E-Commerce Dashboard

Low Level Design (LLD)

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DOCUMENT VERSION CONTROL

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CONTENTS

1.INTRODUCTION

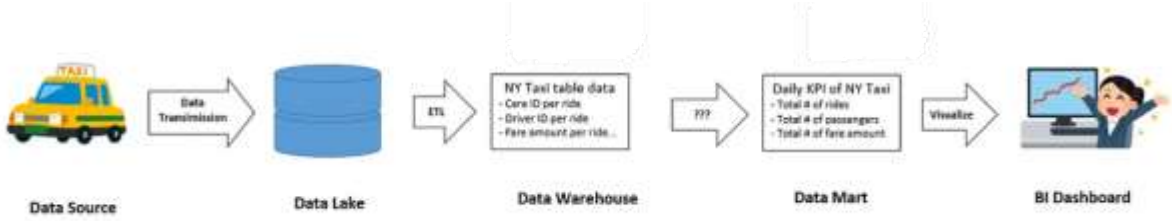
1.1. What is Low-Level Design Document?

The Low-Level Design Document (LLD), also known as an LLDD, aims to provide the core logic design of the actual computer code for the dashboard. Class diagrams with methods and relationships between classes and programme specifications are described using LDD. For the programmer to create the programme directly from the document, it describes the modules.

1.2. Scope

Low-Level Design is a component level design process that uses a sequential process of refinement. Data structures, necessary software architecture, source code and finally performance algorithms can all designed using this method. Overall, during requirement analysis, the data organization may be created and then refined during data design work.

2. ARCHITECTURE



Source: https://towardsdatascience.com/fundamentals-of-data-architecture-to-help-data-scientists-understand-architectural-diagrams-better-7bd26de41c66

3. DESCRIPTION

3.1 Problem Statement

The Analytics team of an Online E-Commerce Company wants to design a Sales dashboard to analyse the sales based on various product categories. The company wants to add user control for product category, so users can select a category and can see the trend month-wise and product-wise accordingly.

3.2 Data Collection

The dataset of the e-commerce company is provided in the form of Excel workbook.

3.3 Data Description

The dataset contains the following columns:

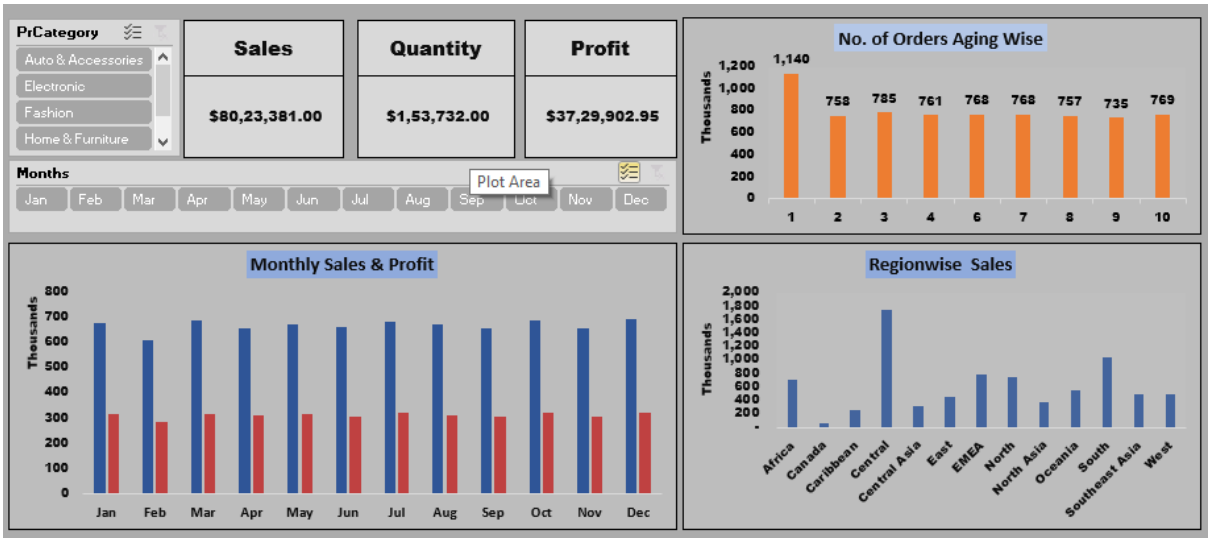
- Order ID
- Order Date
- Ship Date
- Aging
- Ship Mode
- Product Category
- Product
- Sales
- Quantity
- Discount
- Profit
- Shipping Cost
- Order Priority
- Customer ID
- Customer Name
- Segment
- City
- State
- Country
- Region
- Months

3.4 Data Transformation

The dataset doesn’t have any null value, duplicate records and is clean. It is then used for analysis. SUMIFS function is used to calculate the sales, profit, and quantity metrics.

3.5 Deployment

The e-commerce dashboard created:



3.6 Insights

- Electronic is the least-selling category and is preferred by age group 0-1 only.
- The Central region generates the maximum sales for the company.
- In categories other than the Electronics, the distribution of orders is almost similar for all age groups.
- The sales and profit trends for each category keeps on changing monthly.
- Maximum sales is done in December month and least sales is done in February month.

4. UNIT TEST CASES

Test Case Description	Expected Results
Product Category Slicer	When the slicer box is clicked, it will show different product categories.
Different Metrics	Sales, Profit and Quantity- these will change upon choosing different categories.
Monthly Profit and Sales Chart	This column chart depicts the month-wise trends of the Sales and Profit
Aging-wise Orders Count	This column chart depicts the distribution of the count of orders in different age groups
Region-wise Sales	This column chart depicts the sales in different regions.
Month Slicer	When the slicer box is clicked, it will show month wise data/ transaction.