NAAN MUDHALVAN PROJECT

Project Title: Product Sales Analysis

Phase 1:Project Definition and Design Thinking

Team Members:

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I.Project Definition:

The primary objective of this project is to harness the power of IBM Cognos for in-depth sales data analysis. This analysis aims to uncover critical insights, such as identifying top-selling products, discerning sales trends, and gaining a deeper understanding of customer preferences. By achieving these objectives, businesses can make data-driven decisions to enhance their operational efficiency and customer engagement.

II.Project Design:

1.Analysis Objectives:

To commence the project, we define a clear set of analysis objectives. These objectives include:

- Top-Selling Products: Identifying and ranking the products that contribute the most to overall sales revenue.
- Sales Trends: Analyzing historical sales data to uncover trends, seasonality, and any recurring patterns, providing a basis for informed decision-making.

- Customer Preferences: Gaining insights into customer preferences by examining their purchasing behavior, demographics, and product choices.

2.Data Collection:

The next crucial step involves strategizing data collection. We identify the sources and methods for obtaining sales data, encompassing transaction records, product details, and customer demographic information. This involves:

- Transaction Records: Gathering detailed records of sales transactions, including dates, products sold, quantities, and prices.
- Product Information: Collecting comprehensive data about the products, including descriptions, categories, and attributes that influence sales.
- Customer Demographics: Capturing demographic data of customers, such as age, gender, location, and purchase history, to understand their preferences.

3.Visualization Strategy:

Creating effective visualizations in IBM Cognos is a key aspect of this project. The visualization strategy includes:

- Interactive Dashboards: Developing interactive dashboards that allow stakeholders to explore sales data intuitively. These dashboards will feature dynamic charts, graphs, and filters.

- Reports: Generating informative reports summarizing the insights derived from the data analysis. These reports will provide a comprehensive overview of sales trends, top-selling products, and customer preferences.

4.Actionable Insights:

The ultimate goal of this project is to derive actionable insights that can drive improvements in inventory management and marketing strategies. These insights will serve as valuable guidance by:

- Inventory Management: Recommending optimal inventory levels for top-selling products to prevent stockouts or overstock situations.

- Marketing Strategies: Suggesting targeted marketing campaigns based on customer preferences and sales trends to boost sales and customer engagement.

5.Next Steps:

The next phase of the project will involve data preprocessing, loading the data into IBM Cognos, creating visualizations, and conducting statistical analysis to fulfill the defined objectives. Regular updates and collaboration among team members will be essential throughout the project to ensure its success.

III. Timeline:

A tentative timeline for the project is as follows:

- Data Collection and Pre-processing: 2 weeks
- IBM Cognos Setup and Visualization Design: 3 weeks
- Data Analysis and Insights Generation: 4 weeks
- Documentation and Reporting: 2 weeks
- Review and Final Submission: 1 week