

# 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 Type	Machine Type
Barista Lite	1-50	1-100	Black	The Barista Lite App Connectivi	1 https://github.c	699.00	At Home Espresso	1		
Barista Lite	1-50	1-100	Red	The Barista Lite App Connectivi	2 https://github.c	699.00	At Home Espresso	1		
Barista Lite	1-50	1-100	Silver	The Barista Lite App Connectivi	3 https://github.c	699.00	At Home Espresso	1		
Crema Café	1-50	100-200	Black	Perfect for coffee App Connectivi	4 https://github.c	999.00	At Home Espresso	1		
Crema Café	1-50	100-200	Red	Perfect for coffee App Connectivi	5 https://github.c	999.00	At Home Espresso	1		
Crema Café	1-50	100-200	Silver	Perfect for coffee App Connectivi	6 https://github.c	999.00	At Home Espresso	1		
Crema Café XL	1-50	100-200	Black	The Crema Café App Connectivi	7 https://github.c	1199.00	At Home Espresso	1		
Crema Café XL	1-50	100-200	Red	The Crema Café App Connectivi	8 https://github.c	1199.00	At Home Espresso	1		
Crema Café XL	1-50	100-200	Silver	The Crema Café App Connectivi	9 https://github.c	1199.00	At Home Espresso	1		
Crema Quattro	1-50	1-100	Black	Designed to serve App Connectivi	10 https://github.c	1399.00	At Home Espresso	1		
Crema Quattro	1-50	1-100	Red	Designed to serve App Connectivi	11 https://github.c	1399.00	At Home Espresso	1		
Crema Quattro	1-50	1-100	Silver	Designed to serve App Connectivi	12 https://github.c	1399.00	At Home Espresso	1		
Cafe A-100 Automatic	1-50	100-200	Black	The Cafe A-100 App Connectivi	13 https://github.c	21900.00	Commercial Espresso	2		
Cafe A-100 Automatic	1-50	100-200	Red	The Cafe A-100 App Connectivi	14 https://github.c	21900.00	Commercial Espresso	2		
Cafe A-100 Automatic	1-50	100-200	Silver	The Cafe A-100 App Connectivi	15 https://github.c	21900.00	Commercial Espresso	2		
Cafe A-200 Automatic	1-50	100-200	Black	Modern coffee App Connectivi	16 https://github.c	23900.00	Commercial Espresso	2		
Cafe A-200 Automatic	1-50	100-200	Red	Modern coffee App Connectivi	17 https://github.c	23900.00	Commercial Espresso	2		
Cafe A-200 Automatic	1-50	100-200	Silver	Modern coffee App Connectivi	18 https://github.c	23900.00	Commercial Espresso	2		
Cafe S-100 Semi-Automatic	1-50	100-200	Black	The Cafe S-100 App Connectivi	19 https://github.c	17900.00	Commercial Espresso	2		
Cafe S-100 Semi-Automatic	1-50	100-200	Red	The Cafe S-100 App Connectivi	20 https://github.c	17900.00	Commercial Espresso	2		
Cafe S-100 Semi-Automatic	1-50	100-200	Silver	The Cafe S-100 App Connectivi	21 https://github.c	17900.00	Commercial Espresso	2		
Cafe S-200 Semi-Automatic	1-50	100-200	Black	A lower profile App Connectivi	22 https://github.c	19900.00	Commercial Espresso	2		
Cafe S-200 Semi-Automatic	1-50	100-200	Red	A lower profile App Connectivi	23 https://github.c	19900.00	Commercial Espresso	2		
Cafe S-200 Semi-Automatic	1-50	100-200	Silver	A lower profile App Connectivi	24 https://github.c	19900.00	Commercial Espresso	2		

MachineType.xlsx (Screenshot)

Name	Description	Photo	Type ID
At Home Coffee Makers	Contoso Coffee Makers are built with c https://github.com/MicrosoftDocs/mslearn3		
At Home Espresso Machines	Sleek and powerful with first-class pro https://github.com/MicrosoftDocs/mslearn1		
Commercial Coffee Makers	If you're looking for a commercial brew https://github.com/MicrosoftDocs/mslearn4		
Commercial Espresso Machines	At Contoso, we understand that an esp https://github.com/MicrosoftDocs/mslearn2		

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

25 June 2025 12:11

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:

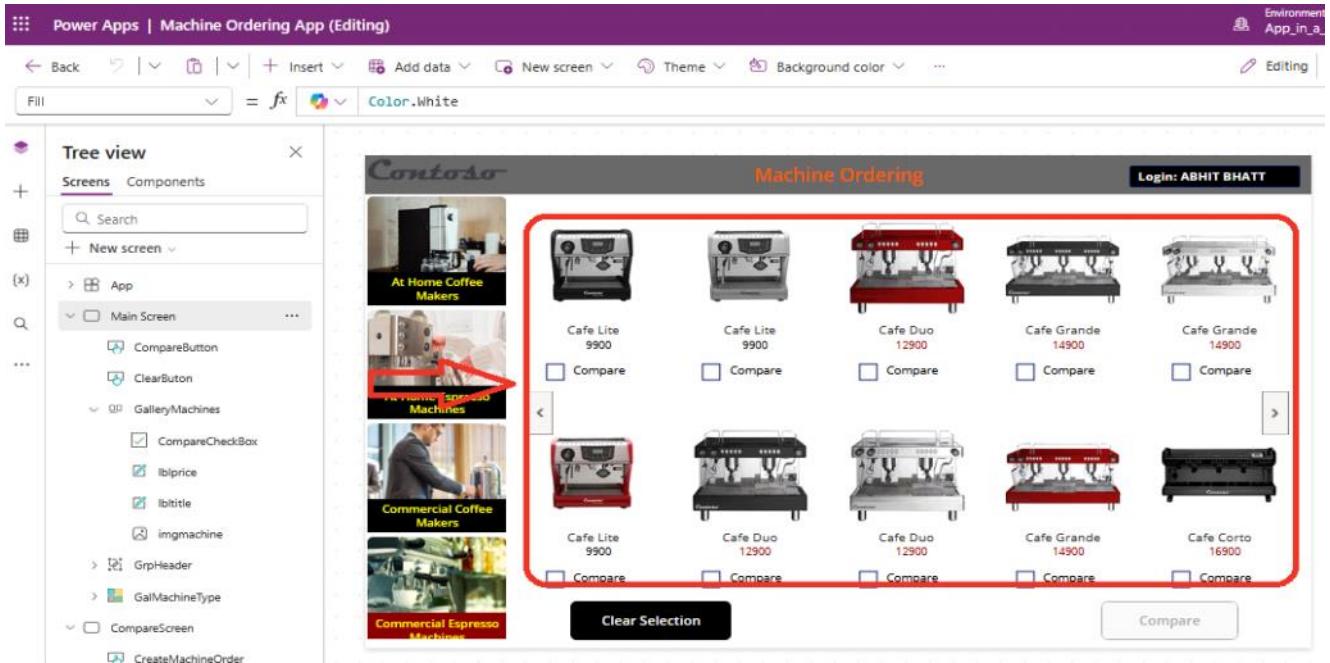
The screenshot shows the Power Apps canvas interface. On the left, the tree view pane displays the app structure with a vertical gallery component highlighted by a red box. A red arrow points to the search bar in the tree view. The main screen shows a horizontal gallery of coffee machines with compare checkboxes. The top navigation bar includes Back, Insert, New screen, Theme, Background color, and an Editing button. The status bar at the bottom shows the page number (3) and a zoom level of 70%.

## • 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)

25 June 2025 12:47

## 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

Tree view

Components

Search

New screen

App

- Main Screen
  - CompareButton
  - ClearButton
  - GalleryMachines
  - GrpHeader
  - GalMachineType
- CompareScreen
  - CreateMachineOrder
  - FormMachineOrders
    - MachineName\_DataCard1
    - Price\_DataCard1

**Contoso Machine Ordering**

Login: ABHIT BHATT

**Cafe Lite 9900**  
App Connectivity  
1-50

**Cafe S-100 Semi-17900**  
App Connectivity  
1-50

**Cafe S-100 Semi-17900**  
App Connectivity  
1-50

**Cafe A-200 Automatic 23900**  
App Connectivity  
1-50

Dead-simple programming, care and maintenance can be yours alongside a price point perfect for beginning baristas and small coffee shops alike.

The Cafe S-100 Semiautomatic is in a league of its own when it comes to the functionality, style and available customizations. This well-designed commercial espresso machine produces high quality and consistent espresso. It's the perfect size for a small to mid-sized cafe with light to moderate traffic.

The Cafe S-100 Semiautomatic is in a league of its own when it comes to the functionality, style and available customizations. This well-designed commercial espresso machine produces high quality and consistent espresso. It's the perfect size for a small to mid-sized cafe with light to moderate traffic.

Modern convenience and technology in espresso culminate in the Cafe A-200 Automatic Espresso Machine. Featuring a touch-screen display and companion app that puts full control of your coffee quality into a simple operating system.

**Create Machine Order**

# 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

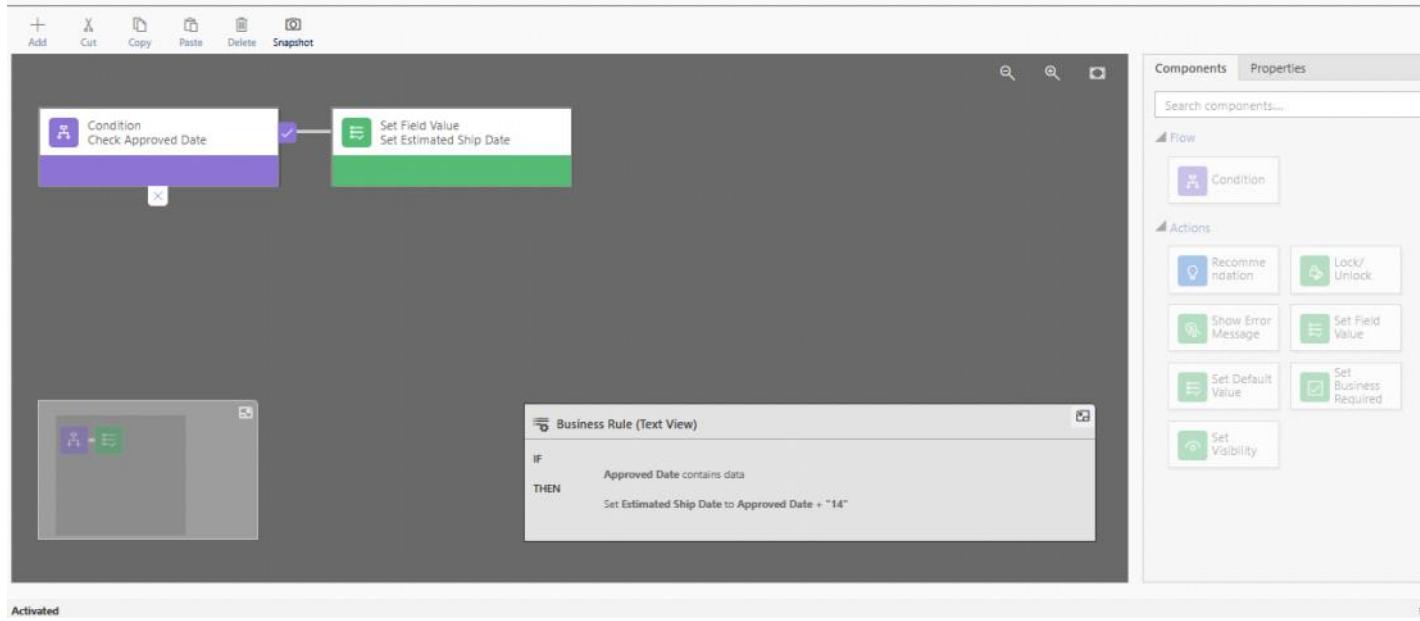
- **Condition:**
  - If **Approved Date** contains data (i.e., is not empty)
- **Action:**
  - Set the value of **Estimated Ship Date** to:  
**Formula** = Approved Date + 14 days

### 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

27 June 2025 11:38

## 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)

S | V | Insert | Add data | New screen | Theme | Background color | ...

Editing

fx Color:White

Home view

Components

Search

New screen

App

Main Screen

CompareScreen

OrderSummary

Contoso ← Machine Ordering Login: ABHIT BHATT

MachineName: Cafe Grande

Price: 14900

Approver: abhitbhatt@infotex898.onmicrosoft.com

Comments: imao lol xd xd..test7 test7

Requested By: abhitbhatt@infotex898.onmicrosoft.com

Create Machine Order

Cafe Grande  
14900  
App Connectivity  
1-50

Keep brewing through the busiest crowds with the simple design and user-friendly features of the Cafe Grande.

Providing high quality espresso and coffee for large and small shops alike, the Cafe Duo best accommodates smaller operations that serve a range of 50-80 drinks per day.

Cafe Duo  
12900  
App Connectivity  
1-50

# Success Screen After Order

27 June 2025 12:02

- **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)

The screenshot shows a mobile application interface. At the top, there is a navigation bar with icons for back, forward, and search, followed by buttons for 'Insert', 'Add data', 'New screen', 'Theme', 'Background color', and more. On the far right, there is an 'Editing' button and other UI elements. Below the navigation bar is a header with the text 'Contoso Machine Ordering' and a login status 'Login: ABHIT BHATT'. To the left is a 'Tree view' sidebar titled 'Screens' with options for 'Search', 'New screen', 'App', 'Main Screen', 'CompareScreen', and 'OrderSummary' (which is currently selected). The main content area displays a message 'Thanks For Shopping Your Order has been Approved' in an orange box. Below this, there is a table with three rows of data:

MachineName	Comments
Cafe Grande	lmao lol xd xd..test7 test7
Price	14900

At the bottom center is a blue 'Return' button. The right side of the screen features a 'Properties' panel with tabs for 'SCREEN', 'Display', and 'Ad'. Under 'Display', there are sections for 'Fill', 'Background image', and 'Image position'.

# Creating a Business Process Flow

27 June 2025 12:13

## 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.

Pages

Power Apps | Machine Procurement

Search

New

Navigation

Orders

Machine Orders view

Machine Orders form

Machine Orders

Other pages

Home

Recent

Pinned

Orders

Machine Procurement Pr... Active for 48 hours

Cafe Grande - Saved Machine Order

Machine Requested (48 Hrs)

Capital Approval

Place Order

Receive Machine

Machine Configured

Inactive

Machine Configured No

Send Survey No

General Related

MachineName \* Cafe Grande

Approver abhirbhatt@infotex898.onmicrosoft.com

Owner \* abhir bhatt

This screenshot shows the Microsoft Power Apps Machine Procurement application. The main interface displays a machine order for 'Cafe Grande'. The order status is 'Machine Requested (48 Hrs)'. The 'General' tab is selected, showing details like MachineName (Cafe Grande), Approver (abhirbhatt@infotex898.onmicrosoft.com), and Owner (abhir bhatt). A modal dialog is open on the right side, titled 'Receive Machine' and 'Machine Configured'. It contains two fields: 'Machine Configured' set to 'No' and 'Send Survey' set to 'No'. The left sidebar includes navigation links for Pages, Power Apps, Home, Recent, Pinned, Orders, Machine Orders view, and Machine Orders form.