# **Lean Poster Series #5**

## Lean Flowcharts

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#### What are Lean Flowcharts?

A flowchart is a type of diagram that represents a process, showing the process steps or tasks as boxes, and their order by connecting them with arrows. Flowcharts are used in Lean to analyze, design, document or managing a process

## **Purpose of Lean Flowcharts**

- Drop down below the level of the Value Stream Map to clarify/ give more detail to a process
- Visually documents a process, clarifying relationships between departments and activities
- Provides a fact-based process description as basis for understanding and analyzing as-is situation and quickly see improvement opportunities
- Helps teams see how a process should work (to-be process) once waste has been eliminated
- Helps to give a common understanding and to communicate inside and outside an organization

## When are Lean Flowcharts Used?

Lean Flowcharts are usually created in the Define and Measure phases to better understand the process and to provide a basis for analysis and improvement, and in the Improve and Control phases as part of the designed to-be process.

DEFINE MEASURE ANALYSE IMPROVE CONTROL

#### **How to Create a Lean Flowchart?**

- The basic steps for creating a process map are the same no matter what type of map you're creating
- Aim for a level of detail that is useful to your project.
- 1. Review the process and its scope as defined for your project
- **2.** Identify the type of flowchart you want to create
- **3.** Have participants identify the steps in the process
- **4.** Working as a team, arrange the steps in order
  - **4.1.** Eliminate duplicates and combine similar ideas
  - 4.2. Maintain a consistent level of detail
  - **4.3.** Keep the process moving in one direction
  - **4.4.** Discuss the results adjust as needed
- **5.** Transfer completed map to paper or, better, computer

## **Types of Lean Flowcharts**

#### **BLOCK DIAGRAM**

The simplest type of flowchart is a block diagram which gives a high level overview and shows everything as a linear flow. Here's one describing a simple claims process.

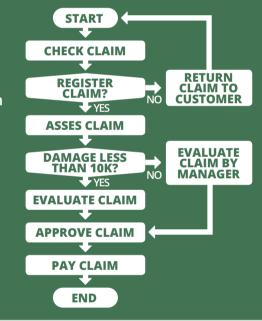
Block diagrams are typically used for higher level, less detailed process maps that are intended to clarify general concepts without concerns for the details of the implementation.



#### **LINEAR FLOWCHART**

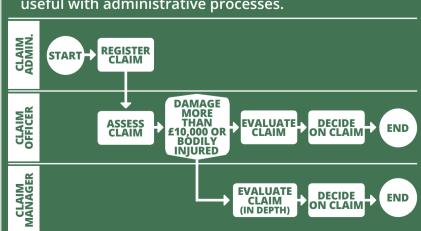
In reality there tends to be some recycling and decision making between activities. We can deal with these using a linear of basic flowchart, a slight extension of the block diagram.

Here we have a decision box where we consider whether the claim is complete and if not we return the claim to the customer. Claims above a certain value need to be evaluated by a Claims Manager.



## SWIM-LANE (DEPLOYMENT) FLOWCHART

A particularly useful form of flowchart uses swimlanes, shown either vertically as columns or horizontally as rows. It is known as an integrated, deployment or (cross-) functional flowchart, and emphasizes the 'who' in 'who does what'. Swimlane flowcharts make it easy to study handovers between actors and organization units, and are especially useful with administrative processes.



### **BPMN 2 DIAGRAM**

BPMN 2 (Business Process Model and Notation) is the de-facto standard for business process modelling, based on the swim-lane flowcharting technique.

