Phase 1: Problem Understanding & Industry Analysis

Requirement Analysis: -

Subscriber & Subscription Management

Track subscriber status as Active, Paused, or Canceled and allow admins to create and edit subscription tiers with unique pricing and products.

Automated Billing & Fulfillment

Automated billing engine to generate invoices and process monthly payments. It also Handle failed payments by notifying customers to update payment info. Real-time inventory tracking with automatic stock deduction to prevent overselling.

Subscriber Self-Service Portal

Portal for subscribers to update shipping and payment details. Options to pause, resume, or cancel subscriptions. Access to order history, including payments and shipments.

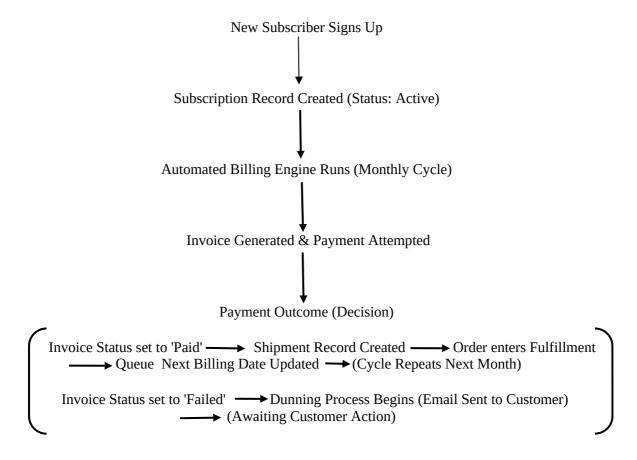
Business Analytics & Reporting

Dashboard for viewing key business metrics. It also Reports on Monthly Recurring Revenue (MRR), Customer Churn Rate, and Inventory Levels.

Stakeholder Analysis:

- **Subscription Manager**: It Oversees daily operations, manages subscription plans, and monitors business performance dashboards.
- **Fulfillment Coordinator**: Manages product inventory and processes paid orders for shipping from a clear fulfillment queue.
- **Finance Manager**: Monitors revenue reports, tracks failed payments, and manages refund approvals.
- **Subscriber (External User)**: The end customer who uses the self-service portal to manage their account and subscription.
- **System Admin**: Manages the system configuration, security, and deployments.

Subscription Subscription Box Service Management System Business Flow Mapping: -



Industry-specific Use Case Analysis

The Subscripify platform is specifically designed to address the unique challenges of the subscription box industry. Its primary function is to serve as a reliable, automated **recurring revenue engine**, managing the entire monthly cycle of billing and payments. The key goal is to reduce customer cancellations with features designed to keep them, like a flexible "pause subscription" option. Also, because we ship physical goods, the system requires precise, real-time inventory management to prevent selling out-of-stock items and ensure happy customers.

Subscription Subscription Box Service Management System Phase-2 (Org Setup & Configuration)

Salesforce Edition: - Salesforce Developer Editon Org

Company Profile Setup

Company Name: Subscripify

Default Currency: INR

Secondary Currency : USD

Locale & Language: India (English)
 Time Zone: Asia/Kolkata (GMT+5:30)
 Fiscal Year: 1st April- 31st March



Business Hours & Holidays

- Business Hours: 10:00 AM 5:00 PM (Monday Saturday).
- Holidays: Sunday holiday, Festive Holiday.

Fiscal Year Settings

- Using the Custom Fiscal Year (1st April 31st March).
- Ensures finances can be reported on a yearly basis and can be managed.

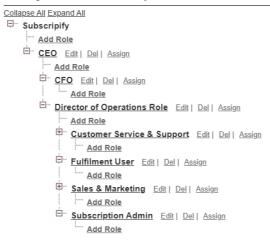
User Setup & Licenses

- Subscription Admin Manages the day-to-day operations and strategy of the subscription service
- Fulfilment User It only has read-only access to orders so they can manage inventory and process shipments, with no access to financial data.

Profiles All Users On this page you can create, view, and manage users To get more licenses, use the Your Account app. Let's Go View: All Users Edit | Create New View New User Reset Password(s) Add Multiple Users Action Full Name † Alias Username Role Active Profile | | Edit Chatter Expect | Chatter chatty.00dgl0000005t5oyua1.4kmb4lonagd@chatter.salestorce.com | | Edit EPIC_OrgFarm | OEPIC | epic.e09780ec1759@orgfarm.salestorce.com | | Edit Sharma_Akshat | aks | akshatteader4174@agentbrore.com | | Edit Singh_Rohan | subs | rohan@subscripty.in Chatter Free User System Administrator | | Edit Singh_Rohan subs rohan@subscriptly.in | | Edit User_Integration | Integration@300dg100000bt5qua1.com | | Edit User_Security | insightssecurity@00dgi00000bt5ojua1.com ☐ | Edit User_Security sec ☐ | Edit Verma_Aakash rverma_ Analytics Cloud Security User aakash@subscripifv.in New User Reset Password(s) Add Multiple Users

- Subscription Admin Profile Complete system access which runs the day-to-day operations of the service.
- **Fulfilment User Profile** It is highly restricted and gives them access only to the tools needed to physically pack and ship customer order.
- Customer Profile It is for external subscribers who log into the customer portal.

Your Organization's Role Hierarchy



Roles

- **Director of Operations Role** Top-level in the business hierarchy, oversees the entire subscription lifecycle and monitors overall business performance.
- **Subscription Manager Role** Manages the core business functions, including subscription plans, automated billing cycles, and subscriber analytics.
- **Fulfillment Coordinator Role** Manages the physical logistics of the operation, including inventory levels and the fulfillment of paid orders.

Permission Sets

- **<u>Billing & Refund Adjustments :-</u>** It Grants special permission to edit paid invoices or process refunds. Assigned to senior managers as needed.
- <u>Product Catalog Manager</u>:- It Grants access to create and edit Product records (subscription plans and items), separate from the main Subscription Admin profile.

OWD (Org-Wide Defaults)

- **Subscription Records :-** Private. This is critical to protect each subscriber's personal and plan information.
- **Invoice Records**:- Private. Protects sensitive customer financial history.
- **Product Inventory :-** Public Read/Write. All internal users can see and manage stock levels.

Sharing Rules

A criteria-based sharing rule will be created to automatically grant read-only access to Invoice records to the Fulfillment Team public group. This rule will trigger when an invoice's Status is marked as 'Paid', ensuring the fulfillment team can only see orders that are ready to be shipped.

Login Access Policies

The policy of logging in as an administrator will be activated. This crucial setting enables System Administrators to log in as other users (such as the Fulfilment Coordinator or Subscription Manager) in order to effectively support and troubleshoot any user-specific issues without needing the password.

Dev Org Setup

- A Salesforce Developer Edition Org will serve as the primary environment for all configuration, custom development (Apex, LWC), and implementation of the Subscripify platform.
- All unit testing, system validation, and final demonstration preparation will be performed within this dedicated environment.

Deployment Basics

- A modern, professional development lifecycle will be followed to ensure best practices are maintained.
- All new features will be developed and tested in a Developer Sandbox to isolate work-in-progress from the stable main environment.
- Completed features will be deployed from the sandbox to the main Developer Org (acting as 'Production') using Salesforce DX (SFDX) and a source control repository (Git), which is the current industry standard for Salesforce development.

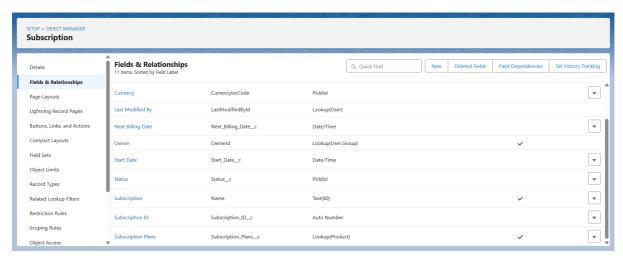
Subscripify:- Subscription Box Service Management System Phase 3: Data Modelling & Relationships

Custom Objects & Fields

1. Subscription (Subscription_c)

Fields:

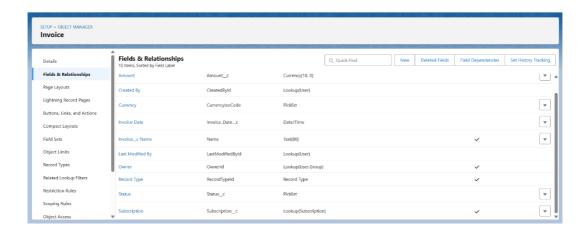
- Subscription ID (Auto-Number)
- Subscriber (Lookup → Contact)
- Subscription Plan (Lookup → Product2)
- Status (Picklist: Active, Paused, Canceled)
- Start Date (Date)
- Next Billing Date (Date)
- Cancellation Date (Date)
- Currency (Currency)



2. Invoice (Invoice_c)

Fields:

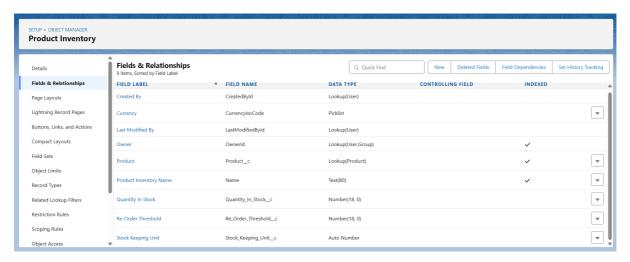
- Invoice Number (Auto-Number)
- Subscription (Lookup → Subscription_c)
- Status (Picklist: Draft, Unpaid, Paid, Payment Failed, Refunded)
- Invoice Date (Date)
- Amount (Currency)
- Payment Method (Picklist)



3. Product Inventory (Product_Inventory_c)

Fields:

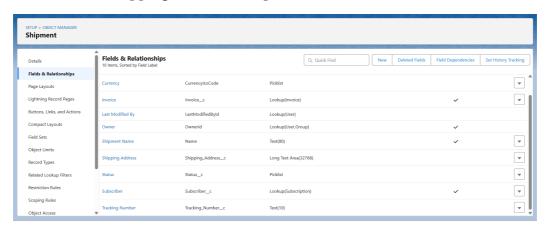
- Product (Lookup → Product2)
- SKU (Text)
- Quantity In Stock (Number)
- Re-Order Threshold (Number)
- Warehouse Location (Text)



4. Shipment (Shipment_c)

Fields:

- Shipment ID (Auto-Number)
- Related Invoice (Lookup → Invoice_c)
- Subscriber (Lookup → Contact)
- Status (Picklist: Ready to Ship, Shipped, Delivered)
- Tracking Number (Text)
- Shipping Address Snapshot (Text Area)

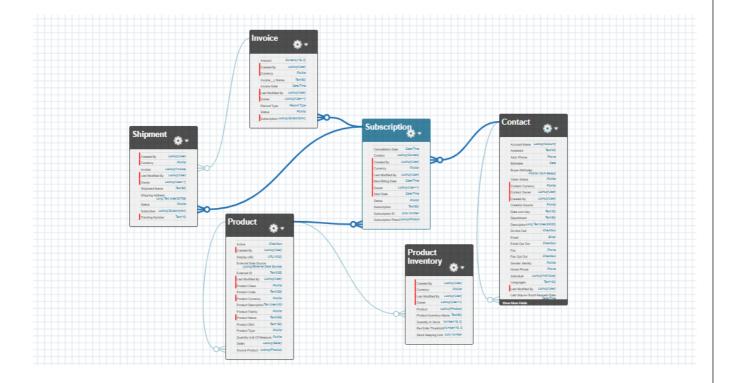


• Page Layouts

- **Subscription Page Layout** → Show subscriber details, the selected subscription plan, current Status (e.g., Active/Paused), and the Next Billing Date.
- **Invoice Page Layout** → Show the related subscription, the invoice Status (e.g., Paid/Unpaid), the total Amount, and the Invoice Date.
- **Subscriber (Contact) Page Layout** → Show the customer's contact details, their primary shipping address, and a related list to display all of their historical Subscriptions.
- Shipment Page Layout → Show the fulfillment Status (e.g., Shipped/Delivered), the Tracking Number, and a link to the paid Invoice.

Schema Builder

- **Customer Transaction Flow:** Contact (Subscriber) → Subscription → Invoice → Shipment
- **Product & Inventory Flow:** Product (Catalog) → Subscription Plan Product (Catalog) → Product Inventory Product (Catalog) → Invoice Line Item → Invoice



Relationships

- **Contact (Subscriber)** → **Subscription**: One subscriber can have multiple subscriptions over their lifetime. (**Lookup**)
- Subscription → Invoice: One subscription will generate many invoices over its lifetime. (Lookup)
- Product (Subscription Plan) → Subscription: One subscription plan (e.g., "Premium Box") can be associated with many different subscriptions.
 (Lookup)
- **Invoice** → **Invoice Line Item**: One invoice can be made up of multiple line items detailing each charge. (**Master-Detail**)
- **Invoice** → **Shipment**: One paid invoice results in one shipment to the customer. (**Lookup**)

Rationale

- The separation of Subscription, Invoice, and Shipment objects creates a clear, scalable process. This design accurately models the real-world lifecycle of a subscription and ensures that billing data and fulfillment data are kept distinct and organized.
- Setting the Org-Wide Default for Subscription_c and Invoice_c to **Private** is a critical security decision. It protects sensitive customer and financial data at the most fundamental level, ensuring a trustworthy and secure platform.
- The use of **Scheduled Apex** for the monthly billing engine is the architectural cornerstone of the project. This ensures the entire revenue generation process is automated and scalable, allowing the business to grow without being limited by manual work.s

Phase 4: Process Automation (Admin)

• Validation Rules

• Subscription

The rule checks the Start_Date_c and Cancellation_Date_c fields. If a user tries to save a record where the cancellation date is earlier than the start date, the system blocks the save and shows an error.

Subscription Validation Rule

Back to Subscription

Validation Rule De	etail	Edit Clone		
Rule Name	Cancellation_Date		Active	✓
Error Condition Formula	Cancellation_Datec < Start_Datec			
Error Message	The cancellation date cannot be before the subscription start date.		Error Location	Top of Page
Description				
Created By	Akshat Sharma, 9/21/2025, 1:44 AM		Modified By	Akshat Sharma, 9/21/2025, 1:44 AM
		Edit Clone		

• Product Inventory

The rule checks the Quantity_In_Stock__c field every time the record is saved. If the number in that field is less than zero, the save action is blocked and an error message appears.

Product Inventory Validation Rule Back to Product Inventory Validation Rule Detail Rule Name Cannot_Be_Negative Active Error Condition Formula Quantity_in_Stock_c<0 Error Message The quantity in stock cannot be a negative number. Description The Product cannot go negative Created By Akshat Sharma, 9/21/2025, 2:04 AM Edit Clone

Invoice

The rule activates when a user tries to edit an invoice. It checks if the invoice's Status was already 'Paid' *before* the current edit. If it was, and the user is trying to change a key field like Amount_c, the rule stops the save.

Invoice Validation Rule

Back to Invoice

Validation Rule De	etail	Edit Clone		
Rule Name	Cannot_Edit_Paid_Invoice_Amount		Active	✓
Error Condition Formula	AND(ISCHANGED(Amount_c), ISPICKVAL(PRIO	PRVALUE(Statusc), "Paid"))		
Error Message	The amount on a paid invoice cannot be modified and is restricted		Error Location	Top of Page
Description	Cannot Edit Paid Invoice Amount			
Created By	Akshat Sharma, 9/21/2025, 2:01 AM		Modified By	Akshat Sharma, 9/21/2025, 2:01 AM
		Edit Clone		

• Shipment

When a user changes the Status picklist on a shipment to 'Shipped', the rule immediately checks if the Tracking_Number_c field is empty. If it is, the rule blocks the save and displays an error.

Shipment Validation Rule Back to Shipment								
Validation Rule Detail		Edit Clone						
Rule Name	Share_Tracking_ID		Active	✓				
Error Condition Formula	AND(ISPICKVAL(Status_c, "Shipped"), ISBLANK(Tracking_Number_c))							
Error Message	Tracking Number Is Needed For Shipment		Error Location	Top of Page				
Description	Share Tracking Id with the customer							
Created By	<u>Akshat Sharma</u> , 9/21/2025, 2:17 AM	Edit Clone	Modified By	Akshat Sharma, 9/21/2025, 2:17 AM				

• Approval Process

High-Value Refund Approval: An approval process is configured on the Invoice_c object. If a user tries to process a refund over a set amount (e.g., ₹500), the record is locked and automatically submitted to a manager for approval before any further action can be taken.

Flow Builder

- Record-Triggered Flow: Automated Fulfillment Process
 - o **Trigger**: This flow automatically runs when an Invoice_c record's Status is updated to 'Paid'.
 - o **Actions**: It creates a new Shipment_c record, performs Field Updates to populate the shipment details, sends an Email Alert to the customer, and sends a Custom Notification to the fulfillment team.
- **Scheduled Flow**: A simple flow that runs daily to send an email alert for any high-value Invoice c that is 5 days overdue.

