Project Design Phase - I
Proposed Solution

Date	24 October 2023
Team ID	PNT2023TMID591623
Project Name	Project - Walmart Sales Forecasting
Maximum Marks	4 Marks

Proposed Solution:

S. No.	Parameter	Description
1	Problem Statement (Problem to be solved)	Walmart's sales forecasting system faces challenges such as inaccurate forecasts, data complexity, regional variations, and difficulties in managing promotions and inventory efficiently. They need a user-friendly, accurate system that accommodates these complexities and provides timely insights.
2	Idea / Solution description	Implement a data-driven and AI-based sales forecasting system for Walmart stores that combines historical data, external factors, and advanced machine learning techniques to provide accurate and actionable predictions.
3	Novelty / Uniqueness	Our novelty is in implementing recently introduced algorithms to increase the overall accuracy of our model compared to the already existing ones.
4	Social Impact / Customer Satisfaction	With an accurate prediction, the company can: Determine seasonal demands and take action for them.

		Protect from money loss because achieving sales targets can have a positive effect on stock prices and investors' perceptions. Forecast revenue easily and accurately. Manage inventories Do more effective campaigns.
5	Business Model (Revenue Model)	Walmart's business model revolves around close supplier collaboration, utilizing initiatives like Vendor-Managed Inventory (VMI) for streamlined operations. Sales forecasting is vital in this partnership to optimize production and timely deliveries. The global retail giant operates across diverse countries, each with distinct market dynamics, requiring global sales forecasting to adapt to regional differences. Additionally, Walmart's commitment to offering everyday low prices relies on sales forecasting to ensure products are stocked efficiently, aligning with their cost-minimization strategy.
6	Scalability of the Solution	Using efficient machine learning algorithms and optimization techniques to ensure that the forecasting models can handle large datasets with reasonable computational resources.