Summary of Analysis and Presentation:

1. **Data Pre-processing and Loading:**
   - Loaded the provided CSV data into BigQuery.
   - Addressed formatting issues, including correcting the hour column discrepancy observed in the raw data.
   - Normalized the data into a MySQL schema, created an ERD, and loaded it into BigQuery.

2. **Exploratory Data Analysis:**
   - Explored key aspects of the dataset, such as transaction count, unique customers, transaction time range, average customer age, total sales, and the number of products and categories.
   - Identified trends, including the gradual increase in sales from January to June, peak transaction and sales times, and the distribution of sales by day of the week.

3. **Report on Looker Studio:**
   - Created a variety of visualizations to answer specific questions:
     - Sales trend over months.
     - Sales distribution throughout the day (morning, midday, evening).
     - Top-selling products and categories.
     - Geographic distribution of customers.
     - Age groups contributing to the most sales.
     - Average customer spending from January to June.
   - Exported the report to a PDF and sent it to william.terry@revature.com.

4. **Additional Trends and Patterns:**
   - Introduced patterns and trends analysis, including sales trend over time, hourly sales distribution, customer age distribution, geographic analysis, and product price impact.

5. **SQL Schema:**
   - Created a MySQL schema with tables for customers, products, transaction time, and sales, establishing foreign key relationships.

6. **Live Queries in BigQuery:**
   - Executed queries in BigQuery to answer specific questions, showcasing the live analysis during the presentation.
   - Developed at least three additional analytical questions and answered them with queries in BigQuery.

7. **Presentation Highlights:**
   - Provided a concise and engaging presentation with a focus on identified trends.

- Showcased visualizations for daily transactions, monthly sales, sales by daytime period, sales by day of the week, hourly sales, and more.
- Emphasized patterns like increasing new customer acquisition, sales peaking midday, and the geographic distribution of customers.

8. **Concluding Insights:**
   - Summarized key findings, such as the popularity of certain products, customer age preferences, and geographic concentrations.
   - Encouraged further exploration by suggesting additional analyses, such as customer retention, product title impact, and seasonal customer age preferences.