Book Sales and Inventory Management System

Project Group 10
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Milestone 1

Objective:

The objective of this project is to design and implement a data warehousing solution that integrates sales, inventory, and customer data for a retail bookstore. By consolidating transactional and static reference data from various operational sources such as orders, books, authors, publishers, and customers, the bookstore will gain valuable insights to optimize inventory management, forecast demand, and execute personalized marketing strategies. The solution will enable the business to make data-driven decisions, improve customer engagement, and enhance overall profitability through better sales and inventory analysis.

Problem Statement:

The retail bookstore faces significant challenges in effectively managing its sales and inventory due to the lack of a centralized system to integrate and analyze data from various operational sources. This disjointed approach leads to inefficient inventory management, difficulty in forecasting demand, and an inability to implement personalized customer marketing strategies. Without a robust data warehousing solution, the bookstore struggles to track book performance, manage supplier relationships, and optimize sales strategies, ultimately impacting profitability and customer satisfaction.

Key Points:

- Disjointed data across multiple operational sources, leading to inefficiencies in sales and inventory management.
- Lack of real-time visibility into stock levels, resulting in overstocking or stockouts.
- Difficulty in forecasting customer demand and planning inventory replenishment.
- Inability to perform customer behavior analysis, hindering personalized marketing efforts.
- Limited insight into book and author performance, affecting targeted promotions and sales optimization strategies.