

Phase 3 — Data Modeling & Relationships

Project: Revolutionizing Agriculture with AgriEdge Or-Mange Ltd — Salesforce OMS

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Status: Completed (verified steps & settings below)

1. Executive Summary

This document captures all the data modeling and relationship configurations created in **Phase 3: Data Modeling & Relationships** for the AgriEdge OMS project. It includes the custom objects, fields, record types, page layouts, and relationships that define the system’s data structure. This serves as proof of completion and a reference for future enhancements.

2. Objects Created

Custom Objects

1. Product

- Fields:
 - Name (Standard)
 - Category (Picklist: Seeds, Fertilizers, Crops, Processed Food)
 - Price (Currency)
 - Stock (Number)
 - Expiry Date (Date)

The screenshot displays the Salesforce Setup interface for the 'Product1' object. The 'Fields & Relationships' tab is selected, showing a list of 9 fields. The fields are sorted by label. The table includes columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed status. The fields listed are: Category (Picklist), Created By (Lookup(User)), Last Modified By (Lookup(User)), Order Line Item (Lookup(Order Line Item)), Owner (Lookup(User/Group)), Price INR (Currency(16, 2)), Product External Id (Text(255) (Unique Case Insensitive)), Product Name (Auto Number), and Unit (Text(50)).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Category	Category__c	Picklist		
Created By	CreatedBy	Lookup(User)		
Last Modified By	LastModifiedBy	Lookup(User)		
Order Line Item	Order_Line_Item__c	Lookup(Order Line Item)		✓
Owner	OwnerId	Lookup(User/Group)		✓
Price INR	Price_INR__c	Currency(16, 2)		
Product External Id	Product_External_Id__c	Text(255) (Unique Case Insensitive)		✓
Product Name	Name	Auto Number		✓
Unit	Unit__c	Text(50)		

2. Customer

- Fields:
 - Name (Standard)
 - Contact (Phone/Email)
 - Location (Text)
 - Type (Picklist: Farmer, Distributor)

3. Order

- Fields:
 - Order No (Auto Number: ORD-{0000})
 - Customer (Lookup → Customer)
 - Date (Date)
 - Status (Picklist: New, In Progress, Shipped, Delivered, Cancelled)
 - Payment Mode (Picklist: Cash, UPI, Card, Bank Transfer)

SETUP > OBJECT MANAGER

Order1

Details

Fields & Relationships
21 Items, Sorted by Field Label

Q Quick Find New Deleted Fields Field Dependencies Set History Tracking

	FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED	
Page Layouts	Bulk Discounts	Bulk_Discounts__c	Percent(16, 2)			▼
Lightning Record Pages	Created By	CreatedById	Lookup(User)			
Buttons, Links, and Actions	Customer	Customer__c	Lookup(Account)		✓	▼
Compact Layouts	Deliveries	Deliveries__c	Lookup(Delivery)		✓	▼
Field Sets	Delivery	Delivery__c	Lookup(Delivery)		✓	▼
Object Limits	Farmer	Farmer__c	Lookup(Farmer)		✓	▼
Record Types	Large Quantity	Large_Quantity__c	Number(16, 2)			▼
Related Lookup Filters	Last Modified By	LastModifiedById	Lookup(User)			
Restriction Rules	Order Date	Order_Date__c	Date			▼
Scoping Rules	Order External Id	Order_External_Id__c	Text(255) (External ID) (Unique Case Insensitive)		✓	▼
Object Access	Order Line Item	Order_Line_Item__c	Lookup(Order Line Item)		✓	▼
Triggers	Order Number	Order_Number__c	Number(18, 0)			▼
Flow Triggers	Order Status	Order_Status__c	Picklist			▼
Validation Rules						
Conditional Field Formatting						

<https://orgfarm-4c5183cd01-dev-ed.develop.lightning.force.com/one/one.app#/setup/Objec...>

4. Order Item (Junction Object)

- Fields:
 - Quantity (Number)
 - Price (Currency)
 - Order (Master-Detail → Order)
 - Product (Lookup → Product)

The screenshot displays the Salesforce Object Manager interface for the 'Order Line Item' object. The 'Fields & Relationships' tab is active, showing a list of 10 fields. The interface includes a left-hand navigation menu with various configuration options like Page Layouts, Lightning Record Pages, and Field Sets. The main table lists fields with their labels, names, data types, and whether they are indexed or controlling fields.

	FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)			
Last Modified By	LastModifiedById	Lookup(User)			
Line External Id	Line_External_Id__c	Text(255) (External ID) (Unique Case Insensitive)			✓
Line Item Number	Name	Auto Number			✓
Line Total INR	Line_Total_INR__c	Formula (Currency)			
Order	Order__c	Master-Detail(Order1)			✓
Product	Product__c	Lookup(Product1)			✓
Product1	Product1__c	Lookup(Product1)			✓
Quantity	Quantity__c	Number(10, 0)			
Unit Price INR	Unit_Price_INR__c	Currency(16, 2)			

5. Delivery

- Fields:
 - Delivery Date (Date)
 - Carrier(Text)
 - Status (Picklist: Pending, In Transit, Delivered)
 - Order (Lookup → Order)

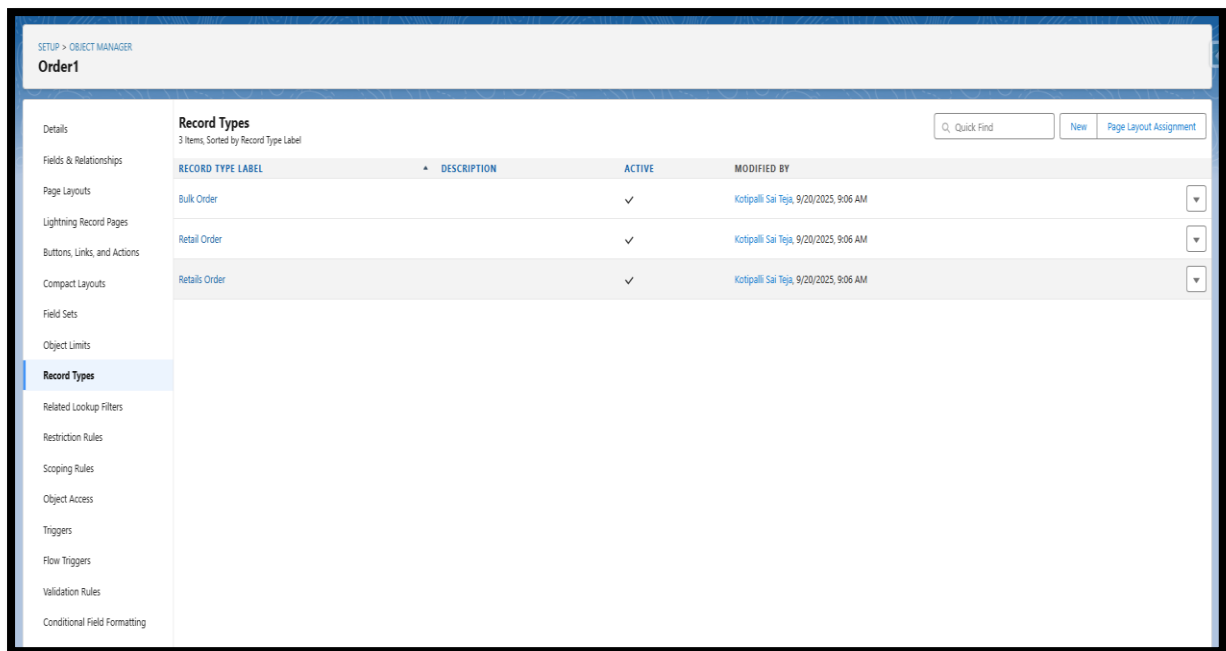
Setup	Home	Object Manager
SETUP > OBJECT MANAGER		
Delivery		
Details	Fields & Relationships 11 Items, Sorted by Field Label	
Fields & Relationships	<input type="text" value="Q, Quick Find"/> New Deleted Fields Field Dependencies Set History Tracking	
	FIELD LABEL	FIELD NAME
		DATA TYPE
		CONTROLLING FIELD
		INDEXED
Page Layouts	Carrier	Carrier_c
Lightning Record Pages	Created By	CreatedById
Buttons, Links, and Actions	Delivery External Id	Delivery_External_Id_c
Compact Layouts	Delivery ID	Name
Field Sets	Dispatch Date	Dispatch_Date_c
Object Limits	Expected Delivery Date	Expected_Delivery_Date_c
Record Types	Last Modified By	LastModifiedById
Related Lookup Filters	Order	Order_c
Restriction Rules	Orders	Orders_c
Scoping Rules	Owner	OwnerId
Object Access	Status	Status_c
Triggers		
Flow Triggers		
Validation Rules		
Conditional Field Formatting		

3. Relationships

- **Customer ↔ Order:** Lookup (One Customer → Many Orders)
- **Order ↔ Order Item:** Master-Detail (Order = Master, controls lifecycle of Order Items)
- **Order Item ↔ Product:** Lookup (One Product can be used in many Order Items)
- **Order ↔ Delivery:** Lookup (One Order can have one or more Delivery records)
- **This relationships has been completed in the previous object creation**

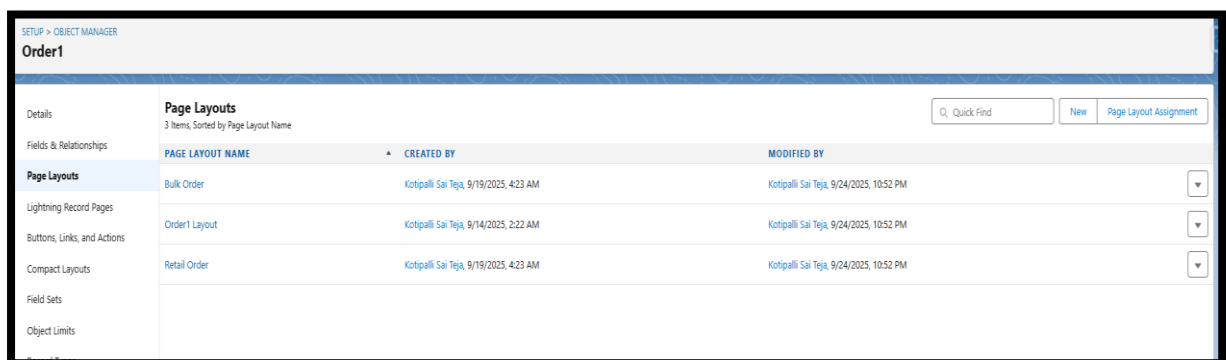
4. Record Types

- **Retail Orders (Farmer)**
 - Applies to **Order** object
 - Page Layout customized for small quantity/individual transactions
- **Bulk Orders (Distributor)**
 - Applies to **Order** object
 - Page Layout customized for large quantity/distribution transactions

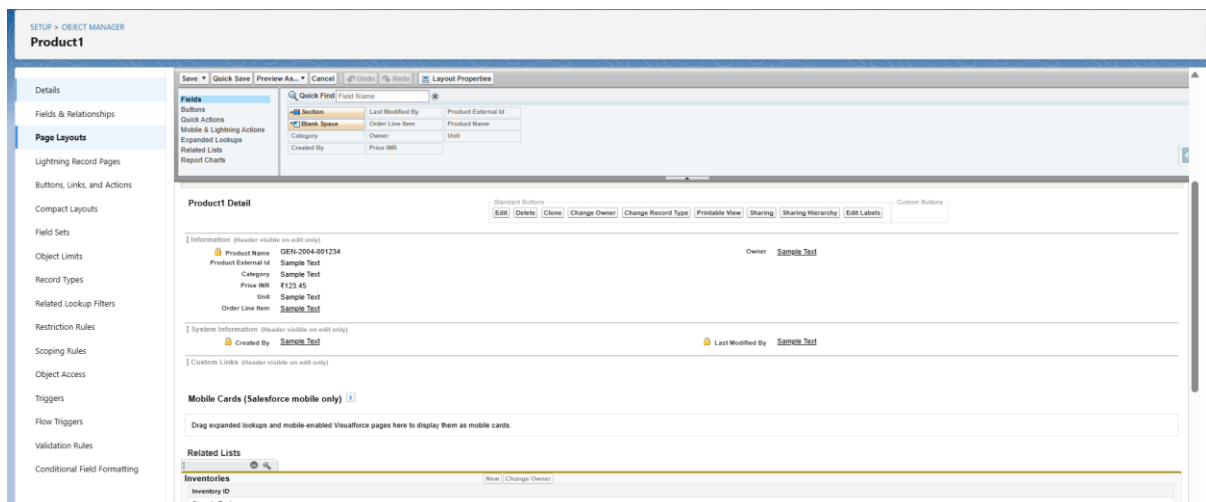


5. Page Layouts

- **Order Layout:** Includes Customer, Status, Payment Mode, related Order Items.



- **Product Layout:** Shows Product details including stock and expiry date.



- **Customer Layout:** Displays customer type (Farmer vs Distributor) for quick reference.

Order1

Save • Quick Save • Preview As... • Cancel • Undo • Redo • Layout Properties

Fields

Field Name	Record Type
Buttons	Buttons
Quick Actions	Quick Actions
Mobile & Lightning Actions	Mobile & Lightning Actions
Expanded Lookups	Expanded Lookups
Related Lists	Related Lists
Report Charts	Report Charts

Order Detail

Standard Buttons: Edit, Delete, Clone, Change Owner, Change Record Type, Printable View, Sharing, Sharing Hierarchy, Edit Labels

Information (header visible on edit only)

Order Name: GEN-2004-001234
 Order External ID: Sample Text
 Order Date: 9/25/2025
 Order Status: Sample Text
 Total Amount: \$123.45
 Customer: Sample Text
 Payment Mode: Sample Text
 Quantity: 173.89
 Large Quantity: 486.97
 Transport Details: Sample Text
 Bulk Discounts: 172.74%
 Order Number: 71.447
 Order Line Item: Sample Text
 Product: Sample Text
 Delivery: Sample Text
 Deliveries: Sample Text

System Information (header visible on edit only)

Created By: Sample Text
 Last Modified By: Sample Text

- **Delivery Layout:** Vehicle, Delivery Date, Status.

Delivery

Save • Quick Save • Preview As... • Cancel • Undo • Redo • Layout Properties

Fields

Field Name	Record Type
Buttons	Buttons
Quick Actions	Quick Actions
Mobile & Lightning Actions	Mobile & Lightning Actions
Expanded Lookups	Expanded Lookups
Related Lists	Related Lists
Report Charts	Report Charts

Delivery Detail

Standard Buttons: Edit, Delete, Clone, Change Owner, Change Record Type, Printable View, Sharing, Sharing Hierarchy, Edit Labels

Information (header visible on edit only)

Delivery ID: GEN-2004-001234
 Delivery External ID: Sample Text
 Order: Sample Text
 Carrier: Sample Text
 Dispatch Date: 9/25/2025
 Expanded Delivery Date: 9/25/2025
 Status: Sample Text
 Orders: Sample Text

System Information (header visible on edit only)

Created By: Sample Text
 Last Modified By: Sample Text

Custom Links (header visible on edit only)

- **Order Item Layout:** Displays Quantity, Price, and linked Product.

Order Line Item

Save • Quick Save • Preview As... • Cancel • Undo • Redo • Layout Properties

Fields

Field Name	Record Type
Buttons	Buttons
Quick Actions	Quick Actions
Mobile & Lightning Actions	Mobile & Lightning Actions
Expanded Lookups	Expanded Lookups
Related Lists	Related Lists
Report Charts	Report Charts

Order Line Item Detail

Standard Buttons: Edit, Delete, Clone, Change Owner, Change Record Type, Printable View, Edit Labels

Information (header visible on edit only)

Line Item Number: GEN-2004-001234
 Order: Sample Text
 Product: Sample Text
 Quantity: 17.862
 Unit Price: \$123.45
 Line Total: \$123.45
 Line External ID: Sample Text
 Product: Sample Text

System Information (header visible on edit only)

Created By: Sample Text
 Last Modified By: Sample Text

Custom Links (header visible on edit only)

6. Compact Layouts

- **Order Compact Layout:** Displays Order No, Customer, Status, Date.
 - **Product Compact Layout:** Displays Name, Category, Stock.
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7. Schema Builder Verification

Schema Builder confirms:

- Correct object creation
- Proper relationships between **Customer** → **Order** → **Order Item** → **Product** → **Delivery**
- Junction object (**Order Item**) is properly linking Orders and Products

