

s Improvement (KSI - KMPII)





Principles of Kaban

The Kaban Method is a simple, yet powerful, system for managing change. It is based on the principles of the Kaban Method, which are designed to help you understand the Kaban Method and its principles.

Schedule Overview

Day	Topic	Time
Day 1	Introduction to the Kaban Method	9:00 - 10:00
Day 2	Why Kaban Method of traditional change methods?	9:00 - 10:00
Day 3	How is the Kaban Method a different type of change management?	9:00 - 10:00
Day 4	Technical Design as a 3x3 Process	9:00 - 10:00
Day 5	How to Process Change	9:00 - 10:00
Day 6	How to Process Change	9:00 - 10:00
Day 7	How to Process Change	9:00 - 10:00
Day 8	How to Process Change	9:00 - 10:00
Day 9	How to Process Change	9:00 - 10:00
Day 10	How to Process Change	9:00 - 10:00
Day 11	How to Process Change	9:00 - 10:00
Day 12	How to Process Change	9:00 - 10:00
Day 13	How to Process Change	9:00 - 10:00
Day 14	How to Process Change	9:00 - 10:00
Day 15	How to Process Change	9:00 - 10:00
Day 16	How to Process Change	9:00 - 10:00
Day 17	How to Process Change	9:00 - 10:00
Day 18	How to Process Change	9:00 - 10:00
Day 19	How to Process Change	9:00 - 10:00
Day 20	How to Process Change	9:00 - 10:00
Day 21	How to Process Change	9:00 - 10:00
Day 22	How to Process Change	9:00 - 10:00
Day 23	How to Process Change	9:00 - 10:00
Day 24	How to Process Change	9:00 - 10:00
Day 25	How to Process Change	9:00 - 10:00
Day 26	How to Process Change	9:00 - 10:00
Day 27	How to Process Change	9:00 - 10:00
Day 28	How to Process Change	9:00 - 10:00
Day 29	How to Process Change	9:00 - 10:00
Day 30	How to Process Change	9:00 - 10:00
Day 31	How to Process Change	9:00 - 10:00
Day 32	How to Process Change	9:00 - 10:00
Day 33	How to Process Change	9:00 - 10:00
Day 34	How to Process Change	9:00 - 10:00
Day 35	How to Process Change	9:00 - 10:00
Day 36	How to Process Change	9:00 - 10:00
Day 37	How to Process Change	9:00 - 10:00
Day 38	How to Process Change	9:00 - 10:00
Day 39	How to Process Change	9:00 - 10:00
Day 40	How to Process Change	9:00 - 10:00
Day 41	How to Process Change	9:00 - 10:00
Day 42	How to Process Change	9:00 - 10:00
Day 43	How to Process Change	9:00 - 10:00
Day 44	How to Process Change	9:00 - 10:00
Day 45	How to Process Change	9:00 - 10:00
Day 46	How to Process Change	9:00 - 10:00
Day 47	How to Process Change	9:00 - 10:00
Day 48	How to Process Change	9:00 - 10:00
Day 49	How to Process Change	9:00 - 10:00
Day 50	How to Process Change	9:00 - 10:00
Day 51	How to Process Change	9:00 - 10:00
Day 52	How to Process Change	9:00 - 10:00
Day 53	How to Process Change	9:00 - 10:00
Day 54	How to Process Change	9:00 - 10:00
Day 55	How to Process Change	9:00 - 10:00
Day 56	How to Process Change	9:00 - 10:00
Day 57	How to Process Change	9:00 - 10:00
Day 58	How to Process Change	9:00 - 10:00
Day 59	How to Process Change	9:00 - 10:00
Day 60	How to Process Change	9:00 - 10:00
Day 61	How to Process Change	9:00 - 10:00
Day 62	How to Process Change	9:00 - 10:00
Day 63	How to Process Change	9:00 - 10:00
Day 64	How to Process Change	9:00 - 10:00
Day 65	How to Process Change	9:00 - 10:00
Day 66	How to Process Change	9:00 - 10:00
Day 67	How to Process Change	9:00 - 10:00
Day 68	How to Process Change	9:00 - 10:00
Day 69	How to Process Change	9:00 - 10:00
Day 70	How to Process Change	9:00 - 10:00
Day 71	How to Process Change	9:00 - 10:00
Day 72	How to Process Change	9:00 - 10:00
Day 73	How to Process Change	9:00 - 10:00
Day 74	How to Process Change	9:00 - 10:00
Day 75	How to Process Change	9:00 - 10:00
Day 76	How to Process Change	9:00 - 10:00
Day 77	How to Process Change	9:00 - 10:00
Day 78	How to Process Change	9:00 - 10:00
Day 79	How to Process Change	9:00 - 10:00
Day 80	How to Process Change	9:00 - 10:00
Day 81	How to Process Change	9:00 - 10:00
Day 82	How to Process Change	9:00 - 10:00
Day 83	How to Process Change	9:00 - 10:00
Day 84	How to Process Change	9:00 - 10:00
Day 85	How to Process Change	9:00 - 10:00
Day 86	How to Process Change	9:00 - 10:00
Day 87	How to Process Change	9:00 - 10:00
Day 88	How to Process Change	9:00 - 10:00
Day 89	How to Process Change	9:00 - 10:00
Day 90	How to Process Change	9:00 - 10:00
Day 91	How to Process Change	9:00 - 10:00
Day 92	How to Process Change	9:00 - 10:00
Day 93	How to Process Change	9:00 - 10:00
Day 94	How to Process Change	9:00 - 10:00
Day 95	How to Process Change	9:00 - 10:00
Day 96	How to Process Change	9:00 - 10:00
Day 97	How to Process Change	9:00 - 10:00
Day 98	How to Process Change	9:00 - 10:00
Day 99	How to Process Change	9:00 - 10:00
Day 100	How to Process Change	9:00 - 10:00

Minutes for the Kaban Method

Why Kaban Method of traditional change methods?

Technical Design as a 3x3 Process



New Kaban Method Information



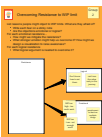
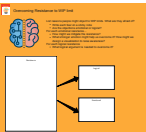
How to Process Change



How to Process Change



How is the Kaban Method a different type of change management?





Welcome!



Kanban Systems Improvement (KSI)

Kanban Management Professional part 2




CONSULTING | TRAINING | COACHING

KMP2 SunLife Dec 7, Online Whiteboard


https://miro.com/app/board/o9J_lc4Lstg=/

miro | KMP2 SunLife Dec 7 ☆ | [Icons]

1.2 Welcome




Welcome!



Kanban Systems Improvement (KSI)

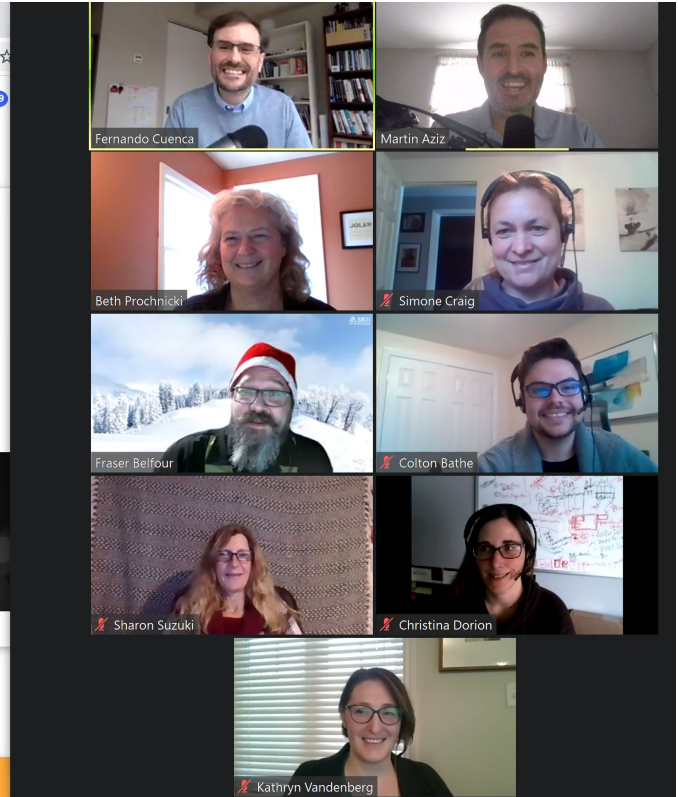
Kanban Management Professional part 2



SQUIRRELNORTH
CONSULTING | TRAINING | COACHING

1.4 Self Assessment

[Icons]



Participants in the video conference:

- Fernando Cuenca
- Martin Aziz
- Beth Prochnicki
- Simone Craig
- Fraser Belfour
- Colton Bathe
- Sharon Suzuki
- Christina Dorion
- Kathryn Vandenberg

Purpose of this Class

- Take a pro-active, rational and well-communicated approach to continuous improvement.
- Achieve higher levels of both internal and external customer satisfaction, sustainably.
- Outline a path to increase organizational maturity, including how to overcome resistance to change.
- Implement simple and effective cross-boundary coordination.
- Use proven tools and methods to increase capability, remove delays, reduce variability and manage bottlenecks.
- Develop an understanding of evolutionary change and avoid the tendency for pushing disruptive, presumptive solutions.
- Effectively scale workflow agility without changing job titles, organization structures, or causing other disruptions.
- Increase skills and implementation of the 6 general practices of Kanban.

Schedule Overview

New grid

	Monday	Tuesday	Wednesday	Thursday	Friday
Session 1	<div>9:30-10:30</div> <div>Intro / Resistance</div> <div>Martin</div>	<div>9:00-10:30</div> <div>Replenishment</div> <div>Fernando</div>			
Session 2	<div>11:00-12:30</div> <div>Evolutionary Change</div> <div>Martin</div>	<div>11:00-12:30</div> <div>Service Deliver Review / Ops Review</div> <div>Fernando</div>	<div>11-12:30</div> <div>(if needed)</div>		
Session 3	<div>1:30-3:00</div> <div>Commitment / Scaling</div> <div>Martin</div>	<div>1:30-3:00</div> <div>Improving: Lead Time & Sources of Delay</div> <div>Fernando</div>			
Session 4	<div>3:30-5:00</div> <div>Upstream</div> <div>Martin</div>	<div>3:30-5:00</div> <div>Variability</div> <div>Fernando</div>			

“Why Kanban instead of traditional change methods?”



How Humans process information



How we Process Change



Adopting new processes challenges people psychologically & conceptually



“How is the Kanban Method a different type of change management?”

The Kanban Method ...



The Kanban Method ...



Overcoming Resistance to WSP limit

Let's assume you're right about the WSP limit. What are they afraid of?

- They want fast, not a little slow
- Are the business consequences of a queue?
- How might we mitigate the resistance?
- What changes might right help us overcome it? How might we bring a visualization to these questions?
- What logical arguments is needed to overcome it?

Business

Impact

Resistance

Overcoming Resistance to WSP limit

Let's assume you're right about the WSP limit. What are they afraid of?

- They want fast, not a little slow
- Are the business consequences of a queue?
- How might we mitigate the resistance?
- What changes might right help us overcome it? How might we bring a visualization to these questions?
- What logical arguments is needed to overcome it?

Business

Impact

Resistance

Overcoming Resistance to WSP limit

Let's assume you're right about the WSP limit. What are they afraid of?

- They want fast, not a little slow
- Are the business consequences of a queue?
- How might we mitigate the resistance?
- What changes might right help us overcome it? How might we bring a visualization to these questions?
- What logical arguments is needed to overcome it?

Business

Impact

Resistance

Overcoming Resistance to WSP limit

Let's assume you're right about the WSP limit. What are they afraid of?

- They want fast, not a little slow
- Are the business consequences of a queue?
- How might we mitigate the resistance?
- What changes might right help us overcome it? How might we bring a visualization to these questions?
- What logical arguments is needed to overcome it?

Business

Impact

Resistance

Overcoming Resistance to WSP limit

Let's assume you're right about the WSP limit. What are they afraid of?

- They want fast, not a little slow
- Are the business consequences of a queue?
- How might we mitigate the resistance?
- What changes might right help us overcome it? How might we bring a visualization to these questions?
- What logical arguments is needed to overcome it?

Business

Impact

Resistance

Motivation for the Kanban Method



Why Kanban instead of traditional change methods?

Traditional Change is an A to B Process

Current
Process



TRANSITION



Future
Process

defined / designed in advance

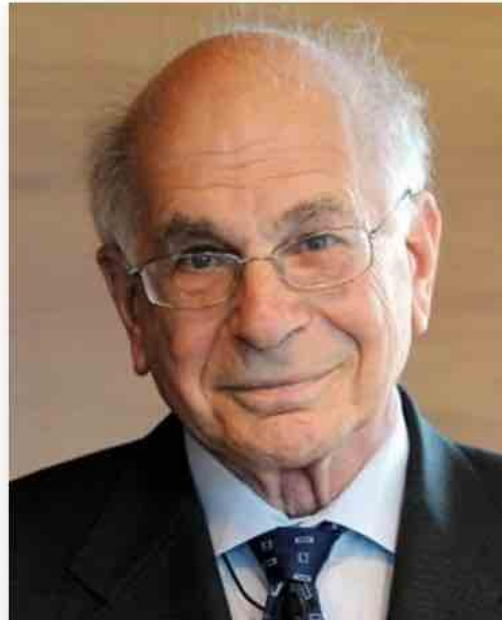


How Humans process Information

Learning by experience

FAST!
But slow to learn.

System 1
Sensory Perception
Pattern Matching



Daniel Kahneman

Learning by theory

SLOW!
But fast to learn.

System 2
Logical Inference
Engine

S1

Making coffee

Responding to a large sound

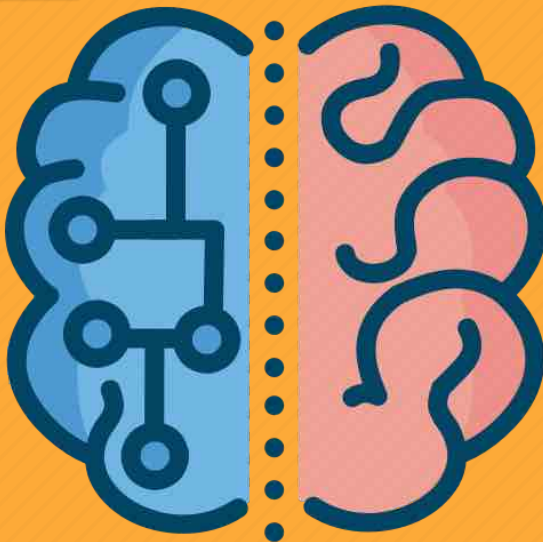
Coming downstairs in the morning means feeding the dog

Walking

Making KD dinner

Trying to catch a falling object (e.g. glass, plate, etc)

Trying to catch a falling object



S2

Learning to cook a new recipe

Not barking when someone is at the door means a treat

Driving for the first time

Riding a bike

Learning to Run

Making fancy dinner - new recipe

How we Process Change

I feel change
emotionally
using System 1.
I adapt slowly.



Carbon-based life form

I logically
evaluate change
using System 2.
I adapt quickly.



Silicon-based life form

Adopting new processes challenges people psychologically & sociologically



- Most people resist change because individually they have more to lose than gain ...
 - New roles attack identity
 - New responsibilities threaten self-esteem & social status
- Keeping current practices is more conservative, but avoids shaking up the current social hierarchy.

“

How is the Kanban Method
a different type
of change management?

The Kanban Method ...

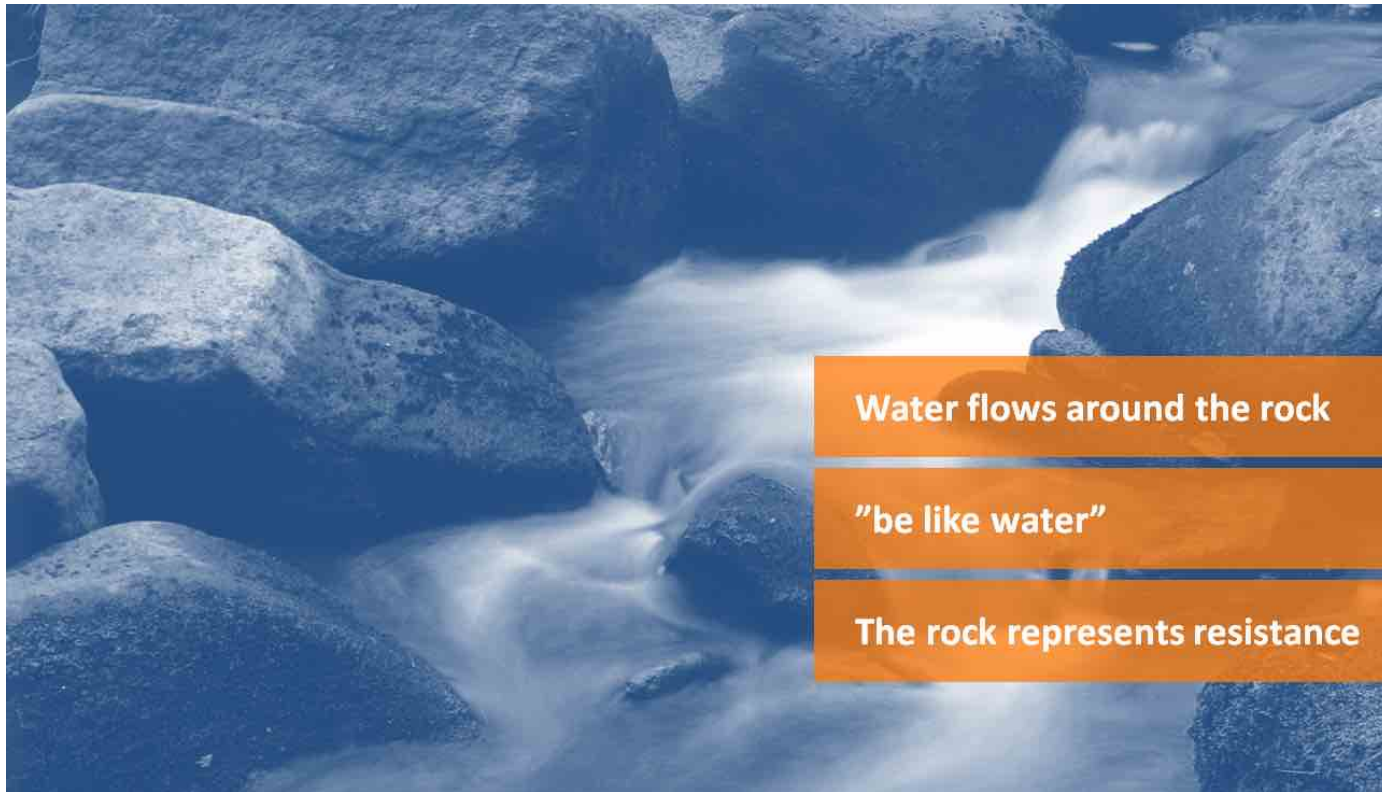


- Rejects the traditional approach to change
- Believes it is better to avoid resistance than to push harder against it
 - Don't install new processes
 - Don't reorganize
- Is designed for carbon-based life forms
 - Evolutionary change that is humane

The Kanban Method ...



- Catalyzes improvement through use of Kanban systems and visual boards
- Takes its name from the use of kanban signals but it is just a name
- Anyone who thinks Kanban is just about Kanban (boards & systems) is truly mistaken



Water flows around the rock

"be like water"

The rock represents resistance



Overcoming Resistance to WIP limit

Group

1

List reasons people might object to WIP limits. What are they afraid of?

- Write each fear on a sticky note
- Are the objections emotional or logical?

For each emotional resistance...

- How might we mitigate the resistance?
- What stronger emotion might help us overcome it? How might we design a visualization to raise awareness?

For each logical resistance

- What logical argument is needed to overcome it?

Resistance

Logical

They don't
know how
to set them

too much
work for
the value

how do you
translate that
into days
and/or hours

Emotional

afraid of
running out
of work

people like to
work on more
than one thing
at a time

worry about
the
dependencies
outside of the
team

may need to
work in another
discipline when
wip is reached
(ie. test vs dev)



Overcoming Resistance to WIP limit

List reasons people might object to WIP limits. What are they afraid of?

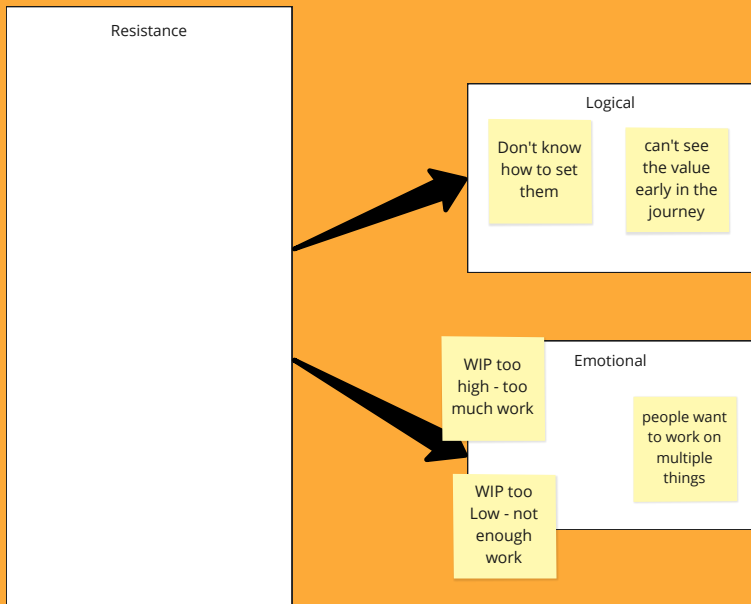
- Write each fear on a sticky note
- Are the objections emotional or logical?

For each emotional resistance...

- How might we mitigate the resistance?
- What stronger emotion might help us overcome it? How might we design a visualization to raise awareness?

For each logical resistance

- What logical argument is needed to overcome it?



There are different types of tasks



Characteristics of these activities

- 1. The activities are simple
- 2. The activities are simple
- 3. The activities are simple
- 4. The activities are simple
- 5. The activities are simple
- 6. The activities are simple



2 Systems of Number Systems

Instructions: Consider these questions in the light. Use them to guide your thoughts on the topic of the system of number systems.

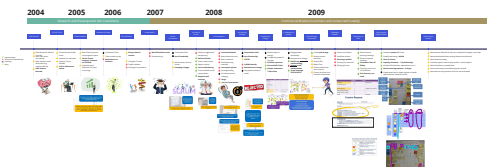
- 1- Have you seen patterns like this?
- 2- Did any good come out of them?
- 3- Did you see the benefits we talked about?
- 4- If not, what did you see? Something else?



Post Science was started by one of the world's most prominent environmentalists to apply new scientific research to help humanity.



PostScience



3 Post Science Case Study Review

- 1. List each of the tasks
- 2. List the tasks in order
- 3. Identify the tasks that are most important
- 4. Identify the tasks that are most important
- 5. Identify the tasks that are most important
- 6. Identify the tasks that are most important



Continued Flow

There are different types of Kanban!

Identify
Patterns
of Kanban

So you
want to
be a KMP?

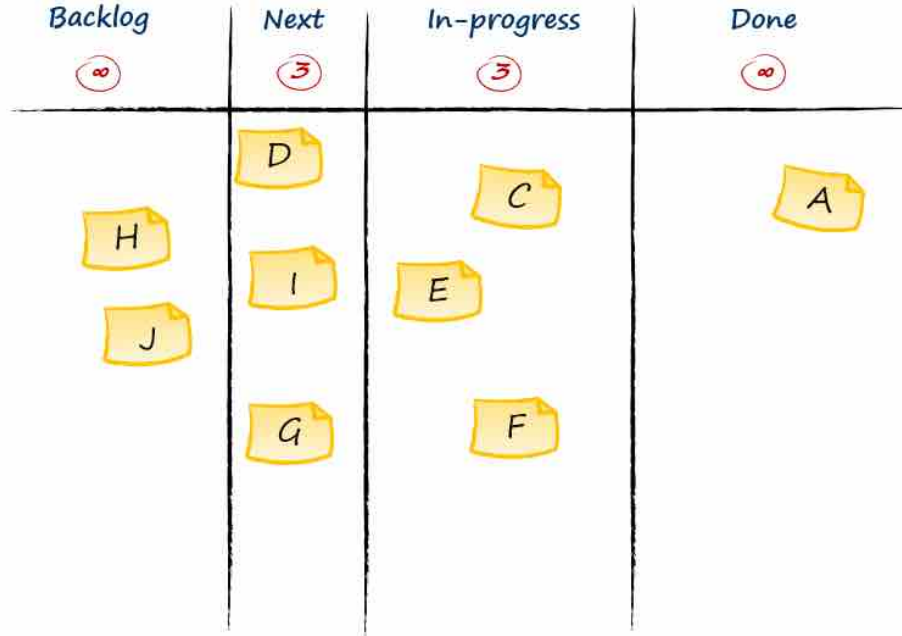
Explain
it to
others

Evolve towards
mature
Kanban
Systems

Detect
benefits &
limitations

Personal Kanban

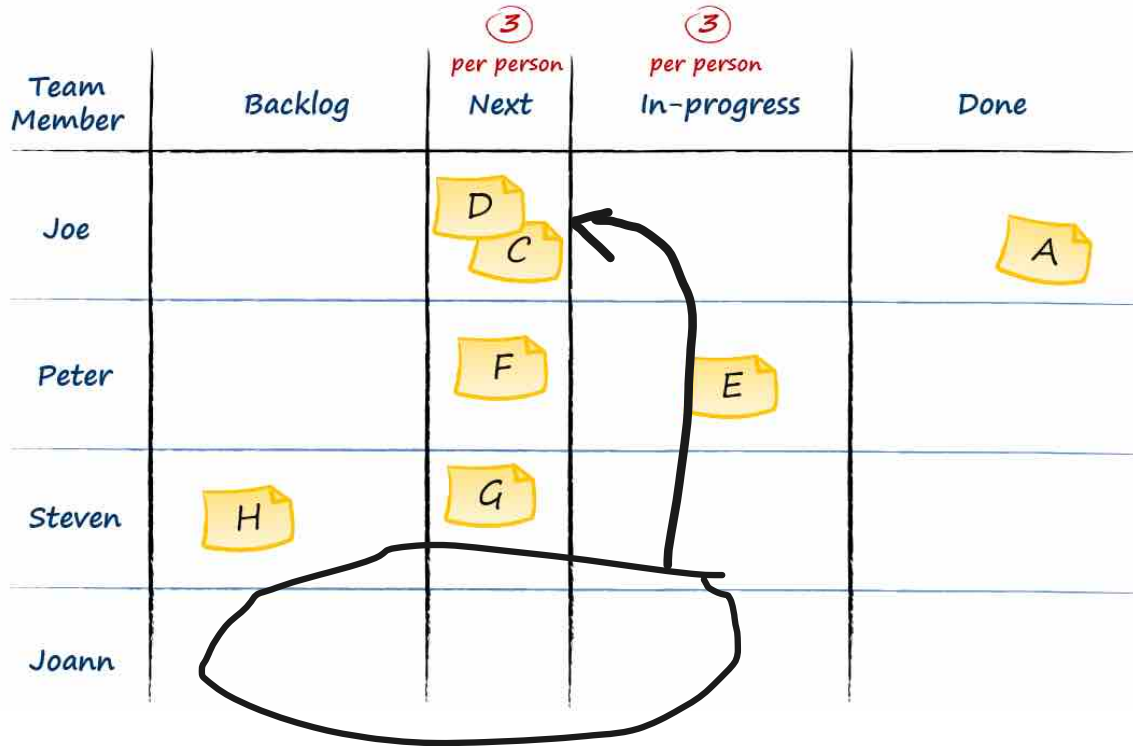
Locally
focused



Customer?
Service
Workflow?

Visualize
Individuals
Work

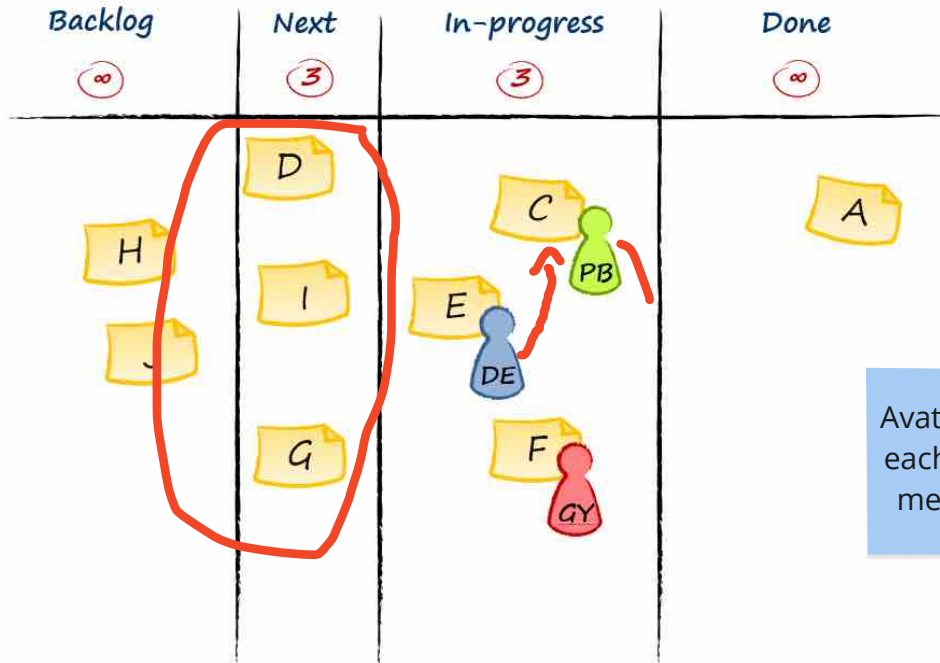
Aggregated Personal Kanban



Multiple
Individuals

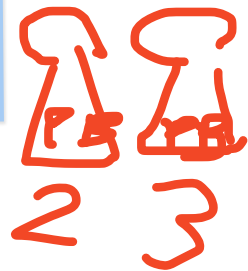
More focus
on managing
people than
work & flow

Team Kanban



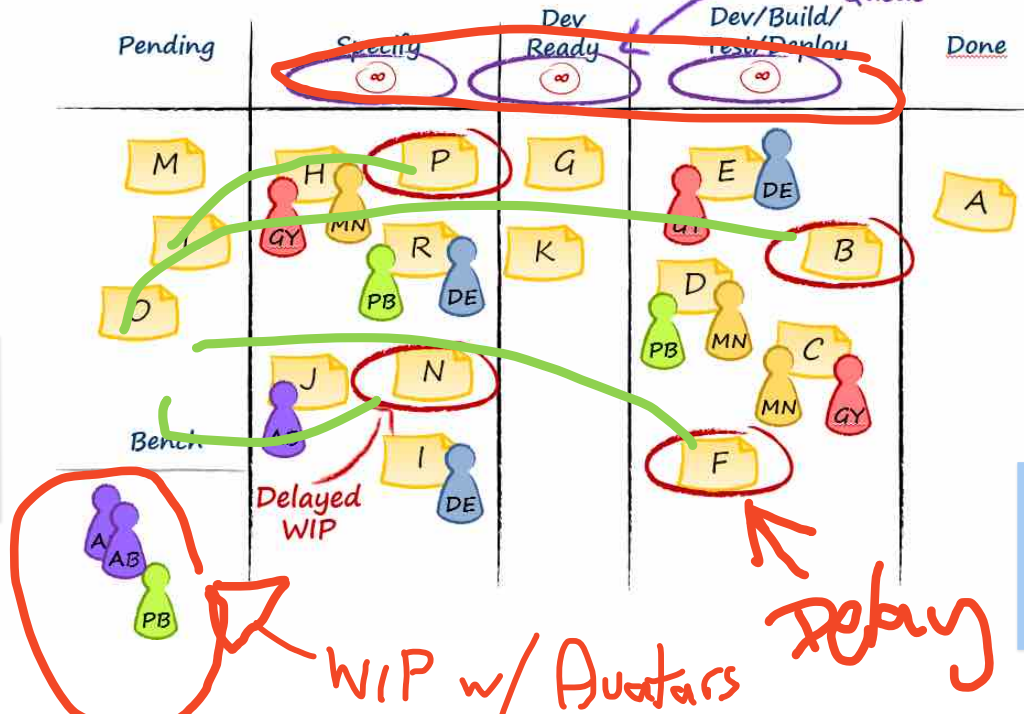
Single
team
focus

Avatars for
each team
member



Team Kanban with Per Person WIP Limit

4 3



Not just
a single
team

System is still
overburdened

Signs of
Service
Delivery
workflow

Is Service
Delivery
predictable
now?

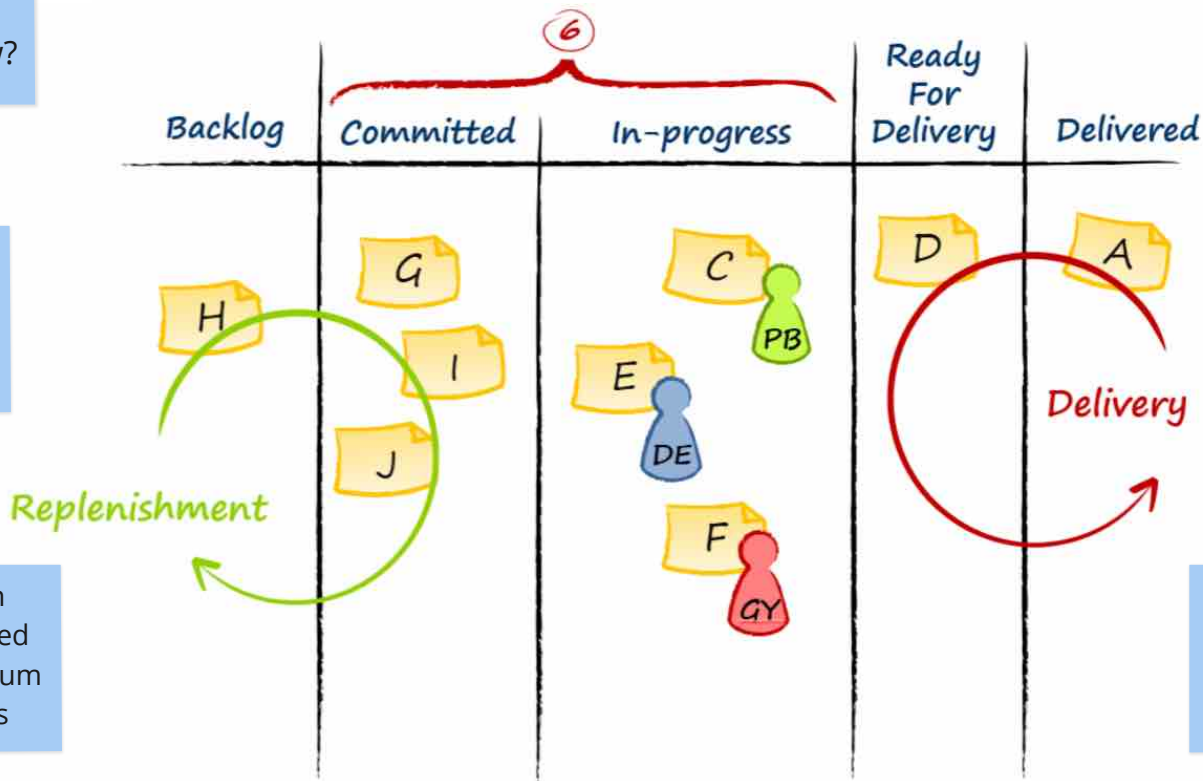
What would
customer
experience
be like?

Decoupled Cadences & Combined WIP

Where is
my
workflow?

Distinct
Replenishment
cadence

Often
observed
with Scrum
teams



Do your
customers
care about
your timebox?

Distinct
Delivery
Cadence

Aggregated Team Kanban

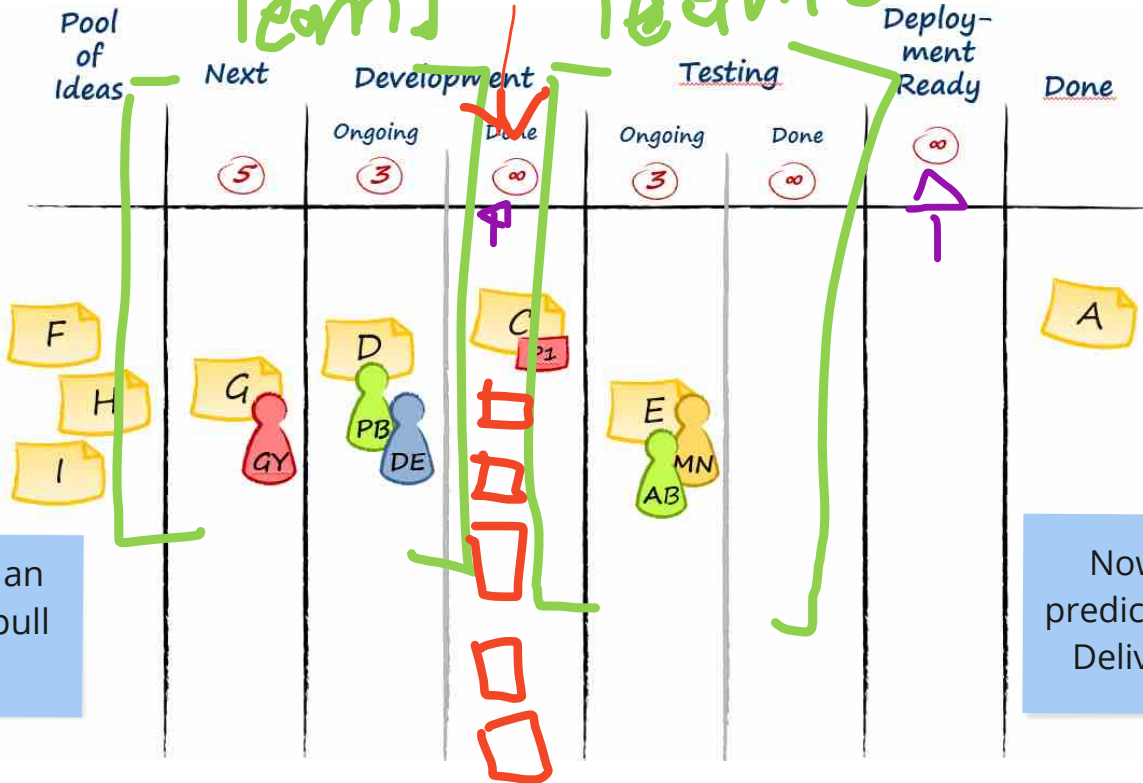
Team 1 10 Team 2

Glass ceiling

Multiple teams

Emerging Service Delivery workflow

Do we have an end-to-end pull system?



What if Dev is faster than Test?

Now we have predictable Service Delivery - right?

Characteristics of these patterns



- Pre-cursors to full Kanban systems.
- Not service oriented Kanban systems.
- Typically these patterns address the initial concerns of “sustainability”
 - The visibility of the work and process
 - Controlling work in progress at the individual worker level, to reduce multi-tasking and over-burdening
 - Making the policies explicit in the current system
- We have covered 5 typical patterns

You're
not
done!

What are you
leaving on
the table?
Stay tuned...





Instructions: Consider the 4 questions to the right. Use stickies and place your answers on top of the appropriate board/pattern.

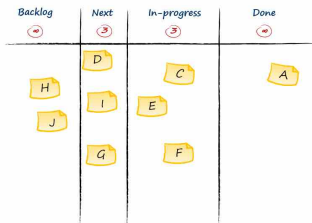
1 - Have you seen patterns like this?

2 - Did any good come out of them?

3 - Did you see the benefits we talked about?

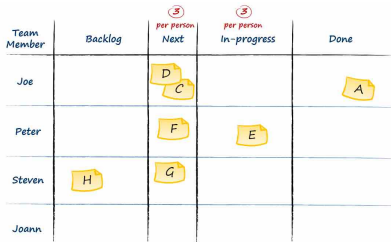
4 - If not, what did you see? Something else?

Personal Kanban



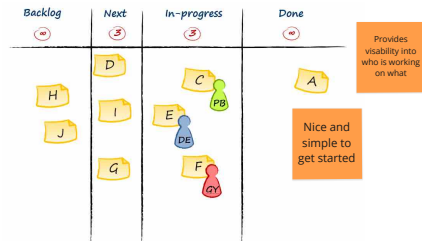
Good

Aggregated Personal Kanban



poor collaboration.

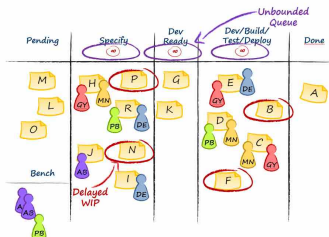
Team Kanban



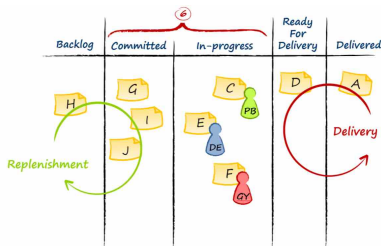
Provides visibility into who is working on what

Nice and simple to get started

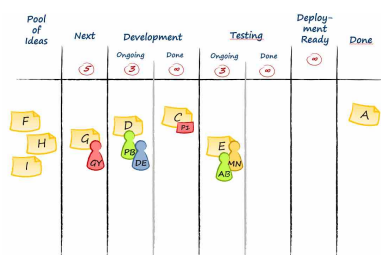
Team Kanban with Per Person WIP Limit



Decoupled Cadences & Combined WIP




Aggregated Team Kanban



ability to identify efficiencies

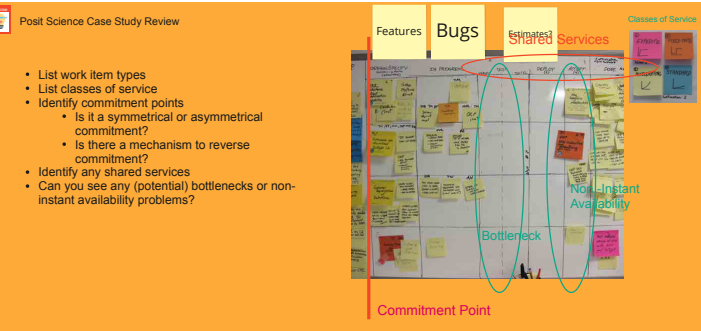
focus on collaboration

Synergies

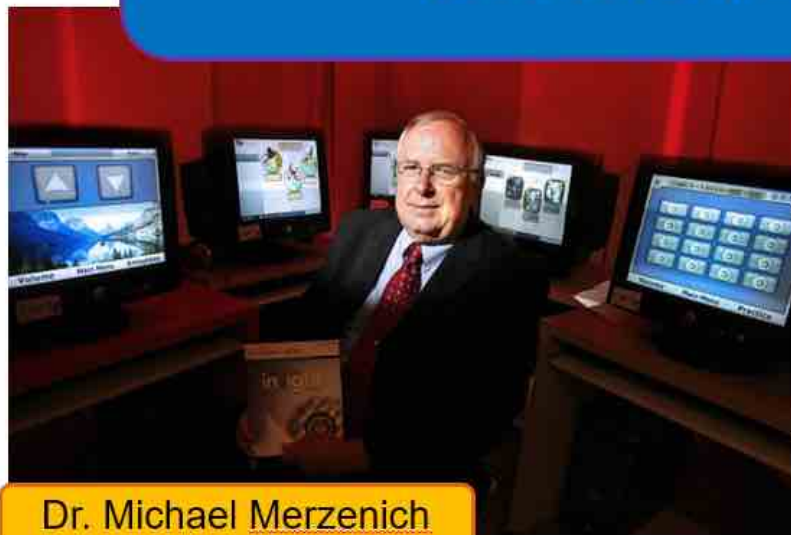


Dr. Michael Merzenich

Dr. Michael Merzenich



Posit Science was started by one of the world's most pre-eminent neuroscientists to apply new discoveries in brain plasticity



Dr. Michael Merzenich

PositScience®

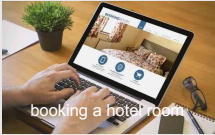

2009





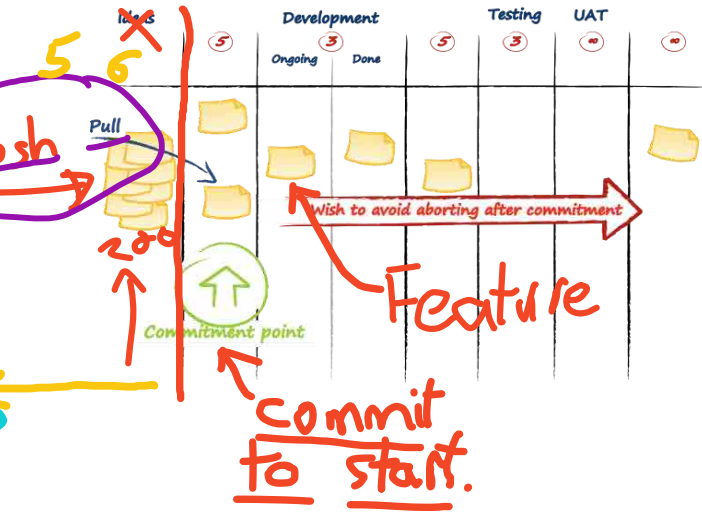
Understanding Commitment

How does commitment work?

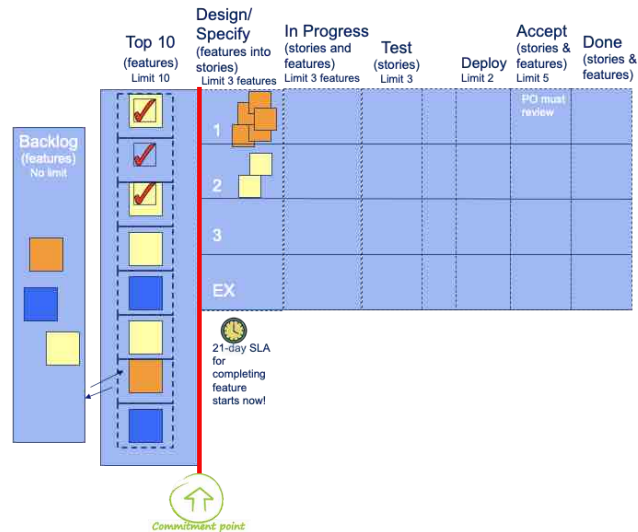
	 booking a hotel room	 marriage	work request- estimate	e-sign room intake process	??	In your Service / Organization
Who makes commitments? To whom? Who else is involved?			estimate requester, team	e-sign commits to t-shirt size estimate. Business agrees to proceed		
How frequently?			once- beginning of request	once for each commitment		
What's the "unit of commitment"? (project? feature? task?)			any	user story / feature		
Who commits first?			requester	e-sig room commits to estimate. business commits to proceeding		
Is it reversible? for whom?			both	yes by buisness		
What's the cost of "backing out"?			incurred cost to date reputational cost	spend to date		

Project

Commitment is deferred



Commitment can be Asymmetrical



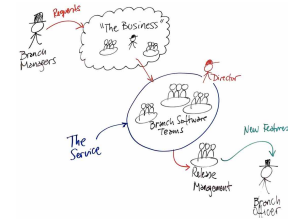
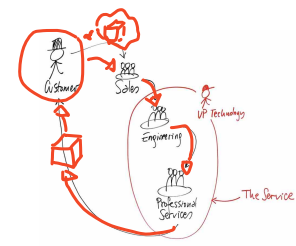
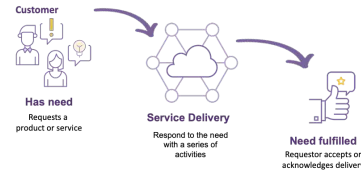
Asynchronous

The Kanban Lens

- 1) See work as flow (from customer, need to needs met)
- 2) See workflow as a series of actions applied to the work
- 3) See knowledge work as a service
- 4) See your organization as a network of services



Choose to see like this



STATIK

(Systems Thinking Approach to Introducing Kanban)

Identify Services. For each service...

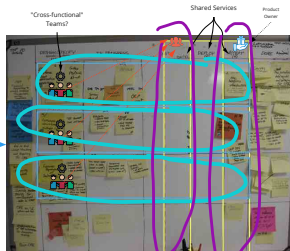
1. Understand what makes the service "fit for purpose"
2. Understand sources of dissatisfaction regarding current delivery
3. Analyze sources of and nature of demand
4. Analyze current delivery capability
5. Model the service delivery workflow
6. Identify & define classes of service
7. Design the Kanban system
8. Socialize design & negotiate implementation

Scope of KMP 1 - Kanban Systems Design class



This process tends to be iterative

Learn to see services everywhere



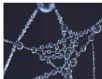
Seeing Services

<p>List the services your customers (or other stakeholders) perceive that you provide to them</p> <p>Does the customer have a consistent workflow for them?</p>	<input type="text"/>
<p>List existing shared services in your organization</p> <p>Why are they shared? Does specialized resources? Common function? Efficiency due to services in demand? Efficiency of operation, personnel sourcing? Historic or geographic reason?</p>	<input type="text"/>
<p>Think of existing functions not currently perceived as services that actually are organized as services</p> <p>Just: If you keep teams, departments or functional groups together and doing work to them then they are most likely service providers</p>	<input type="text"/>
<p>For each service, what level of Kanban do you envisage? Personal, Probe/Team Kanban, Workflow Kanban, pull system?</p>	<input type="text"/>

Kanban Method: Service Delivery Principles

Your organization is a network of interdependent services with policies that determine its behavior. Therefore:

1. Understand and focus on the customer's needs and expectations.
2. Manage the work; let workers self-organize around it.
3. Regularly review the network and its policies to improve outcomes.



Kanban Method: Change Management Principles



- 1) Start with what you do now
 - * Understanding current processes, as actually practiced
 - * Respecting existing roles, responsibilities & job titles
- 2) Gain agreement to pursue improvement through evolutionary change
- 3) Encourage acts of leadership at all levels

Kanban Method: General Practices

- Visualize
- Limit work-in-progress
- Manage flow
- Make policies explicit
- Implement feedback loops
- Improve collaboratively, evolve experimentally (using models & the scientific method)

CONTEXTUALIZATION

Implementing Kanban for Service Delivery

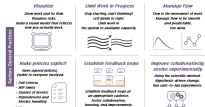


Specific Practices

- 1) Visualize service delivery workflows
- 2) Implement pull systems with WIP limits
- 3) Manage flow within & across workflows
- 4) Make your decision framework, risk management policies & boundaries of empowerment explicit
- 5) Implement the Kanban Cadences
- 6) Improve collaboratively, evolve experimentally

Using these explicit metrics and model-driven improvements based upon an understanding of risk, variability, constraints, sources of delay, service theory, integration theory, interaction, & coordination control.

Kanban Cadences



Are we doing Kanban or not?

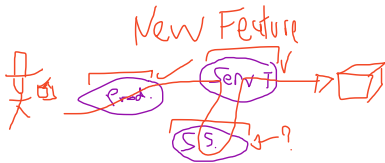
Do you view your organization as a **network of services** and seek to improve the **balance of capability against demand** & customer expectations?

Do you **intend** to use visualization & Kanban systems to drive a **focus on sustained fitness for purpose**?

Kanban Litmus Test

To what degree each of the following is happening in your service? What evidence do you see? what do you see instead?

Have managers changed their behavior?	Manage the work, not the workers	Yes. Customer service metrics improved. More customer-centric. More customer-centric. More customer-centric.	slowly	yes
Has the customer interface changed?	Represent customer discipline. Intuitive demand?	Not sure if the customer interface was changed. Not at representative.	yes	representational customers out of work's context. Intuitive demand.
Has the customer contract changed?	Work item types, SLAs	Yes. How the work item types. Some changes in the way the work item types.	establish delivery date, but no formal SLA	In progress
Has the service delivery model changed?	Class of Service, Capacity Allocation, demand shaping	Yes	yes	in progress



Kanban Method: Service Delivery Principles

Your organization is a network of interdependent services with policies that determine its behavior.

Therefore:

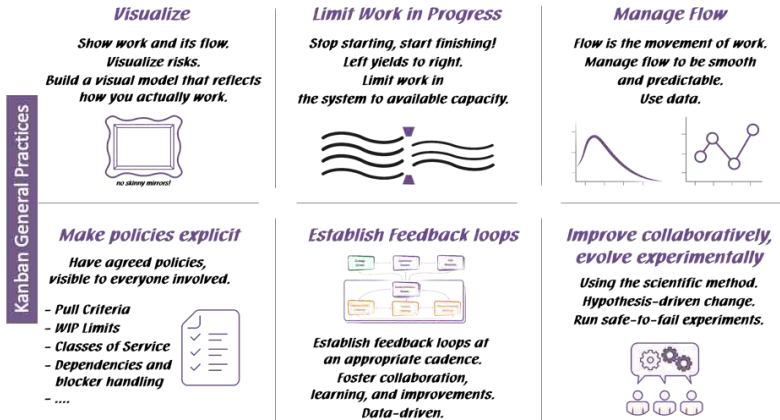
1. Understand and focus on the customer's needs and expectations.
2. Manage the work; let workers self-organize around it.
3. Regularly review the network and its policies to improve outcomes.



Kanban Method: Change Management Principles



- 1) Start with what you do now
 - Understanding current processes, as actually practiced
 - Respecting existing roles, responsibilities & job titles
- 2) Gain agreement to pursue improvement through evolutionary change
- 3) Encourage acts of leadership at all levels



Kanban Method: General Practices

- ▲ Visualize
- ▲ Limit work-in-progress
- ▲ Manage flow
- ▲ Make policies explicit
- ▲ Implement feedback loops
- ▲ Improve collaboratively, evolve experimentally
(using models & the scientific method)

CONTEXTUALIZATION

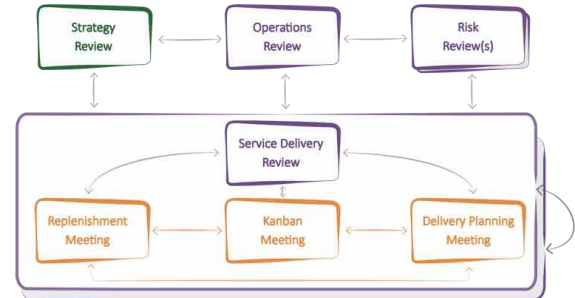
Implementing Kanban for Service Delivery

Specific Practices

- 1) Visualize service delivery workflows
- 2) Implement pull systems with WIP limits
- 3) Manage flow within & across workflows
- 4) Make your decision framework, risk management policies & boundaries of empowerment explicit
- 5) Implement the Kanban Cadences
- 6) Improve collaboratively, evolve experimentally (using fitness criteria metrics, and model-driven improvements based upon an understanding of risks, variability, constraints, sources of delay, queuing theory, real option theory, transaction & coordination costs)



Kanban Cadences



Are we doing Kanban or not?

Do you view your organization as a **network of services** and seek to improve the **balance of capability against demand** & customer expectations?

Do you **intend** to use visualization & Kanban systems to drive a **focus on sustained fitness for purpose**?

Kanban Litmus Test

To what degree each of the following is happening in your service?
What evidence do you see? what do you see instead?

Have managers changed their behavior?	Manage the work, not the workers		the Company is not KanBan. Big Shift. Slow. - Leaders - AVP/VP Yes -Resource managers slower - AOS - Struggling - EPMO - NO	slowly	yes
Has the customer interface changed?	Replenishment Discipline. Irrefutable demand?	Not sure if the business partners were consulted. Yes at replenishment		yes	replenishment sometimes out of team's control. Irrefutable demand.
Has the customer contract changed?	Work Item Types, SLAs	Yes How the work comes in. Some things have to get done e.g. Tax Less Dates		establish delivery date, but no formal SLA	In progress
Has the service delivery model changed?	Classes of Service, Capacity Allocation, demand shaping	Yes		yes	in progress

SCALING KANBAN

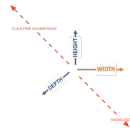
Do more
Kanban!

One service
at a time!

HEIGHT:
How much
detail can
we see?

WIDTH:
How much
are we
visualizing?

Scaling Dimensions



KNOWLEDGE:
How well do
we
understand
Kanban?



STATIK!

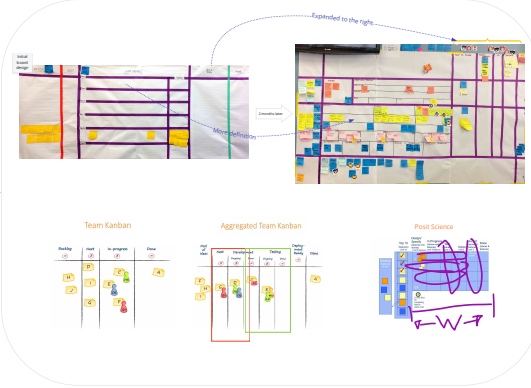
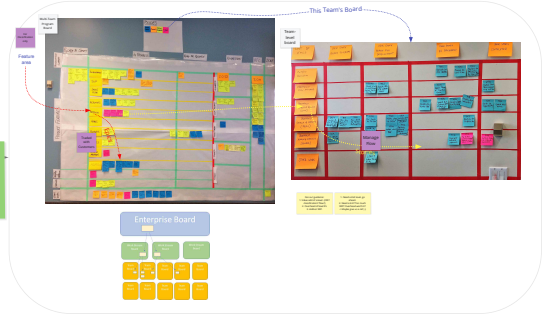
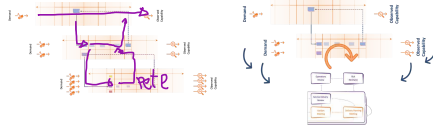
SCALE-FREE:
Will Kanban
work over
here?

DEPTH:
Are
dependencies
also using
Kanban?

Cadences

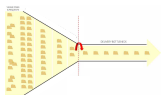
Kanban Scaling Principles

- 1) Scale out in a service-oriented fashion one service at a time
- 2) Design each Kanban system from first principles using STATIK. Do not attempt to design a grand solution at enterprise scale.
- 3) Use the Kanban Cadences as the management system that enable balance, leading to better enterprise services delivery.



Upstream acquires options.
Downstream (delivery)
converts options.

Kanban Balances Demand and Capability

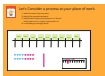


The Upstream Challenge

Upstream acquires options.
Downstream (delivery)
converts options.

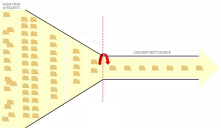
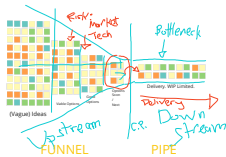
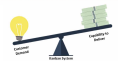


Upstream vs. Delivery Kanban



Upstream acquires options.
Downstream (delivery)
converts options.

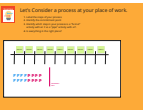
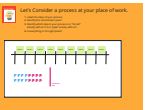
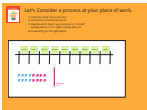
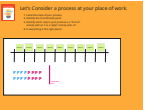
Kanban Balances Demand and Capability



The Upstream Challenge

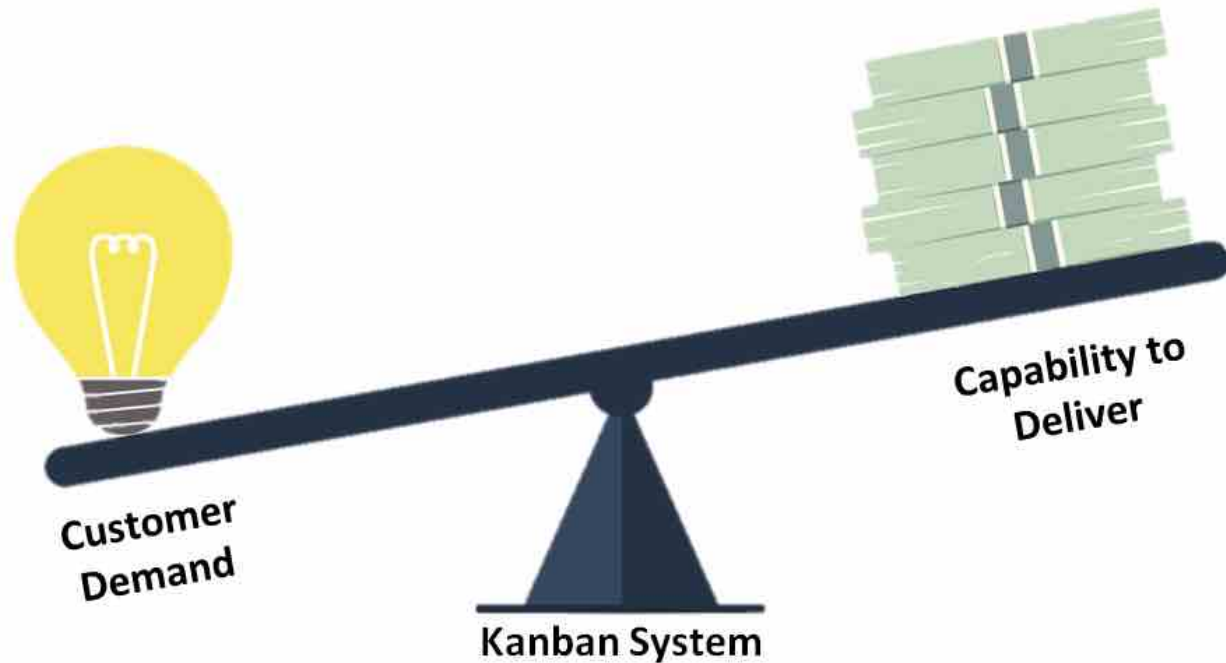


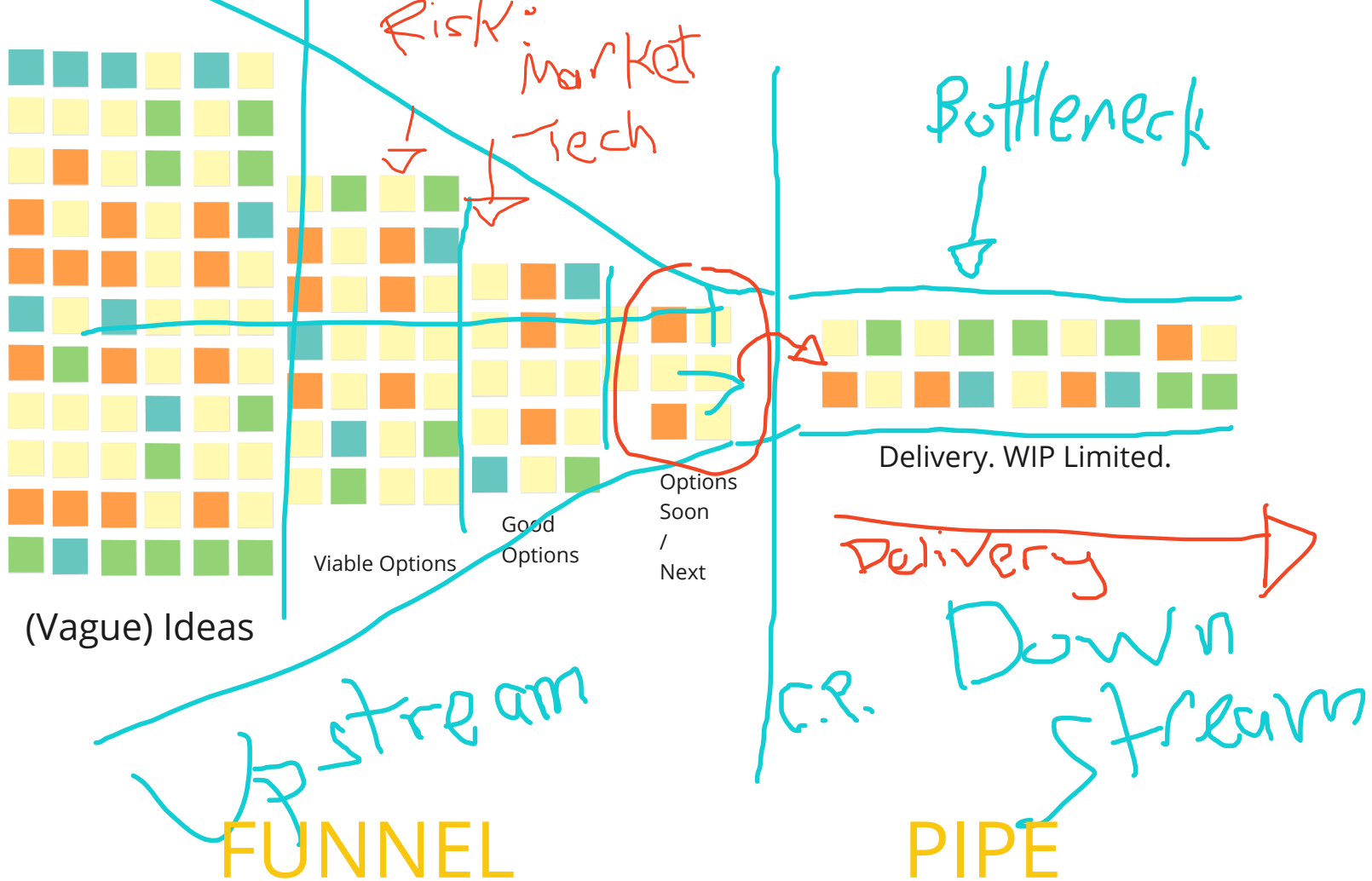
Upstream vs. Delivery Kanban



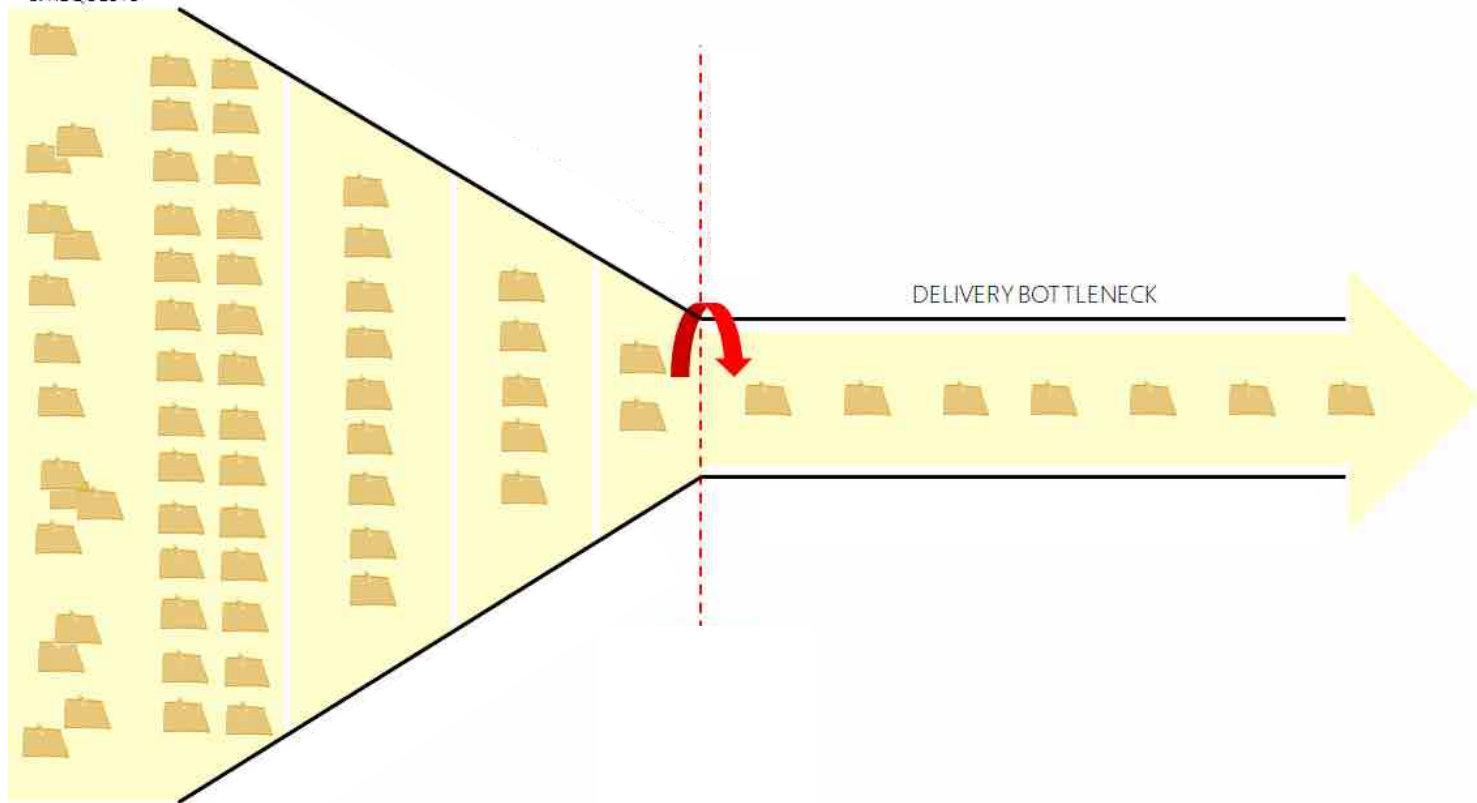
Upstream acquires options.
Downstream (delivery)
converts options.

Kanban Balances Demand and Capability



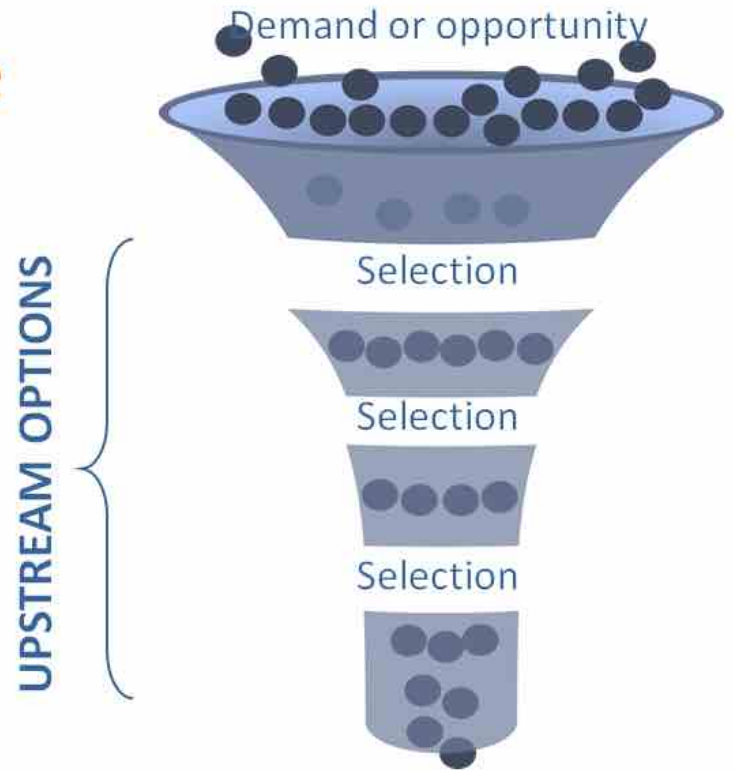


VAGUE IDEAS
& REQUESTS



The Upstream Challenge

- Unclear demand or opportunity that does not present itself in a regular flow
- Demand comes in various shapes, sizes, forms
- Decision making in each of the selection stages causes delay
- Friction with the delivery process of committed work that is best organized around an even and predictable flow



Source: Upstream Kanban Condensed, Patrick Steyaert

Upstream vs. Delivery Kanban



- Upstream
 - Money Spent acquiring options
 - High discard rates
 - Non-linear process
- Delivery
 - Money spent executing options, generating customer value
 - Little to no discarding
 - Linear flow of work

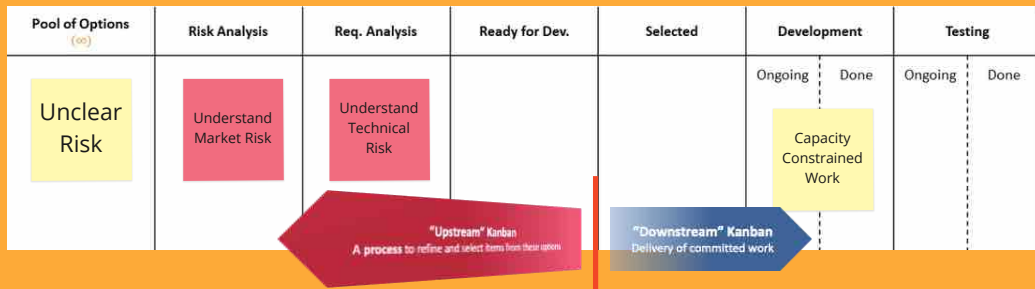
Exercise



Where is the Upstream and Delivery Kanban demarcation point?

Get things discarded.

Getting things done.



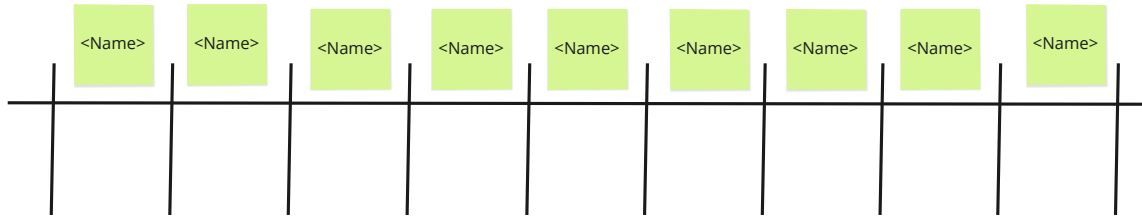
COMMITMENT POINT

Exercise



Let's Consider a process at your place of work.

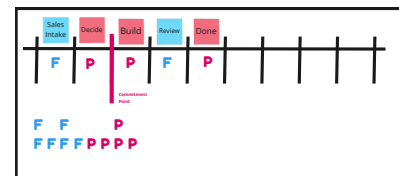
1. Label the steps of your process
2. Identify the commitment point
3. Identify which step in your process is a "funnel" activity with an F vs a "pipe" activity with a P.
4. Is everything in the right place?



FFF F P P P P
FFF F P P P P

Commitment
Point

Example:



Exercise

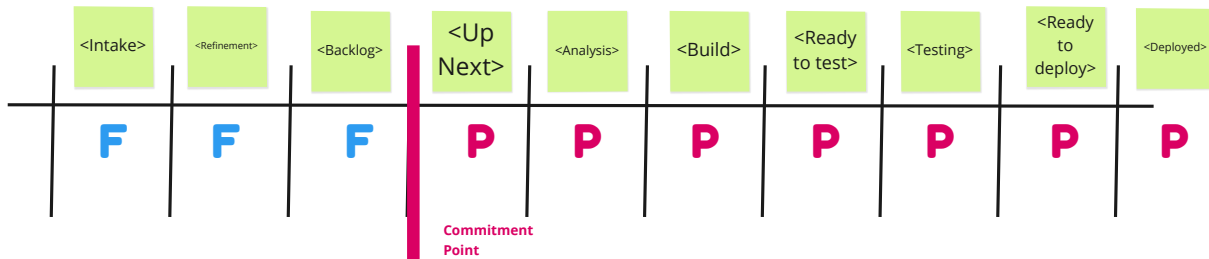


Let's Consider a process at your place of work.

1. Label the steps of your process
2. Identify the commitment point
3. Identify which step in your process is a "funnel" activity with an F vs a "pipe" activity with a P.
4. Is everything in the right place?

Room

1



F F F F F P

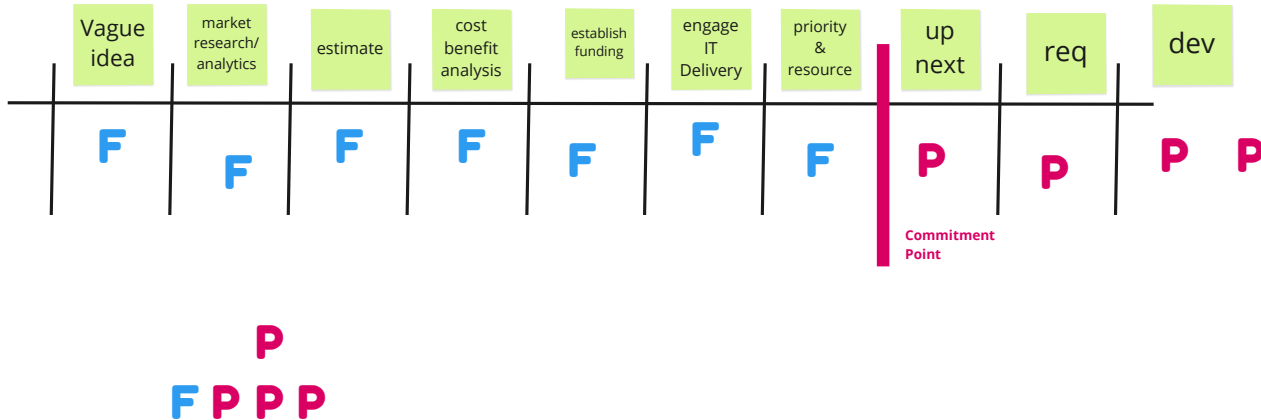
Exercise



Let's Consider a process at your place of work.

1. Label the steps of your process
2. Identify the commitment point
3. Identify which step in your process is a "funnel" activity with an F vs a "pipe" activity with a P.
4. Is everything in the right place?

Room
2



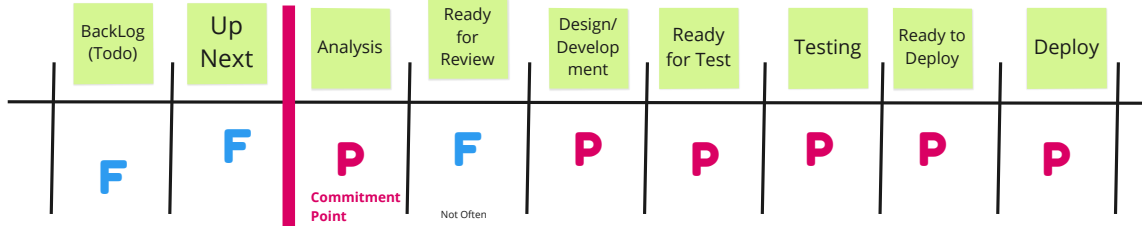
Exercise

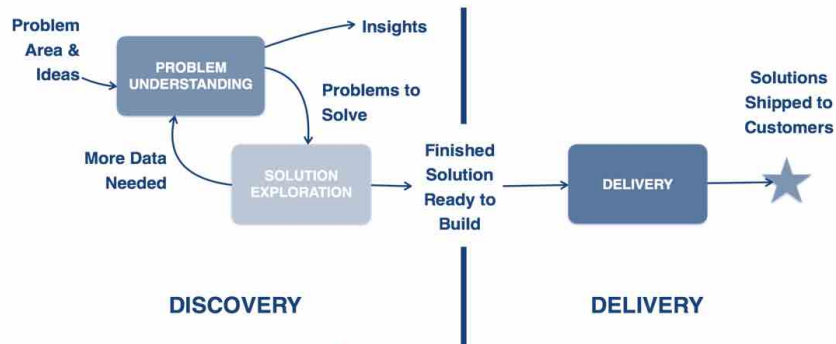


Let's Consider a process at your place of work.

1. Label the steps of your process
2. Identify the commitment point
3. Identify which step in your process is a "funnel" activity with an F vs a "pipe" activity with a P.
4. Is everything in the right place?

Room
3

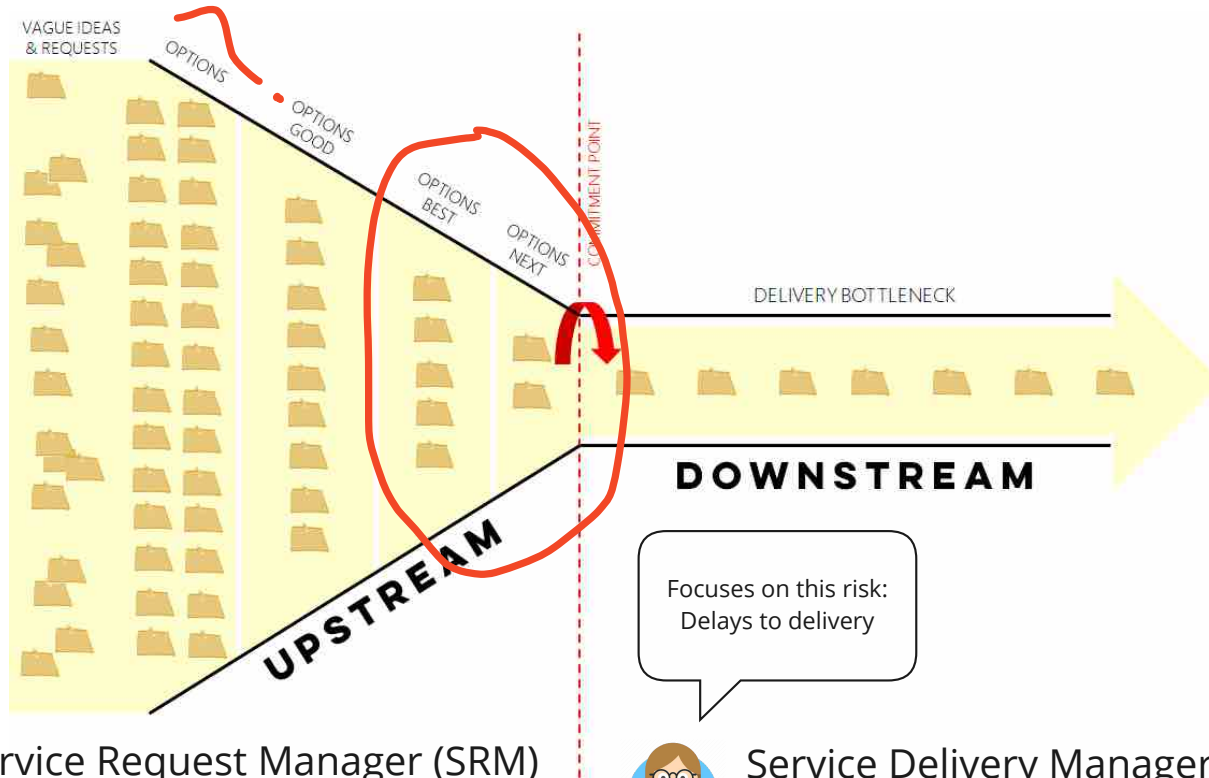




Optimizely's End-to-End Board



Kanban Roles are Emerging



Service Request Manager (SRM)

- Manages flow of options

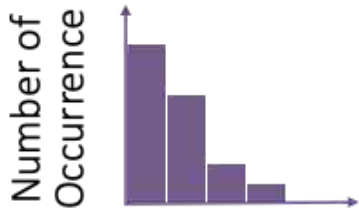


Service Delivery Manager (SDM)

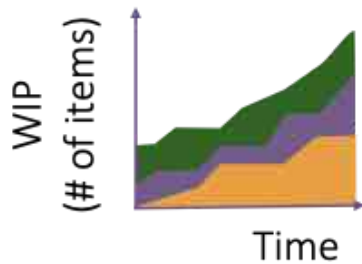
- Manage flow of committed work



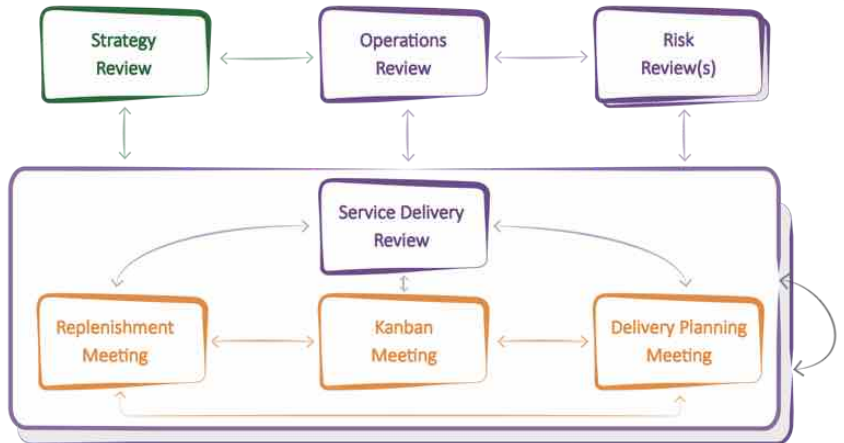
Metrics



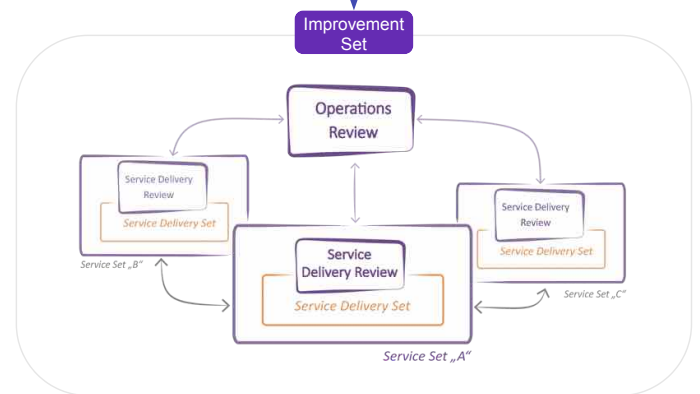
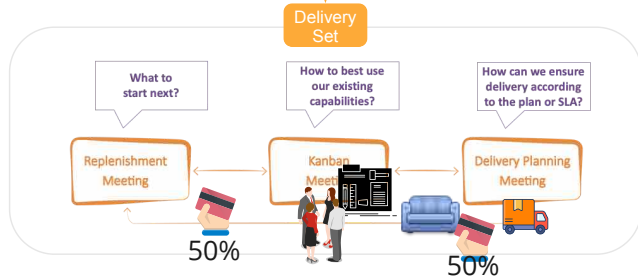
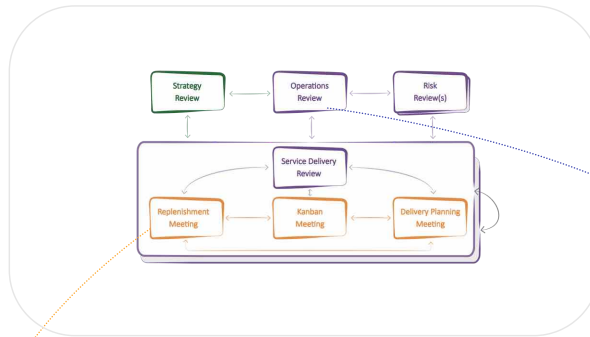
Classes of Lead Time
e.g. 1-3 days

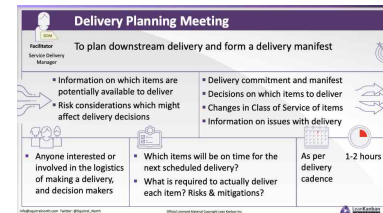
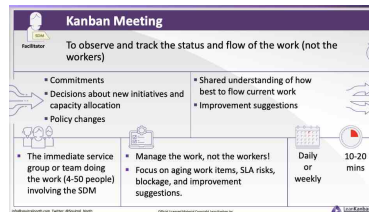
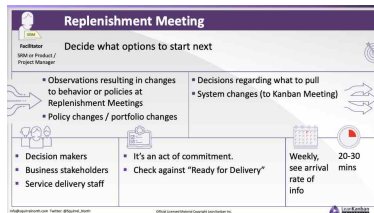
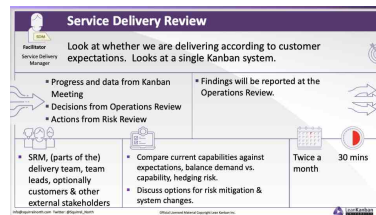
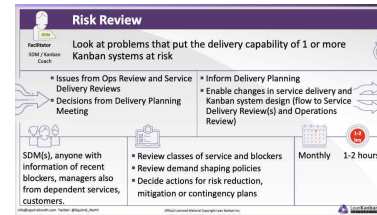
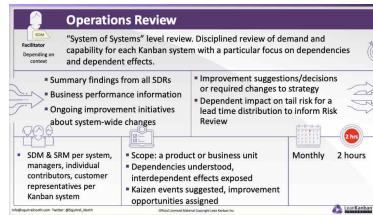


Boards



Cadences







Operations Review

Facilitator

Depending on
context

“System of Systems” level review. Disciplined review of demand and capability for each Kanban system with a particular focus on dependencies and dependent effects.

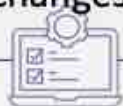


- Summary findings from all SDRs
- Business performance information
- Ongoing improvement initiatives about system-wide changes

- Improvement suggestions/decisions or required changes to strategy
- Dependent impact on tail risk for a lead time distribution to inform Risk Review



- SDM & SRM per system, managers, individual contributors, customer representatives per Kanban system



- Scope: a product or business unit
- Dependencies understood, interdependent effects exposed
- Kaizen events suggested, improvement opportunities assigned



Monthly



2 hours



Risk Review

SDM

Facilitator

SDM / Kanban
Coach

Look at problems that put the delivery capability of 1 or more Kanban systems at risk



- Issues from Ops Review and Service Delivery Reviews
- Decisions from Delivery Planning Meeting

- Inform Delivery Planning
- Enable changes in service delivery and Kanban system design (flow to Service Delivery Review(s) and Operations Review)



SDM(s), anyone with information of recent blockers, managers also from dependent services, customers.



- Review classes of service and blockers
- Review demand shaping policies
- Decide actions for risk reduction, mitigation or contingency plans



Monthly



1-2 hours





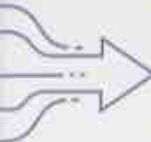
Service Delivery Review


Facilitator

Service Delivery
Manager

Look at whether we are delivering according to customer expectations. Looks at a single Kanban system.



- 
- Progress and data from Kanban Meeting
 - Decisions from Operations Review
 - Actions from Risk Review

- Findings will be reported at the Operations Review.
- 



- SRM, (parts of the) delivery team, team leads, optionally customers & other external stakeholders



- Compare current capabilities against expectations, balance demand vs. capability, hedging risk.
- Discuss options for risk mitigation & system changes.



Twice a
month



30 mins




Replenishment Meeting


Facilitator

SRM or Product /
Project Manager

Decide what options to start next



- 
- Observations resulting in changes to behavior or policies at Replenishment Meetings
 - Policy changes / portfolio changes

- Decisions regarding what to pull
 - System changes (to Kanban Meeting)
- 



- Decision makers
- Business stakeholders
- Service delivery staff



- It's an act of commitment.
- Check against "Ready for Delivery"



Weekly,
see arrival
rate of
info



20-30
mins





Facilitator

Kanban Meeting

To observe and track the status and flow of the work (not the workers)



- 
- Commitments
 - Decisions about new initiatives and capacity allocation
 - Policy changes

- Shared understanding of how best to flow current work
 - Improvement suggestions
- 



- The immediate service group or team doing the work (4-50 people) involving the SDM



- Manage the work, not the workers!
- Focus on aging work items, SLA risks, blockage, and improvement suggestions.



Daily
or
weekly



10-20
mins




Facilitator


Service Delivery
Manager

Delivery Planning Meeting

To plan downstream delivery and form a delivery manifest



- 
- Information on which items are potentially available to deliver
 - Risk considerations which might affect delivery decisions

- Delivery commitment and manifest
 - Decisions on which items to deliver
 - Changes in Class of Service of items
 - Information on issues with delivery
- 



- Anyone interested or involved in the logistics of making a delivery, and decision makers



- Which items will be on time for the next scheduled delivery?
- What is required to actually deliver each item? Risks & mitigations?



As per
delivery
cadence



1-2 hours



"Any additional info?"



Facilitator

KANDAN MEETING : RIGHT → LEFT

- UPDATE THE BOARD BEFORE MEETING
- FREQUENCY: _____ TIME: _____

- ☐ BLOCKED TICKETS
- ☐ DONE TICKETS READY TO PULL
- ☐ TICKETS EXCEEDING "AGE" THRESHOLD OR SLA
- ☐ NEWS & ANNOUNCEMENTS

reason date
reason



Design of the Replenishment Meeting

- 1) Identify and Observe how Replenishment happens today
- 2) Consider design changes for the meeting

Replenishment	Timing	Change
Who facilitated?	When was the last one? (frequency)	What's different since the last meeting? (people, content, options, process, etc.)
Participation	Information	Options
Who attended?	What info was brought?	What decisions were made?
INTERNAL TEAM	priority list, new requests, recommendations, try to build out board for two week increment	what we will work on next
What roles did they play?	Options	Duration
internal team is receiving information	What options were considered?	How long did it take?
devils advocates	based on priority	size & complexity
		1 hour

PDF Version

Replenishment Who facilitated? SRM	Timing Which day? Time? When was the last one? (frequency) weekly, tuesday morning	Change What's different since the last meeting? (people, content, options, process, etc.) options, priority, board clean up
Participation Who attended? INTERNAL TEAM What roles did they play? internal team is receiving information devils advocates	Information What info was brought? priority list, new requests, recommendations, try to build out board for two week increment Options What options were considered? priorities capacity backlog (refined)	Decisions What decisions were made? what we will work on next
	Procedure How were decisions made? based on priority size & complexity	Duration How long did it take? 1 hour



Design of the Replenishment Meeting

Room 1

- 1) Identify and Observe how Replenishment happens today
- 2) Consider design changes for the meeting

Replenishment Who facilitated?	Timing Which day? Time? When was the last one? (frequency)		Change What's different since the last meeting? (people, content, options, process, etc.)
Participation Who attended? What roles did they play?	Information What info was brought?		
	Options What options were considered?		Decisions What decisions were made?
	Procedure How were decisions made?		Duration How long did it take?



Design of the Replenishment Meeting

Room 2

- 1) Identify and Observe how Replenishment happens today
- 2) Consider design changes for the meeting

Replenishment <div>SRM</div>	Timing <div>weekly</div> <div>last week</div>	Change <div>What's different since the last meeting? (people, content, options, process, etc.)</div>
Participation <div>full team</div> <div>Team may identify more detail of the need.</div> <div>business may attend adhoc. eg. tshirt size</div> <div>Team provides input on effort</div>	Information <div>no new work.</div> <div>Review initial user story based on intake</div> <div>questions from PO discussed</div>	
	Options <div>next priority column</div> <div>backlog if nothing prioritized</div>	Decisions <div>What decisions were made?</div>
	Procedure <div>dependencies considered</div> <div>SRM decides based on priorities, due dates</div> <div>team advises</div>	Duration <div>30 min, usually less</div>



Review: Cadences Set

Out of scope

Strategy
Review

Operations
Review

Risk
Review(s)

Improvement Set
(our focus today)

Delivery Set
(covered in the
previous session)

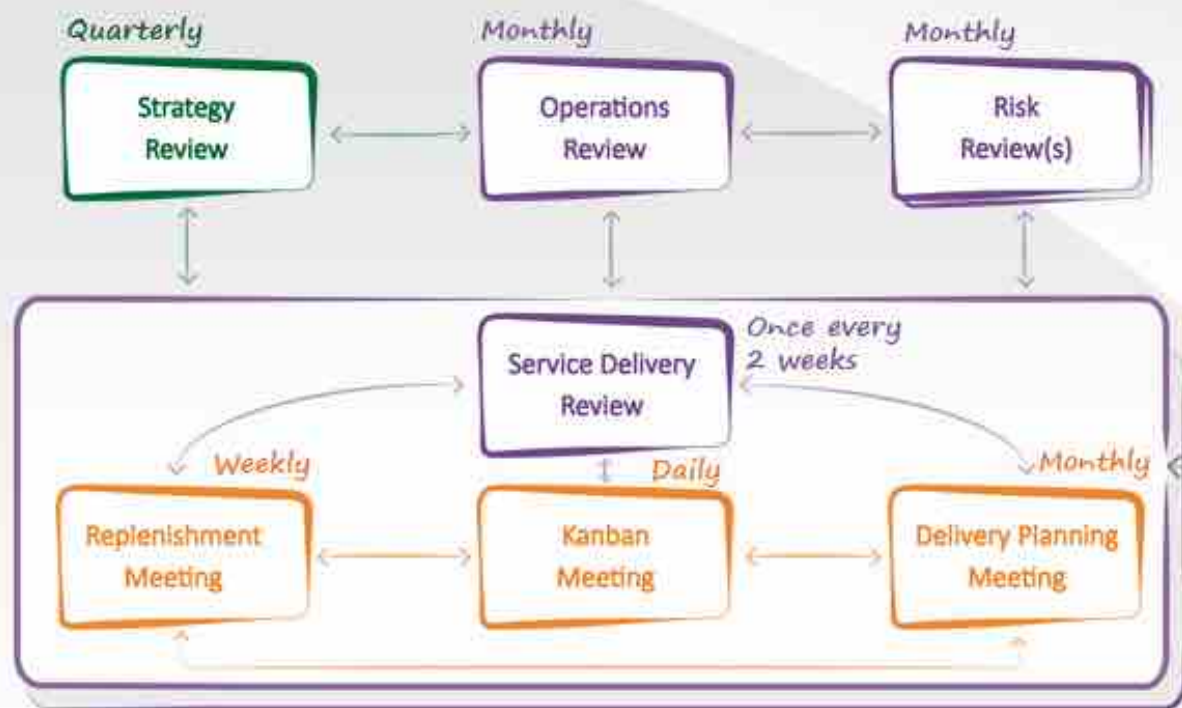
Service Delivery
Review

Replenishment
Meeting

Kanban
Meeting

Delivery Planning
Meeting

Example 1: Cadence of Meetings and Reviews

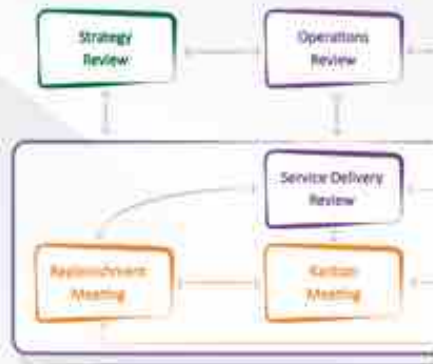


This diagram shows a typical cadence for a medium-sized Service Delivery organization with multiple services in place.

You will need to adjust the frequencies to your needs!

Sneak Preview: Strategy Review

- ▲ Purpose: To review and assess current markets, strategic position, KPIs, strategy, and capabilities
- ▲ Key to aligning strategy and capabilities
- ▲ Attended by senior executives and representatives from strategic planning, sales, marketing, portfolio management, risk management, service delivery, and customer care
- ▲ Key touchpoints with Cadences: Affects replenishment decisions and policies and consumes data from Operations Review.



Overview of Improvement Set



Introduction: Lead Time

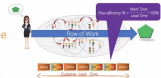
An inconvenient truth:

Lead time(*) is not a single number.
It is a probability distribution.

And here's the good news:

Different distributions can tell us what type of work is being completed
and help us make risk management or planning decisions.

(*) customer lead time, time-to-market, time-in-process, etc.

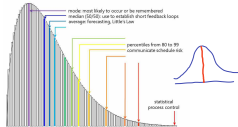


Lead Time Distributions

An Iff operations service in Germany



A major network hardware company in China



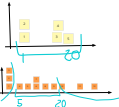
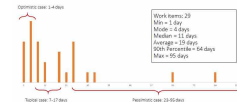
Your very first lead time chart may not look nice



Binning makes histograms more readable



What can we know about this service from these few (29) observations?



Introduction: Lead Time

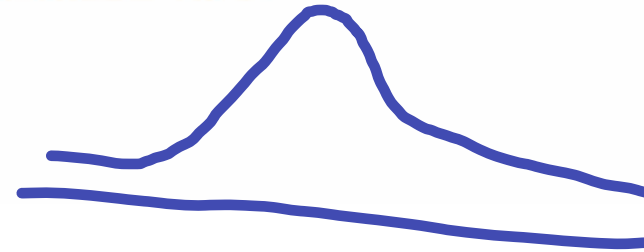
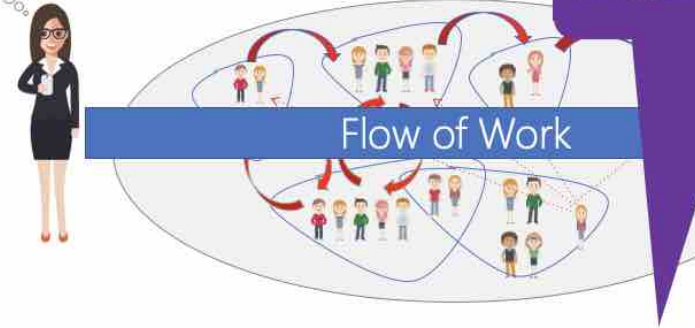
An inconvenient truth:

Lead time(*) is not a single number.
It is a probability distribution.

And here's the good news:

Different distributions can tell us what type of work is being completed and help us make risk management or planning decisions.

(*) customer lead time, time-to-market, time-in-process, etc.

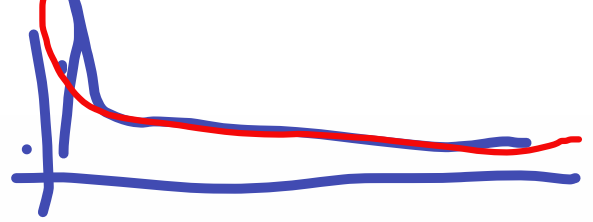
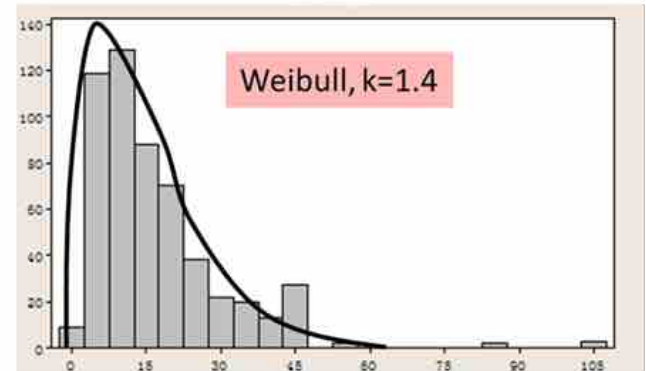


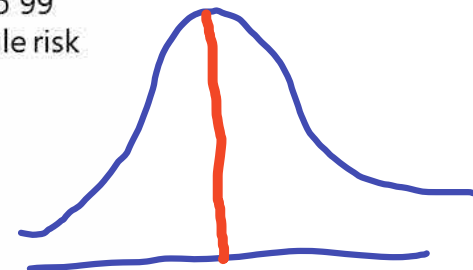
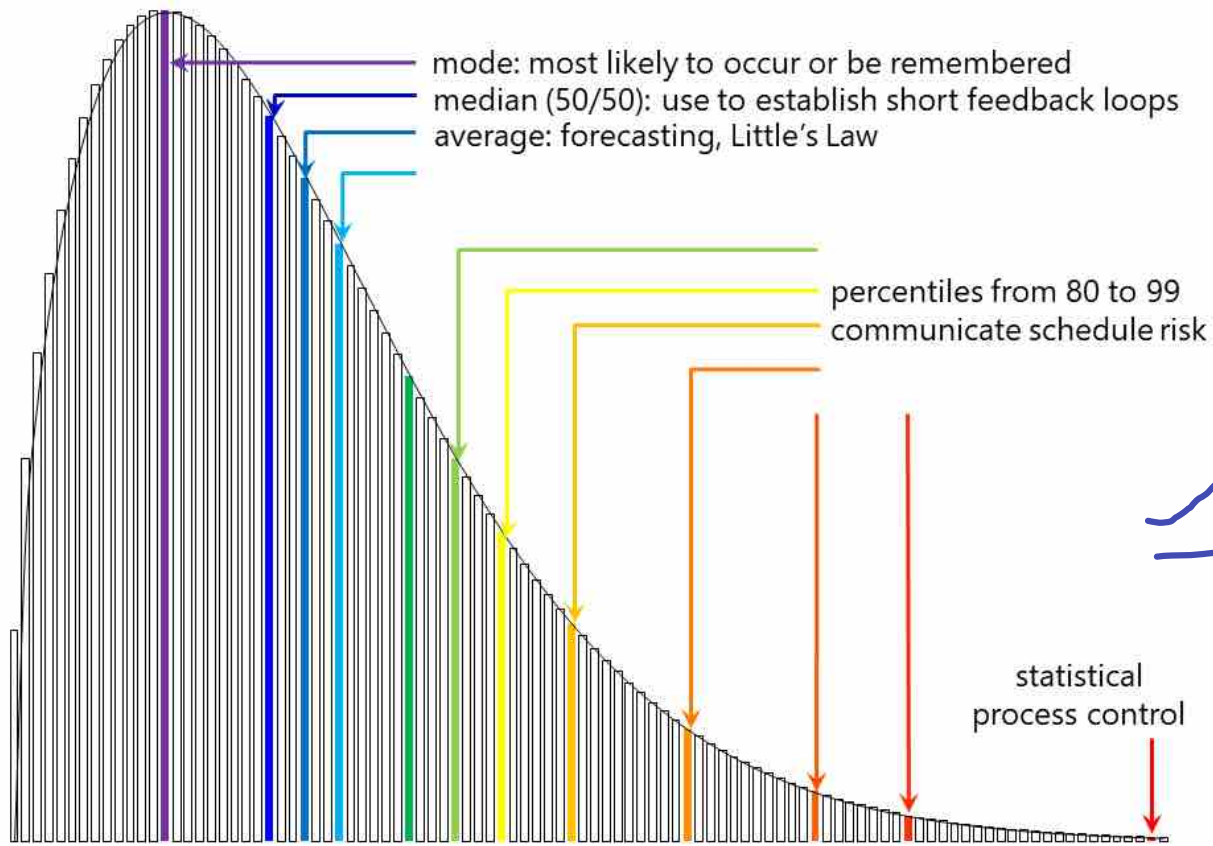
Lead Time Distributions

An IT operations service in Germany

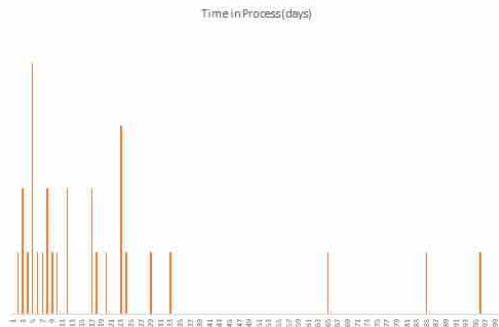


A major network hardware company in China

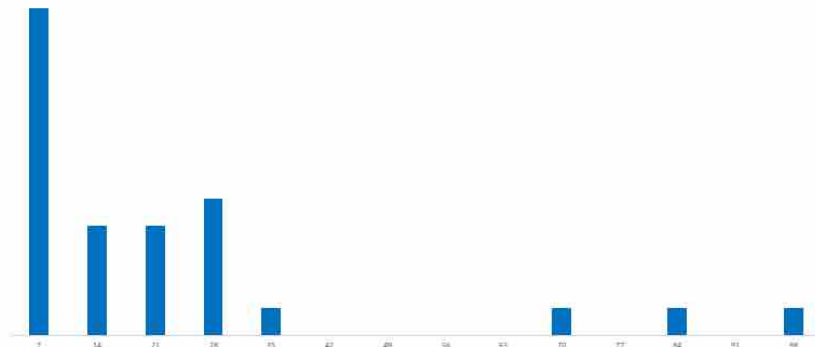




Your very first lead time chart may not look nice

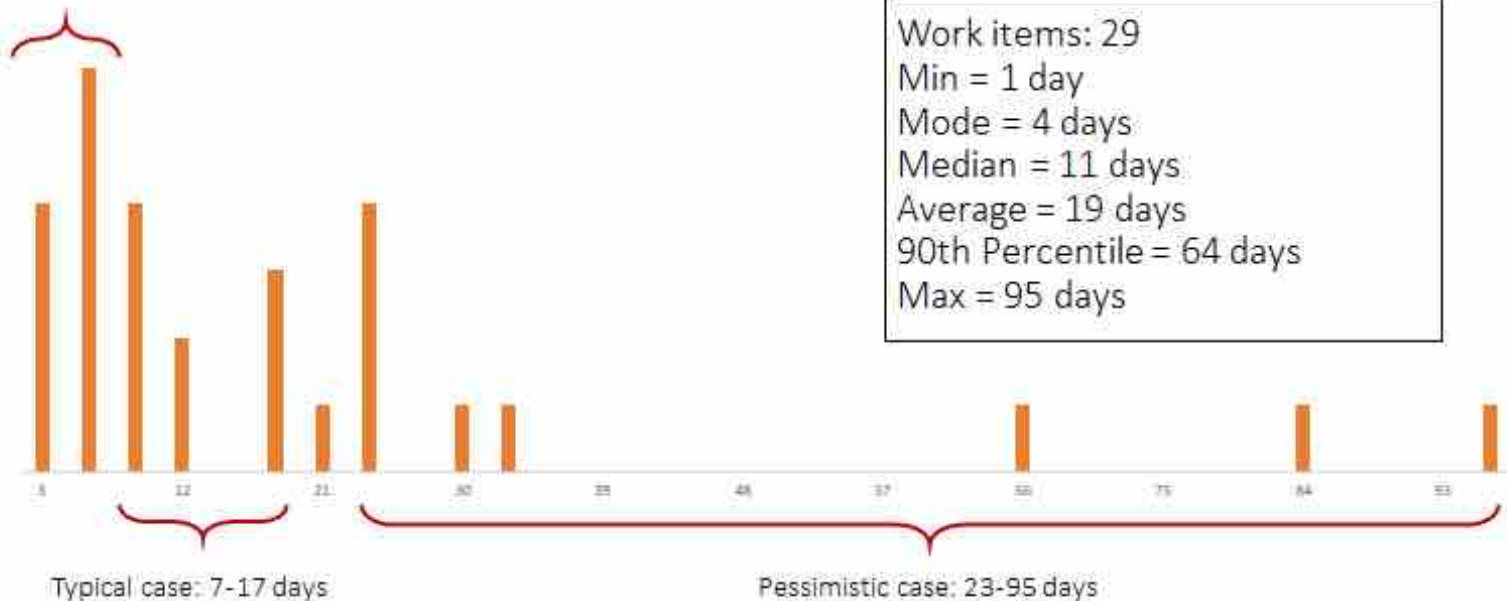


Binning makes histograms more readable



What can we know about this service from these few (29) observations?

Optimistic case: 1-4 days






Facilitator
Service Delivery
Manager

Service Delivery Review

Look at whether we are delivering according to customer expectations. Looks at a single Kanban system.



- 
- Progress and data from Kanban Meeting
 - Decisions from Operations Review
 - Actions from Risk Review

- Findings will be reported at the Operations Review.
- 



SRM together with representatives of the delivery team including team leads for each activity or function in the workflow. Customers and other external stakeholders are optional.



Compare current capabilities against fitness criteria metrics and seek to balance demand against capability and hedge risk appropriately. Discuss options for risk mitigation and system changes to improve observed capability against expectations.

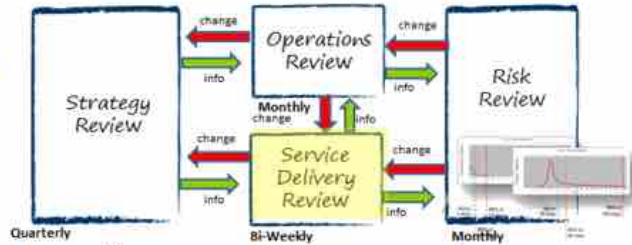


Twice a month



30min

Service Delivery Review



- ▲ **Purpose:** Look at whether we are delivering according to customer expectations. Looks at a single kanban board.
 - Compare current capabilities against fitness criteria metrics and seek to balance demand against capability and hedge risk appropriately.
 - Also known as, kanban system capability review
- ▲ **Cadence:** Twice a month
- ▲ **Duration:** ½ hour
- ▲ **Facilitator:** Service Delivery Manager
- ▲ **Participants:** includes Service Request Manager together with representatives of the delivery team including team leads for each activity or function in the workflow. Customers and other external stakeholders are optional
- ▲ **Inputs:** Progress and data from Daily Kanban Meeting; Decisions from Operations Review. Actions from Risk Review.
- ▲ **Outputs:** Findings reported at Operations Review.

Exercise



Design Your Service Delivery Review

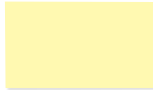
Service - what service are you reviewing?

<Service>

Who is the SDM?

<Service Delivery
Manager>

Who, besides the SDM, should attend? Should one of these people or the SDM run the meeting?



What information are different attendees expected to bring to this meeting? What are the metrics and fitness criteria?

Run Chart

Lead Time
Distribution(s)

Etc.

What insights and actions might you expect as an output from an SDR?



**How much do you need for this meeting the first time?
Can you run it in less time after some practice?**



How often should you run this meeting for your service?



Exercise



Design Your Service Delivery Review

Room 2

Service - what service are you reviewing?

<Service>

Ingenium
System

Who is the SDM?

<Service Delivery
Manager>

Simone

Who, besides the SDM, should attend? Should one of these people or the SDM run the meeting?

Team
SDM runs
meeting

What information are different attendees expected to bring to this meeting? What are the metrics and fitness criteria?

Eventually
SDM brings
metrics

Still early in
journey, ideas
for process
improvements
(retrospectives)

Run Chart

Lead Time
Distribution(s)

Etc.

What insights and actions might you expect as an output from an SDR?

Process
improvements/
changes

Deeper dive
into sources
of delays or
blockers

**How much do you need for this meeting the first time?
Can you run it in less time after some practice?**

should see some
efficiency once
process
improvement
conversations are
less urgent

How often should you run this meeting for your service?

Earlier in
maturity more
often. Later on
monthly should
be sufficient

Exercise



Design Your Service Delivery Review

Room 1

Service - what service are you reviewing?

Service Delivery Review - but it feels more like a retrospective

<Service>

Distribution and Comp

Who is the SDM?

<Service Delivery Manager>

Beth

Who, besides the SDM, should attend? Should one of these people or the SDM run the meeting?

SRM

Team

Maybe PO?

What information are different attendees expected to bring to this meeting? What are the metrics and fitness criteria?

SDM brings metrics

Run Chart

Lead Time Distribution(s)

Etc.

What insights and actions might you expect as an output from an SDR?

Changing WIPS

Increasing or Decreasing Up Next

Discuss Blockers

Solutions for Blockers

Where do we discuss Capacity?

How do we determine the working time?

How much do you need for this meeting the first time? Can you run it in less time after some practice?

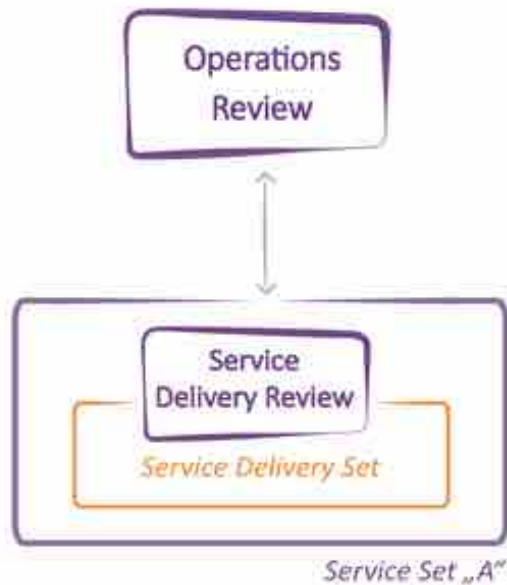
No may need more time as you get more metrics

1 hour minimum

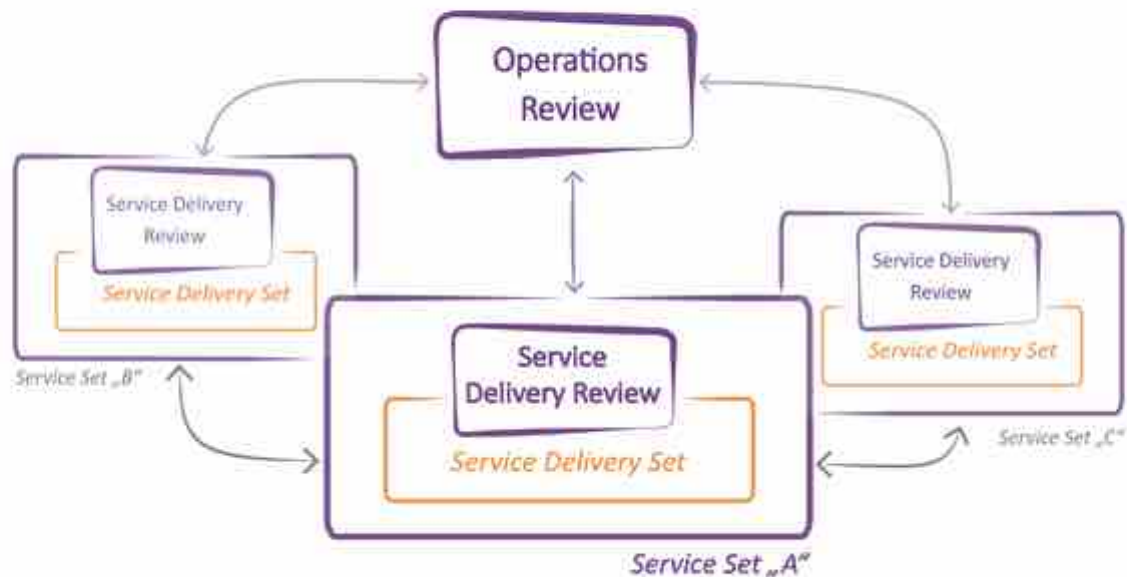
How often should you run this meeting for your service?

Bi Weekly

Drive Improvements in a System of Systems



Drive Improvements in a System of Systems





Operations Review

Facilitator

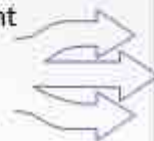
Depending on context

"System of Systems" level review. Disciplined review of demand and capability for each Kanban system with a particular focus on dependencies and dependent effects.



- Summary findings from all SDRs
- Business performance information from Strategy Review such as financial reports, customer satisfaction surveys
- Ongoing improvement initiatives from Risk Review about system-wide changes

- Improvement suggestions/decisions or required changes to strategy with designated owners sent to SDR and to Strategy Review
- Dependent impact on tail risk for a lead time distribution, to Risk Review, to inform prioritizing risks for reduction mitigation or contingency planning



SDM and SRM per system, senior management, head of PMO, customer representatives, downstream mid-level managers, Functional managers and senior individual contributors representing each Kanban system, Product, Portfolio, & Project Managers.



- Only applies where more than 1 system exists.
- Scope: a product or business unit
- Dependencies understood, interdependent effects exposed
- Kaizen events suggested by attendees
- Improvement opportunities assigned to managers
- Strictly orchestrated meeting, timed agenda



Monthly



2 hours

Operations Review



“System of Systems” level review. Disciplined review of demand and capability for each Kanban system with focus on dependencies and dependent effects.

Systematic and data-driven review of how the system of system operates.



- Summary findings from all SDRs
- Business performance information
- Ongoing improvement initiatives about system-wide changes

- Improvement suggestions/decisions or required changes to strategy
- Dependent impact on tail risk for a lead time distribution to inform Risk Review



SDM & SRM per system, managers, individual contributors, customer representatives per Kanban system



Scope: a product or business unit
Dependencies understood, interdependent effects exposed
Kaizen events suggested, improvement opportunities assigned

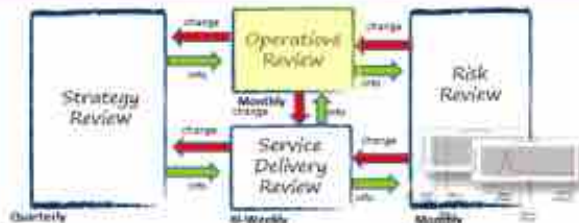


Monthly



2 - 3.5 hours

Operations Review



- ▲ **Purpose:** “Systems of Systems” level review. Disciplined review of demand and capability for each kanban system with a particular focus on dependencies and dependent effects. Only applies where more than 1 system exists
- ▲ **Cadence:** Monthly
- ▲ **Duration:** 8-15 minutes per service, 2-2.5 hours total, 3.5 max
- ▲ **Facilitator:** Service Delivery Director (or Vice President)
- ▲ **Scope:** a product or business unit
 - For smaller/medium sized businesses scope will be the entire business
- ▲ **Participants:** Service Delivery Manager and Service Request Manager for each kanban system. Senior management. Head of PMO. Senior business owners or customer representatives. Downstream mid-level managers. Functional managers and senior individual contributors representing each kanban system. Product, Portfolio, & Project Managers.

Operations Review



- ▲ **Inputs:** Summary findings from Service Delivery Reviews for all kanban systems in the network. Business performance information from Strategy Review such as financial reports, customer satisfaction surveys. Ongoing improvement initiatives from Risk Review about system-wide changes.
- ▲ **Outputs:** A list of improvement suggestions/actions/decisions or required changes to strategy with designated owners sent to Service Delivery Review and to Strategy Review. Dependent impact on tail risk for a lead time distribution, to Risk Review, to inform prioritizing risks for reduction mitigation or contingency planning.

Operations Review



Format

- △ Look at performance, capability, and dependencies between multiple kanban systems
- △ Dependencies understood. Interdependent effects exposed
- △ Scribed – 1-2 scribes take note of improvement suggestions and action items, circulate/publish them afterwards
- △ Kaizen events suggested by attendees
- △ Improvement opportunities assigned to managers as last agenda item
- △ Orchestrated Production / Strictly timed agenda – facilitator should not be among the presenters
- △ May be observed by outside coaches or consultants – this helps refine the format, make it more effective. Coaches should not scribe, facilitate or present

Ops Review Pro Tips



Ops Review Pro Tips

Less frequent than monthly is a slippery slope to "not at all"

Leader stops attending, they stop happening

Create safety!

Avoid dog and pony shows

Lead off with finances or strategy - you're running a business

Guest speaker from a different business un (15 minutes max) works well

Support SDMs through their preparation

First-ever Ops Review: the initiative group of 3-4 people plans it one month in advance (future facilitator, 1-2 SDMs, coach)

Master the SDR skills first

Exercise



Design Your Operations Review

What is the organizational scope (whole company, business unit, etc.) for this Ops Review?

<Biz Unit>

Who is the leader of this organizational unit?

<Leader>

What services are being reviewed?

<Service 1>

<Service 2>

<Service 3>

Who are the SDMs of these services?

<Service Delivery
Manager 1>

<Service Delivery
Manager 2>

<Service Delivery
Manager 3>

**Who will facilitate? Scribe? Be a guest speaker?
Coach/observer?**

<Facilitator>

<Scribe1>

<Guest
Speaker>

<Scribe1>

<Coach>

Time check - how much time do you need?

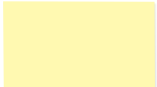
Opening:
??? min

Each SDM has 8?
10? 12? 15?
minutes

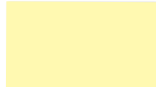
Closing:
??? min

Total Time:
??? hours

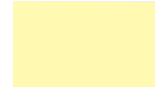
Best room/facility in your company for this meeting?



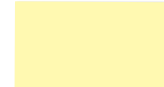
How many team members? How to select them?



How will you publish insights/action items?



Custom name for Ops Reviews in your org?



Exercise



Design Your Operations Review

What is the organizational scope (whole company, business unit, etc.) for this Ops Review?

ISS

Who is the leader of this organizational unit?

David

What services are being reviewed?

<Service 1>

D/C

<Service 2>

TRAD

<Service 3>

SONIC
BOOM

Who are the SDMs of these services?

<Service Delivery
Manager 1>

Beth

SRM?

<Service Delivery
Manager 2>

?

<Service Delivery
Manager 3>

Joyce

Who will facilitate? Scribe? Be a guest speaker? Coach/observer?

Janet or
Steve

anyone

SDMs

anyone

Sheena

Time check - how much time do you need?

Opening:
5 min

Each SDM has
10 minutes

Closing:
5min

Total Time:
1 hour

Best room/facility in your company for this meeting?

ZOOM

How many team members? How to select them?

None- unless
SME required

How will you publish insights/action items?

scribe to
handle

Custom name for Ops Reviews in your org?

Journey
review

Exercise



Design Your Operations Review

What is the organizational scope (whole company, business unit, etc.) for this Ops Review?

<Entire Company>

Who is the leader of this organizational unit?

<Leader: Steve/Janet>

What services are being reviewed?

<Service 1>

Ingenium

Trad

<Service 2>

SLFD
Run
team

<Service 3>

Dist
Comp

Sonic/Atomic
Boom

Who are the SDMs of these services?

<Service Delivery
Manager 1>

Simone

Anthony

<Service Delivery
Manager 2>

Beth

Joyce

<Service Delivery
Manager 3>

??Trad
SDM

Who will facilitate? Scribe? Be a guest speaker? Coach/observer?

<Facilitator>

SDM
rotation

<Scribe1>

recording

<Scribe1>

<Kevin>

<Sheena>

Time check - how much time do you need?

Opening:
??? min

15min

Each SDM has 8?
10? 12? 15?
minutes

90min

Total Time:
??? hours

2hours

Closing:
??? min

10min

Best room/facility in your company for this meeting?

remote

How many team members? How to select them?

minimum

How will you publish insights/action items?

Custom name for Ops Reviews in your org?



Strategies for Improvement

REFUSE THE WORK REQUESTS?

Motivate change through visibility of explicit work types

Eliminate root causes of failure demand, disruptive demand, and speculative demand

Add Capacity Allocation policies

Shape Demand

Customer Demand

Optimize Flow

Capability to Deliver

Use WIP Limits, Flow Efficiency, Focus on disruptions and sources of delay

HIRE MORE PEOPLE?

F = Funnel
P = Pipe

	Testing		
	Done	Ongoing	Done
P			

Strategies for Improving Capability

- Measure Performance and Remove Delays
 - Identify queues and buffers and size appropriately
 - Blocker Clustering – reduce or mitigate root causes
- Reduce Variability caused by disruptions and dependencies
 - Common cause – system design changes
 - Special cause – risk management
- Manage Bottlenecks
 - Improve flow
 - Deliver more value
- Address overhead and inefficiencies
 - Reduce waste/overhead
 - Enable smaller batches



Learning Outcomes: After Attending this Section

- I can identify dependencies across services.
- I can apply suitable metrics to identify delays caused by dependencies.
- Given stable services, I can use Little's Law to find appropriate buffer sizes.

Introduction: Lead Time

An inconvenient truth:

Lead time(*) is not a single number.
It is a probability distribution.

And here's the good news:

Different distributions can tell us what type of work is being completed and help us make risk management or planning decisions.

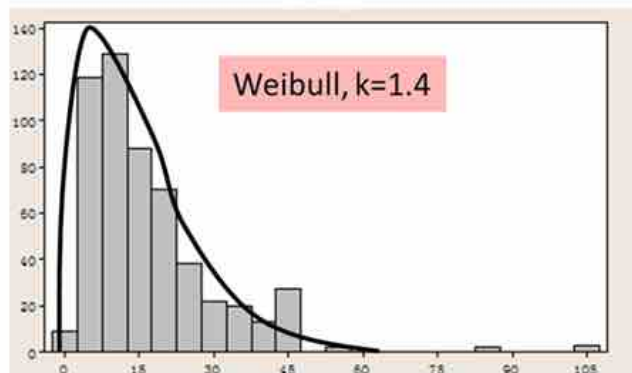
(*) customer lead time, time-to-market, time-in-process, etc.

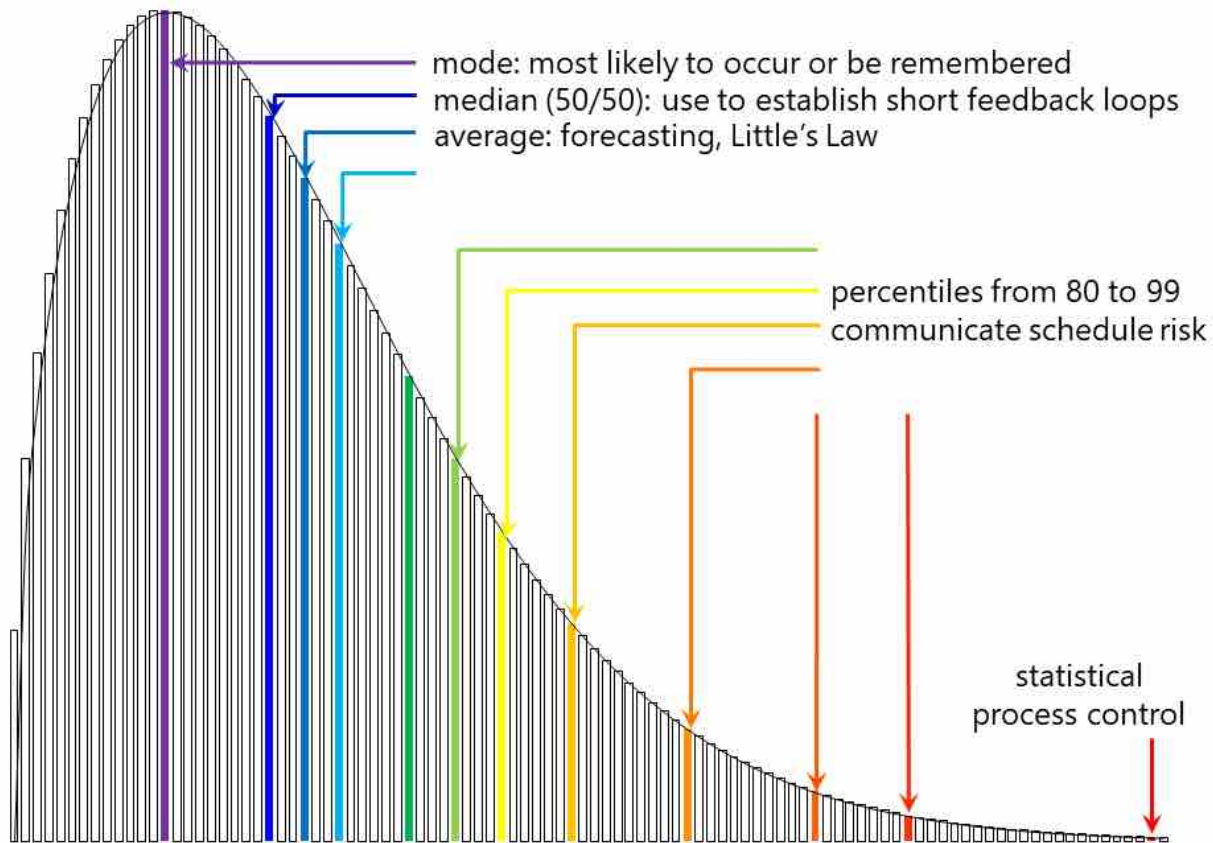
Lead Time Distributions

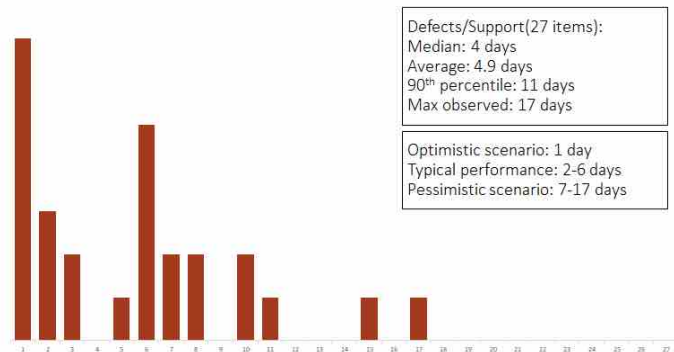
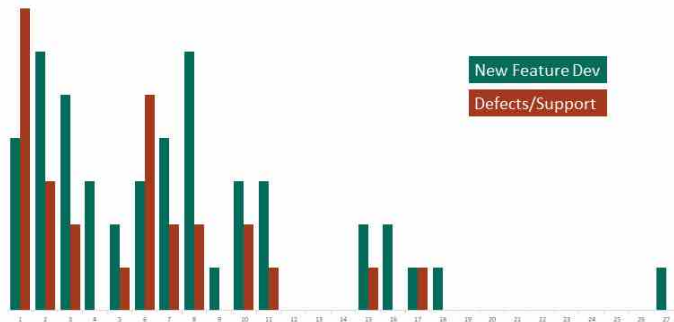
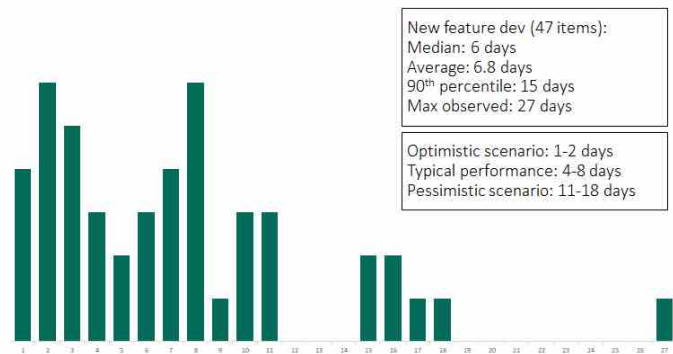
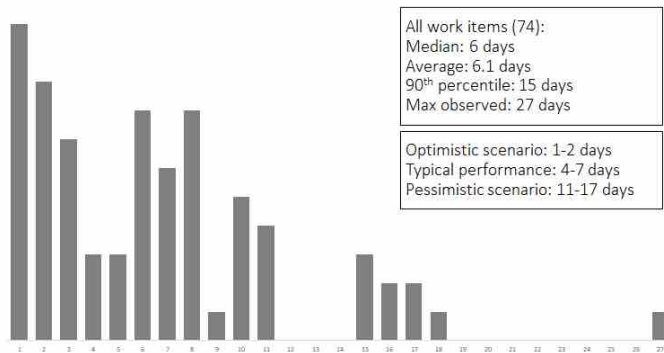
An IT operations service in Germany

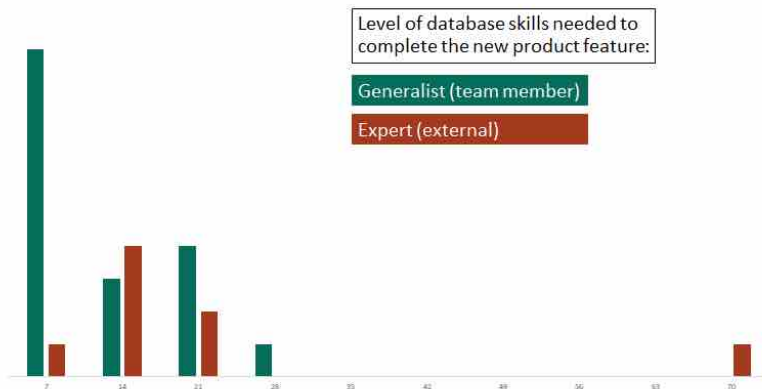
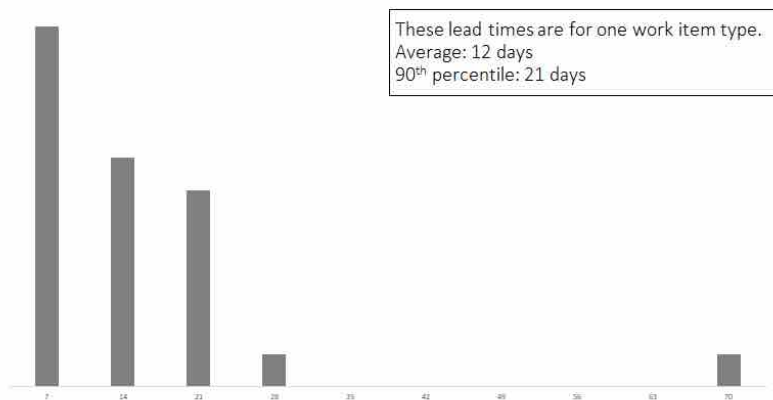


A major network hardware company in China

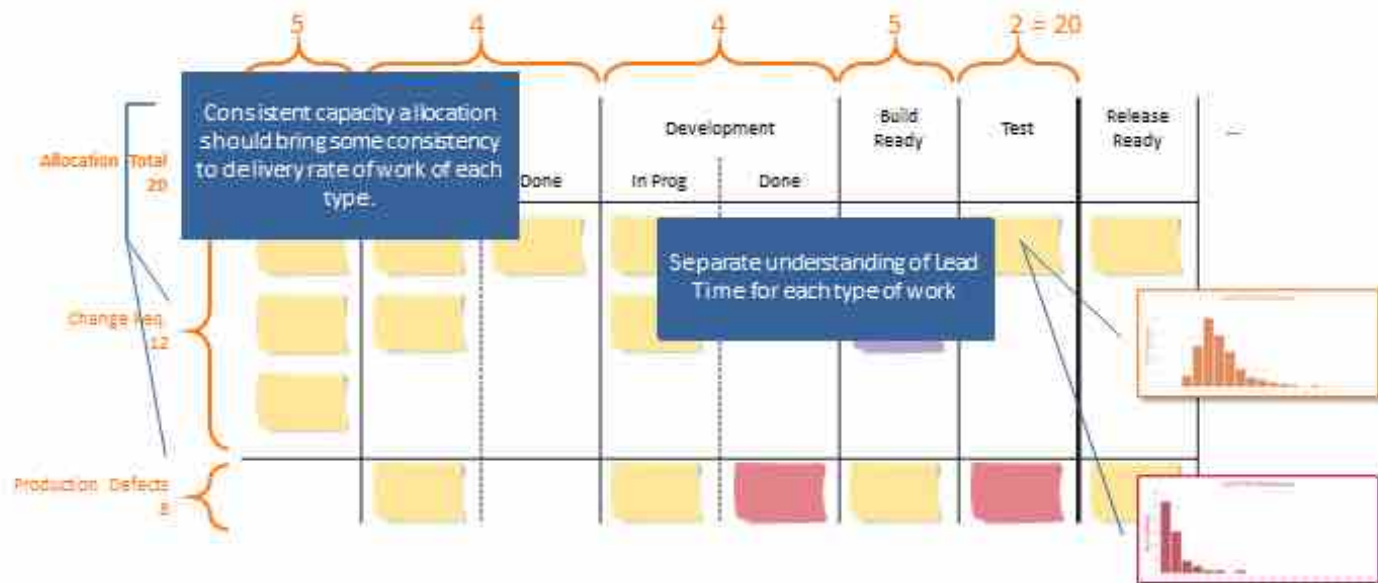








Allocate Capacity to Types of Work



Use Lead Time Distribution to Evaluate Service Delivery Effectiveness



What are customers' expectations?

Exercise



Sources of Delay (in your company)

1. Identify queues - where do work items queue in your service?
2. Identify dependencies - do work items in your service depend on unique specialist skills? other services in your company? external vendors?
3. Describe queues - are they first-in-first-out, dynamic selection/prioritization? several classes of service? some work items skip quickly, others wait for a long time?
4. Describe each dependency - how many (or what %) work items does it affect? How much does it add to the lead time? Can you predict, control or influence this duration?
5. Take action - can you reduce or limit the queues? Can you reduce the variation of queuing time? What are the implications to your customers and other activities in your process?
6. Take action - Can you reduce or limit the duration of delays due to dependencies? Can you decrease the number (or %) of work items affected by a dependency? Would that change the risk in delivering the work? Can you imagine the circumstances were avoiding a dependency (and the delay it causes) would be acceptable?

Type of delay	Identify	Describe	Take Action
Queues	<div>Ready to test</div> <div>Ready to deploy</div> <div>Up Next?</div>	<div>Dev, code review and UT done</div> <div>all done holding to implement</div>	
Dependencies	<div>Internal to your service</div> <div>external to your service, internal to your business</div> <div>External to your business</div> <div>holistic testing (need to wait for all features to be done)</div> <div>Test data set-up</div> <div>funding</div> <div>AOS</div> <div>knowledge constraint</div> <div>Business isn't ready with requirements</div> <div>Business sign-off</div> <div>conflicting priority</div>	<div>business sign-off, waiting for approvals..</div> <div>AOS- must accept transition</div>	<div></div> <div></div>



Exercise



Sources of Delay (in your company)

1. Identify queues - where do work items queue in your service?
2. Identify dependencies - do work items in your service depend on unique specialist skills? other services in your company? external vendors?
3. Describe queues - are they first-in-first-out, dynamic selection/prioritization? several classes of service? some work items skip quickly, others wait for a long time?
4. Describe each dependency - how many (or what %) work items does it affect? How much does it add to the lead time? Can you predict, control or influence this duration?
5. Take action - can you reduce or limit the queues? Can you reduce the variation of queuing time? What are the implications to your customers and other activities in your process?
6. Take action - Can you reduce or limit the duration of delays due to dependencies? Can you decrease the number (or %) of work items affected by a dependency? Would that change the risk in delivering the work? Can you imagine the circumstances were avoiding a dependency (and the delay it causes) would be acceptable?

Type of delay	Identify	Describe	Take Action
Queues	<div>Ready to test</div> <div>Ready to deploy</div> <div>Up Next?</div>	<div>Dev, code review and UT done</div> <div>all done holding to implement</div>	
Dependencies	<div>Internal to your service</div> <div>external to your service, internal to your business</div> <div>External to your business</div> <div>holistic testing (need to wait for all features to be done)</div> <div>Test data set-up</div> <div>funding</div> <div>AOS</div> <div>knowledge constraint</div> <div>Business isn't ready with requirements</div> <div>Business sign-off</div> <div>conflicting priority</div>	<div>business sign-off, waiting for approvals..</div> <div>AOS- must accept transition</div>	<div></div> <div></div>



Exercise



Sources of Delay (in your company)

1. Identify queues - where do work items queue in your service?
2. Identify dependencies - do work items in your service depend on unique specialist skills? other services in your company? external vendors?
3. Describe queues - are they first-in-first-out, dynamic selection/prioritization? several classes of service? some work items skip quickly, others wait for a long time?
4. Describe each dependency - how many (or what %) work items does it affect? How much does it add to the lead time? Can you predict, control or influence this duration?
5. Take action - can you reduce or limit the queues? Can you reduce the variation of queuing time? What are the implications to your customers and other activities in your process?
6. Take action - Can you reduce or limit the duration of delays due to dependencies? Can you decrease the number (or %) of work items affected by a dependency? Would that change the risk in delivering the work? Can you imagine the circumstances were avoiding a dependency (and the delay it causes) would be acceptable?

Type of delay	Identify	Describe	Take Action
Queues	<div>one sticky note for each location</div> <div></div>		
Dependencies	<div>Internal to your service</div> <div>external to your service, internal to your business</div> <div>External to your business</div> <div></div> <div></div>		



Exercise



Sources of Delay (in your company)

1. Identify queues - where do work items queue in your service?
2. Identify dependencies - do work items in your service depend on unique specialist skills? other services in your company? external vendors?
3. Describe queues - are they first-in-first-out, dynamic selection/prioritization? several classes of service? some work items skip quickly, others wait for a long time?
4. Describe each dependency - how many (or what %) work items does it affect? How much does it add to the lead time? Can you predict, control or influence this duration?
5. Take action - can you reduce or limit the queues? Can you reduce the variation of queuing time? What are the implications to your customers and other activities in your process?
6. Take action - Can you reduce or limit the duration of delays due to dependencies? Can you decrease the number (or %) of work items affected by a dependency? Would that change the risk in delivering the work? Can you imagine the circumstances were avoiding a dependency (and the delay it causes) would be acceptable?

Type of delay	Identify	Describe	Take Action
Queues	<div>one sticky note for each location</div> <div>waiting for testing</div>	<div>Technical dependencies to test code together</div>	
Dependencies	<div>Internal to your service</div> <div>external to your service, internal to your business</div> <div>External to your business</div> <div>In build</div> <div>Upstream or BAT</div>	<div>Bottleneck with one specific expertise on team</div> <div>waiting for business decisions or business availability</div> <div>Environmental issues/outages</div> <div>Vendor delays</div>	<div>cross training</div> <div>Policy to put on hold if you don't get answers</div>

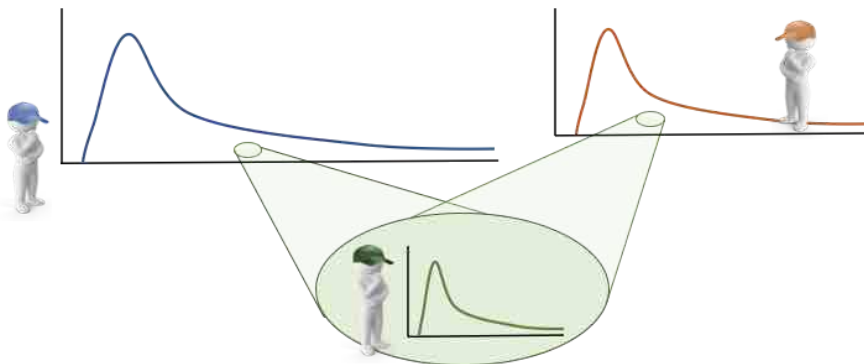
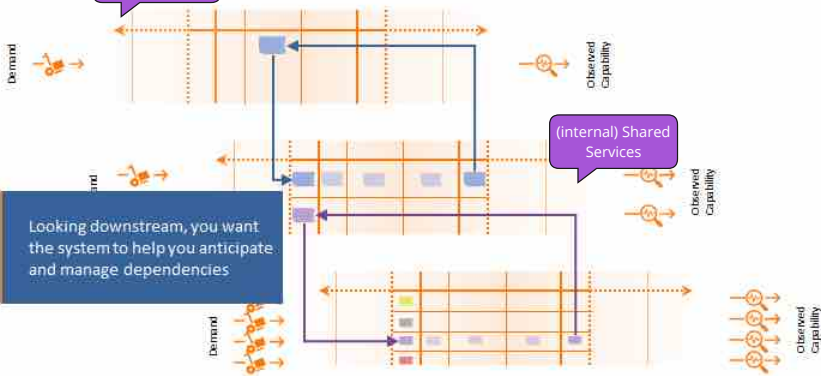


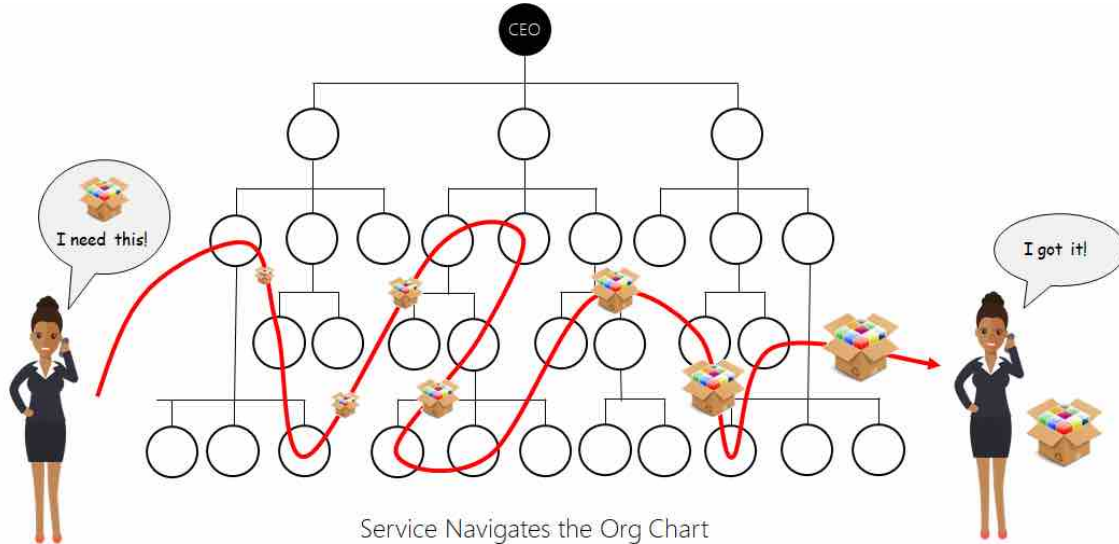
“

Be aware of dependencies,
model them, isolate and
measure them.

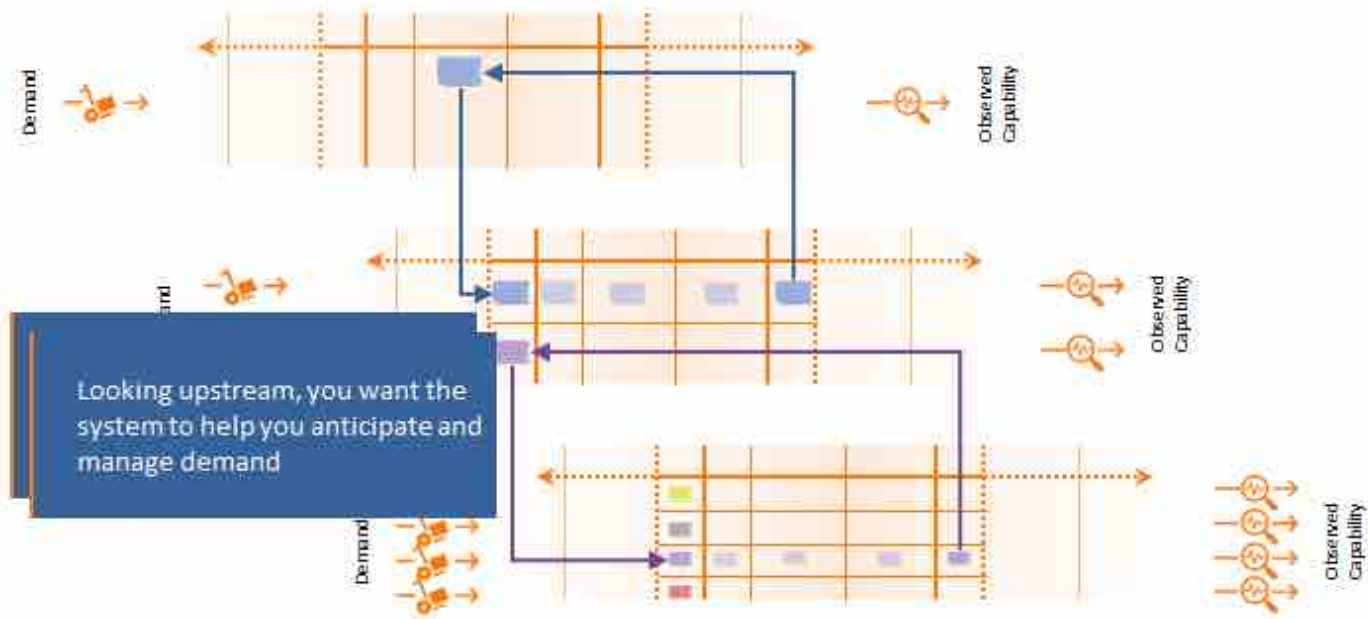
Some system dependencies on others

Customer Facing Services





Some systems have dependencies on others



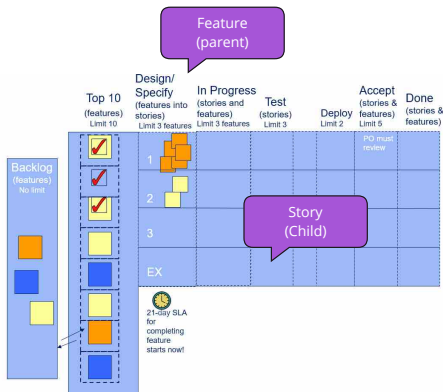
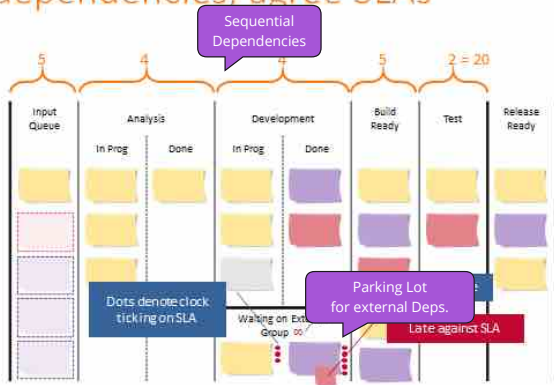
Summary: Manage Dependencies

The system should help you anticipate and manage ...

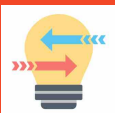


Combine the two, and across the organization you smooth flow end-to-end and help keep demand in balance with overall system capability.




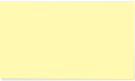


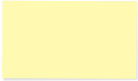


Buffer dependencies, agree SLAs



Exercise



Analyze Dependencies (of your service on others)

Identify services you depend on <i>Can one of them be your Customer?</i>	AOS	<Service 2>	<Service 3>
Anticipate dependencies <i>Which work items will have dependencies on external services? Is this need predictable?</i>			
Anticipate demand <i>What is the dependent service's perspective? Do they have multiple customers and offer classes of service to you?</i>			
Find improvement <i>How can the interaction between the 2 services improve?</i>			

“ Risk is an exception to what is expected. We can have deliberate strategies to mitigate risk. Understanding types of risk informs our actions.

Variation: "Lack of consistency or fixed pattern"

Common Cause ("Chance Cause")

- Expected or unsurprising
- Inside of typical system parameters. "The noise within the system"



Special Cause ("Assignable Cause")

- Unexpected and unpredictable
- Possible but outside of system control



Variation: "Lack of consistency or fixed pattern"

Common Cause ("Chance Cause")

- Expected or unsurprising
- Inside of typical system parameters. "The noise within the system"



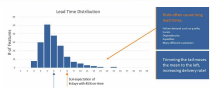
Special Cause ("Assignable Cause")

- Unexpected and unpredictable
- Possible but outside of system control



Risk Management trims the tail

Identify risks, their likelihood & impact (delay that extends lead time).
Eliminating risks or reducing their impact trims the tail on the distribution.



Blocker Clustering

- Collect all blockers (description and ideally blocked time) over a period of time.
- Cluster them by source / cause for the blockers.
- Then analyze:
 - Identify Risks
 - Identify Likelihood & Impact
 - Root Cause Analysis
 - Reduction & Mitigation actions



Do you gather data on blockers today?

Let's Consider Variability at your Organization.

- Discuss policies or policy changes that would left or right shift lead time distribution in your organization.
- Possible risk mitigation & reduction ?
- Wider implications on service delivery?

Policies in your Organization

Left Shift Lead Time Distribution

Timeboxing meetings

Right Shift Lead Time Distribution

Infrastructure window

Freeze Period

COVID

“

Risk is an exception to what is expected. We can have deliberate strategies to mitigate risk. Understanding types of risk informs our actions.

Variation: “Lack of consistency or fixed pattern”

Common Cause (“Chance Cause”)

- Expected or unsurprising
- Inside of typical system parameters. “The noise within the system”

Special Cause (“Assignable Cause”)

- Unexpected and unpredictable
- Possible but outside of system control



An aerial photograph of Wimbledon's Centre Court, showing the large, white, retractable roof partially open. The surrounding seating is green, and the court surface is visible. The image serves as a background for the text overlays.

Wimbledon comes in on time every year

How do event planners do it?

Except 2004 when it rained on Sunday and the final was on Monday;-)

Scheduling Wimbledon isn't an exact science!

Games last different lengths of time and weather conditions can stop play altogether but the Men's Final always happens on the 2nd Sunday.

If only we could project manage like this!

Variation: “Lack of consistency or fixed pattern”

Common Cause (“Chance Cause”)

- Expected or unsurprising
- Inside of typical system parameters. “The noise within the system”



Special Cause (“Assignable Cause”)

- Unexpected and unpredictable
- Possible but outside of system control



Risk Management trims the tail

Identify risks, their likelihood & impact
(delay that extends lead time).

Eliminating risks or reducing their impact
trims the tail on the distribution.



Risks often cause long
lead times.

Failure demand such as quality
Issues
Dependencies
Expedites
Many different customers

Trimming the tail moves
the mean to the left,
increasing delivery rate!

Blocker Clustering



- Collect all blockers (description and ideally blocked time) over a period of time.
- Cluster them by source / cause for the blockers.
- Then analyze:
 - Identify Risks
 - Identify Likelihood & Impact
 - Root Cause Analysis
 - Reduction & Mitigation actions

Do you gather
data on
blockers today?



Let's Consider Variability at your Organization.



- Discuss policies or policy changes that would left or right shift lead time distribution in your organization.
- Possible risk mitigation & reduction ?
- Wider implications on service delivery?

Policies in your Organization

Left Shift Lead Time Distribution

Timeboxing meetings

Right Shift Lead Time Distribution

Infrastructure window

Freeze Period

COVID

Kanban can reveal bottlenecks.
Understanding the type and
location of bottlenecks informs
our actions.

Bottlenecks are common in traffic



Theory of Constraints

- Founded by Eliyahu M. Goldratt
- Based on the premise that a system's throughput is limited by at least one constraint.
- The Five Focusing Steps:
 - Identify the system's constraint(s).
 - Decide how to exploit the system's constraint(s).
 - Subordinate everything else to the above decision(s).
 - Elevate the system's constraint(s).
 - Start all over!



Shared services are often bottlenecks

NON INSTANT AVAILABILITY

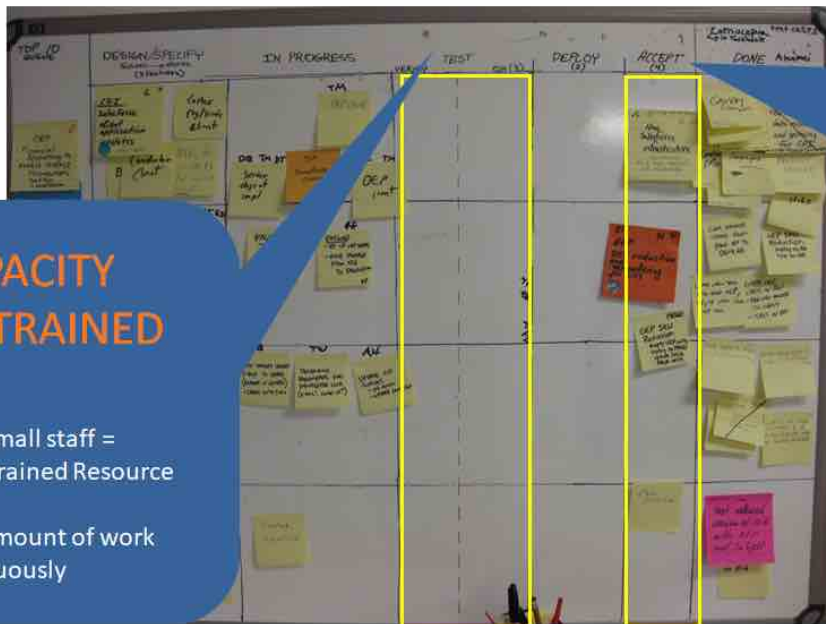
Product Owner is a Non-Instant Availability

Allow work to stack up with a higher WIP limit (but still limited))

CAPACITY CONSTRAINED

Testing and
Deployment: small staff =
Capacity Constrained Resource

Keep a small amount of work
flowing continuously



Bottleneck should always be downstream of the commitment point

Everything upstream of the commitment point is optional and easily discarded!

Everything downstream of the commitment point is committed – not easily abandoned!



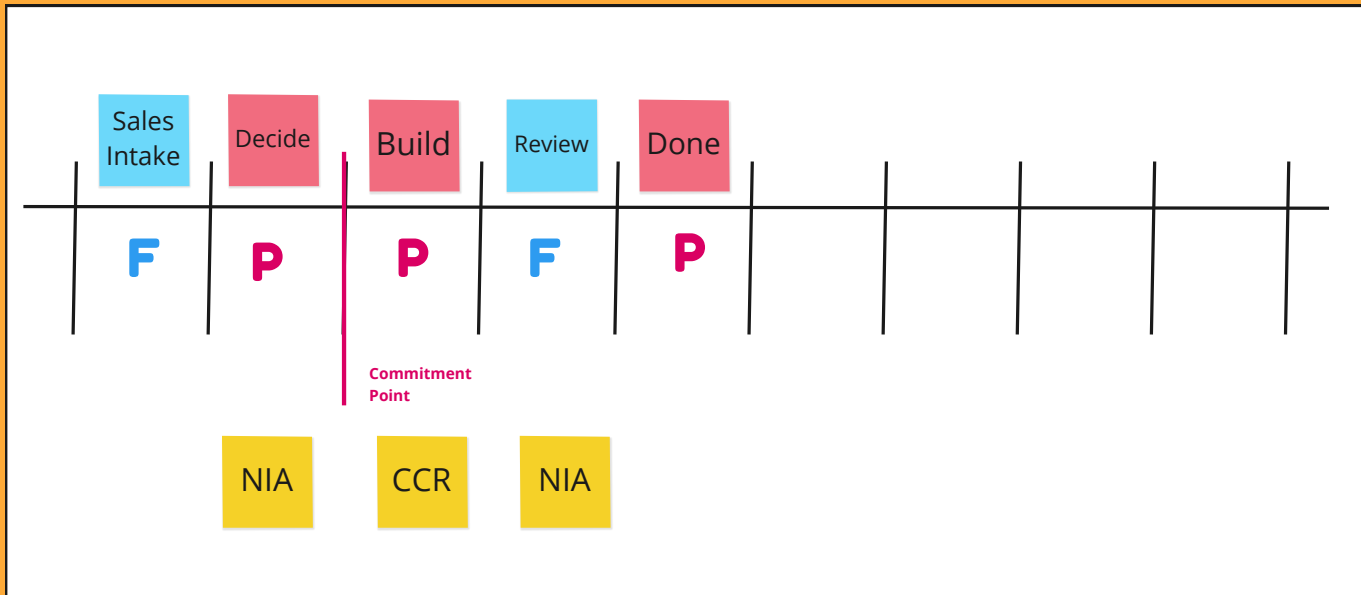
Bottleneck workers should never be asked to work on something that is optional and may be discarded. This includes any risk analysis (or estimation) that may be required to assess viability of an option.

Exercise



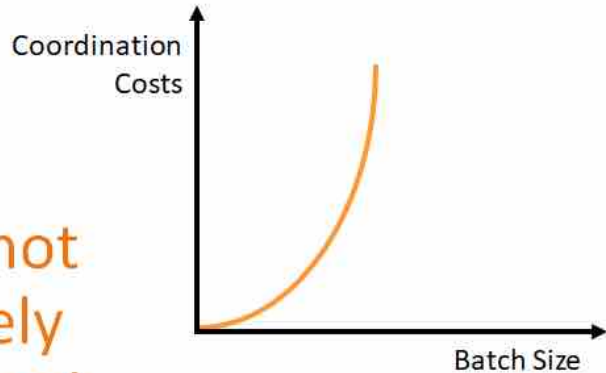
Where are your bottlenecks?

- Let's go back to your workflow in Frame 4.10
- Where are your bottlenecks?
- Is it a CCR (Capacity Constrained Resource) or NIA (Non-Instant Availability)?



In Knowledge Work:
Coordination Costs Grow Non-linearly with Batch Size!

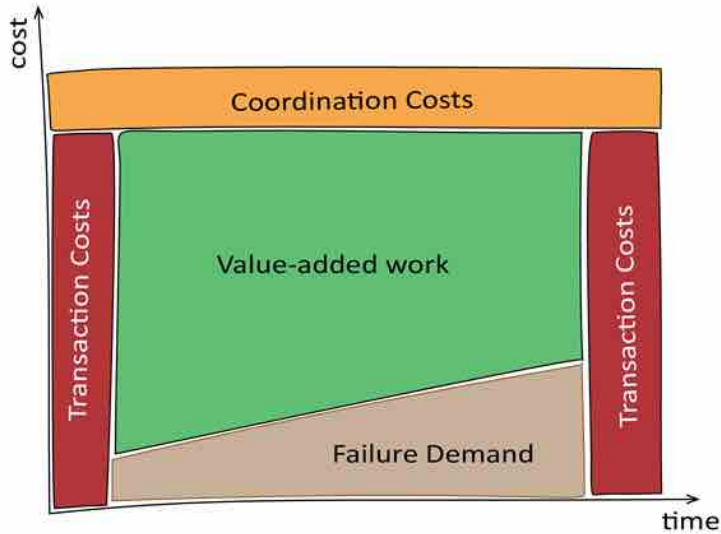
Large batch sizes are actually not efficient but become completely uneconomical in knowledge work.



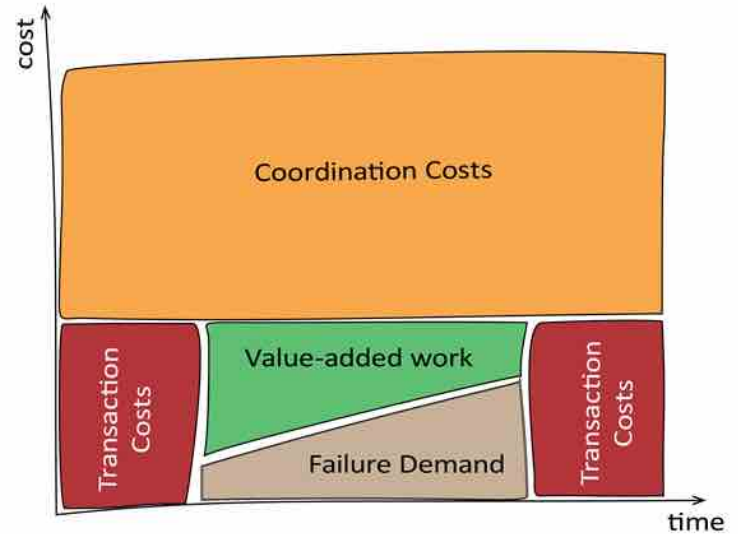
- In traditional physical industries, it is assumed that coordination overhead is either fixed or rises linearly with batch size
- However, in intangible goods, knowledge work, and creative professional services, coordination costs rise non-linearly with batch size due to increased risk and uncertainty and accumulating failure demand



A Model for Value-add vs. Waste



Better

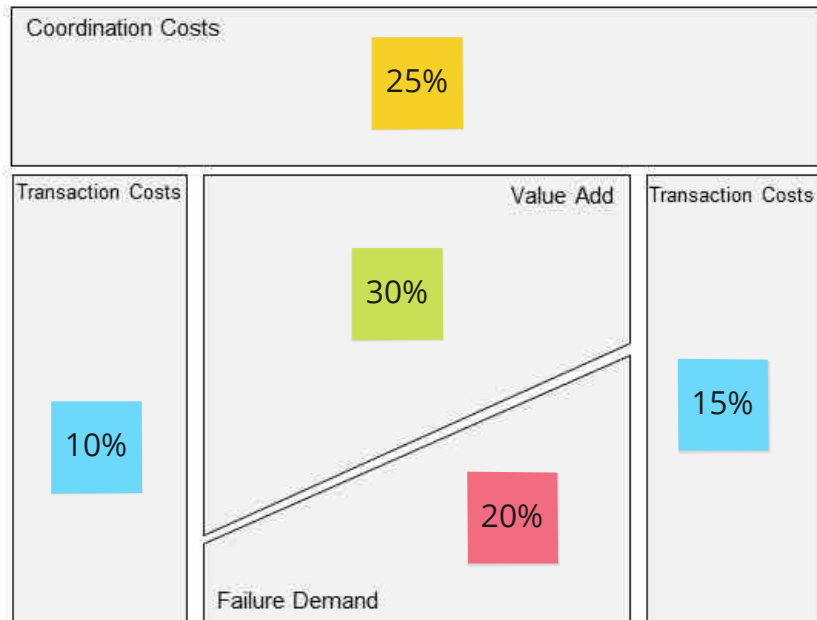


Worse

Exercise



Identify Your Economic Costs



- Identify transaction costs in your project work.
- Identify coordination costs.
- How much of the total effort on projects, do you estimate is transaction or coordination costs (rather than value-added) effort?
- Estimate Failure load – internal (bugs) and external (escaped) sources.
- Draw a sketch of economic cost model based on data.

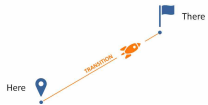
“How is Kanban so effective for successful change initiatives?”

The Kanban Method

“Successful evolutionary change for your 21st century business”

- In order to successfully
- respond to market change,
 - survive in a rapidly changing market, and
 - maintain fitness for purpose (withoug time delay until a crisis punctuated by disruptive change initiatives).

How we wish change worked



Traditional Change is an A to B Process



What Change Really Feels Like: The J Curve



Start with what you do now

- The Kanban Method evolved with the principle that it should “be like water” - enable change while avoiding sources of resistance
- With Kanban you start with what you do now, and “kanbanize” it, catalyzing the evolutionary process into action. Changes to processes in use will occur
- Evaluating whether a change is truly an improvement is done using fitness criteria that evaluate an external outcome

Fitness Criteria

Fitness criteria are metrics that measure observable external outcomes

Things customers or other external stakeholders value:

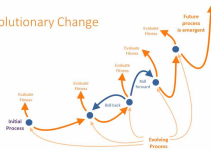
- Delivery time
- Quality
- Predictability
- Safety (conformance to regulatory)



Metrics that qualitatively assess actual outcomes such as:

- Customer satisfaction
- Employee satisfaction

Evolutionary Change





How is Kanban so effective
for successful change
initiatives?

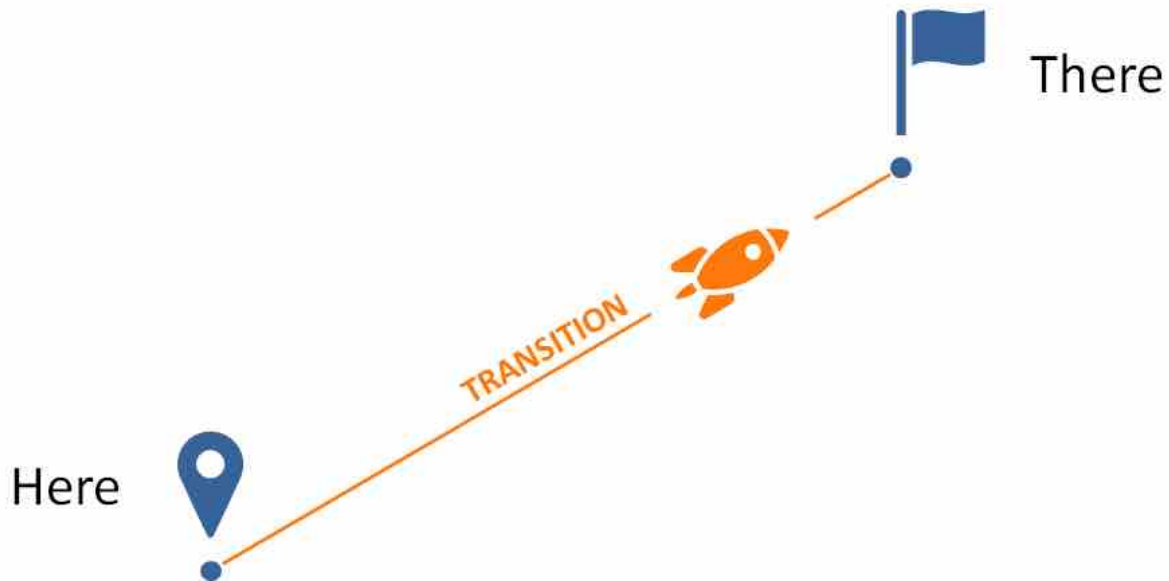
The Kanban Method

“Successful
evolutionary change
for your 21st century
business”

In order to successfully

- respond to market change,
- survive in a rapidly changing market, and
- maintain fitness for purpose (without slow decay until a crisis punctuated by disruptive change initiatives).

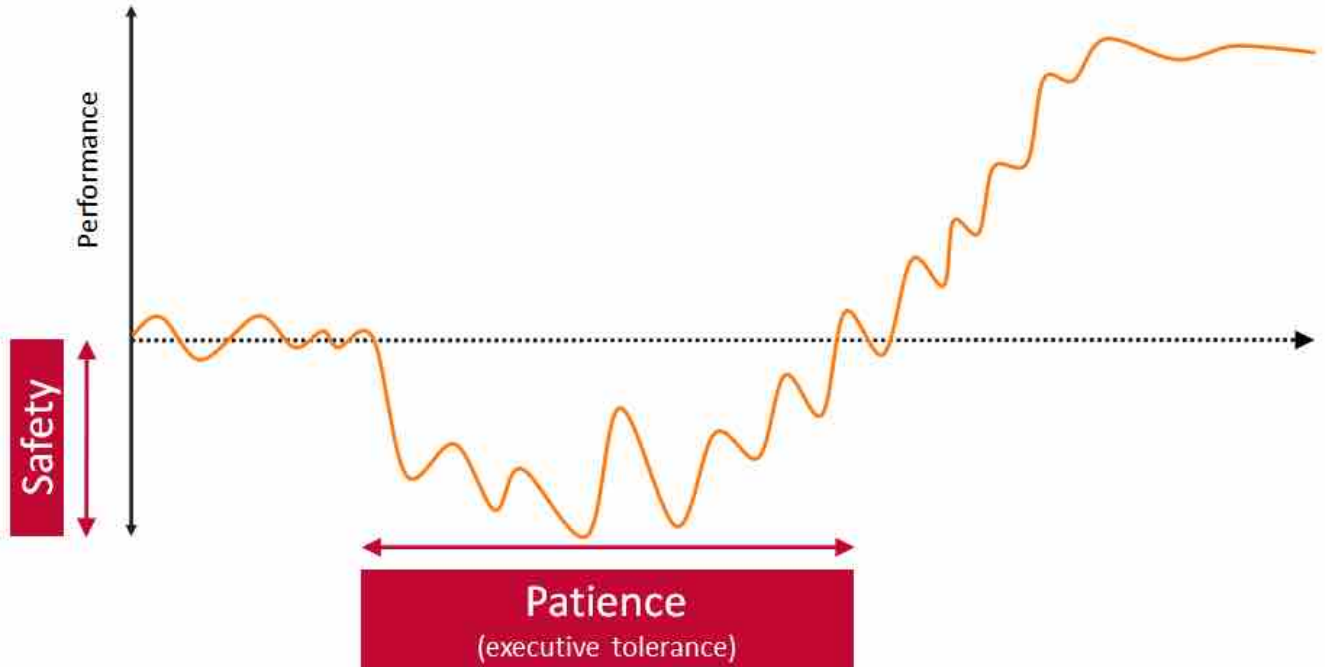
How we wish change worked



Traditional Change is an A to B Process



What Change Really Feels Like: The J Curve



Start with what you do now

- The Kanban Method evolved with the principle that it should “be like water” - enable change while avoiding sources of resistance
- With Kanban you start with what you do now, and "kanbanize" it, catalyzing the evolutionary process into action. Changes to processes in use will occur
- Evaluating whether a change is truly an improvement is done using fitness criteria that evaluate an external outcome

Fitness Criteria

Fitness criteria are metrics that measure observable external outcomes

Things customers or other external stakeholders value:

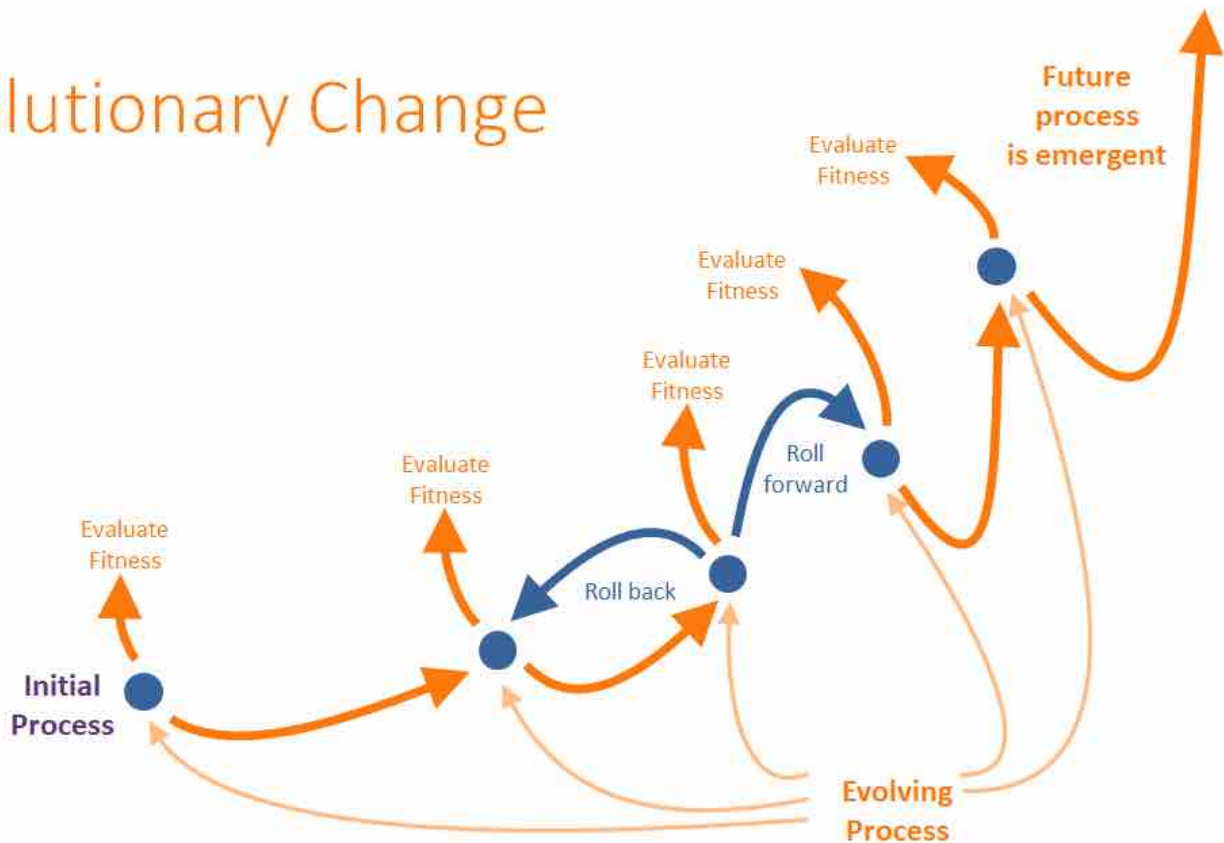
- Delivery time
- Quality
- Predictability
- Safety (conformance to regulatory)

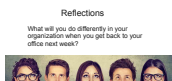
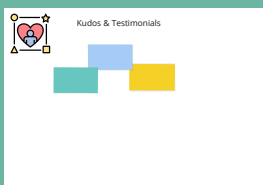


Metrics that qualitatively assess actual outcomes such as:

- Customer satisfaction
- Employee satisfaction

Evolutionary Change





Add your
Question/Discussion
topic in a Sticky here

How can the SDM account for the fact that the SRM is constantly pulling team members from downstream to support upstream?

I saw reference to "working time" in the lead distribution segment. What is this? How is it calculated?

Skill
Liquidity?

Place a dot in an existing question if you want to "vote" for it




Story	To Do	In Progress	DONE

Pending Task
 To Do Task
 In Progress Task

www.squirrelnorth.com

Does your Scrum Board Tell the Whole Story about your Agility?

Are you agile or not? Can your board help answer that question, or is it hiding the answer?





www.squirelondon.com

Why are the right skills never available when you need them?

How to have the right skills available to match our market's volatility, in short: high skill liquidity. The ability to tap into the necessary skills without long delays and expensive transaction costs.


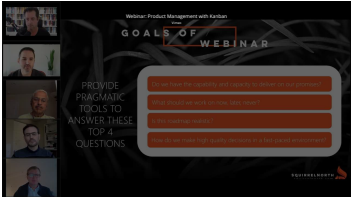
LNN&P: Beyond Cross Functionality: The Skill Liquidity Maturity Model (SLMM)[®] Martin Aziz (NEW)





Rapid
Decision
Making?

Kanban for Product Managers Webinar



How to break down work.

+ when?



CRF

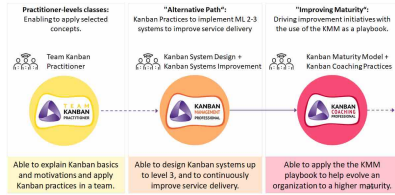


Reflections

What will you do differently in your organization when you get back to your office next week?



Basic Learning Paths



Books

Kanban "Blue Book"



Kanban from the Inside



The Goal



Kanban Maturity Model



Essential Kanban Guides



The Bottleneck Rules



Feedback Survey

<https://forms.gle/fNQwsvZxZpcf1q9Q8>

Help us improve our training.



Survey

What feedback have you been receiving from the attendees of the training?

For each reason, please add one or two points to the question in the table below.

Also please tell us something about why you gave that point (e.g. "I liked it").

Reason

Reason for attending KBT?

Your email

Name for Reason 1?

Do you have any other feedback for us?

Do you have any other feedback for us?



Thank you!
squirrelnorth.com

PODCAST



VIDEOS



WEBINARS



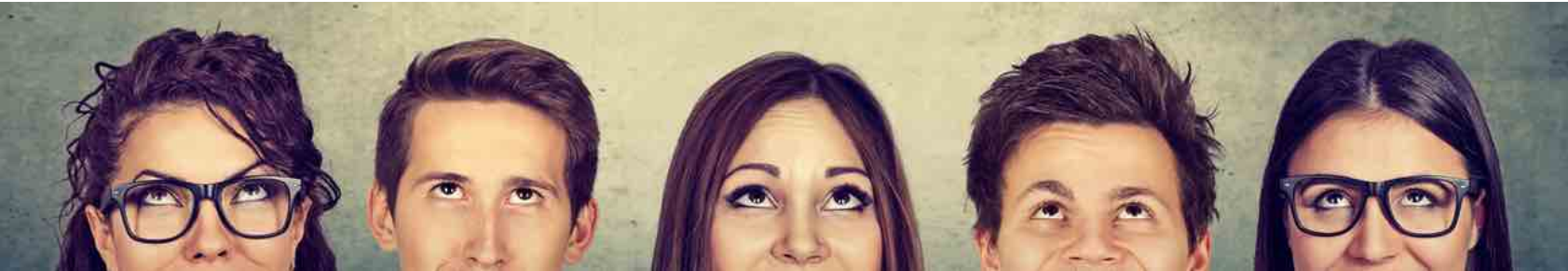
ARTICLES



CONSULTING | TRAINING | COACHING

Reflections

What will you do differently in your organization when you get back to your office next week?



Basic Learning Paths

Practitioner-levels classes:

Enabling to apply selected concepts.



Team Kanban
Practitioner



Able to explain Kanban basics and motivations and apply Kanban practices in a team.

"Alternative Path":

Kanban Practices to implement ML 2-3 systems to improve service delivery



Kanban System Design +
Kanban Systems Improvement



Able to design Kanban systems up to level 3, and to continuously improve service delivery.

"Improving Maturity":

Driving improvement initiatives with the use of the KMM as a playbook.



Kanban Maturity Model +
Kanban Coaching Practices



Able to apply the the KMM playbook to help evolve an organization to a higher maturity.

Exercise



Sources of Delay (in your company)

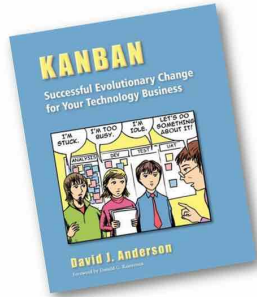
1. Identify queues - where do work items queue in your service?
2. Identify dependencies - do work items in your service depend on unique specialist skills? other services in your company? external vendors?
3. Describe queues - are they first-in-first-out, dynamic selection/prioritization? several classes of service? some work items skip quickly, others wait for a long time?
4. Describe each dependency - how many (or what %) work items does it affect? How much does it add to the lead time? Can you predict, control or influence this duration?
5. Take action - can you reduce or limit the queues? Can you reduce the variation of queuing time? What are the implications to your customers and other activities in your process?
6. Take action - Can you reduce or limit the duration of delays due to dependencies? Can you decrease the number (or %) of work items affected by a dependency? Would that change the risk in delivering the work? Can you imagine the circumstances were avoiding a dependency (and the delay it causes) would be acceptable?

Type of delay	Identify	Describe	Take Action
Queues	<div>Ready to test</div> <div>Ready to deploy</div> <div>Up Next?</div>	<div>Dev, code review and UT done</div> <div>all done holding to implement</div>	
Dependencies	<div>Internal to your service</div> <div>external to your service, internal to your business</div> <div>External to your business</div> <div>holistic testing (need to wait for all features to be done)</div> <div>Test data set-up</div> <div>funding</div> <div>AOS</div> <div>knowledge constraint</div> <div>Business isn't ready with requirements</div> <div>Business sign-off</div> <div>conflicting priority</div>	<div>business sign-off, waiting for approvals..</div> <div>AOS- must accept transition</div>	<div></div> <div></div>

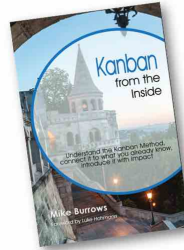


Books

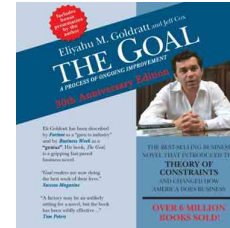
Kanban “Blue Book”



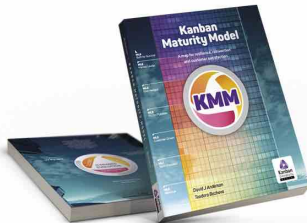
Kanban from the Inside



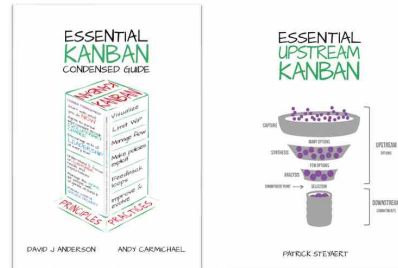
The Goal



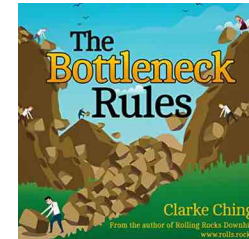
Kanban Maturity Model



Essential Kanban Guides



The Bottleneck Rules



Feedback Survey

<https://forms.gle/fNQwsvZxZpcf1q9Q8>

Help us improve
our training.



Survey

Tell us between one to three reasons you had for attending the webinar.

For each reason, please indicate how fit you found the session in fulfilling that reason.

Also, please tell us something about why you gave us that particular score value for each reason.

* Required

Reason for attending #1? *

Your answer

Score for Reason 1 *

☐ 0 - I found nothing useful. It was unfit for this purpose

☐ 1 - I got some value but most of my expectations were unmet



Thank you!

squirrelnorth.com

PODCAST



VIDEOS



WEBINARS



ARTICLES



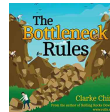
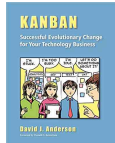
CONSULTING | TRAINING | COACHING



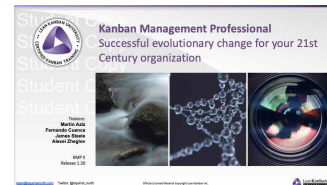
Case Studies



Books



Slides



Download [Classic Slide deck](#)

Videos

Some of these videos are included here for "historical" reference. Guidance might have evolved and been refined since they were recorded.

