Kanban Light

Based on [Lego Farm Animal Kanban game](#) by Saskia Vermeer-Ooms

Rules of the game
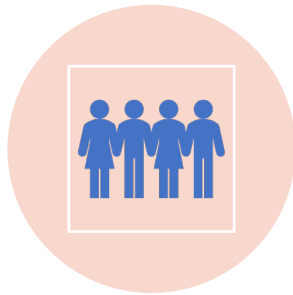
5 PEOPLE PER TABLE
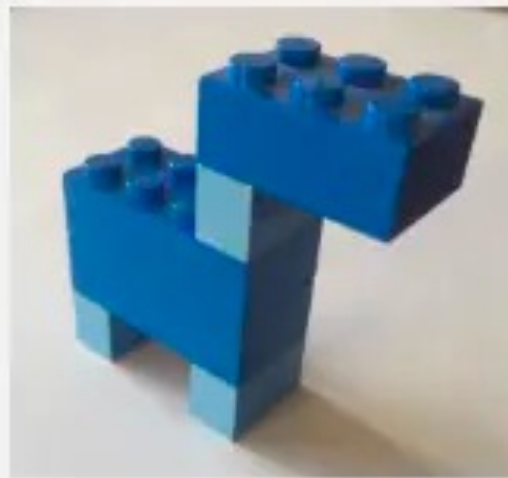

6 ROUNDS OF RANDOM LENGTH

GOAL: CREATE AS MANY ANIMALS AS POSSIBLE WITH MINIMAL WASTE OF MATERIAL
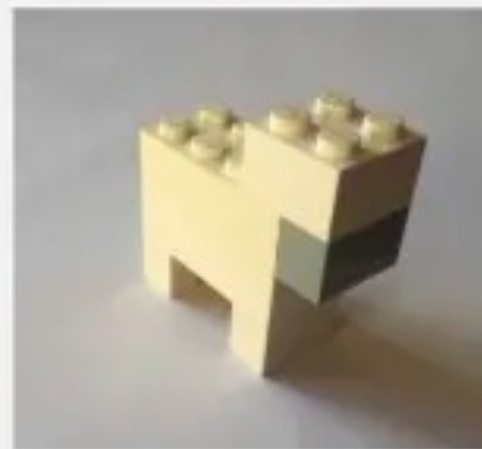
Create 4 types of animals

Cow

Horse

Sheep

Duck

Roles in a team

- **Leg builder**: gathers the legs
- **Body builder**: puts two blocks on top of each other
- **Head builder**: builds the head
- **Transporter**: puts the animal in transport and waits 30 sec
- **Quality Assurance**: keeps score and takes animals apart

Four types of animals to build, transport and dismantle

- Colour of the blocks does NOT matter
- Every animal body is 2 blocks high
- Transport takes 30 seconds (keep track of time yourself). The animal needs to stay in transport for 30 seconds, only then you may unload the truck
- Maximum of 3 animals can be transported at the same time (e.g., 1 animal per truck)
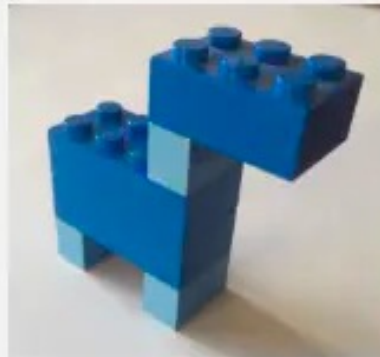- After transport: dismantle the animal and put the individual blocks back into the supply square
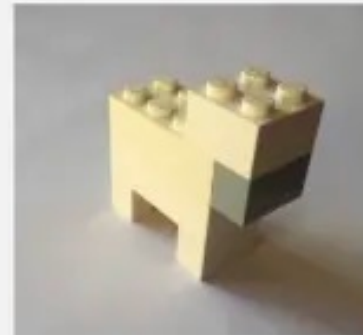
Round 1

Create 4 types of animals

Cow

Horse

Sheep

Duck

Introducing points system

Cow +10 points	Horse +10 points	Sheep +10 points	Duck +10 points
For every unused leg –1 point	For every unused body –4 points	For every unused head –4 points	Each completed animal not arrived yet –10 points

Kanban definition

Kanban is a strategy for optimizing the flow of value through a process that uses a visual, pull-based system.

Kanban Guide 2020

1. Visualize workflow
2. Limit the amount of "Work in Progress" (WIP)
3. Actively manage "flow"
4. Introduce feedback loops
   (*Inspect&adapt on regular basis*)
5. Make policies explicit
   (*Make rules clear*)
6. Improve collaboratively, evolve experimentally
   (*Make enhancements together*)

Kanban principles

Kanban principles in practice

01
Visualize workflow
- What is your workflow?
- Make a station for every step

02
Limit Work in Progress (WIP)
- Where did work pile up?
- Choose a WIP limit and mark it with a post-it at each station

03
Actively manage flow
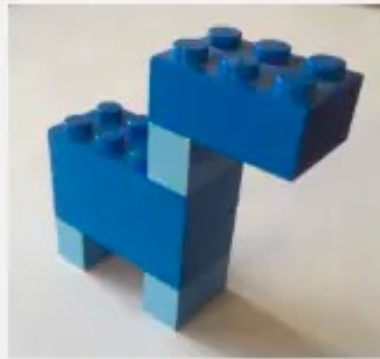- The points system rewards an animal that was finished and penalizes animals (or parts of animals) not done

Round 2

- Every animal done +10 points
- For every unused leg –1 point
- For every unused head/body –4 points
- Each completed animal not arrived yet –10 points
- Transportation: 30 seconds
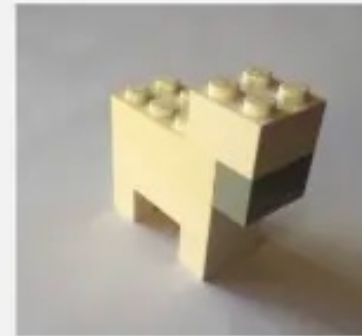

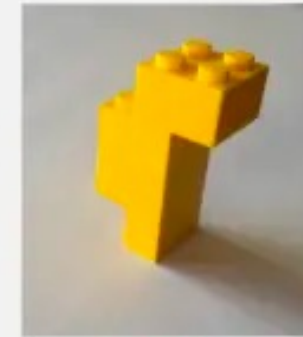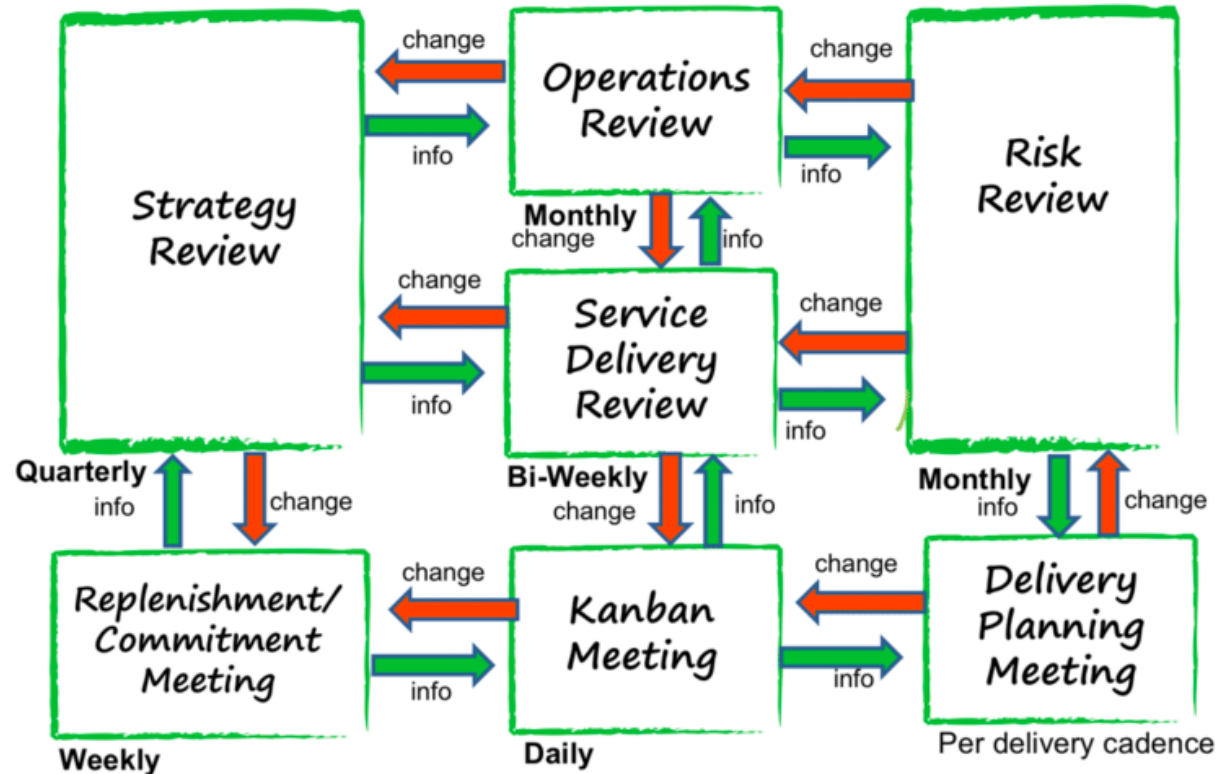Create 4 types of animals

Cow

Horse

Sheep

Duck

Kanban Cadences

Source: Kanban Coaching Professional Masterclass, David J. Anderson, Barcelona 2017

Feedback loops

Stop and reflect

- What went well?
- Where did the work pile-up (bottlenecks)?
- Where can you still improve?
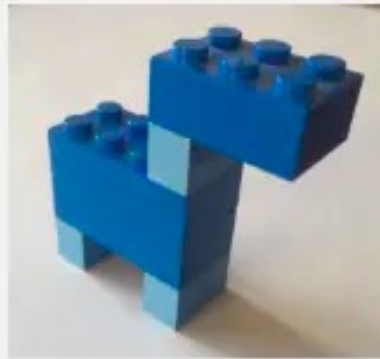- Do you need to change WIP limits? Or any other policies?

Round 3

- Every animal done +10 points
- For every unused leg –1 point
- For every unused head/body –4 points
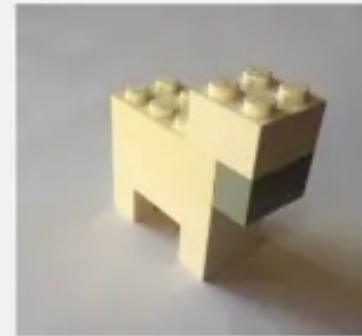- Each completed animal not arrived yet –10 points
- Transportation: 30 seconds

Create 4 types of animals

Cow

Horse

Sheep

Duck

7 types of waste

7 Wastes of Lean: How to Optimize Resources (kanbanize.com)

Stop and reflect

- What went well?

- Where did the work pile-up (bottlenecks)?

- Where can you still improve?

- Do you need to change WIP limits? Or any other policies?
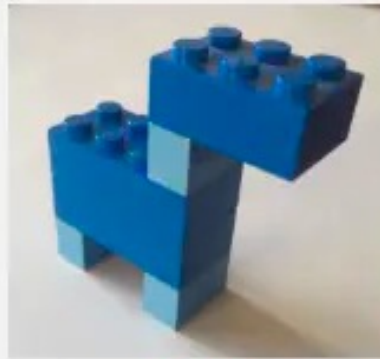
Introducing the Backlog!

Round 4

- Every animal done +10 points
- For every unused leg –1 point
- For every unused head/body –4 points
- Each completed animal not arrived yet –10 points
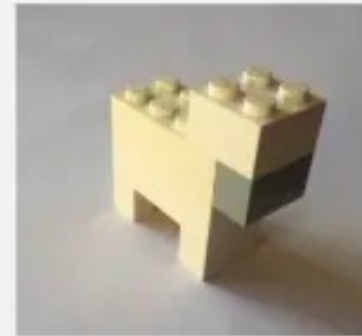- Transportation: 30 seconds

Create 4 types of animals

Cow

Horse

Sheep

Duck

Stop and reflect

- What went well?
- Where did the work pile-up (bottlenecks)?
- Where can you still improve?
- Do you need to change WIP limits? Or any other policies?

Round 5

- Every animal done +10 points
- For every unused leg –1 point
- For every unused head/body –4 points
- Each completed animal not arrived yet –10 points
- Transportation: 30 seconds

Create 4 types of animals
Cow
Horse
Sheep
Duck

Stop and reflect

- What went well?
- Where did the work pile-up (bottlenecks)?
- Where can you still improve?
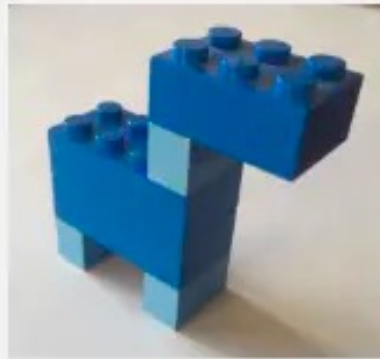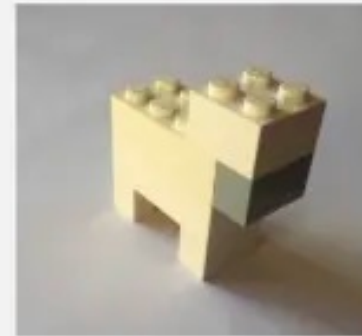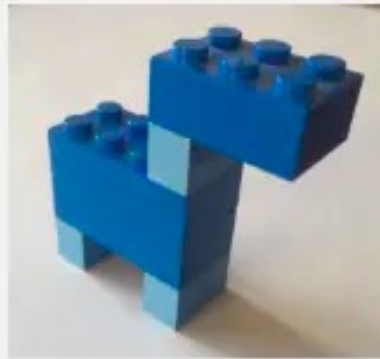- Do you need to change WIP limits? Or any other policies?

Round 6

- Every animal done +10 points
- For every unused leg –1 point
- For every unused head/body –4 points
- Each completed animal not arrived yet –10 points
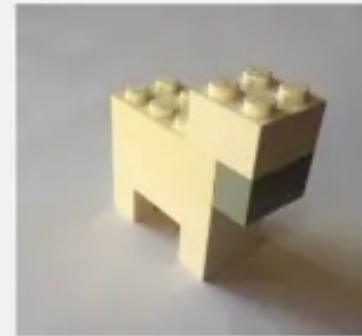- Transportation: 30 seconds
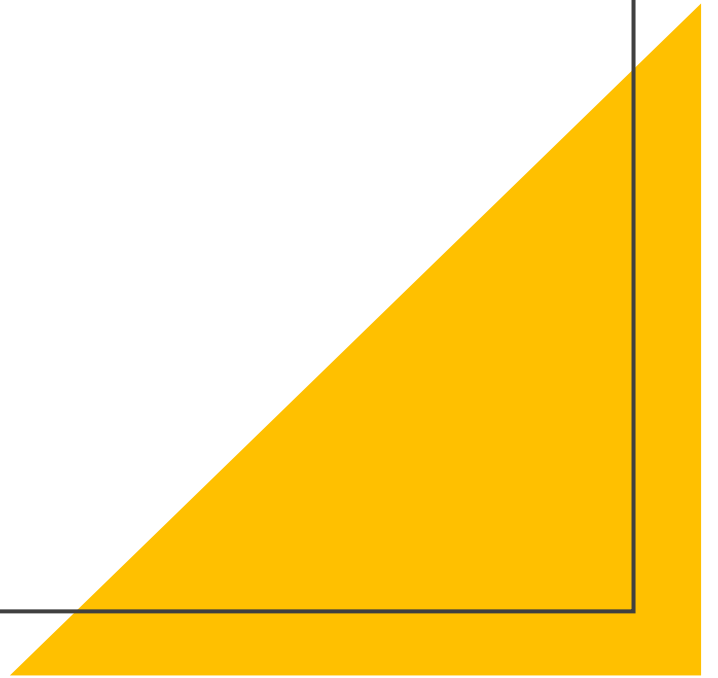

Create 4 types of animals

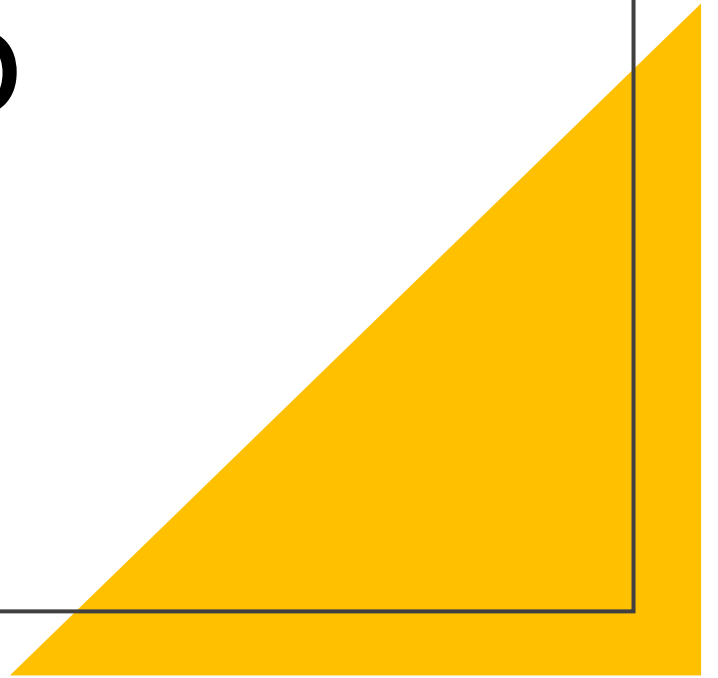Cow

Horse

Sheep

Duck

Who is the winner?

Stop and debrief

- What went well?
- When and where did the work pile-up (bottlenecks)?
- Where did you introduce improvements?
- What was the difference between different rounds?
- Did you experience flow? In which round?
- Did you change your WIP limits?
- Did anything change when you started using the backlog?

What makes a good Kanban system?

Kanban board is a visualization of Policies

identified commitment point

Work in Progress (WIP) limits

identified delivery point

Min 2	Max 4	Max 3	Max 3		Max 2	
TO DO	PLANNED	ANALYSIS	DOING	TESTING	RELEASE	DONE

INCIDENTS

STANDARD

visual signals

cards and activities

Basic Flow metrics

[4 Key Flow Metrics and how to use them in Scrum's events | Scrum.org](#)

1. Work in Progress (WIP)

   The number of work items started but not finished.

2. Cycle Time

   The amount of elapsed time between when a work item "starts" and when a work item "finishes."

3. Throughput

   The number of work items "finished" per unit of time.

4. Work Item Age

   For currently active items - The amount of elapsed time between when a work item "started" and the current time.

HOMEWORK: 7 wastes in software development

[7 Wastes of Lean: How to Optimize Resources (kanbanize.com)](...)

Transportation – switching between tasks too often, countless interruptions from colleagues

Inventory – undelivered code or undelivered features

Motion – unnecessary meetings or extra effort to find information

Waiting – waiting for testing to complete, waiting for code review, and so on

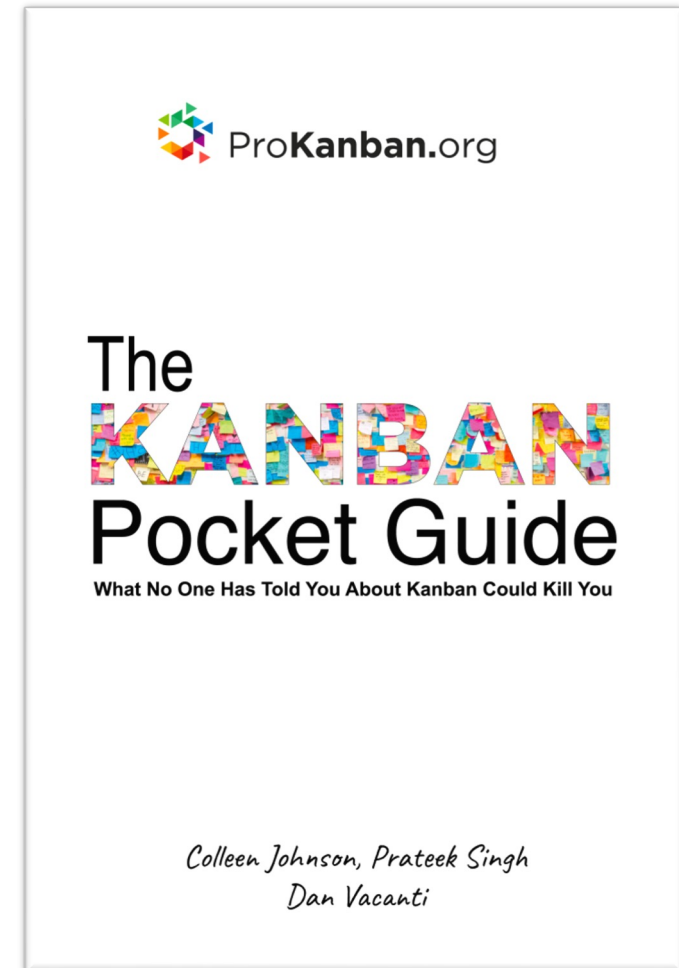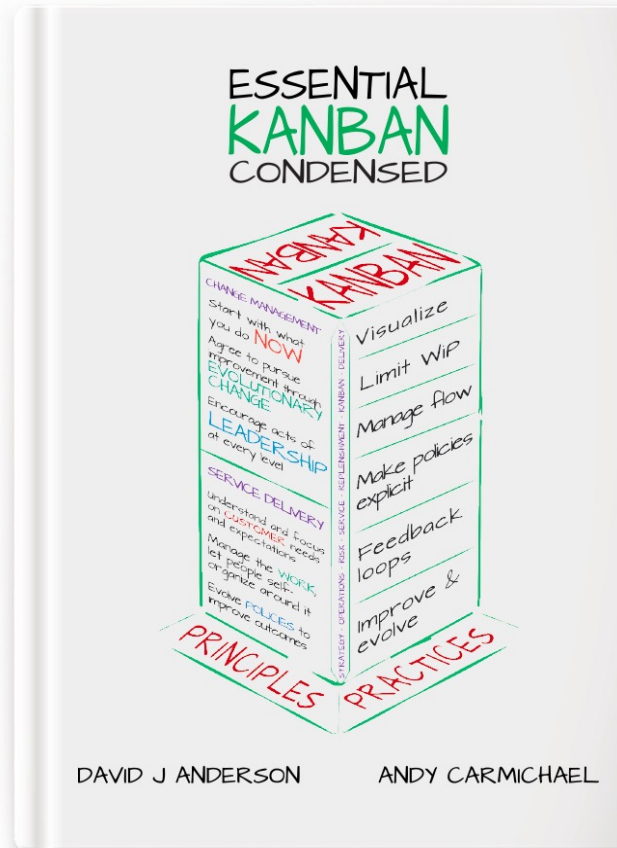**Overproduction** – producing features that nobody is going to use

Over-processing – unnecessary complex algorithms solving simple problems

Defects – bugs

Recommended reading

Thank you!

Jakub Bażela-Federowicz

https://www.linkedin.com/in/jbazela/