Pizza Inventory Analytics Project Report

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1. Introduction

This project presents a complete end-to-end cloud analytics solution for a pizza business using SQL, Google Cloud SQL, Google Cloud Storage, Navicat Premium, and Looker Studio. The goal is to analyze sales, inventory usage, and staff labor cost.

2. Technologies Used

• Google Cloud Storage

• Google Cloud SQL (MySQL)

• Navicat Premium

• SQL (MySQL)

• Google Looker Studio

3. Data Pipeline

1. Upload CSV files to Google Cloud Storage

2. Import tables into Cloud SQL using Navicat

3. Clean and model data using SQL

4. Connect Cloud SQL to Looker Studio

5. Build dashboards for sales, inventory, and staff analytics

4. Database Schema

Relational schema includes: orders, item, recipe, ingredient, inventory, address, staff, shift, rota.

5. Analytical SQL Models

Sales model, ingredient usage model, remaining stock model, and staff labor cost model were written using MySQL joins, aggregation, and time calculations.

6. Looker Studio Dashboards

Dashboards created for:

• Orders analytics

• Inventory analytics

• Staff labor analytics

7. Key Insights

• Evening hours show the highest order volume.

• Ingredient costing identifies high-cost items and waste trends.

• Labor cost aligns with customer demand patterns.

8. Skills Demonstrated

SQL data modeling, cloud database management, BI dashboarding, ETL workflows, business insights, and data visualization.

9. Conclusion

This project showcases strong capabilities in building real-world analytics systems, from raw data processing to dashboard insights. It is a valuable addition to a Data Analyst or Data Scientist portfolio.