

Phase 4: Process Automation (Online Laptop Booking)

1. Validation Rules

Definition: Validation rules ensure that data entered meets specific criteria before it's saved.

Examples in Project:

1. Order Quantity > 0:

- Ensures sales users cannot create an order with zero or negative quantity.
- Validation Rule Formula:
- $\text{Quantity_c} \leq 0$
- Error Message: "Order quantity must be greater than zero."

2. Service Completion Date ≥ Request Date:

- Ensures service completion is not set before it was requested.
- Validation Rule Formula:
- $\text{Completion_Date_c} < \text{Request_Date_c}$
- Error Message: "Service completion date cannot be before the request date."

Impact:

- Prevents **data entry errors**.
- Ensures **data integrity** for reporting and automation.

2. Workflow Rules / Process Builder

Definition: Workflow Rules and Process Builder automate actions based on **record changes**.

Use Cases in Project:

1. Notify Dealer When New Order is Placed:

- Trigger: Laptop Order created
- Action: Send email notification to the assigned dealer
- Salesforce Tools: Workflow Rule or Process Builder

2. Notify Customer When Order is Confirmed or Completed:

- Trigger: Order Status changes to "Confirmed" or "Completed"
- Action: Email alert to customer
- Ensures customers **stay informed without manual emails**

Impact:

- Reduces **manual communication effort**.
- Improves **customer experience** and dealer responsiveness.

3. Approval Process

Definition: A structured workflow where records are **approved by designated users** before final action.

Project Use Case:

- High-value orders (e.g., > \$50,000) require manager or admin approval.
- Steps:
 1. Order created with Amount > \$50,000
 2. Approval request automatically sent to Sales Manager
 3. Manager approves/rejects
 4. Record updates automatically based on decision

Impact:

- Ensures **high-value orders are reviewed** before processing.
- Supports **auditability** and **internal control**.

4. Flow Builder

Definition: Flows provide **powerful, customizable automation**, beyond simple workflow rules.

Use Cases in Project:

1. **Screen Flow for Order Entry by Sales Team:**
 - Provides a **guided interface** for creating new orders.
 - Example steps:
 - Select Customer → Select Dealer → Add Laptops → Review → Submit
 - Ensures **accuracy and consistency** during data entry.
2. **Record-triggered Flow to Update Laptop Stock After Order Confirmation:**
 - Trigger: Order Status changes to “Confirmed”
 - Action: Reduce Laptop Stock by Order Quantity
 - Prevents **over-selling and maintains inventory accuracy**

Impact:

- Reduces **manual updates** of stock and order information.
- Ensures **real-time inventory tracking**.

5. Email Alerts

Definition: Automated emails triggered by specific events.

Project Use Cases:

- **Order Confirmation:** Customer receives confirmation after placing order
- **Testing Complete:** Dealer/Customer notified when laptop testing finishes
- **Service Complete:** Customer notified when service request is resolved

Impact:

- Keeps **customers and dealers informed automatically**.
- Improves **communication efficiency and service transparency**.

6. Field Updates

Definition: Automatically changes field values based on conditions or approvals.

Project Use Case:

- After **approval process**, Order Status is automatically updated to “Approved” or “Rejected”
- Other examples:
 - Update “Testing Status” after testing completion
 - Update “Service Status” after service completion

Impact:

- Eliminates **manual updates**, reduces errors, and maintains **consistent data**.

Summary of Phase 4

- **Validation Rules:** Enforce correct data entry.
- **Workflow Rules / Process Builder:** Automate notifications to dealers and customers.
- **Approval Process:** Manage high-value orders with formal approval.
- **Flow Builder:** Guide users during order entry and automate inventory updates.
- **Email Alerts:** Keep stakeholders informed automatically.

- **Field Updates:** Automatically update status fields to maintain data consistency.
- **Tasks / Custom Notifications:** Ensure users act on pending orders and services.