

ROOT CAUSE ANALYSIS

□ What is an A3 Analysis?

The A3 Analysis is a simple but effective structure that is suitable for documenting Root Cause Analysis. It is inspired by the Toyota Management System, and A3 refers to the international-size piece of paper. The analysis is documented on one side of one piece of A3 paper.

□ Why should we use A3 Analysis?

The structure of the analysis helps you to be concise and is easy for others to understand. However, it is important to keep in mind that the purpose of the A3 Analysis is not the A3 itself. You should therefore tweak the design to fit your requirements.

□ How do we do it?

The elements of the A3 Analysis follow one another in a natural and logical sequence. It is important that the A3 tells a story that is easily understandable for the receiver. The A3 Analysis consists of the following elements:

Title:	Owner:	Sponsor:	Date:
1. Background	5. Countermeasures		
This section establishes the business context and importance of the issue. In this section you should describe the symptom concise, number of occurrences, and the consequences in form of for example wasted man-hours or money.	This section lists potential preventive and contingent actions to address the problem, close the gap, and reach the targets. It is important that the listed countermeasures target the goals in section 3.		
2. Current Situation	You may have to perform a decision analysis if it is not obvious which countermeasures to select. The decision analysis should weigh the different countermeasures against the targets in order to select the best solution.		
In this section you can describe what is currently known about the issue. You should e.g. describe whether you have restored service completely or partly, and whether it could happen again.			
3. Desired Outcome	6. Action Plan		
This section identifies the desired outcome in form of targets. The targets could for example be: <ul style="list-style-type: none"> 1) No similar events in the next 2) Restore service within ... minutes if it happens again. 3) Cost of countermeasures below 	In this section you should prescribe an action plan of who will do what, when in order to reach the targets. The action plan includes the recommended countermeasures and often needs to be approved by the primary stakeholders.		
4. Causal Relationship	7. Follow-up		
Causal Relationship analyzes the situation and the underlying causes that have created the gap between the current situation and the desired outcome. You can apply simple techniques like e.g. 5-whys or Fishbone, or more advanced methods.	Finally, the follow-up which describes how long we must wait before we can declare our actions successful.		