IMPLEMENTATION OF DMAIC METHODS TO REDUCE SCRAP IN PLASTIC INJECTION MOLDING AREA AT PT.ABC INDONESIA

UNDERGRADUATE FINAL PROJECT

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

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SIMILIARITY CHECKING RESULT

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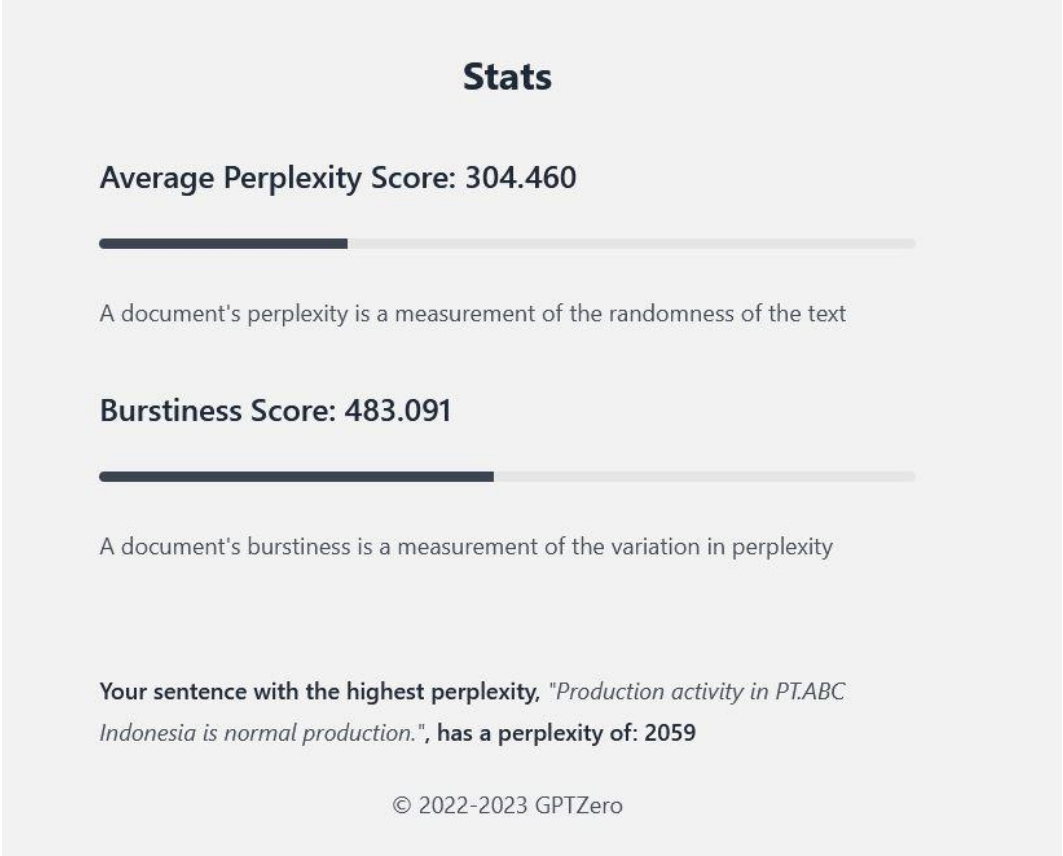
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ABSTRACT

PT.ABC Indonesia has a project to reduce high number of scraps in Primary Production area. Plastic Injection Molding area contributes over 50% from total scrap in Primary Production area and resulted scrap value that total Rp. 378.803.000 in first quarter of 2023. These scraps happen because of the changeover process procedure. This research use Lean Six Sigma approach through DMAIC Methodology. Several improvements are implemented new procedure for color change and tool change without purging process and slide the hopper when Daily Schedule Adherence achieve 95%. The improvement resulted 57% reduction of scrap in Plastic Injection Molding. In detail, color change and tool change procedure reduce 62% scrap, While the slide hopper process was reduce wrong color scrap by 16%. By this research, the company already saving the cost Rp. 49.237.000 and predicted will save up to Rp. 434.660.000 by the end of year 2023.

Keywords: *DMAIC, Lean, Six Sigma, Plastic Injection Molding, Purging, Scrap, Wrong Color*

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