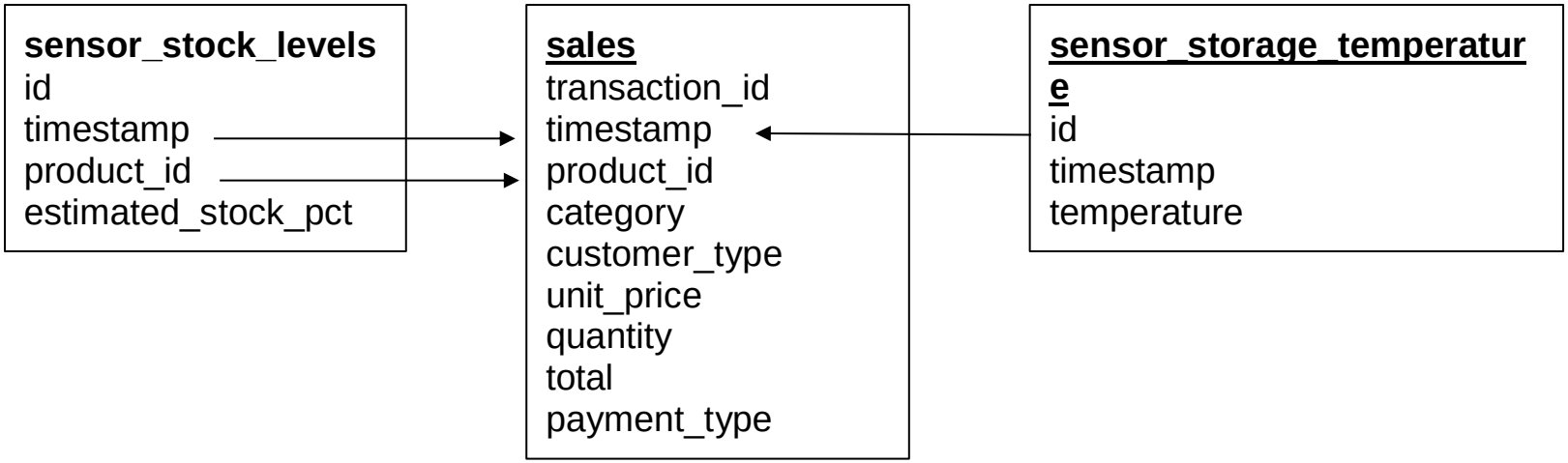

This data model diagram shows:

- 3 tables:
  - sales = sales data
  - sensor_storage_temperature = IoT data from the temperature sensors in the storage facility for the products
  - sensor_stock_levels = estimated stock levels of products based on IoT sensors
- Relations between tables
  - These are shown by the arrows. Make note of the columns that connect the start and end of the arrows, this indicates how you can merge the tables using these linked columns.

Step 1: Data Modeling

I'll use the three tables provided:

1. **Sales:** Contains sales data, likely including information such as customer ID, product ID, quantity sold, and sales date.

2. **Sensor_storage_temperature**: Represents IoT data from temperature sensors in the storage facility, potentially including data like timestamp, temperature readings, and location ID.

3. **Sensor_stock_levels**: Provides estimated stock levels of products based on IoT sensors, possibly including data such as product ID, timestamp, and stock quantity.

The relations between these tables, indicated by arrows, will guide how we can merge the tables using the linked columns. For instance, if there's a column common between sales and sensor_storage_temperature tables, such as product ID, we can merge them to analyze the impact of storage temperature on product sales.

Step 2: Strategic Planning

- Given the data available, I propose the following plan to address the client's needs:

1. **Exploratory Data Analysis (EDA):** Conduct thorough EDA to understand data distributions, identify outliers, and explore potential correlations between sales, storage temperature, and stock levels.

2. **Feature Engineering**: Create new features derived from existing data, such as aggregating sales data by time periods or calculating average temperature exposure for each product.

3. **Merge Data Sources**: Utilize the relations between tables to merge data sources and create a unified dataset for analysis.

4. **Predictive Modeling:** Develop predictive models to forecast sales based on factors like storage temperature and stock levels.Use techniques like regression or time series analysis.

5. **Anomaly Detection**: Implement anomaly detection algorithms to identify unusual patterns in sales or storage conditions, which may indicate issues like stockouts or temperature fluctuations.

6. **Optimization Strategies**: Provide recommendations for optimizing inventory management and storage conditions to maximize sales and minimize losses.

Step 3: Communication

Slide Title: Leveraging Data Insights for Business Success

1. **Data Utilization:**
   - Sales: Customer ID, Product ID, Quantity Sold, Sales Date
   - Sensor_storage_temperature: Timestamp, Temperature Readings, Location ID
   - Sensor_stock_levels: Product ID, Timestamp, Stock Quantity
2. **Strategic Plan:**
   - EDA & Feature Engineering
   - Merge Data Sources
   - Predictive Modeling
   - Anomaly Detection
   - Optimization Strategies

This concise plan summarizes how we'll use the available data to address the client's needs effectively.