDS
TOTAL CONTACT POINTS	MULTIPLE, TOTAL 2 HRS OF DIRECT CONTACT	ONE, TOTAL 80 MINUTES OF DIRECT CONTACT
TOTAL TIME FROM START TO FINISH	42 DAYS	2 HOURS
FLOW EFFICIENCY	0.2 PERCENT	67 PERCENT

Niklas Modig & Par Ahlstrom "This is Lean. Resolving the Efficiency Paradox"

Turn on your System 2 brain now

IF YOU ARE RUNNING A TRADITIONAL
MODEL, THE FLOW EFFICIENCY OF
YOUR ORGANISATION OR TEAM IS
ALMOST CERTAINLY LESS THAN 20%

(LET'S ASSUME 25% FOR THE NEXT SLIDE)

















But we have a problem



Unsplash.com – Alex Kotliarskyi

First you need to see your work

A GENTLE FIRST STEP: TEAM 'KANBAN'

PERSON	BACKLOG	IN-PROGRESS	DONE
 SUSAN			
 MIKE			
 ALICE			
 GARY			

YOU CAN LEARN A SURPRISING AMOUNT HERE!

Some of the things we can learn from a very simple task board

WHO STRUGGLES TO BREAK WORK DOWN

WHEN WORK FLOWS WELL

PERSON	BACKLOG	IN-PROGRESS	DONE
SUSAN	3 tasks	1 task	1 task
MIKE	2 tasks	1 task	2 tasks
ALICE	3 tasks	1 task	1 task
GARY	3 tasks	1 task	2 tasks

WHEN WORK GETS BLOCKED

HOW EFFICIENT OUR PROCESS IS

And you'll probably find 'waste'

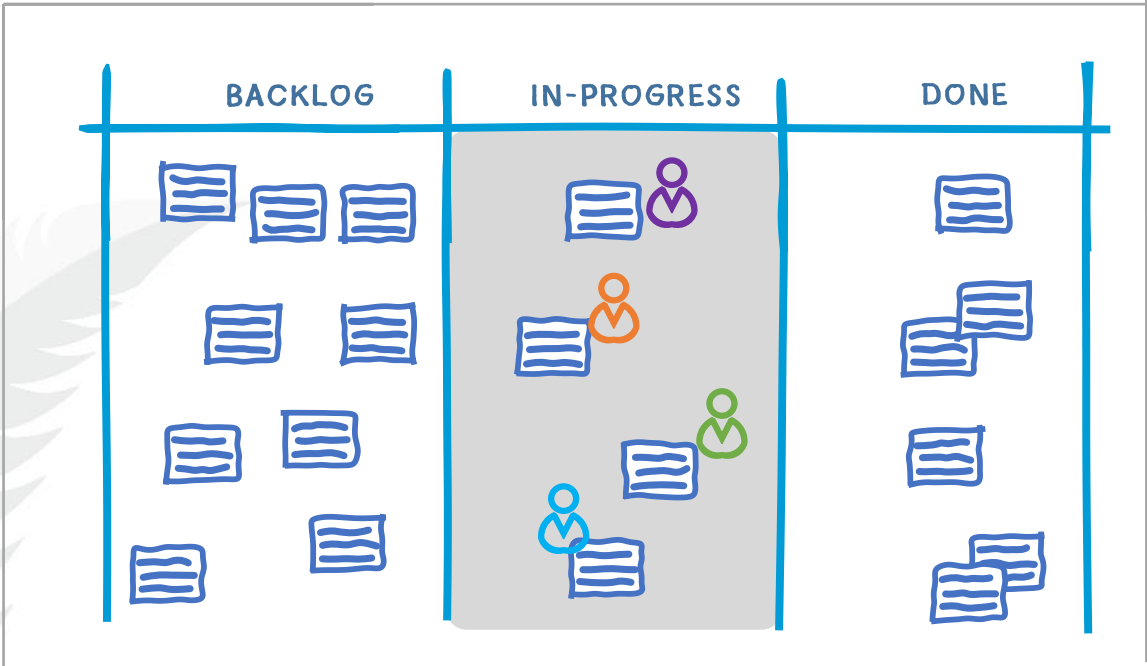
- HANDOFFS (AND ASSOCIATED KNOWLEDGE LOSS/RE-LEARNING)
- CONTEXT SWITCHING & MULTI-TASKING
- PARTIALLY DONE WORK ("INVENTORY")
- UNNECESSARY MEETINGS, DIFFICULTY FINDING INFORMATION
- WAITING
- OVER-DELIVERY & GOLD-PLATING
- QUALITY ISSUES/DEFECTS
- RE-WORK

SOME WASTE IS UNAVOIDABLE, BUT SHOULD BE MINIMISED:

- PLANNING AND REPORTING
- QUALITY INSPECTION/TESTING
- APPROVAL PROCESSES

Focus on capacity and capability

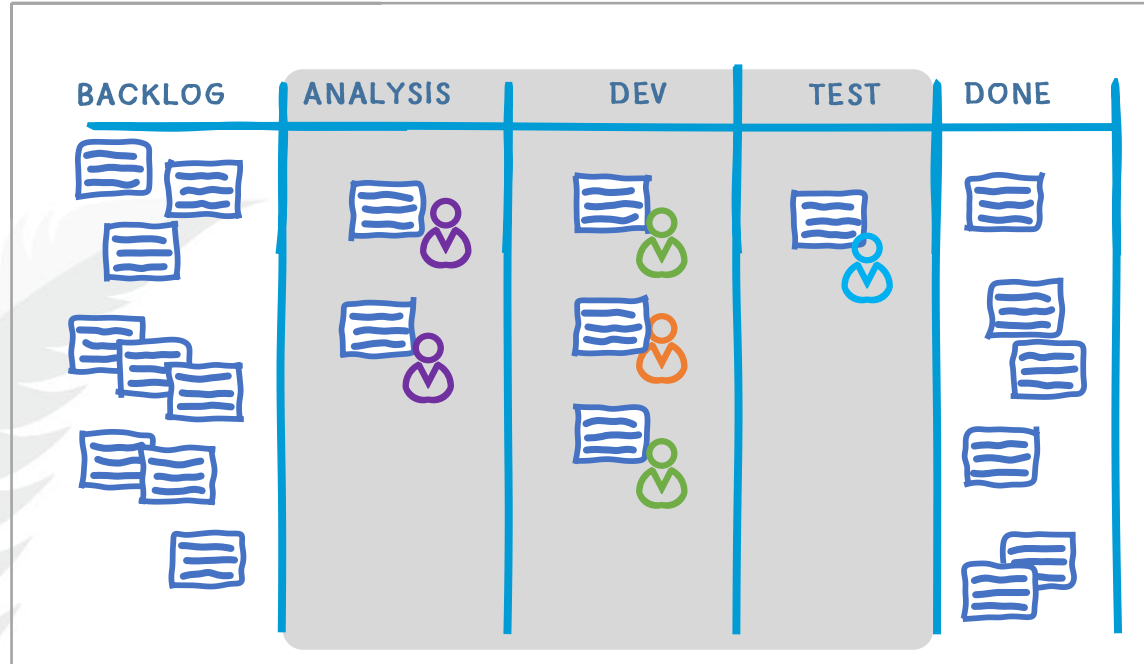
BETTER FLOW: STOP PRE-ASSIGNING WORK



CREATE FLOW

Increase visibility

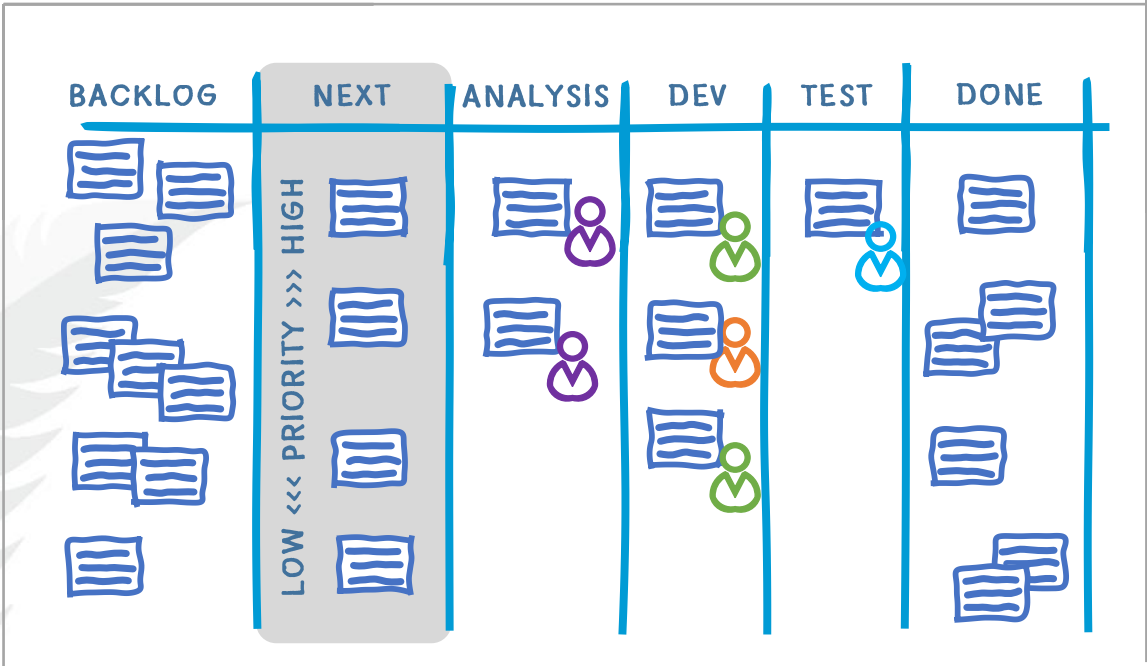
GET A MORE GRANULAR VIEW OF IN-PROGRESS



WITH BETTER
VISIBILITY YOU
CAN START
REMOVING
WASTE

De-couple planning from delivery

TEAM NOW FOCUSES ON INPUT QUEUE PRIORITIES



Balancing incoming and outgoing work

What would happen if more planes landed than were taking off?

ESTABLISH
PULL

Unsplash.com – Skyler_tv

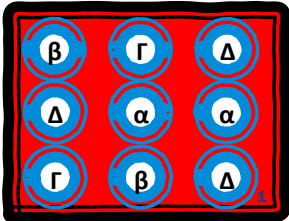
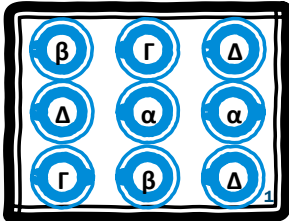
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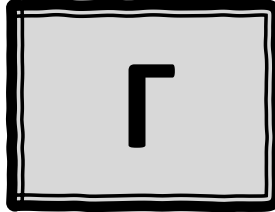
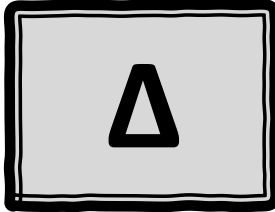
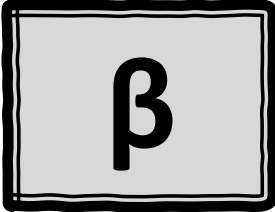
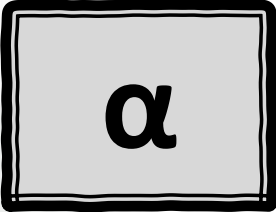
Push vs Pull Systems

THIS IS A 'FEATURE CARD'

THIS IS A RED TIMING CARD

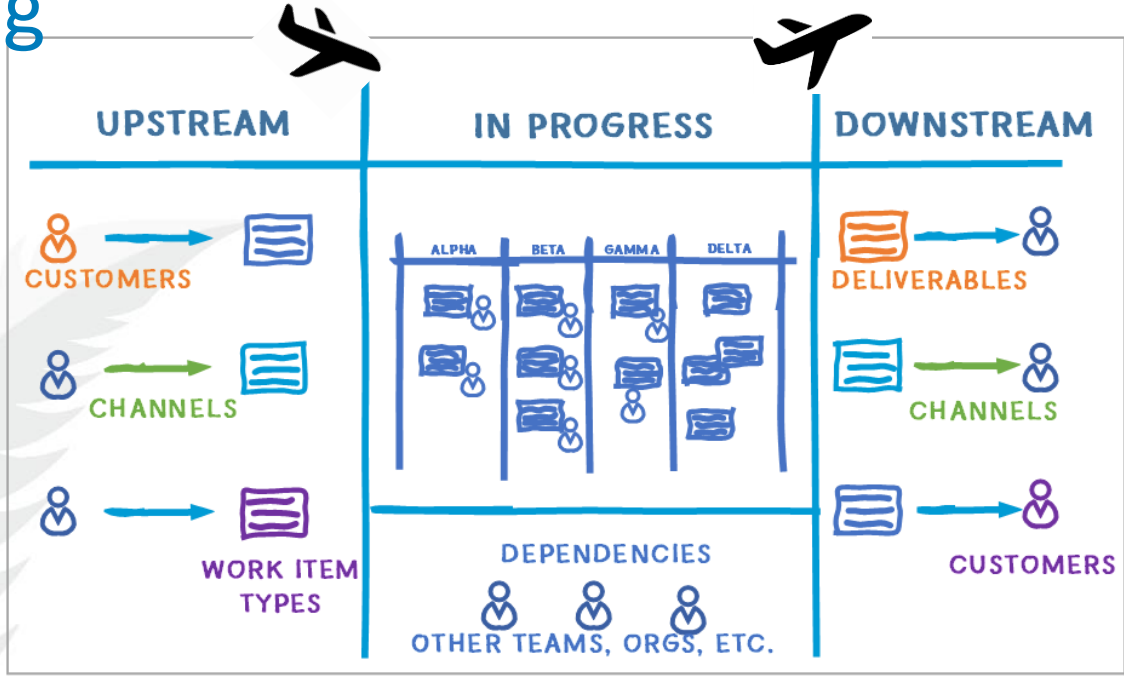


ACTIVITY



THIS IS THE CORRECT ORDER FOR WORK STATION STEPS.
ALL FOUR STEPS NEED TO BE COMPLETED FOR A FEATURE CARD TO BE 'DONE'

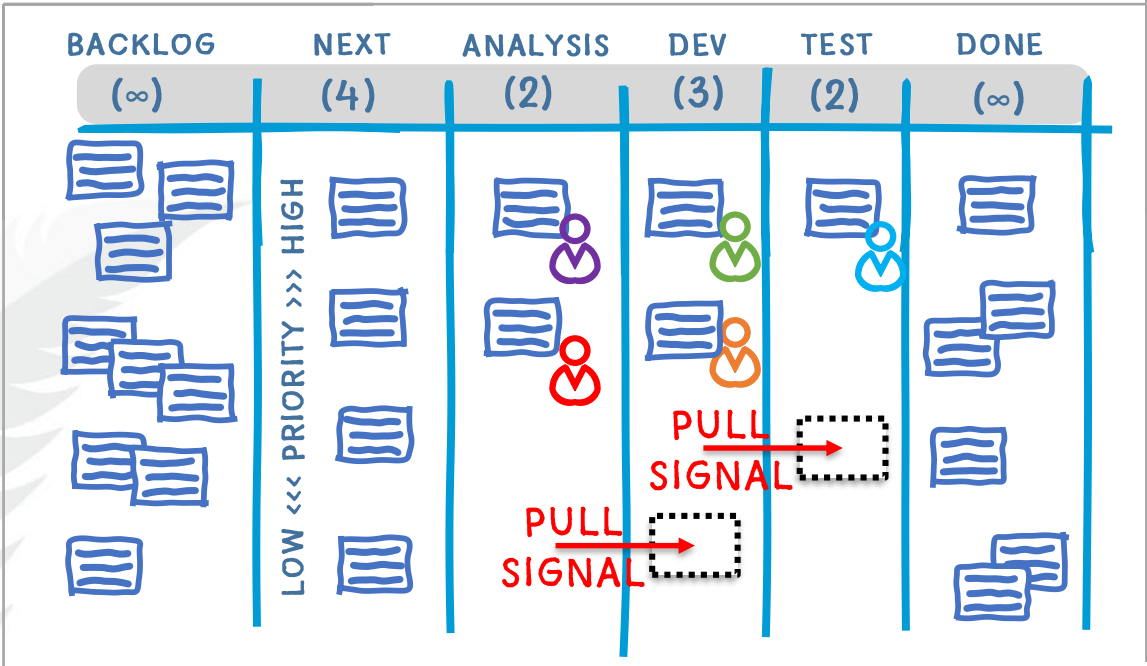
Make sure the right number of 'planes' are landing



Upstream, In Progress, Downstream Model by Christophe Achouiantz & Johan Nordin

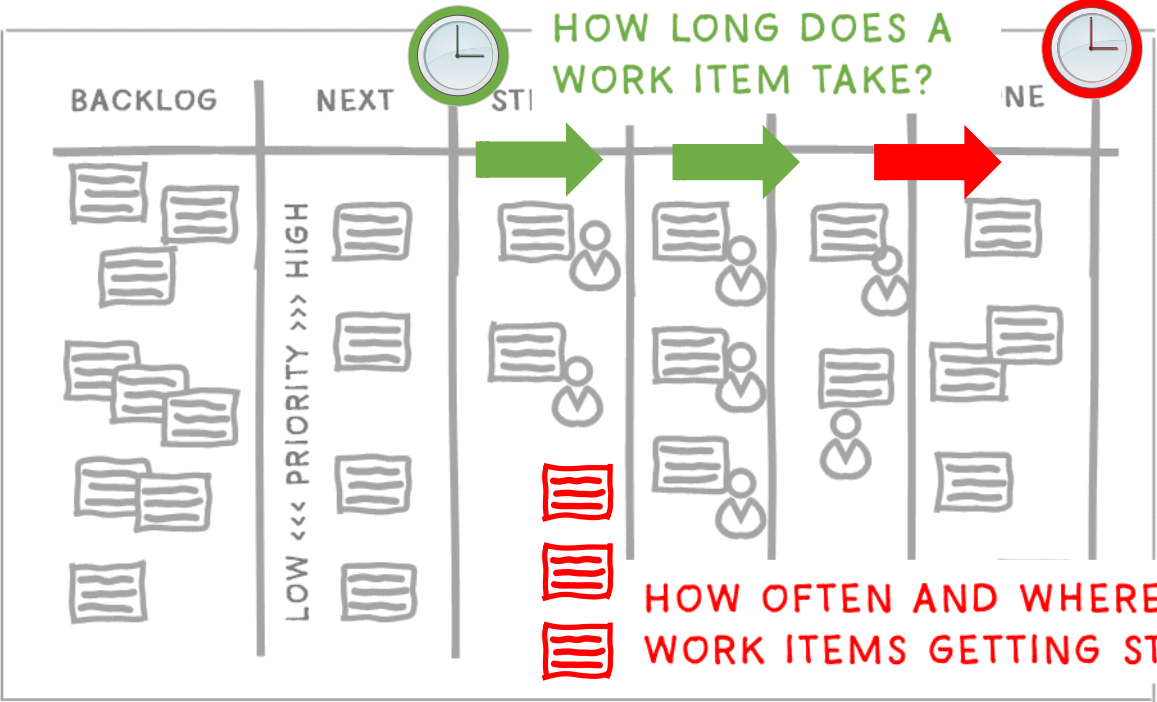
Set Work in Progress (WIP) limits

'PULL' IS CREATED WHERE THERE IS SPARE CAPACITY



How to measure and improve

IMPROVE
USING
FEEDBACK



Cycle Time is a key measure



Average Wait Time = Average Queue Size / Average Throughput

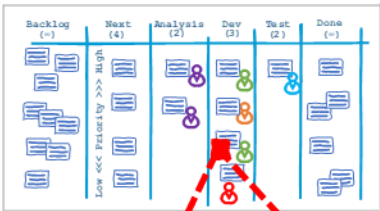
Unsplash.com – Melanie Pongratz

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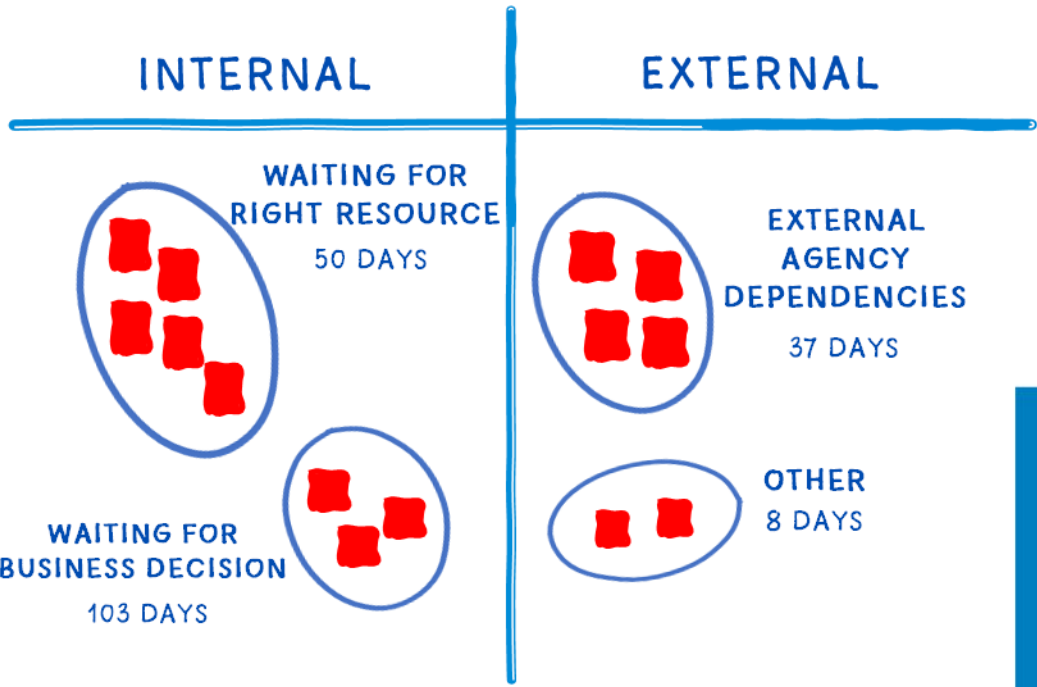
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NEW ZEALAND CHAPTER

Where work stops: blocker clustering



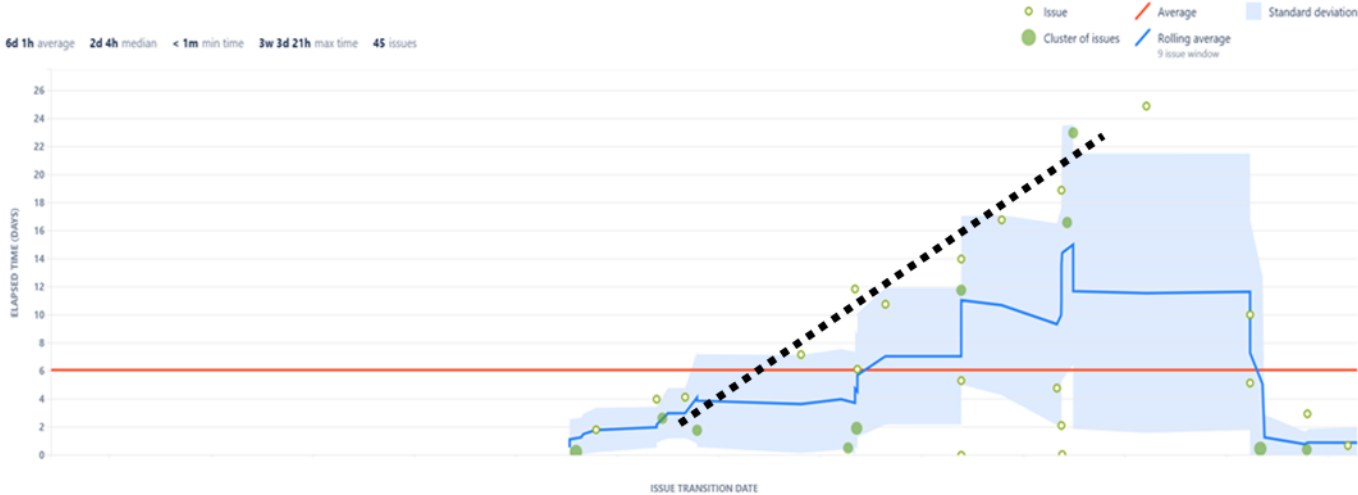
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WAITING FOR APPROVALS



Concept from Klaus Leopold

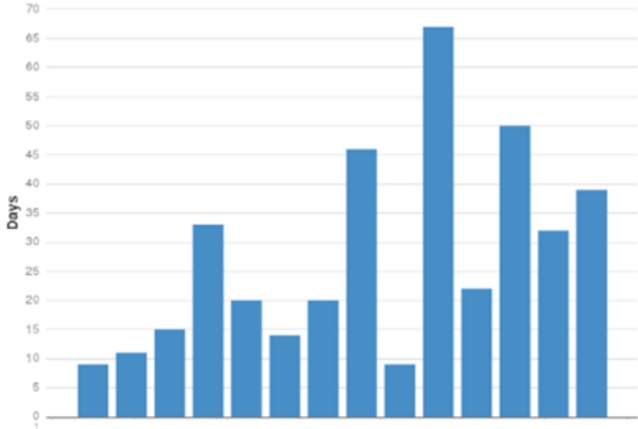
Practical tools to help (1)

JIRA “CONTROL CHART” GRAPHS AGE OF CLOSED ISSUES OVER TIME
HELPFUL TO SPOT NEGATIVE TRENDS (BLACK LINE ADDED BY ME)
BLUE LINE IS ROLLING AVERAGE CYCLE TIME, BLUE SHADING IS SPREAD OR PREDICTABILITY



Practical tools to help (2)

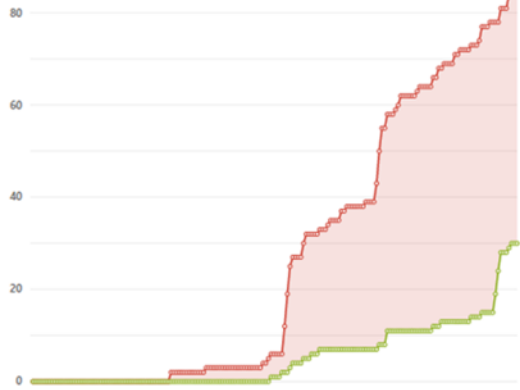
Resolution Time: [Chart Controls]



This chart shows the average number of days that resolved issues were open for over a given period. Period: last 90 days (grouped Weekly)

CREATED VS RESOLVED GADGET SHOWING CUMULATIVE DEFECT COUNTS

Created vs Resolved Chart: [Chart Controls]

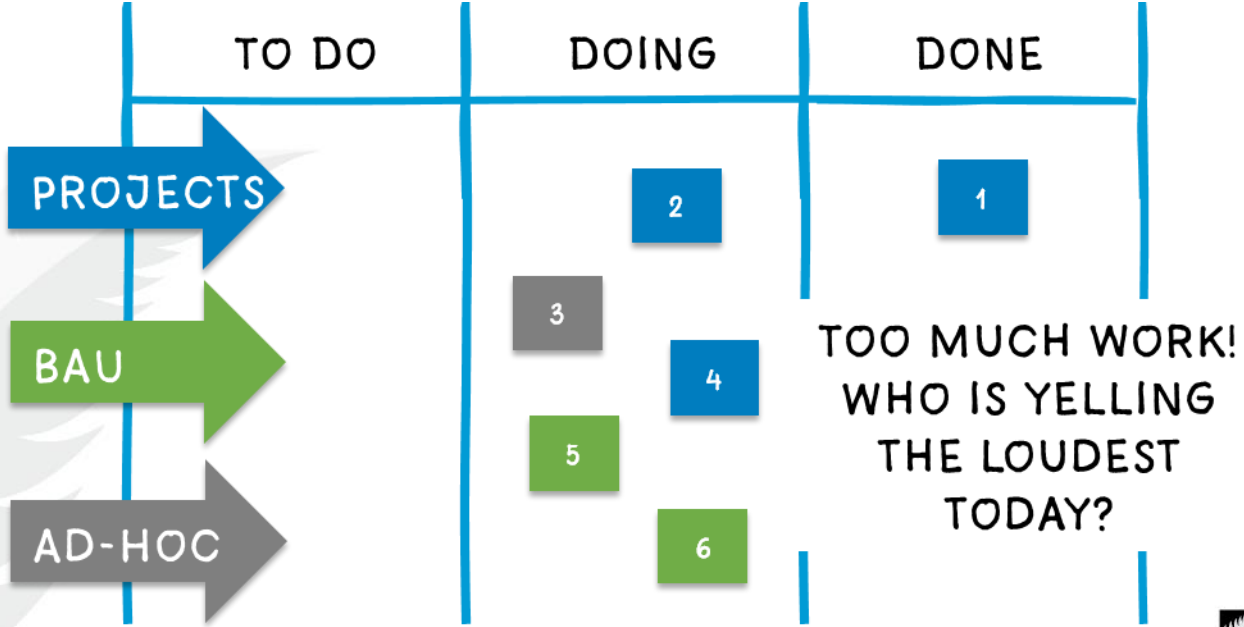


Issues in the last 180 days (grouped daily) View in Issue Navigator

- Created issues (84)
- Resolved issues (30)

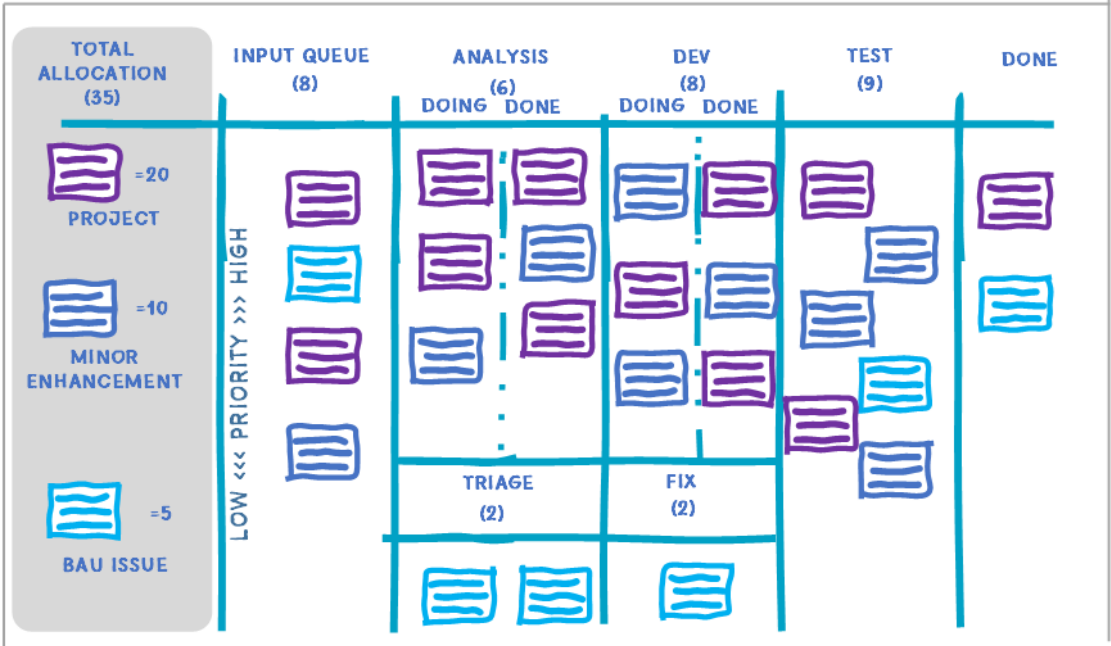
RESOLUTION TIME GADGET SHOWING AVERAGE AGE OF ISSUES CLOSED EACH WEEK.

Despite the best planning intentions, every day your people have choices



So allocate capacity across different work

CREATE RULES TO HELP TEAM MEMBERS PRIORITISE



INITIALLY SET WIP AT 3-5 ITEMS PER TEAM MEMBER

Summary: Kanban is “System 1” aware

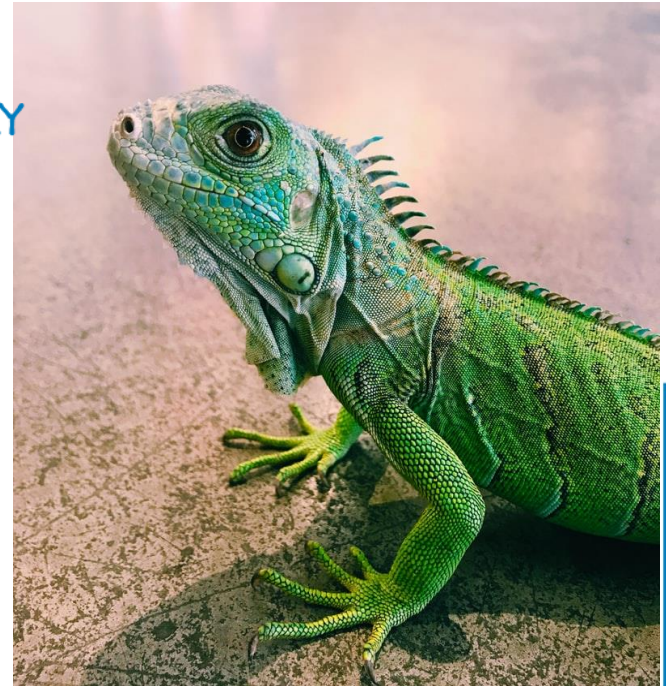
START WHERE YOU ARE NOW

- DON'T CHANGE THE STATUS QUO INITIALLY
- DOESN'T EVOKE A THREAT RESPONSE

USE VISUAL WORKFLOW MANAGEMENT

- ENGAGE THE REPTILIAN BRAIN (SEE AND TOUCH)
- PHYSICAL WORK BOARD CREATES NEW NEURAL PATHWAYS
- VISUALISE WORK AND USE FEEDBACK AND DATA FROM THE PROCESS
- ALLOWS YOU TO 'SEE' AND DEAL WITH ANY ISSUES IN A DE-PERSONALISED WAY

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Unsplash.com – Selin Şahin

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Summary: Know what your customer wants



Unsplash.com – Sharon McCutcheon

**STOP DOING -OR
MINIMISE- ANYTHING
THAT DOESN'T DELIVER
VALUE AS DEFINED BY
THE CUSTOMER**

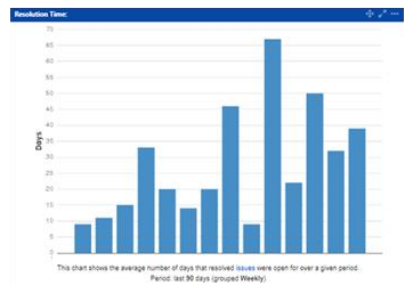
Summary: See and optimise your work system



1. VISUALISE

2. CREATE BALANCE

3. USE DATA TO IMPROVE



And remember this

**“A BAD SYSTEM WILL
BEAT A GOOD PERSON
EVERY TIME”**

W. EDWARDS DEMING



Thanks for coming today!



I'M HAPPY TO ANSWER ANY
QUESTIONS YOU HAVE.

PLEASE REACH OUT TO ME AFTER
THE CONFERENCE IF YOU NEED TO

CARL.WELLER@EQUINOX.CO.NZ