

FINAL REPORT

***GARMENT
WORKER
PRODUCTIVITY
PREDICTION***

TEAM:

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2.1 Project Initialization and Planning Phase

a. Define Problem Statement

To ensure that the garment worker productivity prediction model meets business requirements and can be deployed for public use, it should follow the following rules and requirements: Accuracy: The model should have a high level of accuracy in predicting worker productivity, with a low margin of error. This is crucial to ensure that the predictions are reliable and trustworthy.

- Privacy and security: The model should be developed in accordance with privacy and security regulations to protect user data. This includes ensuring that sensitive data is stored securely and implementing proper data access controls.
- Interpretability: The model should be interpretable, meaning that the predictions can be explained and understood by the end-users. This is important to build trust in the model and to allow users to make informed decisions based on the predictions.
- User interface: The model should have a user-friendly interface that is easy to use and understand. This is important to ensure that the model can be deployed for public use, even by individuals who may not have technical expertise.

2.2 Project Proposal

A literature survey for a garment worker productivity prediction project would involve researching and reviewing existing studies, articles, and other publications related to machine learning in the field of manufacturing and workforce management. The survey would aim to gather information on current methods for predicting productivity in the garment industry, including feature selection, data pre-processing, and machine learning algorithms used for prediction.

The survey would also examine any gaps in knowledge and research opportunities in the field of garment worker productivity prediction, including the use of new machine learning techniques, such as reinforcement learning, and the integration of other data sources, such as wearable technology and environmental sensors.

a. Initial Project Planning

Social Impact: The garment worker productivity prediction model has the potential to improve the lives of garment workers by promoting fair and efficient workforce management practices. The model can identify factors that affect worker productivity and suggest ways to improve working conditions, incentive schemes, and training programs. This can lead to higher job satisfaction, better pay, and improved working conditions for garment workers.

Business Impact: The garment worker productivity prediction model can have significant implications for the garment manufacturing industry. The model can help manufacturers optimize their workforce management strategies, reduce idle time, and increase productivity. This can lead to higher profits, lower production costs, and improved quality of goods produced. Additionally, the model can assist in identifying areas for process improvement, such as reducing rework and improving supply chain efficiency.