

INFORMATICS INSTITUTE OF TECHNOLOGY

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Forecasting The Sewing Efficiency in

Apparel Industry in Sri Lanka

A dissertation by

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ABSTRACT

The goal of this thesis is to create a forecasting model for the sewing productivity of the apparel sector. The study's objectives are to examine the variables that affect sewing productivity and to pinpoint the best methods used by the sector to raise it. Data will be gathered for the study methods from a variety of sources, including brainstorming, industrial reports, and expert interviews. Its purpose is to research the elements influencing sewing productivity in the apparel sector and to utilize the research's outcomes to create a forecasting model for identifying sewing productivity's long-term trends. For the sector to become more competitive in the global market, the research strives to offer insightful advice and best practices.

The proposed forecasting model is designed to provide accurate predictions of sewing productivity for the apparel sector, which can help companies in their decision-making processes. The model is based on machine learning algorithms and uses historical data to identify patterns and trends in the variables that affect sewing productivity.

Keywords: Forecasting Model, Machine Learning, Efficiency, Sewing, Apparel

Subject Descriptors:

Software and its engineering \rightarrow Software creation and management \rightarrow Designing software \rightarrow Software implementation planning \rightarrow Software design techniques

Software and its engineering \rightarrow Software creation and management \rightarrow Software development techniques \rightarrow Software prototyping

Software and its engineering \rightarrow Software creation and management \rightarrow Software verification and validation \rightarrow Process validation \rightarrow Use cases

Computing methodologies \rightarrow Machine learning \rightarrow Machine learning algorithms

Computing methodologies \rightarrow Machine learning \rightarrow Machine learning approaches \rightarrow Classification and regression trees

Human-centred computing \rightarrow Visualization \rightarrow Visualization techniques