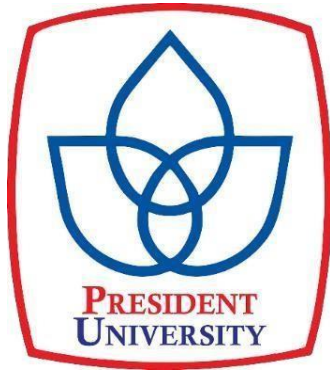




**APPLICATION OF VALUE STREAM MAPPING TO
REDUCE LEAD TIME ON FRONT DOORTRIM
PRODUCTS AT PT XYZ**

UNDERGRADUATE FINAL PROJECT

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

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CIKARANG
OCTOBER, 2024**

SIMILARITY CHECKING RESULT

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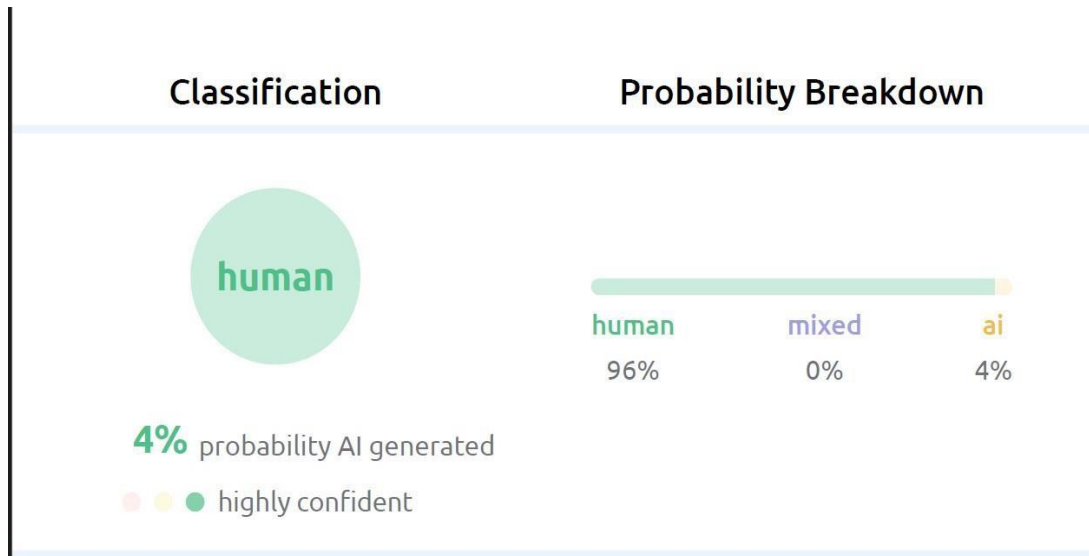
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ABSTRACT

Productivity is a fundamental component in the success and sustainability of a company, playing a crucial role in gaining a competitive advantage. PT. XYZ, an automotive company, faces several challenges in its production process, particularly in the manufacturing of front door trim. The challenges in production process is Poor Inventory Control and Long Supplier Lead Time. with the total lead time 278.7 minutes which according to the management is high. They want to reduce the lead time at least 10%. Due to the inefficiency in productivity and various wastes occurring in the production process, PT. XYZ aims to improve productivity by implementing Value Stream Mapping (VSM). This study identified that defect waste and waiting waste are the most frequent issues leading to Inefficient productivity. Through the application of VSM, the lead time in the production process was reduced by 16.3%, decreasing from 46.4 minutes before the implementation of VSM and Process Activity Mapping to 38.87 minutes, which is 7.57 minutes faster. This demonstrates that implementing VSM and Process Activity Mapping has successfully improved production efficiency at PT. XYZ.

Keyword: *Process Activity Mapping, Lean Manufacturing, Waste, Value Stream Mapping.*

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LIST OF TERMINOLOGIES

Lean Manufacturing	: A systematic approach to identify and eliminate waste through a series of improvement activities
Waste	: Waste is any human activity that uses resources but does not create added value.
Value Stream Mapping	: is one tool of lean manufacturing which basically comes from the Toyota production system (TPS) known as "material and information flow mapping".
Value Added Activity (VA)	: All value-added activities ranging from raw material inputs to finished goods in accordance with consumer needs
Non Value Added Activity (NVA)	: All activities that do not add value to the product in transforming raw materials into finished products and using time, resources, and space.
Necessary but Non Value Added Activity (NNVA)	: All activities that are not value-added to products in converting raw materials into finished goods, but are needed in the production process.