

Agile Intelligence: Kanban Planning & Forecasting Metrics

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▪ Let's Plan a Project

You receive three orders from three different customers that request two projects each (six projects in total).

The customers are called A, B and C. The projects have the code names A1, A2, B1, B2, C1 and C2.

Each project consists of a sentence that is ten words long. The sentences have to be written by hand on a white board. The text is in English.

Please, estimate the projects in two different scenarios:

Scenario 1:

A random employee starts working on projects A1, B1 and C1. Because the customers have no strict deadlines, they agree to wait before they see the first results.

Scenario 2:

The customers have very strict deadlines and want to see progress right away. That is why you pick your best employee and dedicate it to projects A2, B2 and C2.

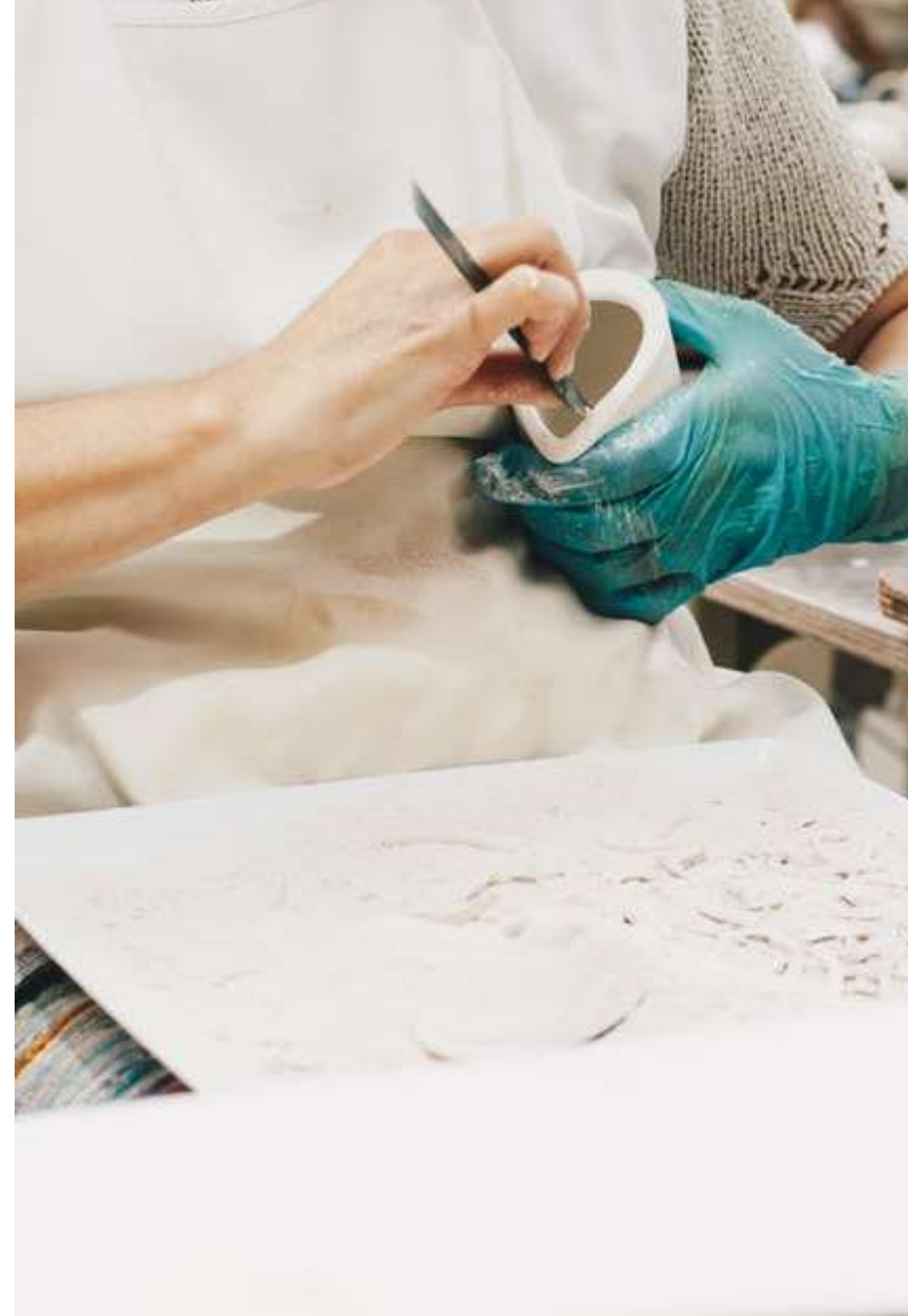
Project	Duration	Project	Duration
A1		A2	
B1		B2	
C1		C2	



- How did you do it? What are the most efficient ways to do it?



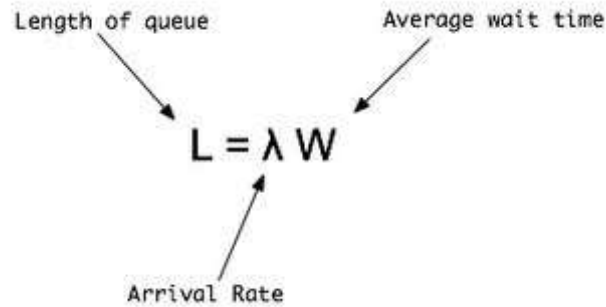
- **A Few Words About WIP**



■ **A Few Words About PUSH vs. PULL
(Lean Simulation)**



Little's Law



- Assumptions
 - Avg. arrival rate is the same as avg. departure rate
 - Whatever goes in, eventually goes out
 - The average age doesn't grow
 - The units are the same
 - The total WIP is roughly the same at the beginning and at the end



Kanban & Little's Law

Requested



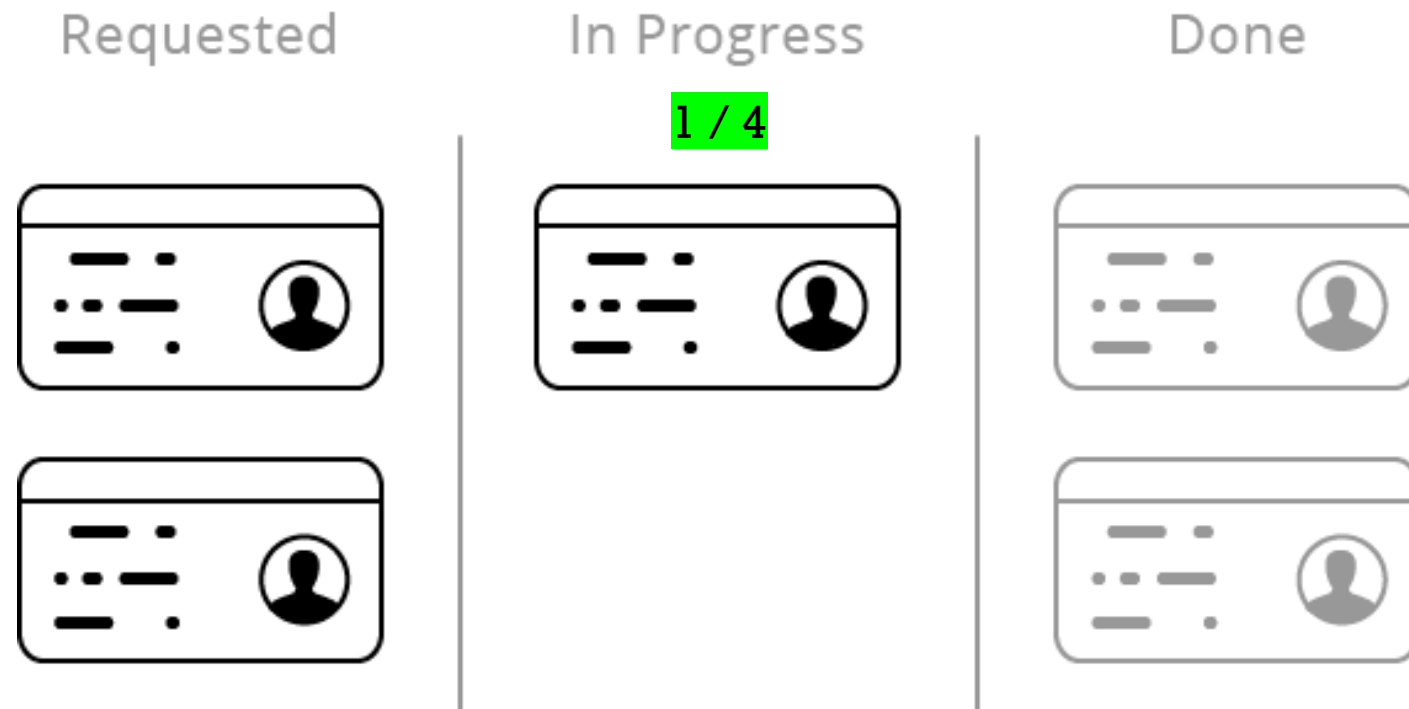
In Progress



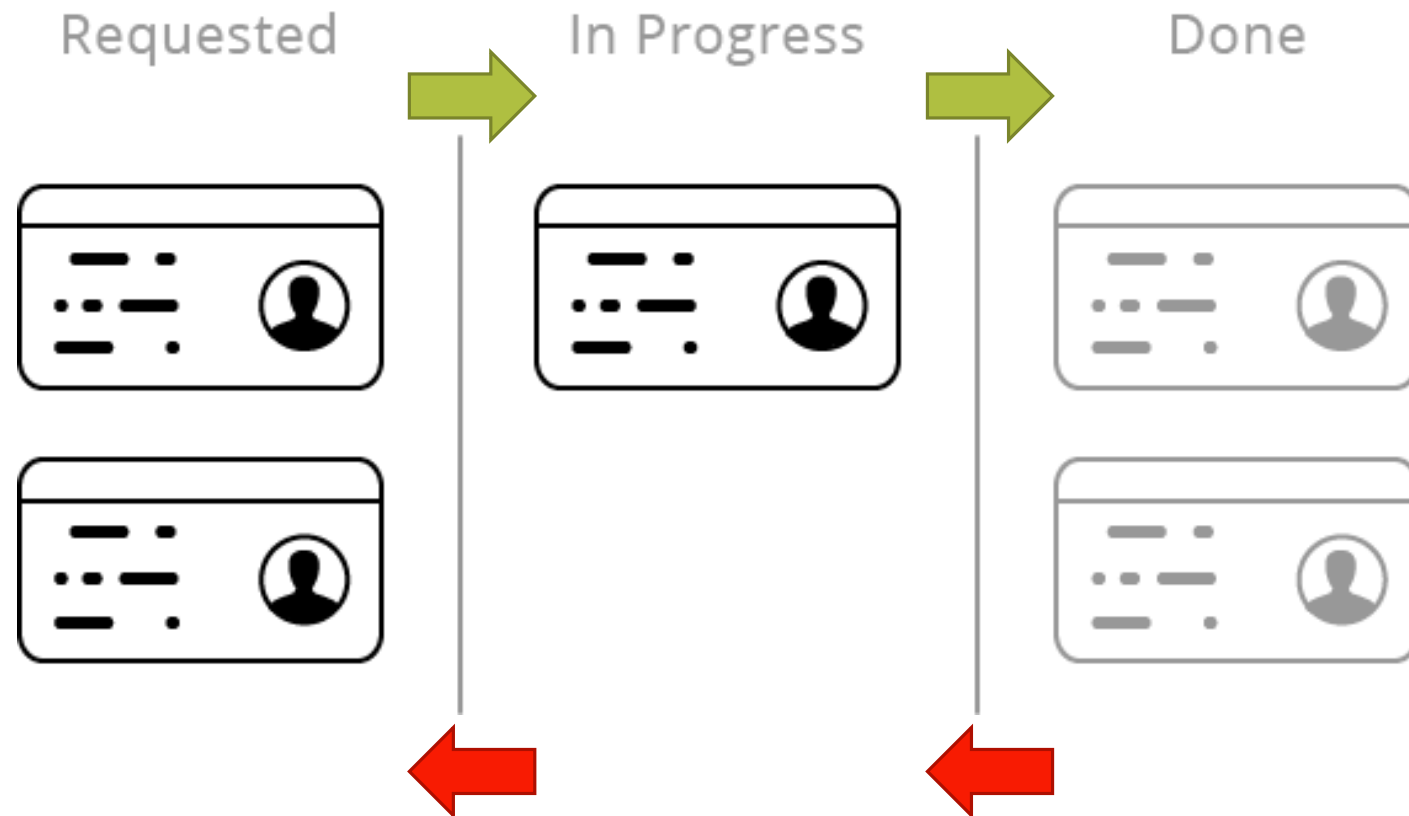
Done



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- The total WIP is roughly the same at the beginning and at the end



- Whatever goes in, eventually goes out

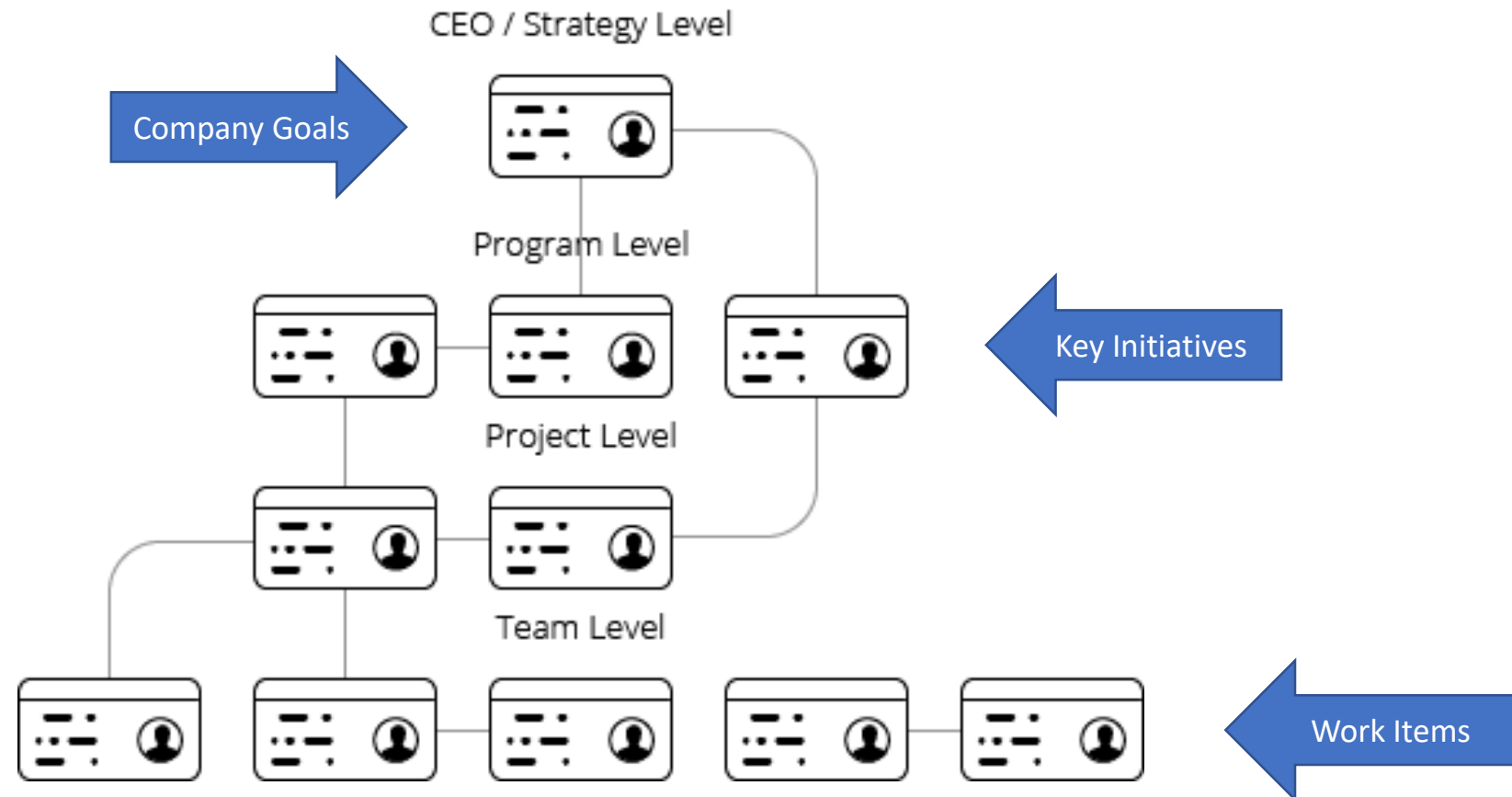


When you have a stable system,
analytics are a breeze.

- Cycle Time Scatter Plot
- WIP Aging Chart
- Cumulative Flow Diagram
- Monte Carlo When
- Monte Carlo How Many?



Scale Flow Across Your Org:





Kanban Software for Lean Management

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