IMPLEMENTATION OF DMAIC METHOD TO REDUCE PRODUCTION DEFECTS, IN PLANT AREA AT PT MANUFACTURING FMCG, INDONESIA

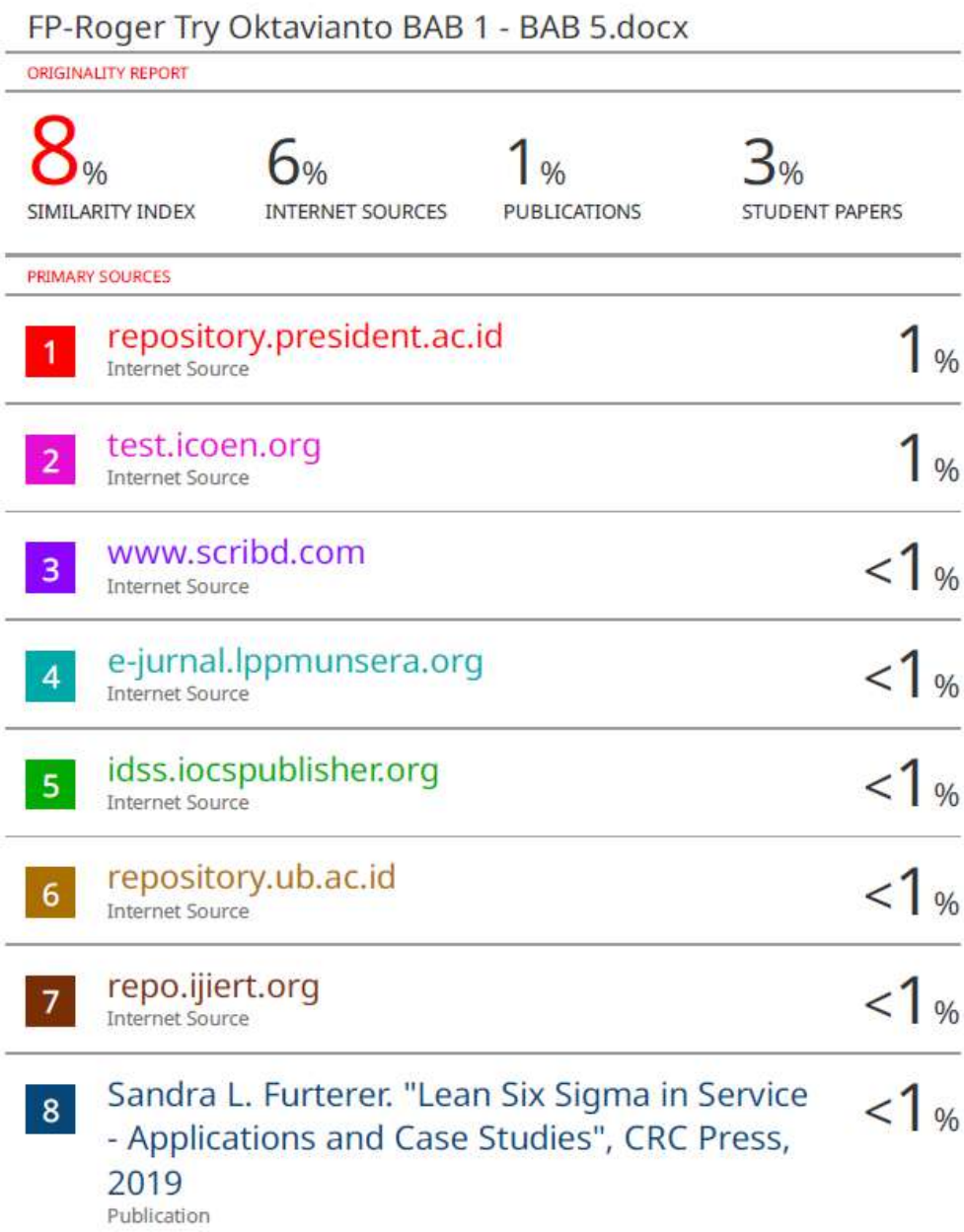
UNDERGRADUATE FINAL PROJECT

Submitted as one of the requirements to obtain Sarjana Teknik (S.T.)

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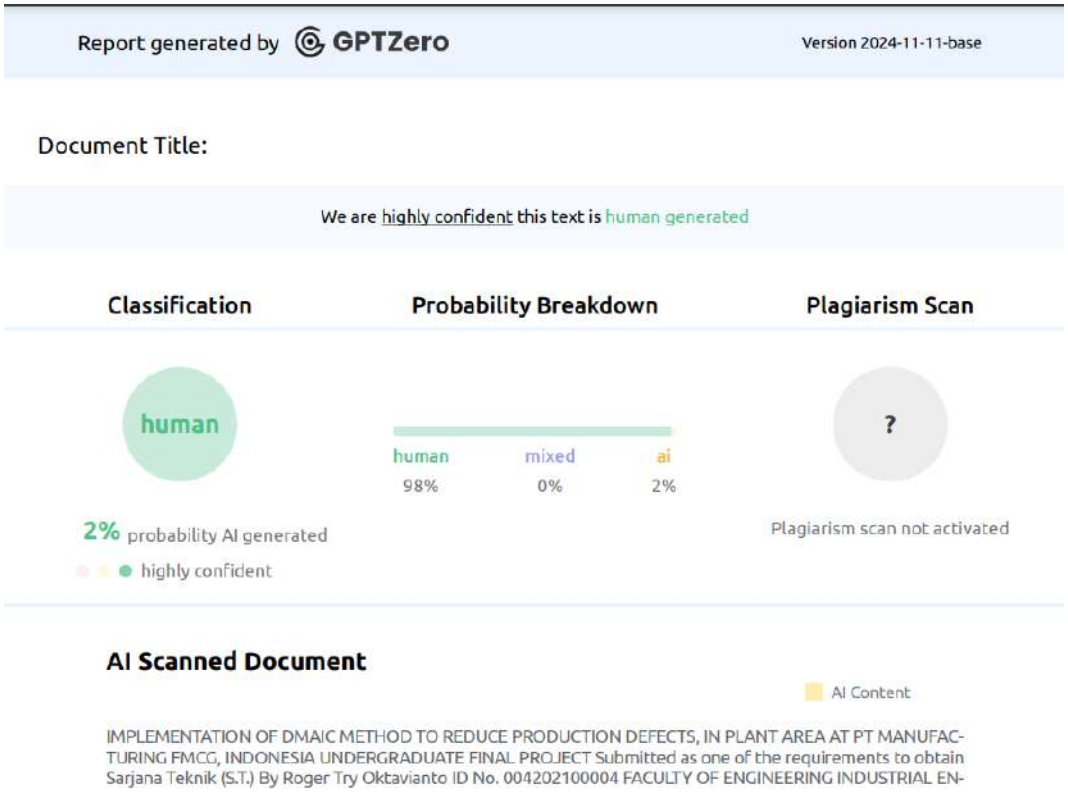
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ABSTRACT

Product quality is an important aspect for companies regarding their existence, performance, productivity, and profitability. The company faces issues with many defects with total defects in semester 1 (Jan-Jun) 25,734 with the highest defect color, taste, and aroma defects. These factors contributed to 17,850 defects, or 69% of all defects in the company, during the first semester (Jan-Jun). Therefore, Lean Six Sigma with a DMAIC approach was also applied to address these issues in the research, The research found that these defects were caused by inconsistent color and rotting in chili peppers, which was further affected by a lack of supplier selection criteria and no SOP for inspection upon the arrival of chili peppers at the warehouse. As a result, supplier selection using AHP was implemented, and an SOP for inspection was created. This improvement successfully reduced defects in color, taste, and aroma the main focus of this research to only 179 defects, or just 4% of the total defects.

Keywords: *Defects, Quality, Lean Six Sigma, DMAIC, SOP, Reduce*

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