

ADVANCE A SOLUTION MATRIX

Purpose

The Advancing a Solution Matrix is used to advance solutions, then to rank them in order of priority.

When to Use it

Use the Matrix when you have gathered data about the issues, mapped the processes and investigated root causes using Fishbone and/or Why-Why.

How to Use it

Start with a list of Root Causes identified from Fishbone, Why-Why and any other information, and a list of Opportunities for Improvement identified from process maps – both the current process map and the “Ideal Process” map.

Examine your list of root causes and decide which are the most important ones affecting the problem. You may need to gather more information to confirm which root causes are the most important.

List the important Root Causes and Opportunities for Improvement in the first column. Then, for each Root Cause or Opportunity consider what alternative strategies you can think of to address the issue or opportunity. This is a creative exercise and brainstorming is one tool you should use to generate possible solution strategies. Once all the alternative strategies have been written onto the Matrix, score them using the criteria on the worksheet. The criteria are:

Impact of the strategy on improving the problem.

If it has a High impact, that is, it would have a significant effect on improving the process, then rate it a 6. If it has a medium impact – it goes some way to improving the process – then rate it a 3. If it has low impact then rate it a 1.

Cost/Resources to implement the solution.

If it is a low cost alternative (can be implemented with no extra materials, people or equipment costs) rate it as 6, if medium cost rate it as 3 and if high cost (such as additional people or a lot of equipment or materials) rate it as 1.

Time to implement the solution.

If it can be implemented in a relatively short time (within 1 month) rate it a 3, if it will take between 1 and 6 months rate it a 2 and if it will take longer than 6 months rate it a 1.

Ease of implementing the solution.

If the solution can be implemented with minimal difficulty, rate it a 3, if it has a moderate difficulty using current resources rate it a 2; if it will be very difficult to implement, rate it a 1.

Add up the scores for each strategy. The highest scores indicate preferred solutions.

Review the results and make sure they make practical sense. A low-scoring but very important strategy should not necessarily be discarded. Use your common sense.

In the last column write “preferred” against each preferred solution.

It is quite acceptable to implement more than one solution at the same time to address an issue, or to implement them one after other over a period of time.

Advance a Solution Matrix

Team:

Date:

Root Cause or Opportunity for Improvement	Alternative Solution Strategies <i>Brainstorm different ways of addressing the Root Cause or Opportunity Ask: "What other ways can this be done?"</i>	Impact on improving the process <i>High Impact 6 Medium Impact 3 Low Impact 1</i>	How Cheap it would be to implement <i>Cheap 6 Acceptable cost 3 Expensive 1</i>	How Quickly it could be implemented <i>Fast – within one month: 3 Medium – between two and five months: 2 Slow – more than six months: 1</i>	How Easily it could be implemented <i>Easy 3 Moderately difficult 2 Very difficult 1</i>	Total <i>Add the scores</i>	Preferred Solutions <i>Write 'Preferred Solution' against the alternatives with the highest total scores and any low-scoring strategies which are very important to implement.</i>