Value Stream Mapping

Why

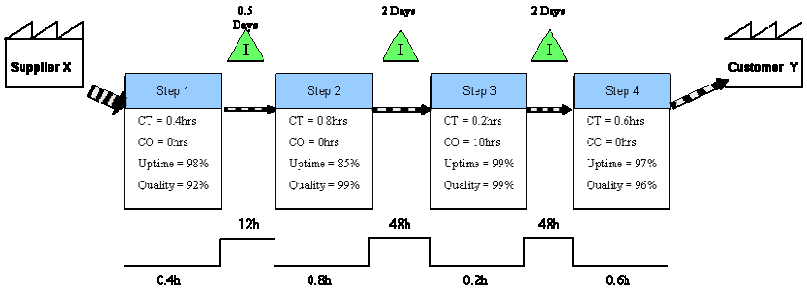
Value Stream Mapping (VSM) is used to understand the sequence of activities of the process under investigation and identify any weaknesses, waste, lost time and ultimately opportunities for improvement.

What

The VSM shows the key steps of your process from suppliers to customer as defined by your project scope. The map additionally displays actual process data within and between each process step. Because they include data, value stream maps can help teams pick out specific points in the process that add no value such as long waiting times or high defect rates.

VALUE STREAM MAPPING - EXAMPLE

A Value Stream Map that presents what is happening today is known as a "Current State" map.



Can you identify where the improvement opportunities lie within this process?

Key:
I = Inventory
CT = Cycle Time
CO = Changeover Time
Uptime = How much of the time the process step is operational
Quality = Defined by customer

Standard symbols are included in our Network Rail Green Belt training material

How

1. Obtain a VSM facilitator (typically a Six Sigma Black Belt).
2. Assemble team – The team must include representation from different parts of the process and different disciplines to capture all the information required to create a representative VSM.
3. Decide on scope – Decide on the start and finish boundaries.
4. Agree data to be collected – There are many options as to what data is collected but the team needs to ensure that data is relevant and supports the purpose of the VSM. Examples of data collected on VSM's are:
    a. Material i.e. batch sizes and Inventory
    b. Customer requirements i.e. usage volume
    c. Method/process i.e. cycle time and waiting times
    d. Equipment i.e. uptime or availability and change over times.
    e. Man Power i.e. manning levels and available working time per shift
    f. Information i.e. availability and correctness
    g. Quality i.e. defect rates or yields
5. Map the current state process – "Walk" the process and document using standard VSM icons which convey specific information.
6. Collect agreed data and append to the map.
7. Identify improvement opportunities / actions – Look for areas of high waste and/or non value add.
8. Capture what success will look like through a future state VSM.