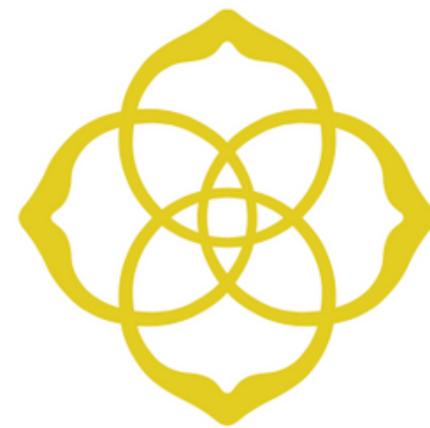


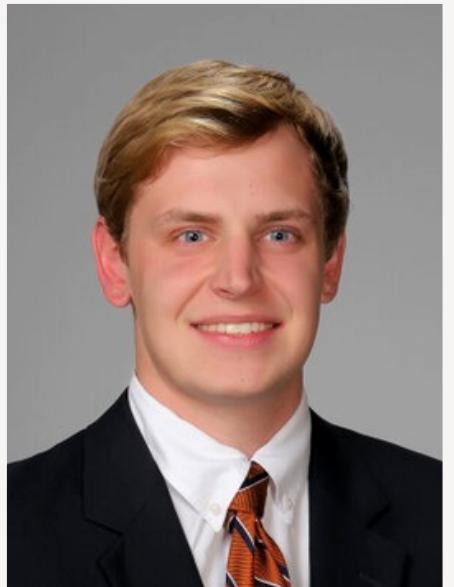
DATABASE MANAGEMENT STRATEGY



KENDRA
SCOTT

Group 2

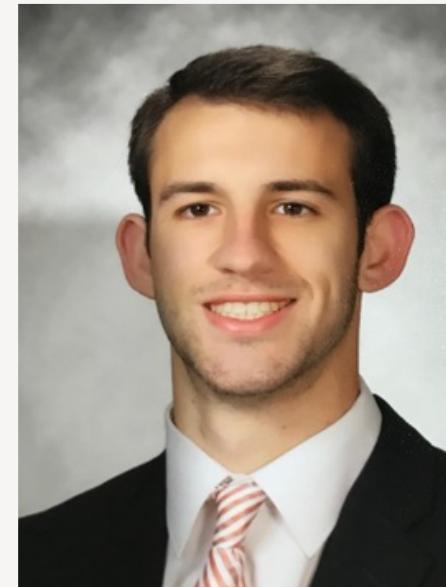
Meet Our Team



**Ben
Sullivan**



**Casey
Copland**



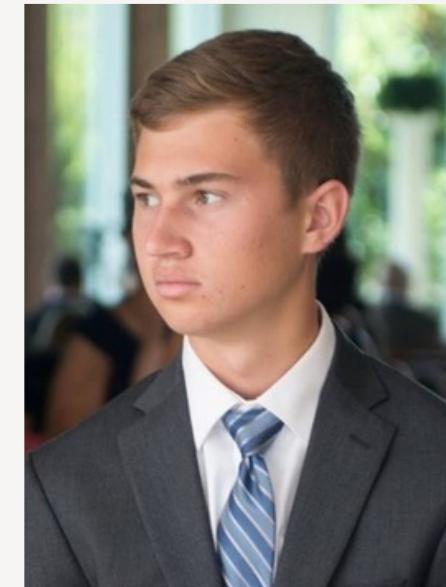
**Kolton
Fowler**



**Rhiannon
Pytlak**



**Sophia
Scott**



**Scott
Fields**

Why Kendra Scott?

- Retail Business
- Austin Native
- Potential for Growth





Agenda

TOPICS TO BE COVERED

1. Data Strategy
 2. Transaction Management Application
 3. Data Warehouse Design Decisions
 4. Data Lake Modeling - NoSQL choice
 5. Connection to Other Classes
 6. Lessons Learned & Key Insights
 7. Opportunities & Potential Changes
- 

Data Strategy

- Offensive Strategy
- Flexible Data Access
- High Use of Analytics



Transaction Management Applications

Order
Processing



Inventory
Management

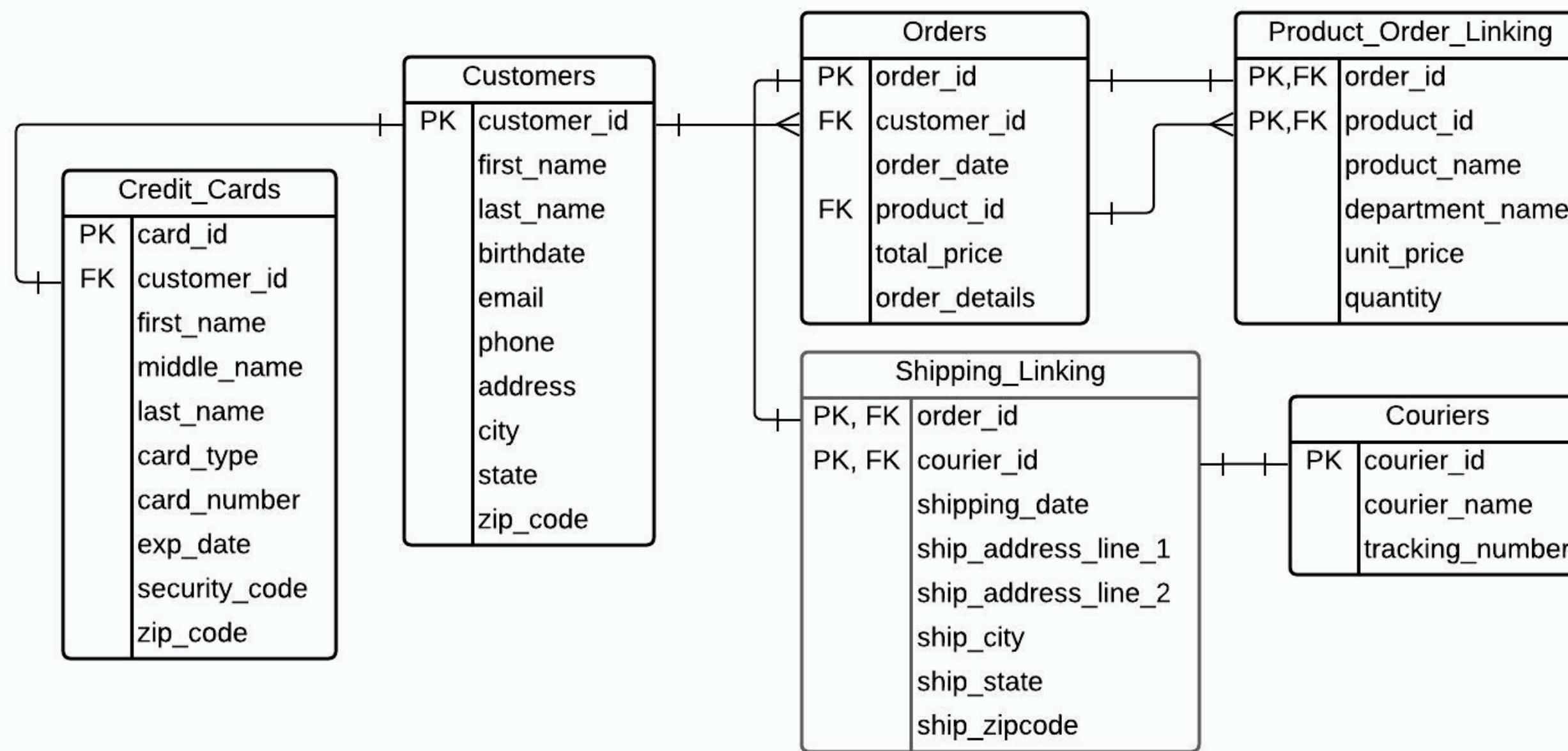


Customer
Analytics

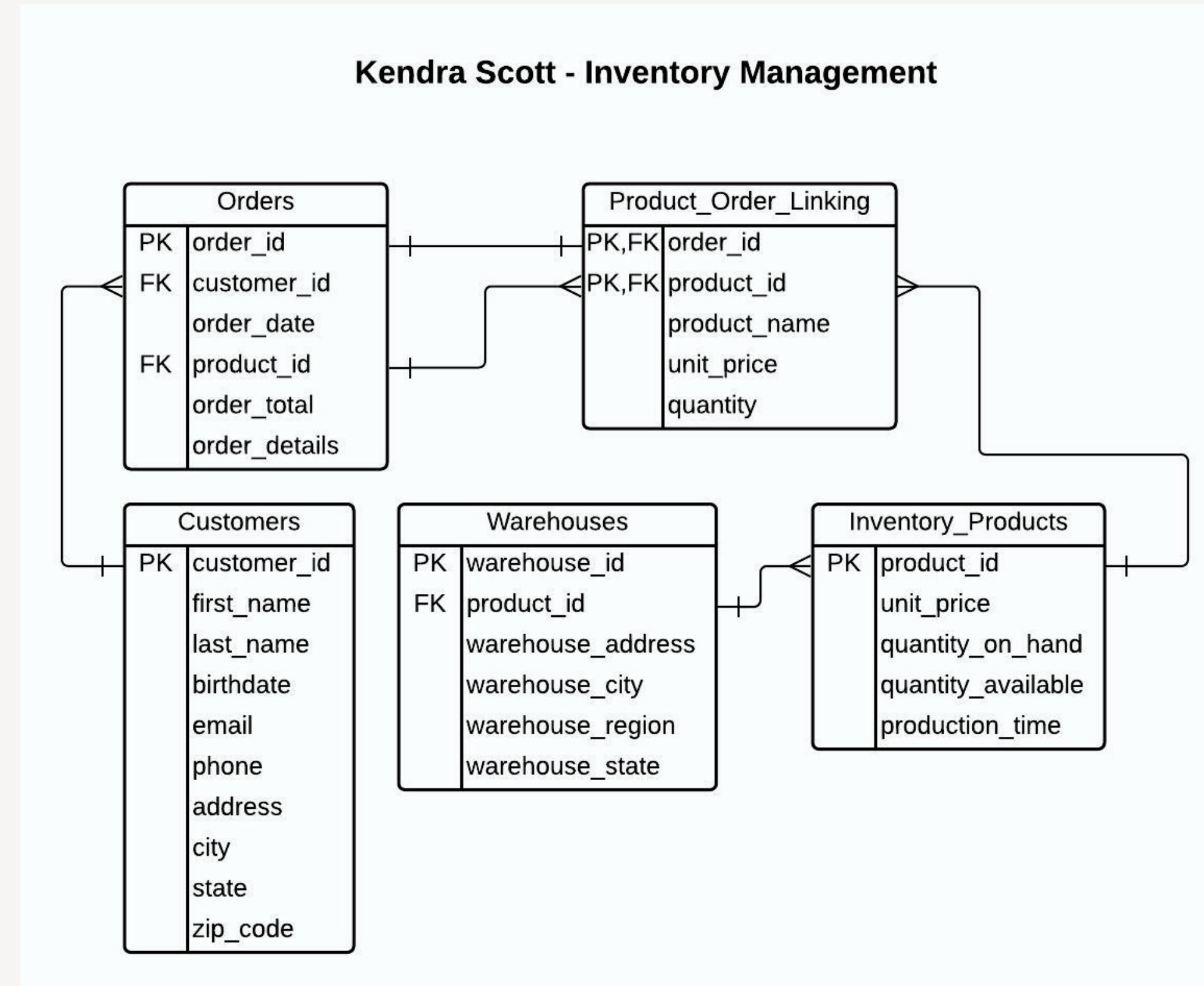


Order Processing ERD

Kendra Scott - Online Order Processing

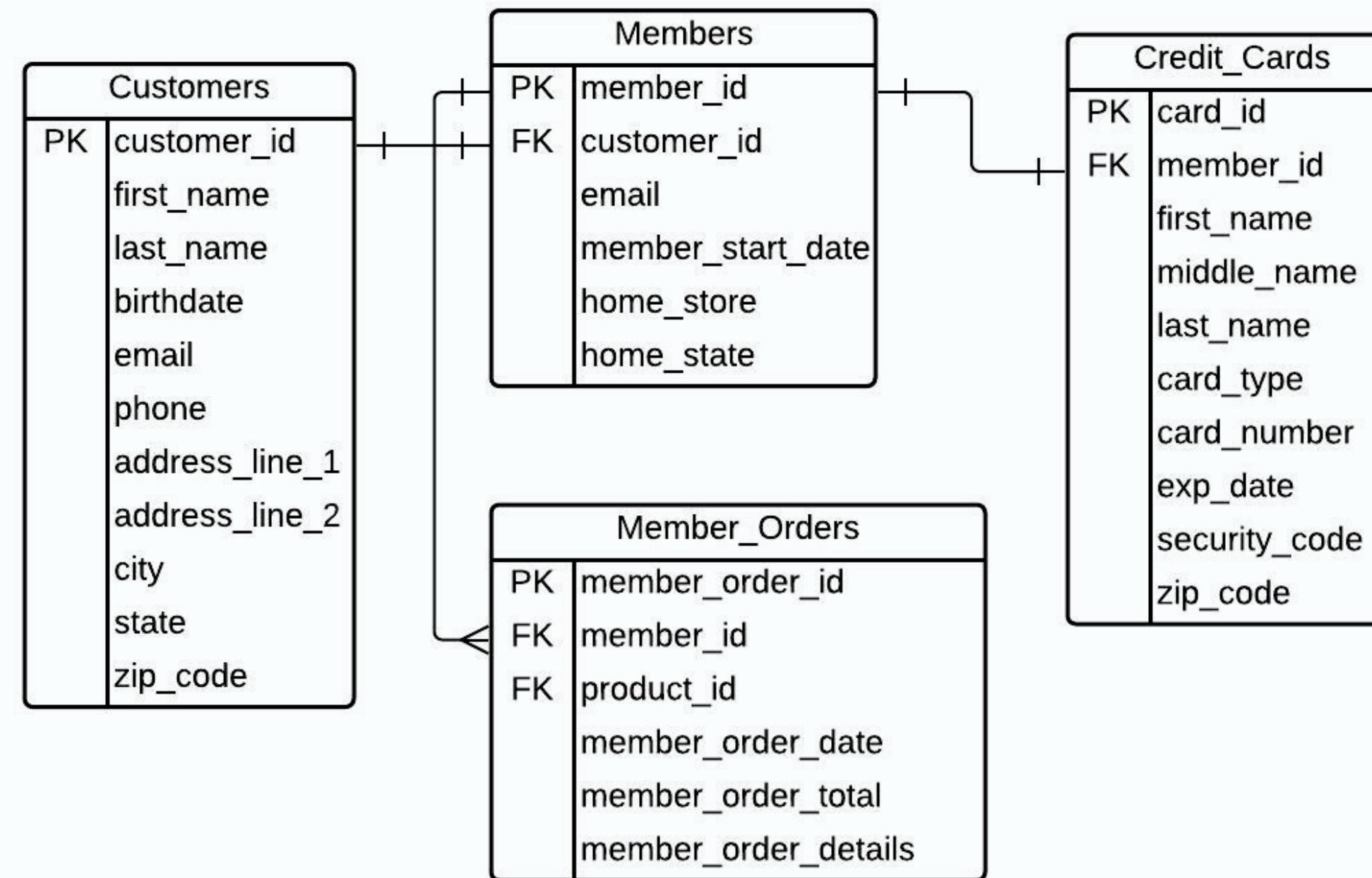


Inventory Management ERD



Member Accounts ERD

Kendra Scott - Member Accounts



Data Warehouse Design Decisions



Order Processing

- Shipping Decisions
 - Order Entity, Shipping Entity, Courier Entity
- Assume all items ship together

Members vs Customers

- Store 1 credit card and update as needed
- Track order history

Inventory Management

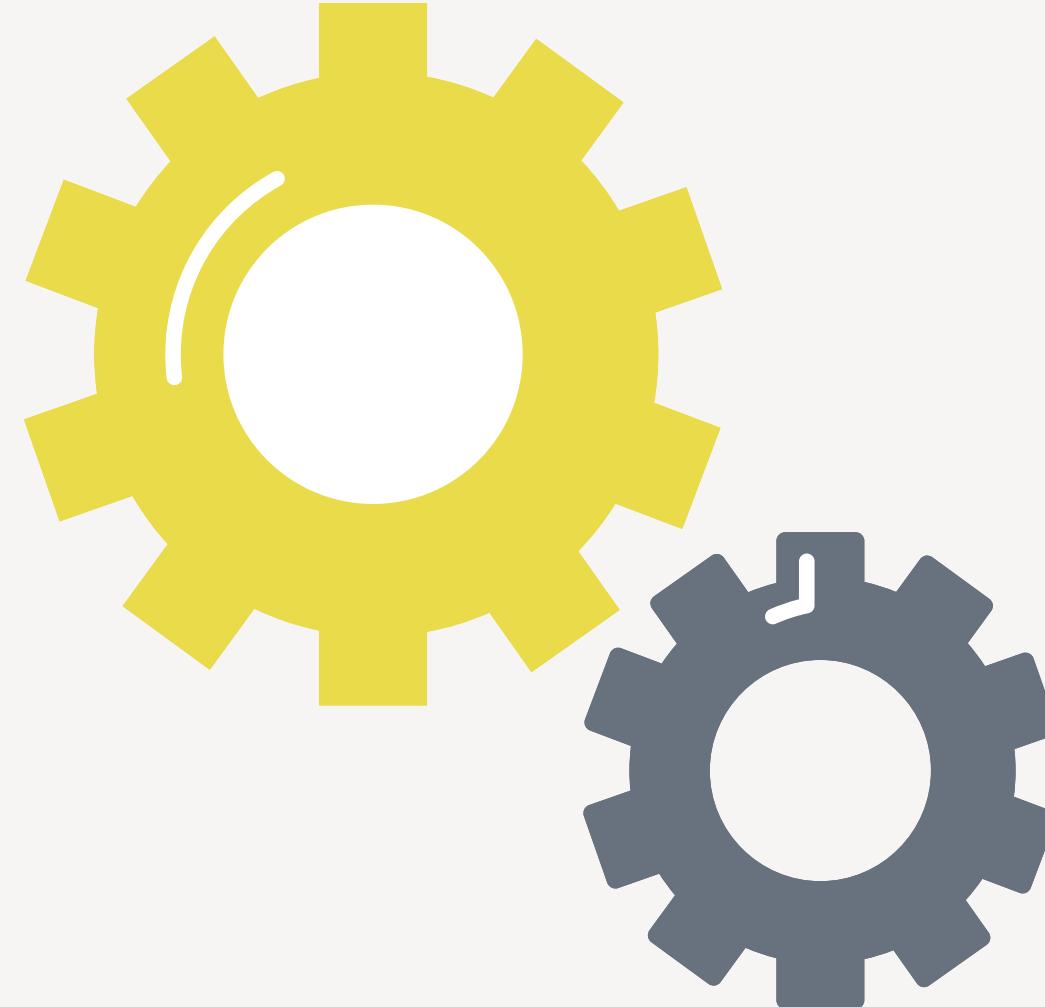
- Product Order Linking entity
 - Front-End (purchases) versus Back-End (inventory)
 - Purchases: fashion trends, new lines, seasonality
 - Inventory: shift production to meet demand

Data Transformation Importance

INSIGHTS FROM DATA SEEDING PROCESS

1. Typos

- Email addresses
 - email marketing issues
- Mailing addresses
 - shipping nightmare!



2. Duplicate Customer or Member Records

- inaccurate aggregate query output

ETL to Analysis:

JOINS TO BE USED IN THE DATA WAREHOUSE

Variables Used in Joins:

- **Customers:**
 - customer_id
 - order_date
 - total_price
- **Members:**
 - member_id
 - member_start_date
 - member_order_id
 - member_order_date

Joins & Aggregate Queries

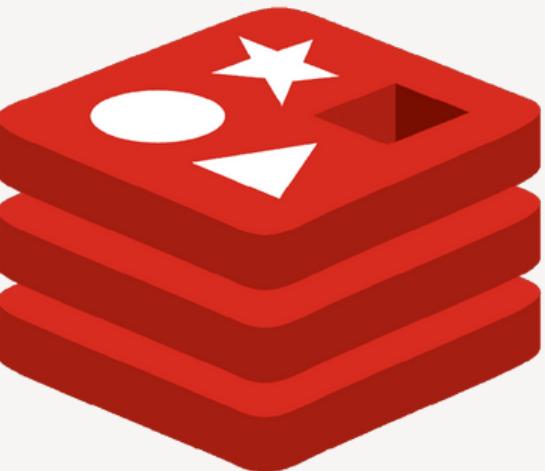
Valuable Query Output:

- customer lifetime
- member lifetime
- total spent over lifetime
- average order total
- member order history

Data Lake Modeling - Redis

NOSQL - KEY VALUE

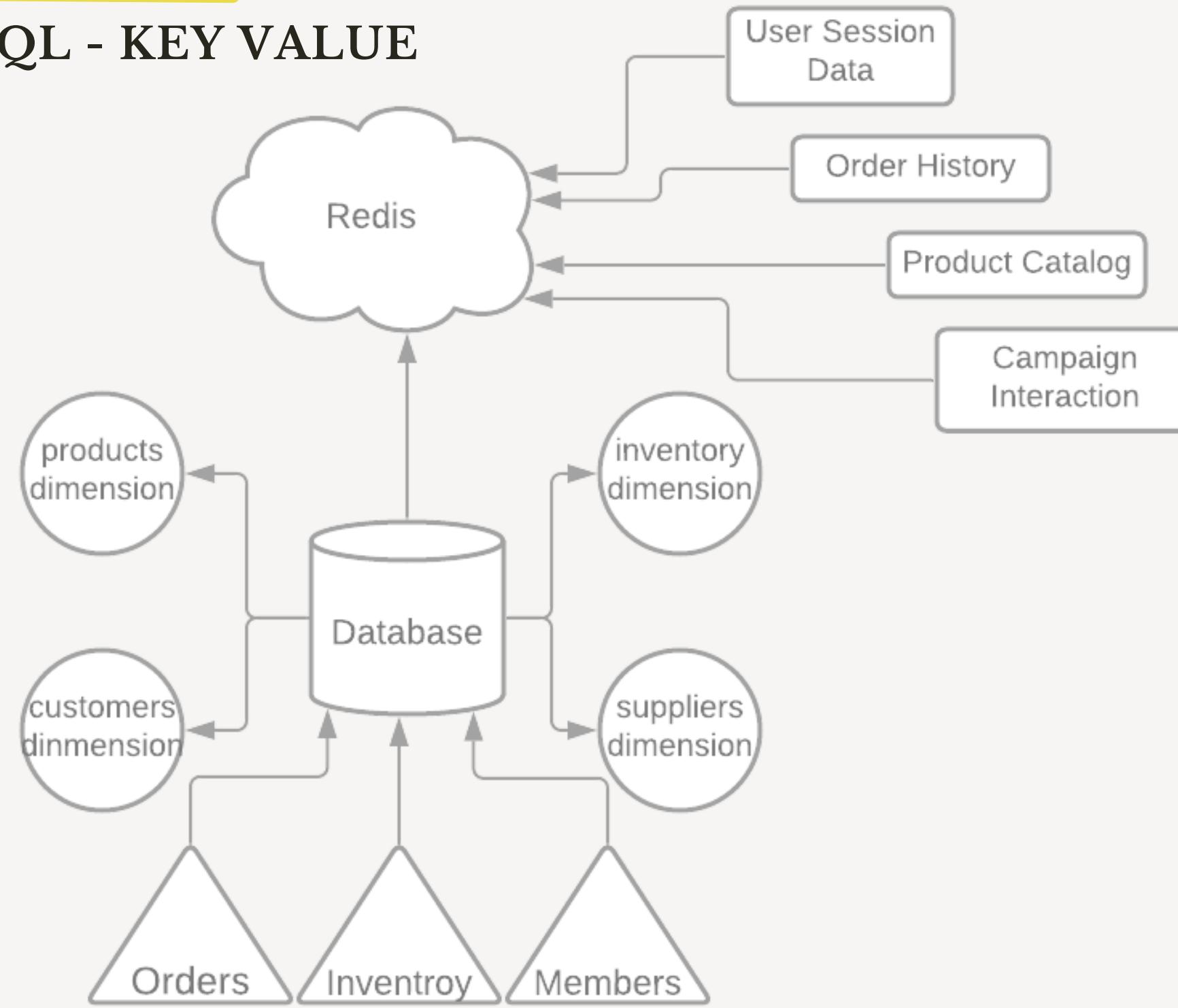
- Storing user session data
- Maintaining schema-less user profiles
- Storing user preferences
- Storing shopping cart data



redis

Data Lake Modeling - Redis

NOSQL - KEY VALUE



Example Retail Data in Redis

- User Session Data
- Online Cataloging
- Member Order History
- Purchase History
- Real-time Inventory data
- Caching recent views

Connection To Other Classes

Supply Chain Analytics

- Forecast demand based on order history saved in Database
- Inventory decisions based on popularity of products, production time, and inventory holding costs
- Regional demand forecasting based on member accounts & order history

Marketing Analytics

- Member order tracking will allow for more accurate targeted promotions
- Targeted promotion will increase customer sales and retention
- Product order tracking will increase understanding of promotions effectiveness

Lessons Learned & Key Insights



- Creating these transactional applications will allow Kendra Scott to
 - Implement new strategies for effective growth
 - Maintain data structure and integrity
- Retail businesses need a strong data management strategy
 - High in transactional volume
- Moving Forward
 - Adapted and Implemented

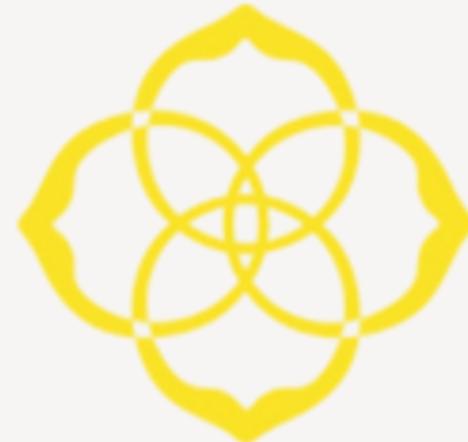


Opportunities & Potential Changes



COMPLEXITY OF THE DATABASE

- SSoT vs MVoT decisions
 - Inventory
 - Member Accounts
- Cost of data versus value added
 - Maintaining scale
 - Trends



KENDRA SCOTT



Thank you!

FASHION. FAMILY. PHILANTHROPY.

Q & A



KENDRA SCOTT



Appendix

- Ben Sullivan - Marketing, Lessons learned/Insight, opportunities and potential changes
- Casey Copeland - Research, ER Diagrams, DDL Script, Supply Chain Analytics
- Kolton Fowler - ETL, Data Lake
- Rhiannon Pytlak - Research, ER Diagrams, Seeding data, ETL
- Sophia Scott - Research, project ideation & organization, Canva presentation, Marketing Analytics
- Scott Fields - Data Lake, ETL, Data Strategy