Data Dictionary(Conceptual / for ER Modeling)

1. Supplier

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| SupplierID | Unique value identifying supplier | Identifying attribute |
| SupplierName | Name of Supplier |  |
| ContactName | Point of Contact |  |
| ContactDesignation | Designation of Point of Contact |  |
| Email | Email of the supplier | Multivalued Attribute |
| Phone | Phone of the supplier | Multivalued Attribute |
| Address | Address of the supplier | Composite Attribute |
| Street | Street of the supplier |  |
| City | City of the supplier |  |
| State | State of the supplier |  |
| Country | Country of the supplier |  |
| PostalCode | PostalCode of the supplier |  |

1. SupplyOrder

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| SupplyorderID | Unique value identifying supply order | Identifying attribute |
| SupplyPrice | Supply Price in ($) |  |
| TotalValue | Total value of the suppliers order | Derived attribute from quantity and supply price |
| SupOrderDate | Date of the order |  |
| ItemName | Name of the item |  |
| PaymentInfo | Mode by which the payment was made |  |
| NoofLineitems | Number of each product purchased |  |

1. SupplyInventory

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| SupplyInvID | Unique value identifying supply inventory | Identifying attribute |
| InventoryName | InventoryName of the supply Inventory |  |
| Address | Address of the supply Inventory | Composite Attribute |
| Street | Street of the supply Inventory |  |
| City | City of the supply Inventory |  |
| State | State of the supply Inventory |  |
| Country | Country of the supply Inventory |  |
| PostalCode | PostalCode of the supply Inventory |  |
| UnitsInStock | Total Units in Inventory |  |

1. Product

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| ProductID | Unique value identifying products | Identifying attribute |
| ProductName | Name of the product |  |
| Description | Description of Product |  |
| UnitPrice | Unit Price in ($) |  |
| Weight | Weight in lb |  |

1. Category

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| CategoryID | Unique value identifying Category | Identifying attribute |
| Description | Description of Product Category |  |
| CategoryName | Name of the Category |  |

1. SubCategory

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| SubCategoryID | Unique value identifying subcategory | Identifying attribute |
| SubCategoryName | Name of the Category |  |

1. ReviewDetails

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| ReviewNo | Unique value identifying review details | Partial identifier |
| ReviewTitle | Title of the review |  |
| Rating | Rating of the review |  |
| ReviewText | Text of the review |  |

1. Warehouse

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| WarehouseId | Unique value identifying warehouse | Identifying attribute |
| WarehouseName | Name of the warehouse |  |
| Location | Location of the warehouse |  |
| Capacity | Capacity of the warehouse |  |
| UnitsInOrder | No. of units placed in order |  |
| Discontinued | Discontinued warehouse |  |

Sub-class:

1. SalesRepresentatives
2. Shipment

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| ShipmentID | Unique value identifying shipment | Identifying attribute |
| TrackingNumber | Unique number for tracking |  |
| ShipmentDate | Date of Shipment |  |
| ShipmentStatus | Status of the Shipment |  |
| ShipmentType | Type of the Shipment |  |
| ShipmentWeight | Weight in lbs |  |
| ArrivalDate | Date of arrival of shipment |  |

1. Carrier

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| CarrierID | Unique value identifying carrier | Identifying attribute |
| CarrierName | Name of Carrier |  |
| Region | Region of Carrier |  |

1. MaintenanceSchedule

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| ScheduleID | Unique value identifying maintenance schedule | Identifying attribute |
| MaintenanceType |  |  |
| StartDate | Start date of maintenance schedule |  |
| EndDate | End date of maintenance schedule |  |

1. Employee

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| EmployeeID | Unique value identifying employee | Identifying attribute |
| EmployeeName | Full Name of Employee | Composite attribute |
| FirstName | First Name of the employee |  |
| LastName | Last Name of the employee |  |
| PhoneNo | Contact no. of employee | Multi-valued attribute |
| Email | Contact email of employee |  |
| EmployeeType | Type of Employee | E.g. Sales representative, Warehouse workers |

**Subclass of Employees (based on EmployeeType):**

1. Packer
2. Shipping Clerk
3. Forklift Operator
4. Supervisor
5. Quality Control Inspector
6. Inventory Manager

14. WarehouseWorkerTeam

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| WarehouseWorkerTeamID | Unique value identifying worker team | Identifying attribute |
| WarehouseWorkerTeamName | Name of the Worker Team |  |

15. Department

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| DepartmentId | Unique value identifying Department | Identifying attribute |
| DepartmentName | Name of the department |  |
| DepartmentHead | Name of the department head |  |

16. PaymentMethod

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| PaymentID | Unique value identifying payment made | Identifying attribute |
| Description | Description related to Payment |  |
| PaymentGateway | Gateway Used |  |
| Currency | Currency of Transaction | Multi-valued attribute |
| PaymentType | Type of Payment | E.g, cash, credit, debit etc. |

17. Customer

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| CustomerID | Unique value identifying the customer | Identifying attribute |
| CustomerName | Name of Client |  |
| ContactNumber | Contact no. of client |  |
| CreditLimit | Credit Limit for each Client |  |
| ShippingAddress | Address of Client |  |
| EmailID | Email ID of Client |  |

18. Manufacturing Unit

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| UnitID | Unique value identifying the unit | Identifying attribute |
| UnitName | Name of Unit |  |
| Location | Geographical Location |  |
| Status | Information whether unit is currently active or not |  |
| ProductionCapacity | Total Capacity of unit |  |
| FacilitySize | Size in square meters |  |

19. Equipment

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| EquipmentID | Unique value identifying equipment | Identifying attribute |
| EquipmentName | Name of Equipment |  |
| Manufacturer | Name of Manufacturer |  |
| Type | Type of Equipment | e.g. mixer, grinder |
| MaintenanceFreq | How frequently the equipment should be checked for maintenance | e.g. biweekly, monthly |
| ModelNumber | Serial Number of Model of equipment |  |

20. Orders

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| OrderID | Order identifying id | Identifying attribute |
| OrderDate | Date when order was placed |  |
| OrderTotalValue | Total value of the order |  |
| OrderType | Type of order | e.g. |
| ExpectedDeliveryDate | Expected delivery date of the order |  |

**Subclass of orders**:

1. Offline Orders
2. Online Orders

21. Territory

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| TerritoryID | Territory identifying id managed by Sales Representative | Identifying attribute |
| TerritoryName | Name of Territory |  |
| Region | Region in which Territory falls |  |
| ExpectedRevenue | FY revenue anticipated |  |

22. SupplyOrderDetails

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| TotaSupOrderValue | Total value of the supply order($) | Partial identifier |
| PricePerUnit | Price of a unit in ($) |  |
| LineItemID | Individual item id in order |  |
| Quantity | Quantity of each item ordered |  |

23. OrderDetails

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| OrderItemId | Unique id to identify order | Partial identifier |
| ODTotalValue | Total order value of order details |  |
| OrderItems | List of items ordered |  |
| OrderDate | Order Date |  |

24. WarehousingDetails

| **Schema Construct** | **Construct Description** | **Other Information** |
| --- | --- | --- |
| WhReorderLevel | Minimum threshold to restock units | Format: Integer |
| ProductWarehouseId | To identify product and warehouse combination | Partial Identifier |

Relationships

| **Relation** | **Description** |
| --- | --- |
| Supplies | Relationship that models the supplier supplies supply order |
| Stores | Relationship that models the supply order that is stored in supply inventory |
| Used By | Relationship that models the supply inventory that is used by manufacturing unit |
| Has | Relationship that models the manufacturing unit which houses the equipment |
| Follows | Relationship that models the equipment following a maintenance schedule |
| Manufactures | Relationship that models the manufacturing unit created the product |
| Classifedinto | Relationship that models that product are classified into sub category |
| Belongs | Relationship that models that sub categories belong to certain product categories |
| Reviews | Relationship that models the customer reviews a product |
| Uses | Relationship that models the customer uses a payment method to make payments |
| Places | Relationship that models the customer placing an order |
| Contains | Relationship that models the order contains product |
| Stored in | Relationship that models that products are store in warehouses |
| Ships | Relationship that models the warehouse ships shipment |
| Shipped by | Relationship that models that shipments are shipped by carriers |
| Comprises of | Relationship that models that shipments contain order products placed by customers |
| Associated With | Relationship that models the employee is associated with a department |
| Takes | Relationship that models the sales representative takes offline orders |
| Handles | Relationship that shows that sales representatives manage certain territories |
| Consists | Relationship that models warehouse workers consists of packer, operator, shipping clerk, supervisor, quality control inspector, and inventory manager |
| Works in | Relationship that shows that the warehouse worker team works in warehouses |