Phase 4: Process Automation (Admin)

1. Introduction

In the earlier phases of this project, we built the **data model (Phase 2)** and set up **security, sharing, and role hierarchies (Phase 3)**. With these foundations ready, Phase 4 focuses on **Process Automation** using Salesforce's point-and-click tools (no coding).

Restaurants deal with a lot of **repetitive, manual, and error-prone tasks**:

- Staff may accidentally enter wrong prices or stock quantities.
- Managers spend time manually approving purchase orders.
- Servers need to constantly update the kitchen and customers about order statuses.
- Inventory levels are often tracked manually, leading to shortages or wastage.

The goal of Phase 4 is to **automate these workflows** so that the system takes care of repetitive tasks

- **Before automation:**
  A waiter takes an order → writes it down → tells the kitchen manually → updates the manager if ingredients are missing → later calls the supplier. This creates delays, mistakes, and confusion.
- **After automation:**
  The moment the waiter confirms the order → kitchen is notified instantly → inventory updates automatically → if stock is low, supplier is notified → customer gets order status on mobile.

Automation transforms **reactive operations** into **proactive management**.

4. Automation Breakdown

4.1 Data Quality (Validation Rules)

Problem: Staff often enter wrong values (e.g., menu item with $0 price or inventory stock with unrealistic levels).

Solution: We created **5 validation rules**:

1. **Menu Price Rule:** Prevents saving items with a price of 0.
2. **Cost vs Price Rule:** Ensures selling price > cost price.
3. **Stock Level Rule:** Stops unrealistic stock entries.
4. **Order Quantity Rule:** Every order must have at least 1 item.
5. **Purchase Order Total Rule:** Total is system-calculated, not manually editable.

Impact:

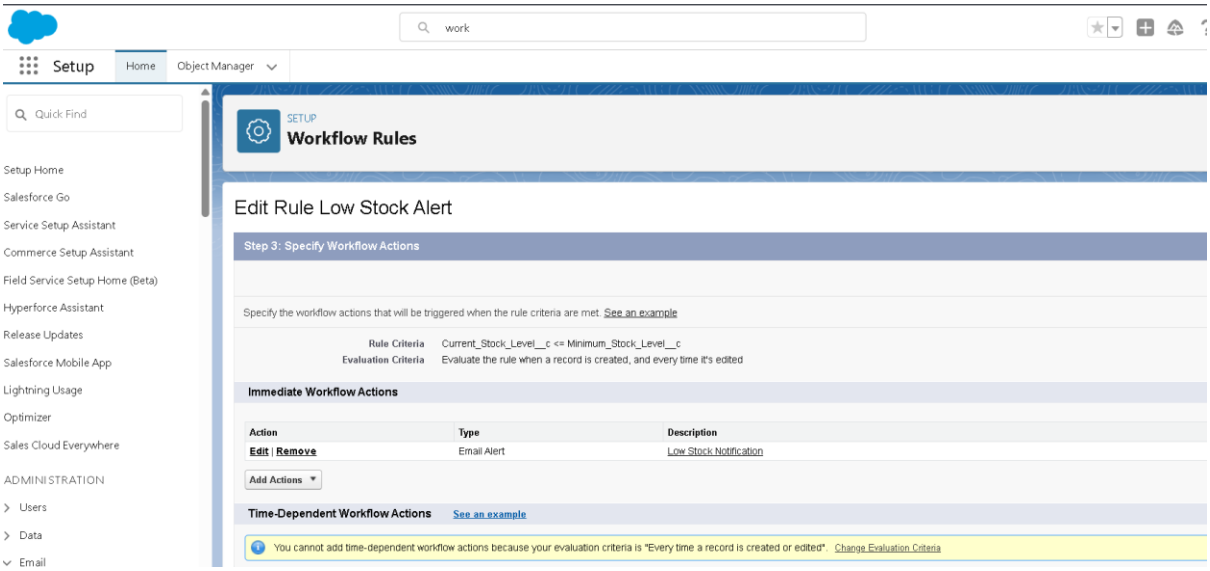
- Data errors reduced significantly.
- Managers don’t need to manually audit entries.
- Staff confidence improves because mistakes are caught early.

4.2 Workflow Rules (Simple Automations)

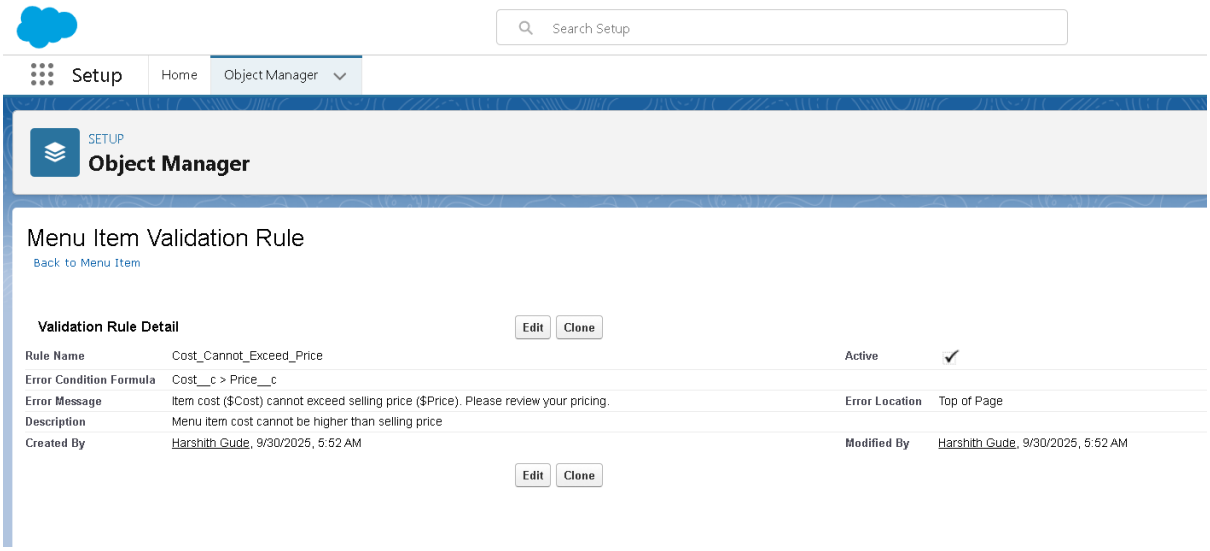
Problem: Staff often miss important updates, like low stock alerts or unavailable menu items.

Solution: We implemented **2 workflow rules**:

1. **Low Stock Email Alert:** Automatically emails manager + supplier if inventory < threshold.

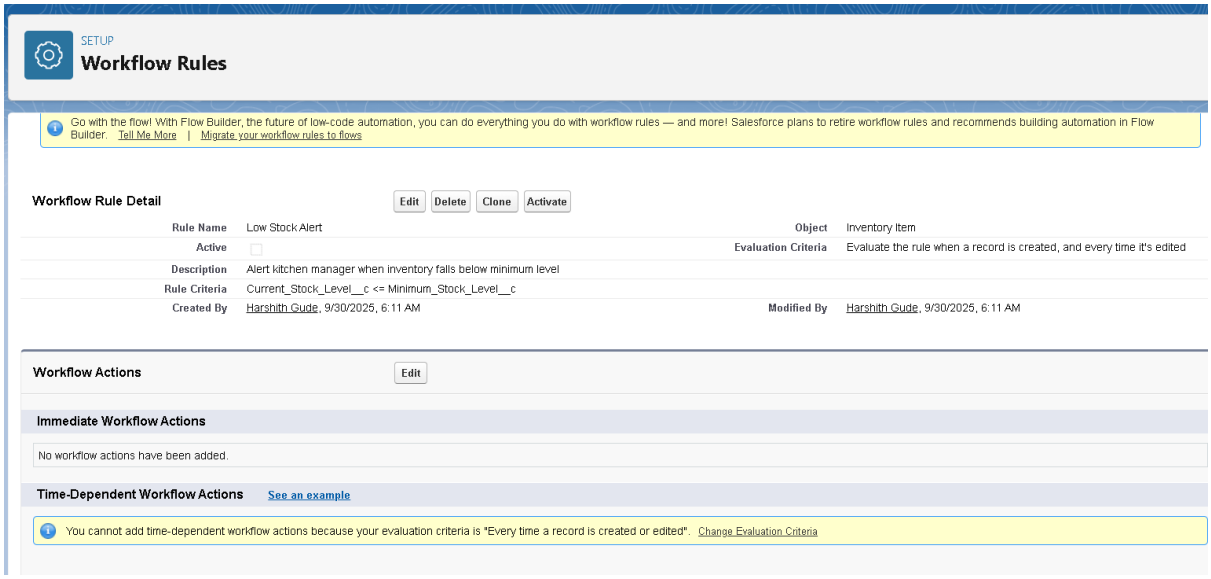


2. **Menu Availability Update:** Menu item status auto-changes to "Unavailable" when ingredients run out.



Impact:

- Prevents customers from ordering unavailable items.
- Avoids manual checking of stock.



Process Builder Automations (Complex Automations)

Problem: Order processing and purchase approvals require multiple steps and staff involvement.

Solution: We used **Process Builder** to automate **multi-step workflows**:

- **Order Lifecycle:**
  - Order confirmation → email sent to kitchen.
  - Task assigned to server → follow-up with customer.
  - Order completion → Customer record updated.
- **Purchase Order Workflow:**
  - Orders > $500 → routed for manager approval.
  - Orders < $500 → auto-approved.

Impact:

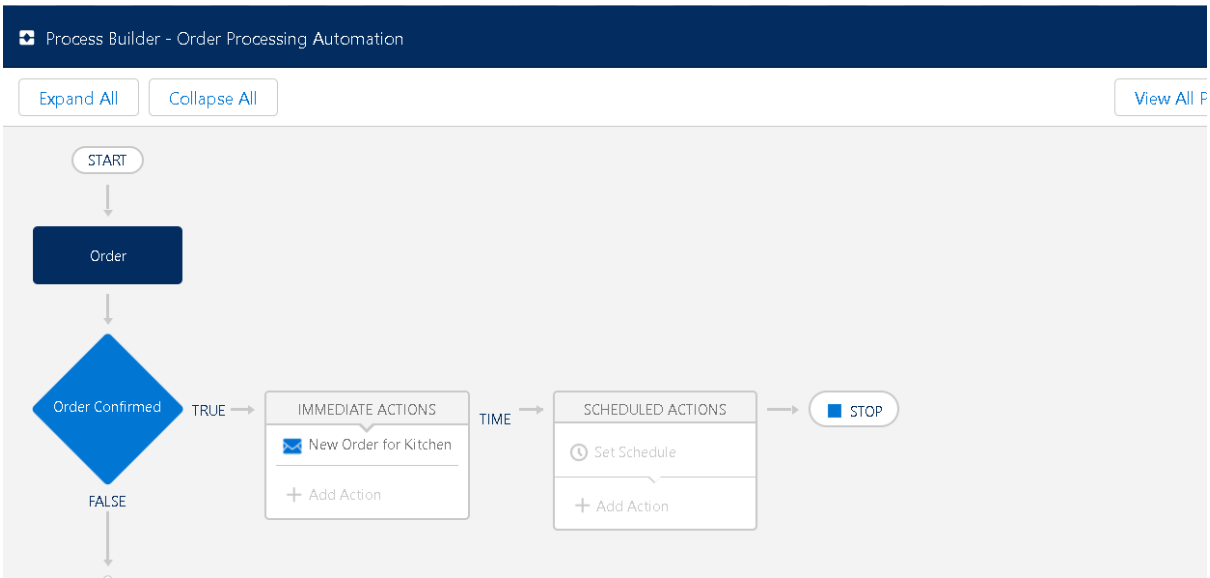
- Faster processing.
- Approvals are consistent.
- No missed steps in order handling.

.4 Approval Processes

Problem: High-value purchases need oversight but approvals take time.

Solution: We built an **Approval Process** for large purchase orders:

- Orders > $500 → sent to manager.
- Manager receives email → approves/rejects with one click.
- Staff instantly notified of outcome.



Impact:

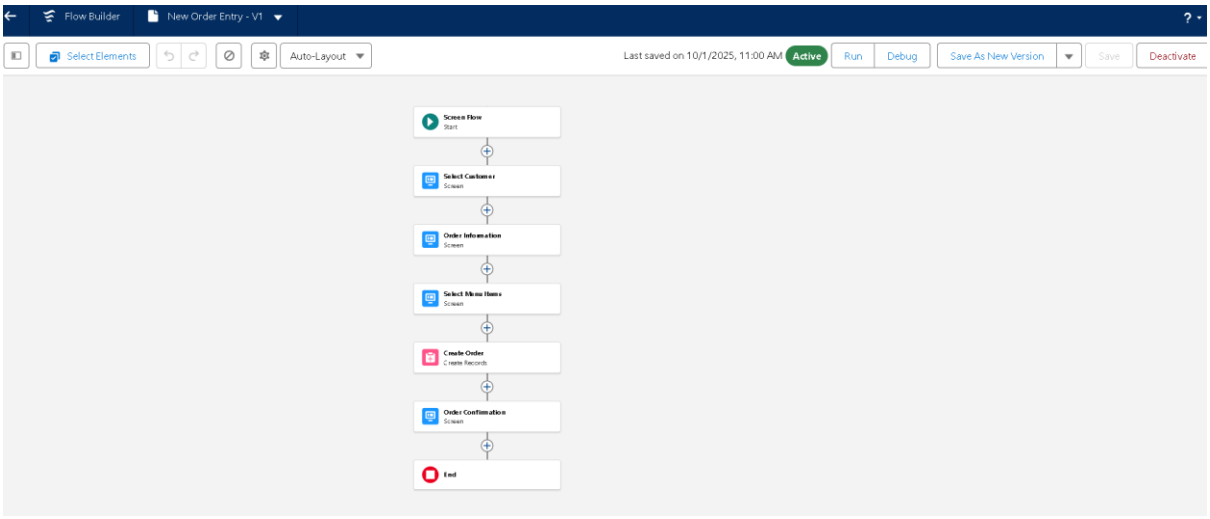
- Financial control maintained.
- Approval time reduced from hours to minutes.

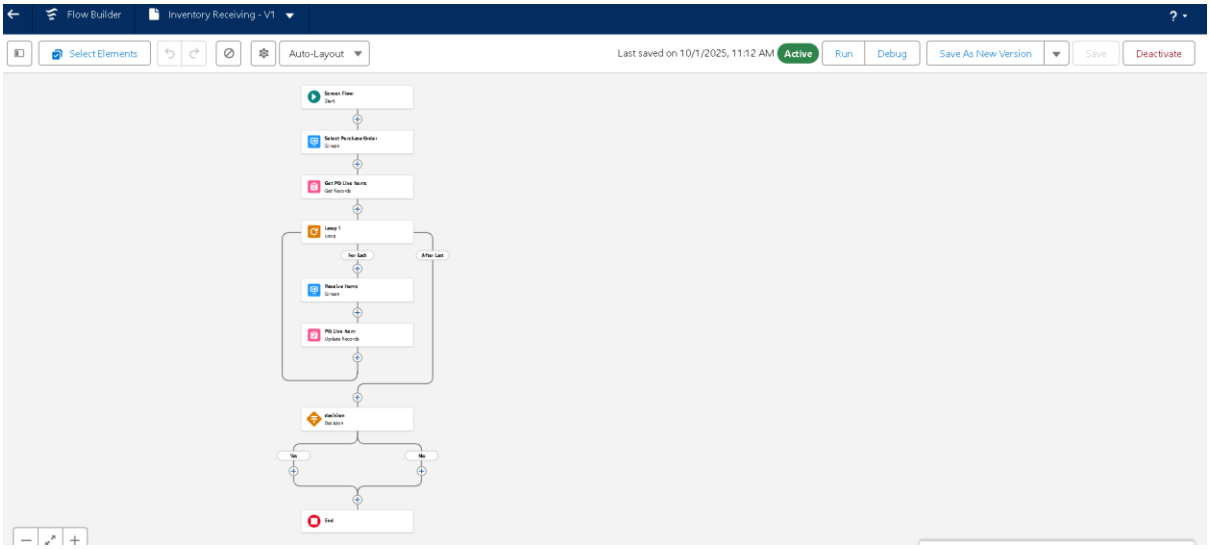
4.5 Guided Flows (Screen Flows)

Problem: Staff had to navigate multiple screens to enter orders or update inventory, leading to confusion.

Solution: We created **2 guided flows**:

- **New Order Flow:** Step-by-step order-taking screen for servers.
- **Inventory Receiving Flow:** Quick entry for received stock, auto-updating inventory.





Impact:

- Easy for new staff with little training.
- Errors reduced as flows guide staff properly.

4.6 Notifications & Alerts

Problem: Delays in communication between servers, kitchen, suppliers, and customers.

Solution: Real-time alerts:

- Kitchen notified of new orders instantly.
- Push notifications to managers for low stock.
- Customers auto-notified when order is ready.
- Suppliers instantly emailed purchase orders.

Impact:

- Faster service.
- Staff always updated.
- Customers more satisfied.

5. Testing & Validation

We simulated real-world scenarios to ensure automation works:

- **Order Simulation:** Placed sample orders to test kitchen alerts.
- **High-Value PO:** Created $600 order → correctly sent for manager approval.
- **Low Stock Test:** Dropped stock below threshold → alerts triggered.
- **Customer Notification:** Confirmed customer SMS/email for order readiness.

Result: All automations worked smoothly.