

<div>1) Background &amp; Business Case</div> <div><b>Background:</b> Round 3 of the Quality Lab with the challenges of not having enough team members (absenteeism), resulting in changing several people's roles and requiring more work overall. The resulting confusion saw mis-produced items produced.</div> <div><b>Business Case:</b> When items are mis-produced, they must be treated as defects and the materials discarded because they are not fit for sale. This results in lost revenue for the company as well as wasted time, effort, and costs.</div> <div><b>Problem Statement:</b> Line workers are manufacturing the wrong items.</div>	<div>3) Target Condition</div> <div><b>Target Condition:</b> Line workers will switch from producing one product series to another without confusion.</div> <div><p>The flow chart depicts a production line switching from one series to another. The ideal production line can do this with no difficulty or time loss.</p><div><b>Hypothesis &amp; Experiment</b> Management will hold a stand-up meeting before the production run to explain proper use of visual cues, followed by regular checking of use on line.</div></div> <div><p>Example Production Order Flow Chart</p><p>Risto Rushford   November 27, 2018</p><pre>graph TD; Prd1[Prd 1] --&gt; Prd2[Prd 2]; Prd2 --&gt; Prd3[Prd 3]; Prd3 --&gt; Prd4[Prd 4]; Prd4 --&gt; Prd5[Prd 5]; Prd5 --&gt; Prd6[Prd 6]; Prd6 --&gt; Prd7[Prd 7]; Prd7 --&gt; Prd8[Prd 8]; Prd8 --&gt; Prd9[Prd 9];</pre></div>
<div>2) Current Condition</div> <div>Line workers are manufacturing the wrong items.</div> <div><ul style="list-style-type: none"><li>▶ <b>Why?</b> They feel rushed and are confused by the visual cues</li><li>▶ <b>Why?</b> Visual cues are not being coordinated properly</li><li>▶ <b>Why?</b> Management was helping to record data on the line</li><li>▶ <b>Why?</b> All workers were given a quick brief on the visual cues before the production run</li><li>▶ <b>Why?</b> Management assumed line workers understood the production process</li></ul></div> <div>It seems that management was too quick to operate on assumptions, spurred by the success of the previous round of the Quality Lab.</div>	<div>4) Action Plan (Steps)</div> <div><ol style="list-style-type: none"><li>1. Management holds a stand-up meeting centered around use of visual cues, emphasizing that time trackers are in charge of coordinating the cues for production.</li><li>2. Once production starts, management follows production down the line to make sure the appropriate visual cue is used and the workers understand it.</li><li>3. When production shifts to a different product, management will again follow the production sequence to verify workers understand which product is being made.</li></ol></div> <div><b>Measurement:</b> Incidences of defect or mis-production will be counted and tracked on the Quality Data sheet.</div> <div><b>Results:</b> Results will then be compared to the rate of defects from the prior round, and additional steps taken as appropriate.</div>