

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.


The screenshot shows the Salesforce Setup interface. The left sidebar contains navigation links: Setup Home, Salesforce Go, Service Setup Assistant, Commerce Setup Assistant, Field Service Setup Home (Beta), Hyperforce Assistant, Release Updates, Salesforce Mobile App, Lightning Usage, Optimizer, Sales Cloud Everywhere, ADMINISTRATION, Users, Data, and Email. The main content area is titled 'Workflow Rules' and shows the 'Edit Rule Low Stock Alert' configuration. The 'Step 3: Specify Workflow Actions' section is active. It includes a table for 'Immediate Workflow Actions' with columns for Action, Type, and Description. The table shows one action: 'Email Alert' with a description of 'Low Stock Notification'. There is also a section for 'Time-Dependent Workflow Actions' which is currently empty, with a message stating: 'You cannot add time-dependent workflow actions because your evaluation criteria is "Every time a record is created or edited"'. A link 'Change Evaluation Criteria' is provided.

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

The screenshot shows the Salesforce Setup interface. The left sidebar contains navigation links: Setup, Home, Object Manager, and a search bar. The main content area is titled 'Object Manager' and shows the 'Menu Item Validation Rule' configuration. The 'Validation Rule Detail' section is active. It includes a table with columns for Rule Name, Error Condition Formula, Error Message, Description, Created By, and Modified By. The table shows one rule: 'Cost_Cannot_Exceed_Price' with a description of 'Item cost (\$Cost) cannot exceed selling price (\$Price). Please review your pricing.' and a status of 'Active'. There are 'Edit' and 'Clone' buttons for each row.

Impact:

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


Workflow Rules

Go with the flow! With Flow Builder, the future of low-code automation, you can do everything you do with workflow rules — and more! Salesforce plans to retire workflow rules and recommends building automation in Flow Builder. [Tell Me More](#) | [Migrate your workflow rules to flows](#)

Workflow Rule Detail

EditDeleteCloneActivate

Rule Name	Low Stock Alert	Object	Inventory Item
Active	<input type="checkbox"/>	Evaluation Criteria	Evaluate the rule when a record is created, and every time it's edited
Description	Alert kitchen manager when inventory falls below minimum level		
Rule Criteria	Current_Stock_Level__c <= Minimum_Stock_Level__c		
Created By	Harshith Gude, 9/30/2025, 6:11 AM	Modified By	Harshith Gude, 9/30/2025, 6:11 AM

Workflow Actions

Edit

Immediate Workflow Actions

No workflow actions have been added.

Time-Dependent Workflow Actions

[See an example](#)

You cannot add time-dependent workflow actions because your evaluation criteria is "Every time a record is created or edited". [Change Evaluation Criteria](#)

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:

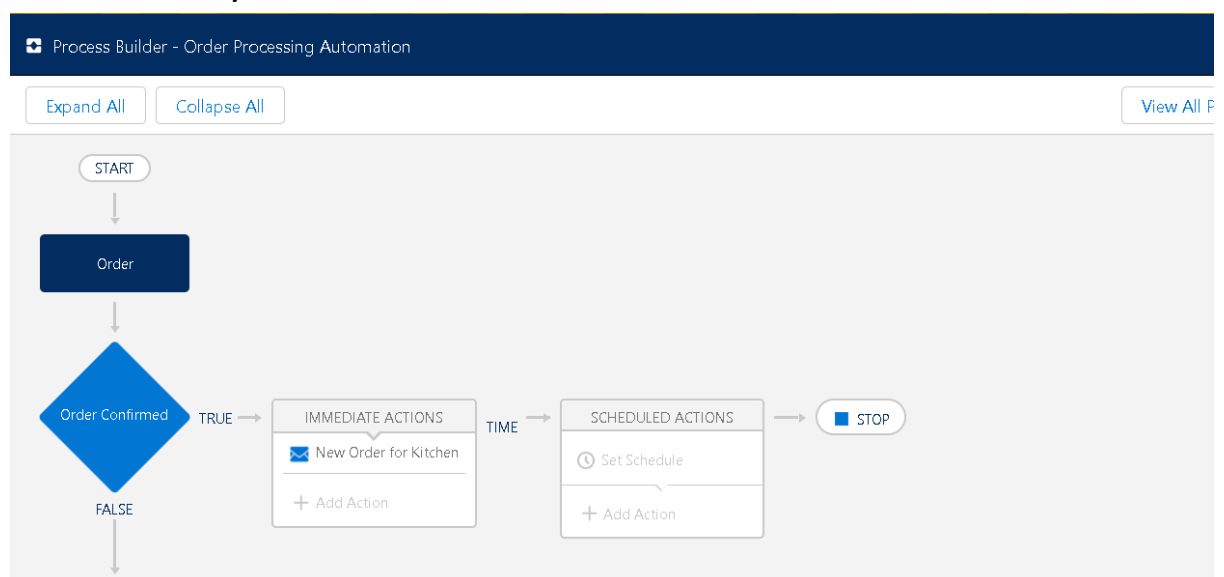
- Faster processing.
- Approvals are consistent.
- No missed steps in order handling.

.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:

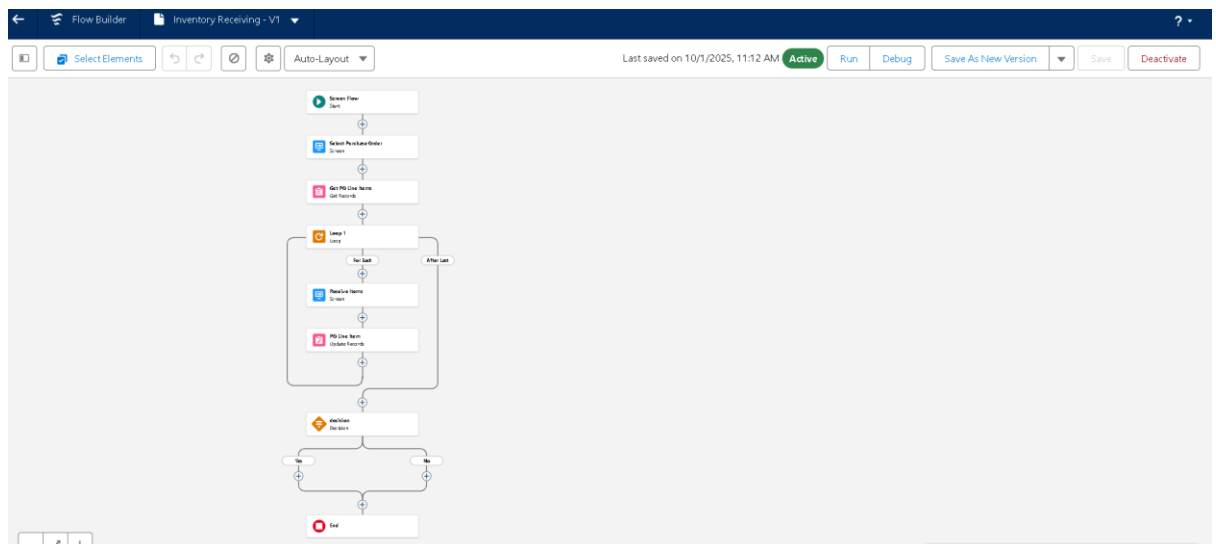
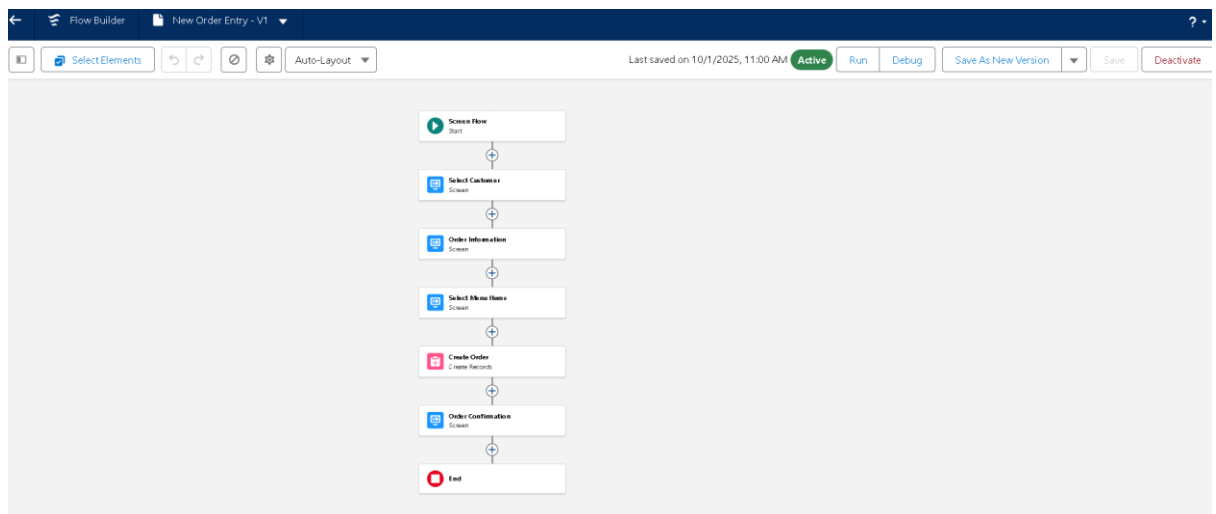
- Financial control maintained.
- Approval time reduced from hours to minutes.

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.

