

High Level Document (HLD)

Swiggy Project Data Analysis

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Document Version Control

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1. Project Overview

Swiggy is an online food delivery platform that connects users with a variety of restaurants, allowing them to order food from the comfort of their homes. This project involves the development of a comprehensive database to manage and organize restaurant information, including Shop Name, Cuisine, Location, Rating, and Cost for Two.

2. Introduction

2.1 Why this High-Level Design Document?

The purpose of this High-Level Design (HLD) Document is to add the necessary detail to the current project description to represent a suitable model for coding. This document is also intended to help detect contradictions prior to coding, and can be used as a reference manual for how the modules interact at a high level.

3. Database Schema

The database schema for the Swiggy project includes the following columns:

- **Shop_Name:** The name of the restaurant or food outlet available on Swiggy.
- **Cuisine:** The type of cuisine offered by the restaurant, such as Indian, Chinese, Italian, etc.
- **Location:** The geographical location or address of the restaurant, helping users identify the restaurant's proximity.
- **Rating:** A numerical value representing the average rating given by users for the restaurant's services.
- **Cost_for_Two:** The estimated cost for two people to have a meal at the restaurant.

4. Tools used

Business Intelligence tools and libraries works such as Numpy, Pandas, Excel, Tableau, Power BI are used to build the whole framework.



5. Design Details

5.1 Functional Architecture

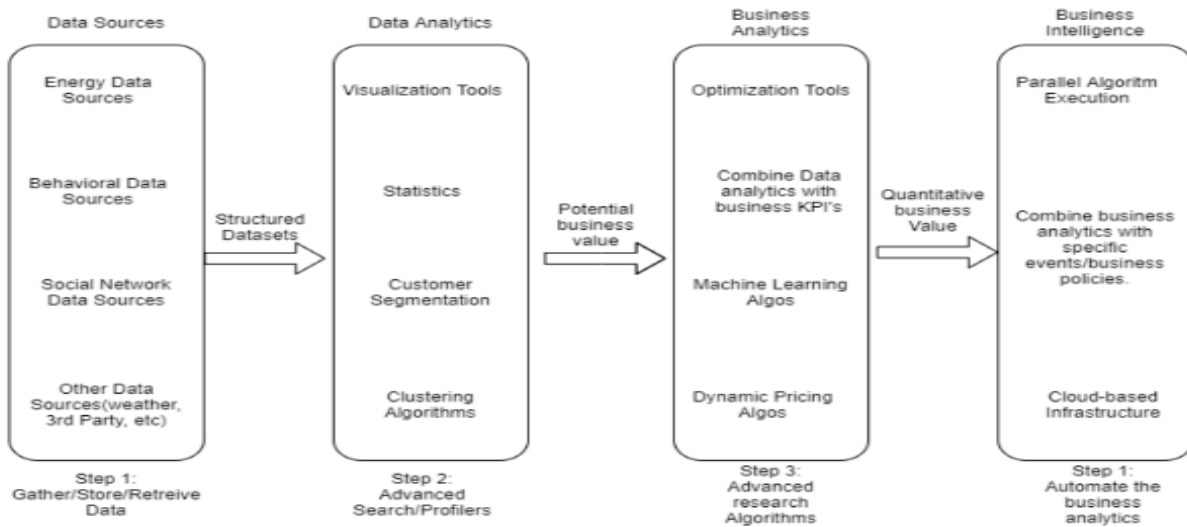


Figure1: Functional Architecture of Business Intelligence

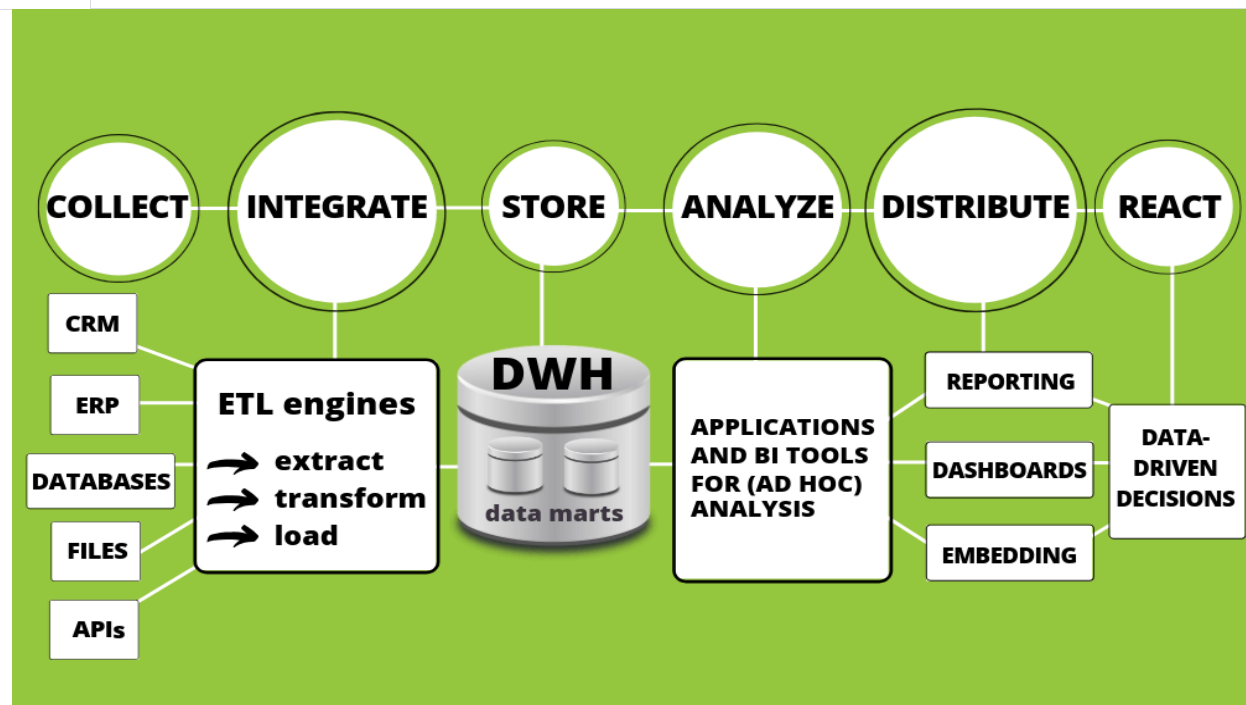


Figure2 : Working of Power BI

6. Data Collection

Sources

The data for the Swiggy project will be collected from **INeuron**.

- Restaurant Partners: Swiggy's restaurant partners will provide information on their shop name, cuisine, location, ratings, and cost for two.
- User Ratings and Reviews: User-generated ratings and reviews will be used to calculate the average rating for each restaurant.
- Menu Information: Additional details on cuisine types and cost for two will be sourced from the menu information provided by restaurants.

7. Data Cleaning and Validation

The collected data will undergo a thorough cleaning process to ensure accuracy and consistency. Validation checks will be implemented to identify and correct any discrepancies or missing information.

8. Database Management

8.1 Database System

The project will utilize a robust relational database management system (RDBMS) to store and manage the restaurant information efficiently.

8.2 Table

The Table will consist of a primary key named "Restaurants" with the other columns mentioned earlier (Shop Name, Cuisine, Location, Rating, Cost_for_Two).

9. Indexing and Optimization

Appropriate indexing will be implemented to optimize query performance, ensuring swift retrieval of restaurant information.

10. User Interface

The Swiggy platform will feature a user-friendly interface, allowing users to:

- Search for restaurants based on cuisine, location, or shop name.
- View detailed information about each restaurant, including ratings and cost for two.
- Place orders seamlessly through an intuitive and responsive ordering system.

11. Future Enhancements

The Swiggy project is designed to be scalable and adaptable for future enhancements. Potential future features include:

- Integration with third-party payment gateways for secure and convenient transactions.
- Implementing advanced recommendation systems based on user preferences and behavior.
- Enhancing the user interface with personalized profiles and order history.

12. Conclusion

The Swiggy project aims to provide a seamless and enjoyable experience for users looking to order food online. By organizing and managing restaurant information effectively, the platform strives to connect users with a diverse range of culinary options.