



SIX SIGMA FISHBONE DIAGRAM

Whitepaper written by:

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One of my very favorite tools, under the Six Sigma umbrella, is the Fishbone Diagram. A more formal name for the diagram is the Cause and Effect Diagram, but I believe that there is greater group participation in the diagramming with a certain degree of informality. Almost anyone can draw the fish structure, and the diagram presents a great visual as the exercise progresses.

As with any Six Sigma tool for problem solving, it is always important to clearly understand the actual problem. The problem should be stated as simply as possible but with a metric that allows a measure of where we are now and our success as we reduce or eliminate the problem. For example, the problem that “Customer returns are too high” is better when quantified as “Customer returns are running at 7% over the last 6 months.” The 7% customer returns becomes the Effect or in our diagram the Fish head.

It is important to have the right facilitator for the diagramming exercise in order to pull all members of the group into the discussion. One of the great things about problem solving with the Fishbone Diagram is that you can involve a larger group of people with lots of different backgrounds and ideas in the solution process. All ideas as to the causes of the problem become part of the fish structure. There is no screening or vetting of the ideas before they are added to the diagram. Encouragement should be given to adding “Why” bones to each “Cause” bone of the diagram. Nothing is considered insignificant or off the wall, at this point. There is no singular overriding voice with “the” answer at the beginning of the exercise.

Through this diagramming process, everyone in the group becomes part of the diagnostic team while recognizing that “We have a problem.” The analysis deepens, and the fish grows in size as the “Why” bones are added to each of the “Cause” bones. Once the team fully develops the fish, it is a good idea to take a picture of

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the creature and share it with other members of the organization, outside the analysis team. Target those external resources who can have a positive impact on the causes.

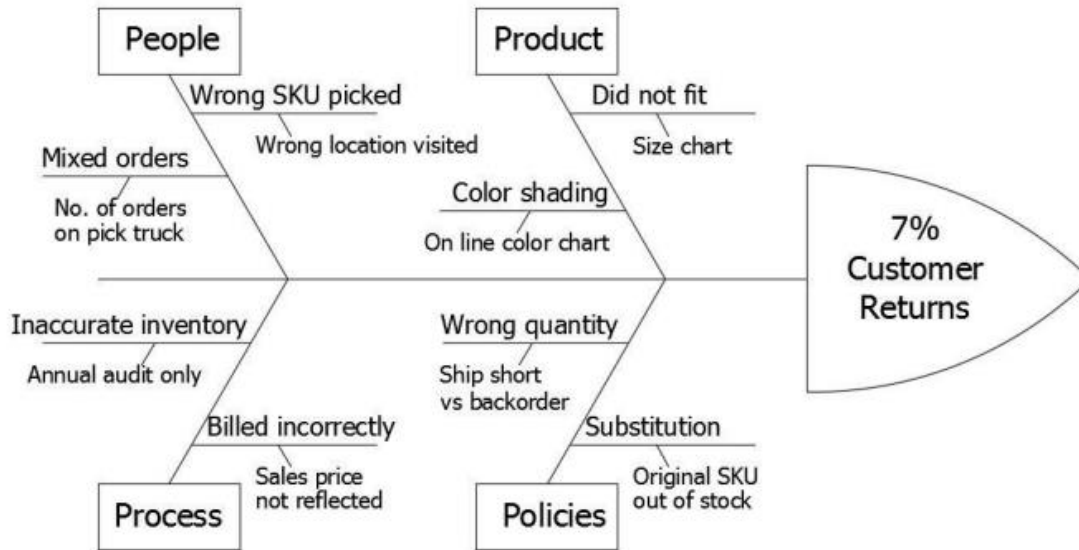
The obvious next step in this problem-solving exercise is to begin the improvement process by addressing the controllable causes of the effect.

Although it would be nice to simply fillet this fish, getting rid of all the causes with one simple process change, the more likely procedure will be more of a deboning exercise as the group addresses the individual causes for opportunities.

As bones of the fish diagram are removed, the positive improvements to the updated effect are posted on the fish as well. Updated pictures document the progress. This visual tracking of the progress is a great inspirational tool, and the visuals are easily shared within the organization.

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Contact us at info@hy-tek.com or call us at 678.842.9114, if you want to learn more about Six Sigma Fishbone Diagram.