**ROOT CAUSE ANALYSIS (5 Whys)**

**Purpose**

A Root Cause Analysis (also known as the “5 Whys”) helps identify the source of a problem. This template investigates what is really causing a problem by asking a series of why questions to move beyond symptoms to causes. When a root cause is removed or addressed, the undesirable effects, or symptoms will no longer be present.

**Related Tools**

A Root Cause Analysis may be performed after contributing factors to a problem are identified using a Fishbone Diagram or Failure Modes Effects Analysis (FMEA). Once a root cause is identified with a Root Cause Analysis, a mPDSA should be used to test ways to remove or address the root cause.

**How to Facilitate**

1. Align your team by agreeing upon the problem description and focus the group conversation around a specific problem definition or statement.
2. Be sure to clarify what the “why” is trying to answer. Are you investigating the reason why something wasn’t detected or the root cause of the problem? Make edits in the template as necessary to reframe questions.
3. Try to ask at least 5 “why” questions to get to the root cause of the problem. If you struggle to answer at least 5Whys, the problem might not be complex enough to address. If your team provides more than one answer to a “why”, there can be an offshoot for another set of whys.
4. Fill out the answer to each why, then read them backward using “therefore” to ensure each why response is associated with a linear process.
5. If the answer to the last “why” is not feasible to address, encourage your team to think about other “whys” that may either start from the beginning, or shoot off from the exiting set of whys.
6. Once a root cause is determined, and your team agrees that it is feasible to mitigate or eliminate the root cause, brainstorm the next steps to address the root cause. Document the corrective action, the person in charge, and the target completion date.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Date: | Organization: | Owner: |
| Problem Description: | | | |
| Include complete by date  Corrective Action and Responsibility  Why   |  |  | | --- | --- | | Investigate why the problem wasn’t detected | | | Why? | | Therefore  Why | | Therefore  Why | | Therefore  Why | | **Root Causes**  Therefore | | Therefore  Why |   Include complete by date  Why   |  |  | | --- | --- | | Investigate the root cause of the problem | | | Why? | | Therefore  Why | | Therefore  Why | | Therefore  Why | | Why  Therefore | | Therefore  Why |   Why | | | |

**EXAMPLE ROOT CAUSE ANALYSIS – Baking a Custom Cake**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Date: 4/15/20 | Organization: Bakery | Owner: Head Baker |
| Problem Description: Cakes are overbaked & dried out | | | |
| Baker sets expectations & trains apprentice on all unfamiliar recipes (4/21)  Baker tests & updates recipes for electric ovens (4/17)  Corrective Action and Responsibility   |  |  | | --- | --- | | Investigate why the problem wasn’t detected | | | Why?  Why | | Apprentice takes cake out of oven after 60 min  Therefore | | Recipe says cake will be done at 60 min  Why  Therefore | | Recipe was tested using electric ovens, not gas  Why  Therefore | | Recipe is old  **Root Causes**  Therefore | | Baker hasn’t updated recipes  Why  Why  Therefore  Why | | Investigate the root cause of the problem | | | Why?  Why | | Apprentice does not know how to check for cake doneness  Therefore | | They don’t have formal training  Therefore  Why | | Baker assumed apprentice knew how to bake  Why  Therefore | | Apprentice never told baker they were unfamiliar with specific recipe  Why  Therefore | | Apprentice was nervous & wanted to maintain a good impression  Why  Therefore  Why | | | | |