

## Root Cause Analysis – The Core of Problem Solving and Corrective Action

**Duke Okes****Introduction**

*The ASQ Pocket Guide to Root Cause Analysis* by Bjorn Anderson and Tom Fagerhaug provided a general overview of the root cause analysis (RCA) process. *Root Cause Analysis: The Core of Problem Solving and Corrective Action* spends more time on each of the RCA steps, including the steps toward corrective action. The objective of this paper is to discuss select tools and techniques that may benefit church-school ministries in corrective action: problem solution and implementation, steps 6 – 10.

**Step 6 – Identify and Select Solutions**

Haste makes waste. Okes encourages RCA teams to move slowly, carefully, and be creative in searching for solutions. He says, “There’s a tendency in many organizations to come up with one idea that people think will work and immediately implement it.”<sup>1</sup> He recommends utilizing a variety of tools and techniques to discover possible solutions.

1. *Scale up or scale down* – The scale up or scale down technique involves shifting perspective by thinking of what might be done if the problem were much worse than it is or not nearly as bad as it is.
2. *Mind Maps* – The mind map technique is another type of tree diagram that starts with a central idea or issue and expands on it. This technique uses a starburst pattern that helps engender an expansionary (as opposed to reductionist, as in the case of a logic tree) perspective.
3. *What Would X Do* – Another technique is to imagine what another individual or an organization might do in a similar situation.
4. *No Limits* – The no limits technique imagines limits are suspended for a few minutes when brainstorming. One of the problems people face when trying to brainstorm solutions is the automatic but subconscious limits they place on the ideas thought to be viable.
5. *Mistake-Proofing* – Also known by the Japanese term “poka-yoke,” mistake-proofing looks for simple ways to either prevent or warn of problems.
6. *Benchmarking* – Rather than trying to come up with its own original ideas, an organization can see what others have done.<sup>2</sup>

**Step 7 – Selecting Solutions to Be Implemented**

While Step 6 encourages many solutions to be generated, Step 7 promotes the importance of narrowing down the solutions. Okes states, “Once a list of possible solutions has been generated, the solutions must be sorted through to identify the one(s) to be implemented.”<sup>3</sup> The author suggests, “Two major issues need to be considered relative to the decision-making process: (1) who should make the decision, and (2) what criteria should be used to make it?”<sup>4</sup>

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<sup>1</sup> Ibid., 99.

<sup>2</sup> Ibid., 100 – 105.

<sup>3</sup> Ibid., 106.

<sup>4</sup>

Regarding who should make the decision, Okes offers the following three approaches:

- autonomous: the individual (or group) makes the decision;
- consultative: the individual (or group) makes the decision, but only after first getting input from others; and
- consensus: the individual (or group) shares the decision-making process equally with others with knowledge of or responsibility for the change.<sup>5</sup>

To decide the best approach of the three, Okes recommends considering how much time, knowledge, and willingness the individual (or group) has to support the change efforts.<sup>6</sup> Many church-school ministries appear to operate with two of the three approaches: that is, consultative and consensus. It seems there is a reluctance to defer many of the tactical (operational) decisions to the staff and strategic decisions to lay leaders. Most decisions are deferred to a congregational vote when people are short on time, short on desire to change, and short on expertise.

Okes suggests several criteria to consider when deciding among solutions. He recommends measuring or collecting data: technical gains, financial return, how long it will take, and how well it will fit the organizational systems and culture.<sup>7</sup> A church-school ministry may additionally want to consider strengthening Christian witness, Christian love, and faith.

Okes offers several tools to assist the decision-making process. Two may be easily used in a church-school ministry: decision table and Debono's Six Thinking Hats. Decision tables "allows decision makers to specify the criteria used and to score each possible solution, with the one getting the highest score being the most viable."<sup>8</sup> Debono's six thinking hats method does not focus on the criteria but on a range of thinking perspectives by the group, including:

- Blue Hat – focuses on making sure the thinking process is managed.
- Green Hat – expands the list of current ideas.
- Yellow Hat – optimistically asks, "what are we hoping for?"
- White Hat – discusses what is known or what needs to be known.
- Red Hat – expresses participants gut feelings about the solution.
- Black Hat – looks at the potential downsides.<sup>9</sup>

### ***Step 8 – Implement the Solutions***

When a church-school ministry is ready to implement a solution, Okes cautions, "Finding a good solution is one thing, but effectively implementing it is another. With the former it's all cognitive, but with the latter it's all about getting organizational resources very focused for a specific period of time."<sup>10</sup> He observes that implementation calls for management of three knowledge areas: technology, project

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<sup>5</sup> Ibid., 107.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid., 108.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid., 110.

<sup>10</sup> Ibid., 113.

management, and organizational change management.<sup>11</sup> To properly manage the implementation Okes recommends specific steps:

- Develop and execute a validation protocol to ensure that the process change is robust
- Revise and approve procedures, and other relevant information sources, to get them in line with the change
- Determine how the change will be communicated to those responsible for carrying it out, and any training necessary
- Determine how effectiveness of the change will be evaluated
- Develop a contingency plan for what to do if the change goes awry.<sup>12</sup>

### ***Step 9 – Evaluate the Effect(s)***

Andersen and Fagerhaug refer to this action as taking a “virtual step back.”<sup>13</sup> Okes equates Step 9 in his process to Check/Study step in the PDCA/PDSA model.<sup>14</sup>

### ***Step 10 – Institutionalize the Change***

There are no guarantees the new action items implemented will be widely accepted or stay the intended course. To preserve and protect the improvements, Okes recommends three steps: standardization, knowledge management process, and a formal tracking process.<sup>15</sup>

### ***Theological Reflection***

In my experience, selecting the solution to be implemented (Step 7) seems to be a significant challenge for most church and school ministries during organizational change; for instance, when a church and school must reassess budget limits or which ministry department can add staff. Okes states that there are two important questions to consider during this step: who should decide and what criteria should be used to make the decision.<sup>16</sup> Interestingly, Okes includes deferring to an experienced or knowledgeable individual as a viable option. Deferring to an individual is not something church and school ministries routinely do. Deferring to called church workers, acting within their vocational boundaries, may be an option that reduces waste of time and resources. Alternatively, deferring to a competent lay person, may show a level of trust in God and one another as “the members [of the body of Christ which] do not all have the same function...”<sup>17</sup>

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<sup>11</sup> Ibid.

<sup>12</sup> Ibid., 114 – 115.

<sup>13</sup> Bjorn Andersen and Tom Fagerhaug, “The ASQ Pocket Guide to Root Cause Analysis,” (Quality Press, Milwaukee, WI, 2014.) 79.

<sup>14</sup> Dukes Okes., 115.

<sup>15</sup> Ibid., 117.

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<sup>17</sup> Romans 12:4