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Sales Performance Analysis System

PROJECT SYNOPSIS

Real-Time Sales Performance Dashboard

BACHELOR OF COMPUTER APPLICATION
Cyber forensics, Cyber security & Data analytics with IBM

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1. Introduction

This project focuses on analyzing and visualizing retail sales data using Power BI. The dashboard enables users to monitor sales performance across cities, product lines, customer types, and payment methods. The objective is to derive actionable insights for business growth and decision-making using interactive dashboards and visual analytics.

Key Metrics Analyzed:

* Gross Income by City
* Sales by Product Line and Gender
* Sales by Payment Method
* Customer Type Distribution
* Average Rating by Branch and Gender

Technologies Used:

* Power BI Desktop
* DAX (Data Analysis Expressions)
* Excel for Data Preprocessing

2. Literature Survey

Various dashboards exist for business analytics using tools like Tableau, Excel, and Python. However, Power BI's strong integration with Microsoft services and ease of use for real-time dashboards make it a favorable choice. Previous work has demonstrated its capability in supply chain, finance, and retail analytics.

3. Methodology

* *Step 1:* Data Extraction from source files (.xlsx)
* *Step 2:* Data Cleaning and Preprocessing in Power BI
* *Step 3:* Creating Data Models and Relationships
* *Step 4:* Designing Visualizations (charts, KPIs, filters)
* *Step 5:* Analysis & Interpretation of Results
* *Step 6:* Final Dashboard Deployment

4. Facilities Required for Proposed Work

Software:

* Power BI Desktop
* Microsoft Excel

Hardware:

* Standard PC or Laptop with at least 4 GB RAM, Windows OS
* Internet connectivity for Power BI updates and documentation access

5. References

- * Microsoft Power BI Documentation
- * Kaggle Datasets for Retail Sales
- * Online tutorials and YouTube channels for Power BI Dashboard design