ABSTRACT

SMEs Pancong Pocong Ketintang is an SMEs that operates in the food industry, producing contemporary specialty snacks, namely pancong, with its own brand name Pancong Pocong and is located in Ketintang, Surabaya. Currently, there are still frequent problems with the packaging of half pans of pancong pocong products, such as stereofoam packaging that is not closed tightly enough, causing the filling or topping to overflow, which makes the packaging dirty and the packaging breaks easily. To minimize and reduce packaging defects for Pancong Pocong Ketintang SMEs products, this can be done using the Six Sigma method with the DMAIC approach or Define, Measure, Analyze, Improve and Control.

The Six Sigma method with the DMAIC (Define, Measure, Analyze, Improve, Control) approach is usually used to minimize the level of defects in a product or packaging, because this method has been proven effective in reducing defects and can improve quality in various industries.

At the defining stage, researchers define the types of defects that exist and determine critical aspects of quality. In the measurement stage, the average DPMO value was 157,088, which means it has a sigma level of 2.51. At the analysis stage, the results obtained from the Pareto diagram showed that the most dominant type of defect was overflowing packaging, amounting to 48%. The fishbone diagram shows that the factors that cause defects are humans, materials, methods and the environment. The improvement stage is carried out using the kaizen five m checklist tool which consists of man, material, method, machine and environment. In the final stage, the improvement control provided can be implemented on an ongoing basis by implementing work operational standards.

Based on this research, the recommendation that can be given is to carry out monitoring every month to calculate packaging defects, so that you can continue to maintain packaging quality and find out how many levels of defects occur each month. It is hoped that the improvement proposals from researchers will be useful in reducing and minimizing the level of defects in half pans.

Keywords: Six Sigma, DMAIC, Fishbone Diagram, SMEs, Packaging Defects