Building a Dynamic Value Stream Mapping – DVSM

A Value Stream Map: is a powerful tool that is used to map both the material and information flow for any manufacturing or administrative process. This powerful tool enables companies to map the flow of products coming in the back door as raw material, through all manufacturing process steps, and off the loading dock as finished product.

Research Objectives: provide a dynamic working environment to enable the interaction between the workers and processes, material, and any other constraint relevant to the production situation. As time progresses and the operation are "producing", the worker will have the ability to interact live with the animated flow. In this live environment workers will see queues build up, inventory deplete, people move, etc... Based on the situation guided by the simulation analysis workers will make changes to processing capacity, labor requirements, flow, and cell layout, to optimize and design the future state.

Tasks

- Making a literature review for traditional VSM
- Find out the possible method to transform VSM to dynamic VSM.
- Explain this method and how it can be used in the production lines.

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