Toyota-Style Problem-solving A3 Reports

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The A3 Report

**THEME:** "What are we trying to do?"

**Background**
- Background of the problem
- Context required for full understanding
- Importance of the problem

**Current Condition**
- Diagram of current situation (or process).
- Highlight problem(s) with storm bursts.
- What about the system is not IDEAL.
- Extent of the problem(s), i.e., measures.

**Cause Analysis**
- List problem(s)
- Most likely direct (or root) cause:
  Why? Why? Why?

**Target Condition**
- Diagram of proposed new process
- Countermeasures noted as fluffy clouds
- Measurable targets (quantity, time)

**Implementation Plan**

<table>
<thead>
<tr>
<th>What?</th>
<th>Who?</th>
<th>When?</th>
<th>Where?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actions to be taken</td>
<td>Responsible person</td>
<td>Times, Dates</td>
<td></td>
</tr>
</tbody>
</table>

**Follow-Up**

**Plan**
- How will you check the effects?
- When will you check them?

**Actual Results**
- In red ink/pencil.
- Date check done.
- Results, compare to predicted.
Encounters Problem.  

Studies Problem.  

Devises Countermeasures. (A3)  

Builds consensus with affected parties.  

Measures Effects.  

Implements Plan.  

Implements Plan.  

Gets Approval.  

Builds consensus with affected parties.
Target State for A3 Problem-Solving
(see attached figure)

Encounters Problem
- Something about the way work happens now is not IDEAL.

Studies Problem
- Observe the work in its actual context.
- Document the current condition.
- Validate observations.
- Quantify the extent of the problem.
- Perform cause analysis: is work properly specified? Are connections clear, direct, yes/no? Are pathways simple, direct, and uninterrupted?
- Write the left-hand half of the A3.

Devises Countermeasures
- Generate ideas to move the organization closer to IDEAL.
- Design specific countermeasures that i) specify the work, ii) create better connections, and/or iii) simplify pathway.
- Involve the people affected by the change; get their ideas, their reservations.
- Envision and document a target condition.
- Devise an implementation plan: what, who, when, and desired outcome.
- Predict the results of implementation quantitatively.
- Decide on a follow-up plan.
- Write the right-hand half of the A3.

Builds consensus with affected parties
- Build consensus with ALL people affected by the implementation or target condition.
- May involve studying problem further or reworking the target condition.

Gets approval
- The appropriate authority verifies that problem has been sufficiently studied.
- The authority verifies that all affected parties are “on board” with the proposal.
- Appropriate authority approves the change and implementation.

Implements plan
- Each person listed in implementation carries out his/her assignment by the deadline.

Measures effects
- On the date specified in the follow-up plan, measure the results of implementation and document.
- If results differ from predicted, research why.
- On to the next problem!