



# Bike Store Database Analysis

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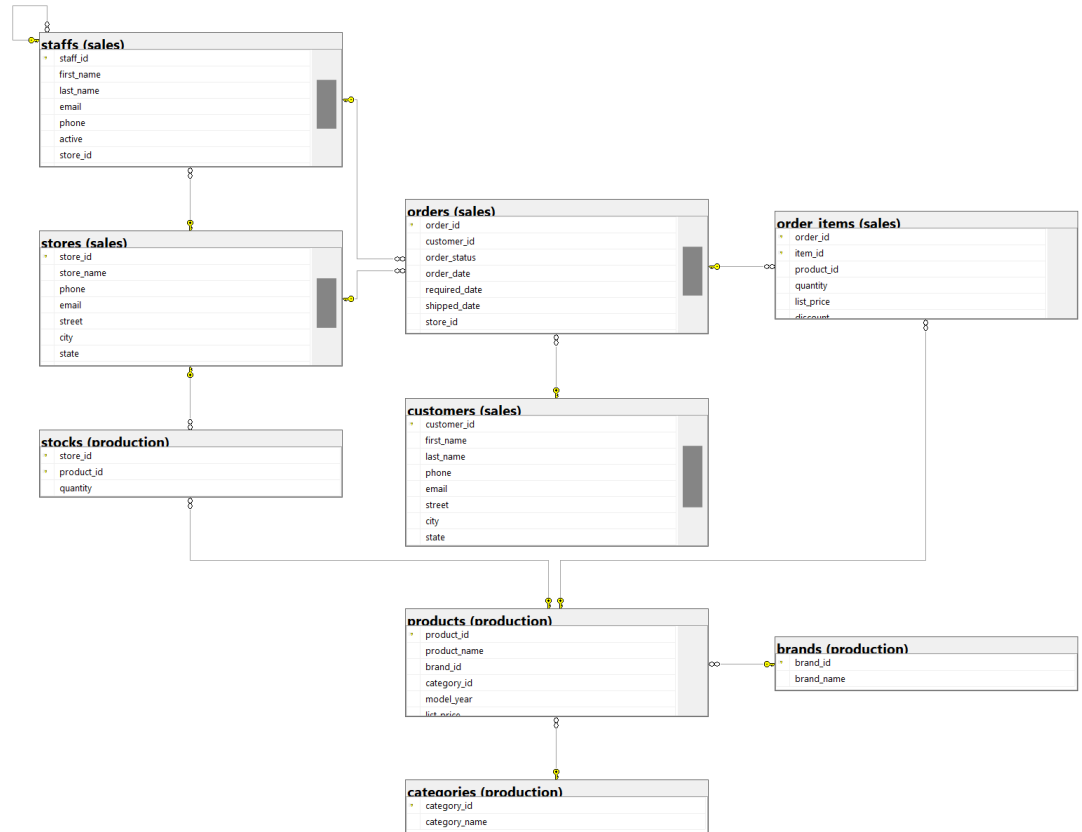
# Project Overview

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- **Objective:**
  - Explore and analyze the Bike Store database to extract valuable business insights.
- **Schemas Involved:**
  - **Production:** Products, Brands, Categories, Stocks
  - **Sales:** Customers, Orders, Order Items, Staffs, Stores
- **Key Deliverables:**
  - Data exploration
  - Answering 24 business-critical questions
  - Generating insights for decision-making

# BikeStore Database - ERD

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# Data Exploration & Analysis

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- **Production Tables:** Explored brands, categories, products, and stocks.
- **Sales Tables:** Analyzed customer behavior through customers, orders, order\_items, staffs, and stores.

```
-- Production data exploration
```

```
SELECT * FROM production.brands;  
SELECT * FROM production.categories;  
SELECT * FROM production.products;  
SELECT * FROM production.stocks;
```

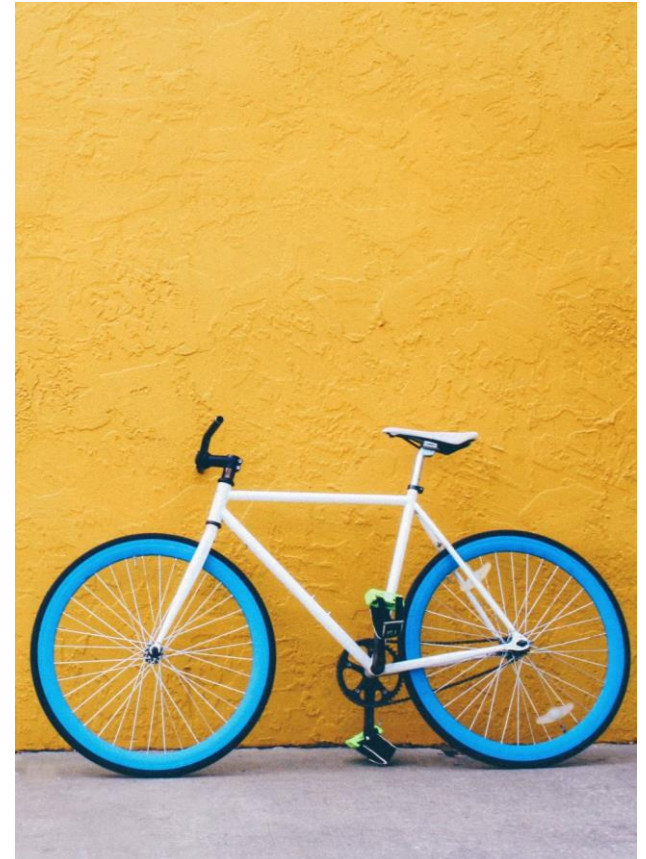
```
-- Sales data exploration
```

```
SELECT * FROM sales.customers;  
SELECT * FROM sales.order_items;  
SELECT * FROM sales.orders;  
SELECT * FROM sales.staffs;  
SELECT * FROM sales.stores;
```

# Business Insights

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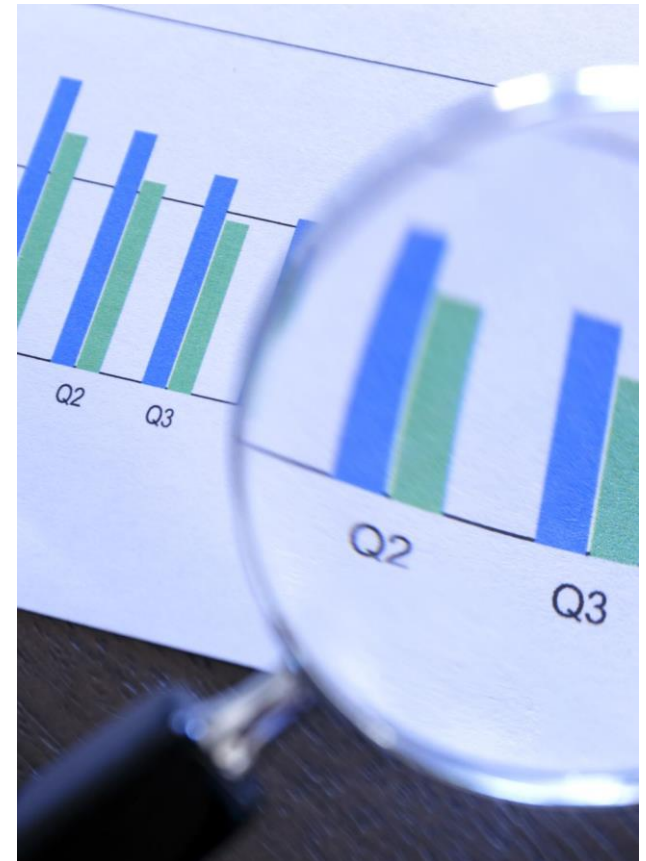
- **Most Expensive Bike:** Found premium-priced bike based on brand and design.
- **Total Customers:** Determined by excluding rejected orders.
- **Store Revenue:** Calculated sales revenue per store based on order items.
- **Most Sold Category:** Identified which product category is the best-seller.



# Performance Metrics & Key Findings

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- **Top Performing Store:** Location with the highest sales revenue.
- **Least Sold Bike:** Identified bike model with the lowest sales.
- **Staff Analysis:** Found the lead staff member based on order processing activity.
- **Popular Category:** Discovered the most liked and rejected categories.



# Conclusion & Future Work

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- **Overall Outcome:**
  - Gained actionable insights on products, customers, and store performance.
  - Used SQL queries for efficient data exploration.

