

# Coffee Click Power Canvas App ( + Data Driven)

25 June 2025 11:29

## Steps to Build the Coffee Approval App:

### 1. Create a New Environment

Start by creating a new environment in Power Apps named "**App\_in\_a\_day**".

### 2. Set Up a Solution

Navigate to the **Solutions** area and create a new solution named "**Contoso Coffee Approval**". Fill in all the necessary details, including the solution name, publisher, and version.

### 3. Create the Canvas App

Within the solution, create a new **Canvas App** named "**Machine Ordering App**".

### 4. Load Data Sources

Import two Excel files as data sources:

- **Machines.xlsx**: Contains details about each coffee machine, including Name, Price, Average Cups per Day, Color, Image Link, and TypeID.
- **MachineType.xlsx**: Defines machine categories with columns like MachineCategory, TypeID, and Image Link.

Machine.xlsx (Screenshot)

Machine Name	Avg. Cups/Wk	Avg. Espresso	Color	Description	Feature	Machine ID	Photo	Price	Machine Typ	Machine Typ
Barista Lite	1-50	1-100	Black	The Barista Lite App Connectiv	1 https://github.r	699.00	At Home Espres	1		
Barista Lite	1-50	1-100	Red	The Barista Lite App Connectiv	2 https://github.r	699.00	At Home Espres	1		
Barista Lite	1-50	1-100	Silver	The Barista Lite App Connectiv	3 https://github.r	699.00	At Home Espres	1		
Crema Café	1-50	100-200	Black	Perfect for coffi App Connectiv	4 https://github.r	999.00	At Home Espres	1		
Crema Café	1-50	100-200	Red	Perfect for coffi App Connectiv	5 https://github.r	999.00	At Home Espres	1		
Crema Café	1-50	100-200	Silver	Perfect for coffi App Connectiv	6 https://github.r	999.00	At Home Espres	1		
Crema Café XL	1-50	100-200	Black	The Crema Café App Connectiv	7 https://github.r	1199.00	At Home Espres	1		
Crema Café XL	1-50	100-200	Red	The Crema Café App Connectiv	8 https://github.r	1199.00	At Home Espres	1		
Crema Café XL	1-50	100-200	Silver	The Crema Café App Connectiv	9 https://github.r	1199.00	At Home Espres	1		
Crema Quattro	1-50	1-100	Black	Designed to ser App Connectiv	10 https://github.r	1399.00	At Home Espres	1		
Crema Quattro	1-50	1-100	Red	Designed to ser App Connectiv	11 https://github.r	1399.00	At Home Espres	1		
Crema Quattro	1-50	1-100	Silver	Designed to ser App Connectiv	12 https://github.r	1399.00	At Home Espres	1		
Cafe A-100 Automatic	1-50	100-200	Black	The Cafe A-100 App Connectiv	13 https://github.r	21900.00	Commercial Esp	2		
Cafe A-100 Automatic	1-50	100-200	Red	The Cafe A-100 App Connectiv	14 https://github.r	21900.00	Commercial Esp	2		
Cafe A-100 Automatic	1-50	100-200	Silver	The Cafe A-100 App Connectiv	15 https://github.r	21900.00	Commercial Esp	2		
Cafe A-200 Automatic	1-50	100-200	Black	Modern conver App Connectiv	16 https://github.r	23900.00	Commercial Esp	2		
Cafe A-200 Automatic	1-50	100-200	Red	Modern conver App Connectiv	17 https://github.r	23900.00	Commercial Esp	2		
Cafe A-200 Automatic	1-50	100-200	Silver	Modern conver App Connectiv	18 https://github.r	23900.00	Commercial Esp	2		
Cafe S-100 Semi-Automatic	1-50	100-200	Black	The Cafe S-100:App Connectiv	19 https://github.r	17900.00	Commercial Esp	2		
Cafe S-100 Semi-Automatic	1-50	100-200	Red	The Cafe S-100:App Connectiv	20 https://github.r	17900.00	Commercial Esp	2		
Cafe S-100 Semi-Automatic	1-50	100-200	Silver	The Cafe S-100:App Connectiv	21 https://github.r	17900.00	Commercial Esp	2		
Cafe S-200 Semi-Automatic	1-50	100-200	Black	A lower profile App Connectiv	22 https://github.r	19900.00	Commercial Esp	2		
Cafe S-200 Semi-Automatic	1-50	100-200	Red	A lower profile App Connectiv	23 https://github.r	19900.00	Commercial Esp	2		
Cafe S-200 Semi-Automatic	1-50	100-200	Silver	A lower profile App Connectiv	24 https://github.r	19900.00	Commercial Esp	2		

MachineType.xlsx (Screenshot)

D	E	F	G
Name	Description	Photo	Type ID
At Home Coffee Makers	Contoso Coffee Makers are built with chttps://github.com/MicrosoftDocs/msl#:3		
At Home Espresso Machines	Sleek and powerful with first-class projhttps://github.com/MicrosoftDocs/msl#:1		
Commercial Coffee Makers	If you're looking for a commercial brewhttps://github.com/MicrosoftDocs/msl#:4		
Commercial Espresso Machines	At Contoso, we understand that an esp https://github.com/MicrosoftDocs/msl#:2		

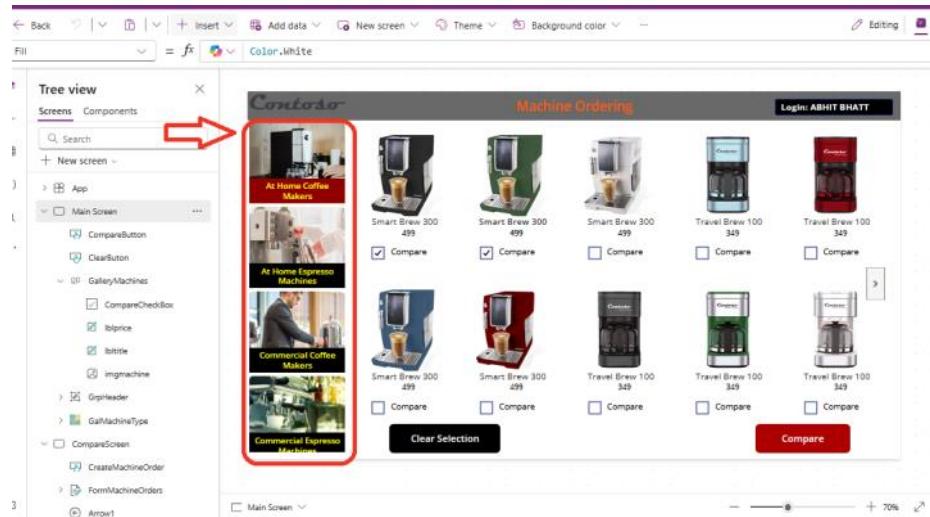
# App Development Steps: UI Setup, Filtering & Comparison Feature

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After creating the app, follow these steps to build the user interface and add filtering and comparison functionality:

## 1. Add a Vertical Gallery (Machine Types)

- On the first screen of the canvas app, insert a **Vertical Gallery** on the **left side**.
- Connect it to the **MachineType.xlsx** data source.
- Display the **Image** from MachineType (e.g., 4 images for different machine categories).
- Add **Text Labels** inside the gallery to show additional information like **MachineCategory**.
- To highlight the selected machine type, update the **Fill property** of the gallery template:

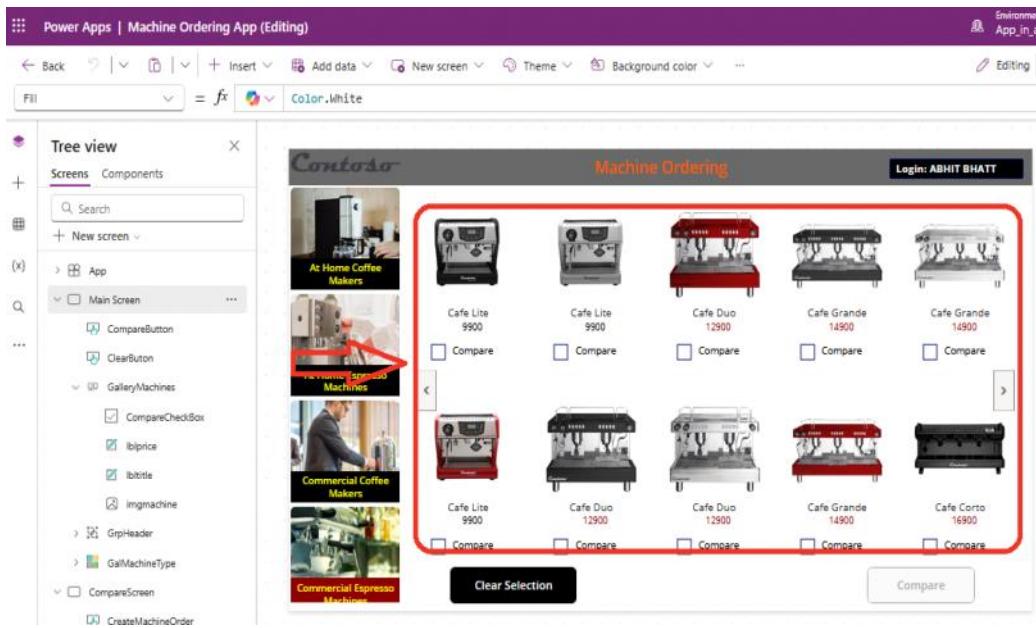


## • Add a Horizontal Gallery (Machine Listings)

- Insert a **Horizontal Gallery** to display coffee machine names and images from the **Machines.xlsx** table.
- Set properties such as:
  - WrapCount = 2 (to show machines in two rows)
  - Add navigation icons or styling as needed for improved UX.

## • Filter Machines Based on Selected Type

- When a user selects a machine type from the vertical gallery, filter the horizontal gallery to show only machines of that type.
- Use this formula in the **Items property** of the horizontal gallery:
  - Formula = `Filter(Machines, 'Machine Type ID' = GalMachineType.Selected.'Type ID')`



### Enable Machine Comparison Using Checkboxes

- Inside the horizontal gallery (Machines), add a **Checkbox** control.
- Set the **Text** property of the checkbox to "Compare".
- In the **OnCheck** property of the checkbox, use:  
• Formula = Collect(CompareList, ThisItem)
- **Explanation:** This formula adds the currently selected machine (ThisItem) to a collection named CompareList. This collection stores all machines marked for comparison.
- In the **OnUncheck** property, use:  
• Formula = Remove(CompareList, ThisItem)
- **Explanation:** This removes the unchecked machine from the CompareList collection.
- **Add a “Clear Selection” Button**  
• Insert a **Button** and name it "Clear Selection".  
• In its **OnSelect** property, add:  
• Formula = Clear(CompareList) // This clears all selected machines from the comparison list at once.
- **Add a “Compare” Button**  
• As it will redirect to the second screen of canvas app.

# Add a Compare Feature (Redirect to Second Screen)

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## 1. Add a "Compare" Button

- Place a new **Button** on the first screen and rename it to **"Compare"**.
- This button will navigate users to a second screen where the selected machines (from checkboxes) will be displayed side-by-side.

## 2. Control Button Activation

- To ensure that the Compare button is only active when at least **two items are selected**, set the **DisplayMode** property of the button to:
  - Formula = If(CountRows(CompareList) >= 2, DisplayMode.Edit, DisplayMode.Disabled)

**Explanation:** This disables the button unless the user selects 2 or more items for comparison.

## 3. Navigation Logic

- Set the **OnSelect** property of the button to:

Formula = Navigate(CompareScreen)

# Create a Second Screen for Comparison

## 1. Add a New Screen

- Create a new screen and name it **"CompareScreen"**.

## 2. Insert a Horizontal Gallery

- Add a **Horizontal Gallery** to this screen.
- Set the **Items** property of the gallery to = CompareList

This displays all machines that the user selected for comparison.

## 3. Edit Gallery Layout

- Set **WrapCount = 1** so that the items appear **side by side** in a single row, not multiple rows.
- Inside the gallery, add **Label** and **Image** controls to show:
  - MachineName
  - Description
  - Price
  - Average Cups Per Week
  - Color
  - Image

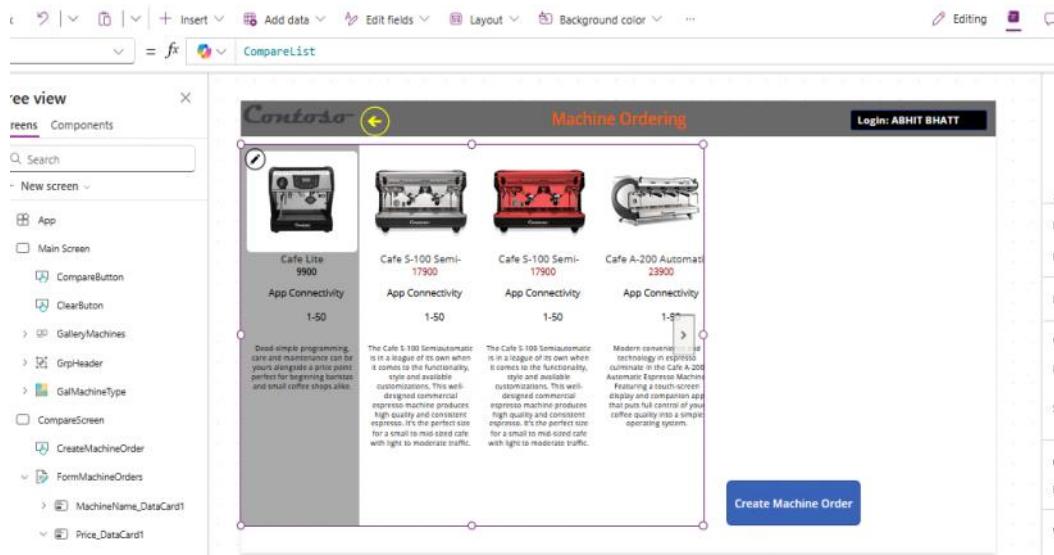
## 4. Highlight Selected Item

- To highlight a selected item inside the gallery, modify the **TemplateFill** property like this:  
Formula =  
`If(ThisItem.IsSelected, ColorFade(Color.Black, 65%), RGBA(0, 0, 0, 0))`

## 5. Add a Back Arrow

- Insert a **Back Arrow Icon** at the top left of the **CompareScreen**.

- Set its **OnSelect** property to : Navigate(MainScreen)
- It will Navigate users to the MainScreen



# Creating a Dataverse Table & Business Rule in an Existing Solution

27 June 2025 10:17

## Creating a Dataverse Table in an Existing Solution

### 1. Navigate to Your Solution

- Open Power Apps and enter your existing solution.
- Click on + New → Table → Table (Advanced Properties).

### 2. Configure Table Details

- Set the **Display Name** to “MachineOrder”.
- Set the **Primary Column** to “Machine Name” (Text datatype by default).

### 3. Add Additional Columns to the Table

Now add the following columns with appropriate data types and settings:

- **Price**
  - Data Type: Currency
  - Setting: Business Required
- **Requested By**
  - Data Type: Text
  - Format: Email
- **Approval Status**
  - Data Type: Choice
  - Choices: Approved, Rejected
- **Request\_Date**
  - Data Type: Date
- **Approval**
  - Data Type: Email
- **Comments**
  - Data Type: Text
  - Format: Multiline text
- **Estimated Ship Date**
  - Data Type: Date & Time
- **Approved Date**
  - Data Type: Date
- **Department Contribution**
  - Data Type: Formula (Calculated Column)
  - Formula: Decimal(Price) \* 0.1

## Creating a Business Rule: "Calculated ShipDate"

### 1. Go to Customizations

- In the “MachineOrder” table settings, navigate to the **Business Rules** tab.
- Click + New Business Rule.

### 2. Set Rule Details

- **Business Rule Name:** Calculated ShipDate
- **Scope:** Entity

### 3. Define Rule Logic

- **Condition:**
  - If **Approved Date** contains data (i.e., is not empty)
- **Action:**

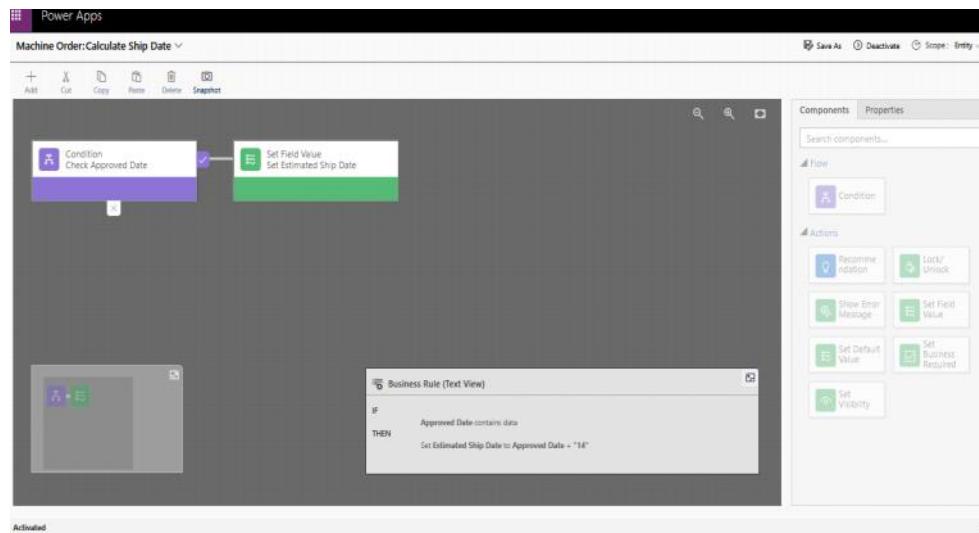
- Set the value of **Estimated Ship Date** to:  
**Formula** = Approved Date + 14 days

#### 4. Publish & Activate

- Once the rule is created, click **Publish**, then **Activate** it to make it live.

##### **Outcome:**

You've successfully created a functional "**MachineOrder**" table in Dataverse with essential columns, a calculated field for department contribution, and a business rule that dynamically sets the shipping date based on approval.



# Connecting Canvas App with Dataverse Table and adding Form in Compare Screen

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## Step 1: Add MachineOrder Table to the App

- Open your Canvas App.
- Go to **Data pane**, click + Add Data.
- Search for and connect the **MachineOrder** Dataverse table.
- **Note:** Yes, you're correct — this table is used to **store customer order data at the backend** when they submit a form for purchasing coffee machines.

## Step 2: Insert Edit Form on Second Screen

- On the **second screen (CompareScreen)**, insert an **Edit Form**.
- Connect it to the **MachineOrder** table.
- Choose only these fields for the form interface:
  - Machine Name
  - Price
  - Approver
  - Comments
  - Requested By
  - Request Date

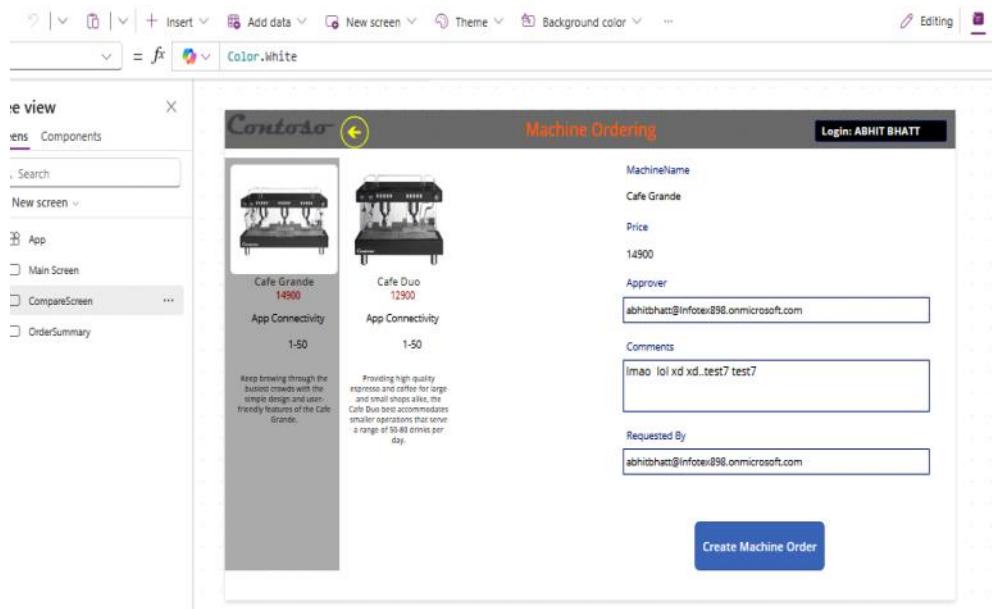
## Step 3: Configure Individual Form Fields

1. **Unlock all cards** in the form to customize them.
2. **Machine Name & Price**
  - Set their **Default** to the selected item's values from the horizontal gallery:  
**Formula** : galCompareList.Selected.'Machine Name'  
**Formula**: galCompareList.Selected.Price
    - a. Set their **DisplayMode** to **DisplayMode.View**
3. **Approver**
  - Use the **Office365Users connector**.
  - Set the **Default** to:
    - a. **Formula**: Office365Users.Manager(User().Email).Mail
  - **Explanation**: This formula fetches the **email of the logged-in user's manager**, assuming the user has a manager set up in Azure AD.
  - **Note**: Since you're working in a personal/dev environment without a tenant, this might not work. You can temporarily use:
    - **Formula**: User.Email()
4. **Requested By**
  - Default value:
  - **Formula**: User.Email()
5. **Request Date**
  - Default value:
  - **Formula**: Today()
  - **Hide this field** from the form UI (in Properties → Visible = false), so the user can't edit it.

## Step 4: Add "Create Machine Order" Button

- Add a button below the form.
- Rename it to: "**Create Machine Order**"
- **DisplayMode** property:

- **Formula:** If(IsBlank(galCompareList.Selected), DisplayMode.Disabled, DisplayMode.Edit)
- **OnSelect** property:
- **Formula:** SubmitForm(FrmMachineOrder)



# Success Screen After Order

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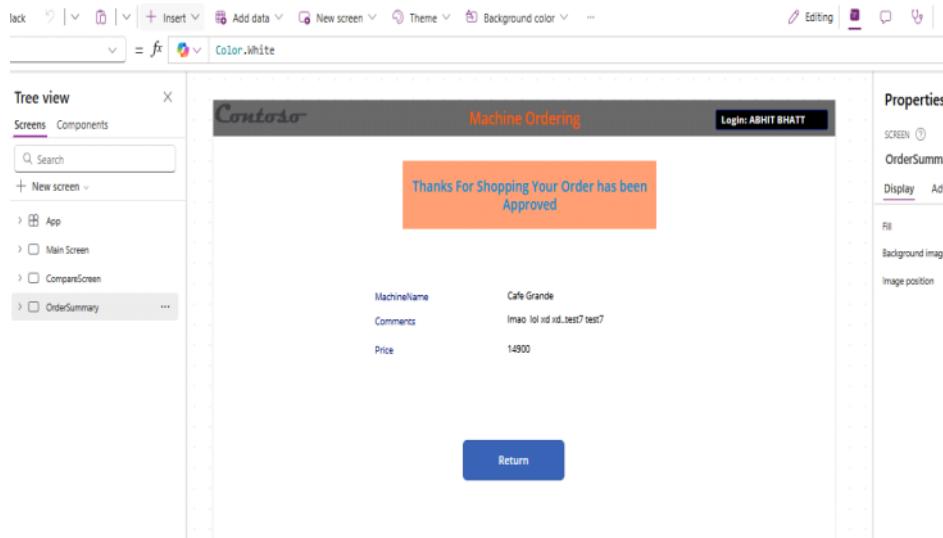
- **Create a New Screen**
  - Name it: OrderSummary
- **Add Confirmation Message**
  - Insert a **Label** with this text
  - "Thanks For Shopping Your Order has been Approved."

## Add Display Form

- Connect it to the **MachineOrder** table.
- Include fields like:
  - Price
  - Comments
  - MachineName
- Set **Item property** of the form to:
- **Formula:** frmMachineOrder.LastSubmit

## Add Navigation Button

- Add a button (Return).
- Set its **OnSelect** property to:
- **Formula:** Navigate(Main Screen);Clear(CompareList)



# Creating a Business Process Flow

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## 1. Step 1:

2. Before creating flow go back to the **MachineOrder table** inside the same solution.
3. Add the following new columns:
  - **Capital Approved**
    - Data Type: Choice (Yes/No)
  - **Machine Received**
    - Data Type: Choice (Yes/No)
  - **Machine Configured**
    - Data Type: Choice (Yes/No)
  - **Send Survey**
    - Data Type: Choice (Yes/No)
  - **Machine Delivered**
    - Data Type: Choice (Yes/No)
  - **Supplier Order ID**
    - Data Type: Text (Single line)

## Step 2: Create a Business Process Flow

### Navigate to:

Solution → New → Automation → Process → Business Process Flow

1. **Display Name:** Machine Procurement Process
2. **Table:** MachineOrder
3. Click **Create** – this will open the **BPF Designer** in a new window.

## Configure Business Process Stages

### Stage 1: Machine Requested

- **Data Step 1:** Request Date
- **Data Step 2:** Approval Status
- **Data Step 3:** Price

### Stage 2: Place Order

- **Data Step 1:** Estimated ShipDate
- **Data Step 2:** Supplier Order ID
  - **Mark this field as Required**

### Stage 3: Receive Machine

- **Data Step 1:** Machine Received

### Stage 4: Configure Machine

- **Data Step 1:** Machine Configured
- **Data Step 2:** Send Survey

### Stage 5: Conditional Branch – Check Price

- Add a **Condition** after Stage 1 (Machine Requested)
- **Field:** Price

- **Operator:** is greater than
- **Type:** Value
- **Value:** 10000

## Stage 6 (Follows Condition): Capital Approved

- **Data Step 1:** Capital Approved

## Final Step:

- Click **Save**, then **Activate** the Business Process Flow.

