



Solution Outline Root Cause Analysis Exercise

Step / Typical Expected Outcome & Tools To Use (information available for analysis if text in blue)
<p><u>1. Describe Problem</u></p> <ul style="list-style-type: none"> ▪ <i>Pareto chart</i> of complaints (Identify vital few) ▪ Collect data for product dimension (<i>histogram</i>) ▪ Collect data delivery time deviations (<i>histogram</i>) ▪ Initiate <i>survey</i> for employee satisfaction and identify major issues using a Pareto chart ▪ Assemble team of managers and associates (5 to 8) and include purchasing, inspection, packaging, and labeling, ▪ Examples of metrics to use: <ul style="list-style-type: none"> - (# of Complaints/# of Deliveries) ratio - Cost of complaints / sales ratio - Current order fulfillment lead time - % of dissatisfied employees - Product dimensional (Cp, Cpk, ppm) - Delivery time deviation (Cp, cpk, ppm)
<p><u>2. Detail Current Process Status</u></p> <ul style="list-style-type: none"> ▪ Obtain information to draw <i>flowcharts</i> for: <ul style="list-style-type: none"> - Overall order fulfillment process - Supplier qualification and evaluation - Detailed packaging / labeling ▪ Validate flow charts with users / owners of the above processes
<p><u>3. Find Root Cause</u></p> <ul style="list-style-type: none"> ▪ For each effect (problem), generate possible causes using <i>brainstorming</i> ▪ Draw or mention the use of <i>Ishikawa Diagram</i> ▪ Explain how you pick potential cause(s)
<p><u>4. Develop Solution</u></p> <ul style="list-style-type: none"> ▪ Identify potential solution(s) for each issue or explain how you would get to a solution ▪ Develop steps for each solution or mention that you would develop steps using a method such as <i>Gantt chart</i>
<p><u>5. Implement solution</u></p> <ul style="list-style-type: none"> ▪ Explain how you would implement plan
<p><u>6. Review & Evaluate</u></p> <ul style="list-style-type: none"> ▪ Compare metrics (identified in step 1) after improvement ▪ Ensure that changes stick through standardization and training
<p><u>7. Reflect & Act on Learning</u></p> <ul style="list-style-type: none"> ▪ Assess results and method for getting there (<i>Radar Chart</i>) ▪ What if the results in 6 fall short of your goals (repeat cycle) ▪ Recognize achievement