

LeanMan Car Factory Simulation – Kanban 4-Event Value Stream Simulation

260 minutes

LM Kanban Introduction 60 minutes

PowerPoint
Kanban
Simulation
Facilitator
guide
80 slides

Introduction to kanban concepts begins with a discussion on the supermarket concept with two-kanban card replenishment.

Facilitator training

PowerPoint
Facilitator
Presentation
23 slides

Kaizen eno Yon Danki – improvement in 4 Steps. A bit of history in lean flow methods leading into a discussion on kanban. A 4-step approach to lean flow is depicted graphically for discussion. Tools for heijunka planning are reviewed.

30 minutes

PowerPoint
Little's Law
Presentation
15 slides

Discuss
Little's
Law

30 minutes

Simulation Events 1 to 4 200 minutes

Setup Table with placemats, heijunka box (if available) slideboard and kit of materials

15 minutes

EVENT 1: Single-Kanban Card System: Initial build of product following instructions on participant placemats. Record metrics using wet erase marker and stopwatch. [8 participants + observer team]

* 20 minutes

Record metrics for Financial and Inventory. Discuss pros and cons of a single card

10 minutes

Refresh table arrangement and placemats for event two with Production and Move cards

10 minutes

EVENT 2: Dual Card System: Second build of product following instructions on participant placemats. Record metrics using wet erase marker and stopwatch. [8 participants + observer team]

* 20 minutes

Record metrics for Financial and Inventory.

10 minutes

Discuss observations and metrics considering the difference between single and dual card system, and in particular the flow between salesroom and the factory,

15 minutes

Refresh table arrangement and placemats for event three

10 minutes

EVENT 3: Dual Card with Heijunka: Third build of product following instructions on participant placemats. Use Heijunka box if available. [8 participants + observer team]

* 20 minutes

Record metrics for Financial and Inventory.

10 minutes

Discuss observations and metrics considering the difference the Heijunka plan method made on the dual card system, and in particular the flow between salesroom and the factory,

15 minutes

Refresh table arrangement and placemats for event four

10 minutes

EVENT 4: Dual Card with Heijunka and Near-Zero FGI: Fourth build of product following instructions on participant placemats. [8 participants + observer team]

* 20 minutes

Record metrics for Financial and Inventory.

10 minutes

Discuss observations and metrics considering the difference reducing FGI made on the dual card system, and in particular the flow between salesroom and the factory,

15 minutes