# ERD for Daikin Industries

# Industry Visit Project

**Project**: Industry Visit to Daikin Industries

**Objective:** Develop an Entity Relationship Diagram (ERD) for Daikin Industries

**Focus:** Mapping key business processes and analyzing data flow

# Problem Satatement

- During our industry visit to Daikin Industries, we aimed to gain insights into the company's operations and data management practices.
- The key objective was to design an Entity Relationship Diagram (ERD) that effectively represents the flow of data across various business functions, including order processing, inventory management, customer interactions, and supplier coordination.
- By mapping these relationships, the ERD serves as a valuable tool for optimizing data flow and enhancing operational efficiency.

# Data and Analysis



Entity Relationship Diagram (ERD) for Daikin Industries:

The ERD models Daikin Industries' key business processes and data flow by capturing essential entities and their relationships.

Key Entities:

Customer Management: Orders, Customers, Payments, and Shipments

Inventory & Supply Chain: Products, Inventory, Warehouses, Suppliers, and Supplier Orders

Workforce & Operations: Employees, Departments, and Service Technicians

Manufacturing & Services: Service Requests and Manufacturing Plants

Relationships:

Many-to-One, One-to-One, and Many-to-Many connections accurately reflect real-world business interactions, ensuring an optimized data structure for operational efficiency.

# Observations



- **Holistic Data Representation:** The ERD comprehensively models business operations, covering orders, inventory, customers, suppliers, employees, and service requests.
- **Data Integrity & Efficiency:** Proper normalization eliminates redundancy, ensuring consistency and optimal database performance.
- S**eamless Order Processing:** Strong linkages between orders, products, and inventory enable efficient order fulfillment and stock management.
- **End-to-End Transaction Visibility:** Integrated payment and shipment tracking enhances transparency and real-time monitoring.
- **Optimized Workforce & Service Management**: Clearly structured employee, department, and service technician data facilitate streamlined operations and customer support.

# Insights and Recommendations



- **Streamlined Data Management:** A structured ERD minimizes inconsistencies, ensuring seamless operations.
- **Automated Validation:** Implementing automated data entry and validation reduces human errors and enhances accuracy.
- **Robust Data Integrity:** Enforcing integrity constraints safeguards critical business in**formation.**
- **Continuous Accuracy Maintenance**: Regular audits and validation ensure long-term data reliability.

# Entity Relationship Diagram