Low Level Design (LLD)

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Amazon Sales Data Analysis

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Abstract

The Ecommerce Sales Data Analysis High-Level Design Document outlines the plan for analyzing sales data for an ecommerce company, with the goal of providing valuable insights into customer behavior, product performance, and overall business trends. The document presents a high-level overview of the proposed solution, which involves gathering and processing large amounts of data from various sources to create a unified data model for analysis.

The design includes a comprehensive data pipeline architecture that involves data extraction, transformation, and loading (ETL) processes to collect data from various sources such as ecommerce platforms, payment gateways, and customer service databases. The data is then cleansed, transformed, and aggregated to create a unified data model that can be used for analysis.

The document also outlines the various analytical methods that will be used to derive insights from the data. The results of the analysis will be presented through interactive dashboards and reports, which will enable stakeholders to make data-driven decisions.

1. Introduction

1.1. Why this Low-Level Design Document?

The goal of the LDD or Low-level design document (LDD) is to give the internal logic design of the actual program code for the Bank Marketing Campaign Analysis. LDD describes the class diagrams with the methods and relations between classes and programs specs. It describes the modules so that the programmer can directly code the program from the document.

1.2. Scope

Low-level design (LLD) is a component-level design process that follows a step-by-step refinement process. The process can be used for designing data structures, required software architecture, source code and ultimately, performance algorithms. Overall, the data organization may be defined during requirement analysis and then refined during data design work.

2. General Description

2.1 Product Perspective and Problem Statement

Sales management has gained importance to meet increasing competition and the need for improved methods of distribution to reduce cost and to increase profits. Sales management today is the most important function in a commercial and business enterprise.

2.2 Tools Used

2.2.1. MS Excel

Microsoft excel is used for loading the data in csv format, basic data cleaning and filter operations to execute the program and after that it was used to create visual representations of data.

3. Design Details

3.1 Flow of Data Analysis

* Load data into excel
* Understanding the dataset
* Filtering and cleaning
* Create tabular format filtering
* Create pivot table
* Pivot chart creation
* Finally dashboard creation

3.2 Data Description

The number of rows – 100+

The number of columns – 15

Column names – Region, Country, Item Type, Sales Channel, Order Priority, Order Date, Order Year, Order ID, Ship Date, Units Sold, Unit Price, Unit Cost, Total Revenue, Total Cost, Total Profit.