

Project Initialization and Planning Phase

Date	5 July 2024
Team ID	739719
Project Title	Garment Workers Productivity Predictions
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

This project proposal outlines a solution to define scope, gather requirements, plan resources, and assess risks for developing a predictive model. The activities are Kickoff meeting, requirements gathering, project planning, and risk assessment. Project charter, WBS, project plan, and risk management plan.

Project Overview	
Objective	To boost garment worker productivity through technology integration, predictive analytics, and process optimisation
Scope	integrating advanced technologies, predictive analytics, and lean processes to enhance productivity, quality, and worker satisfaction in garment manufacturing.
Problem Statement	
Description	Garment manufacturing struggles with low productivity, inconsistent quality, and poor worker morale due to inefficient processes and lack of modern technology integration.
Impact	To reduced productivity, lower product quality, and diminished worker morale, leading to operational inefficiencies and competitive disadvantages in garment manufacturing
Proposed Solution	

Approach	Develop a machine learning model using worker attributes, task details, and environmental factors to predict garment workers' productivity.
Key Features	Worker attributes (such as experience and skill level), task complexity, and environmental conditions (like temperature and noise levels).

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	High-performance CPU/GPU for efficient model training	e.g., 2 x NVIDIA V100 GPUs
Memory	Sufficient RAM to handle large datasets and model computations	e.g., 16 GB
Storage	Adequate disk space for storing data, models, and logs	e.g., 2 TB SSD
Software		
Frameworks	Python machine learning frameworks	e.g., Tensorflow, PyTorch
Libraries	Statistical and machine learning libraries	e.g., scikit-learn, pandas
Development Environment	IDE, version control	e.g., Jupyter Notebook, Git
Data		
Data	Source, size, format	e.g., Kaggle dataset, 10,000 images

