Dynamics 365 Customer Insights

Lab 6: Extend the Solution with Power Platform

Contents

Module Introduction

Having successfully ingested Contoso Coffee’s data sources and created a Unified Customer Profile and calculated key measures, you are now able to leverage the insight you have generated to empower different personas within Contoso Cofee over different platforms.

Power BI Extensibility

The Customer Insights Power BI Connector enables you to use the unified data that you have unlocked through the data configuration process within Microsoft Power BI to further analyze and uncover insight.

From customer details such as roles and locations, to communication details such as email addresses and phone numbers, to unique key performance indicators (KPIs) you might have defined using the Measures page (such as Customer Lifetime Spend or Engagement Score), many insights can be uncovered.

Power Automate Extensibility

Contoso want to capture in-store interactions with their customers. You are charged with enabling Contoso Retail staff to capture ‘Customer Check-In’ activities and deliver personalized recommendations to customers.

In this Module you will create a custom ‘Check In’ activity within Dynamics 365 to store details of customer store visits. You will enable Contoso Retail staff to capture these check ins using a planned ‘Greeter App’ and Power Automate, including details of the subjects discussed with the customer.

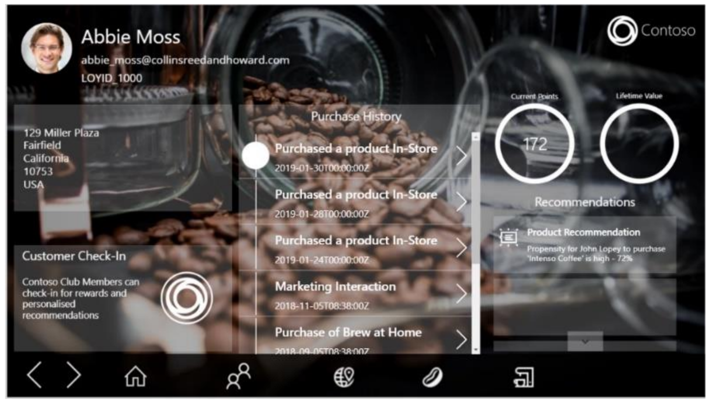
In this Module you will create the custom ‘Check In’ activity and configure a Flow to capture a customer check in, to be triggered from a planned ‘Greeter App’.

In this module you will also create a Flow to generate personalized recommendations that can be surfaced within Dynamics 365 or the Greeter App using Insight Cards.

Power App Extensibility

Contoso want to deliver personalized service and recommendations to customers who visit their retail stores and café's and capture details of customers visiting their stores. To do this, they have decided to empower their Contoso Coffee Retail staff with a greeter app, empowering staff to have a more informed conversation with customers and deliver personalized service and recommendations.

As Project Manager for Contoso Coffee, you will create a Greeter App using Power Apps for Contoso retail staff who will be able to look-up unified customer profiles, capture customer check-ins and deliver personalized recommendations to customers.



Objectives

- Connect Power BI to Customer Insights
- Visualise Customer Insights Data
- Create a Power Automate to configure 'Churn Customers Surge Alert'
- Create Contoso Coffee Greeter App using PowerApps
- Connect app with Customer Insights Unified Profile

Prerequisites

To complete this lab, you will need to have completed Lab 5

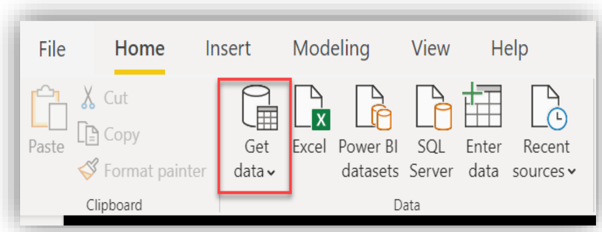
Approximate Time: 90 min

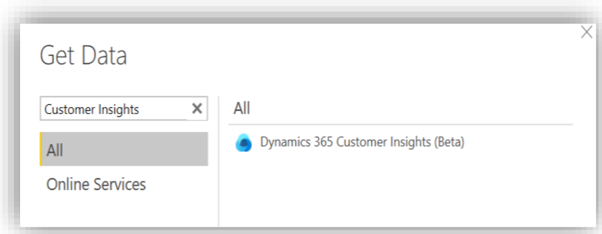
Exercise 1 – Power BI

Task 1 – Connect to Customer Insights

1. Open the **PowerBI_template.pbix** file from the lab assets in Power BI Desktop. Make sure you are logged in with the admin account for your tenant. (Top right)

2. Click **Get Data** and click more and search for the **Dynamics 365 Customer Insights (Beta)** connector.

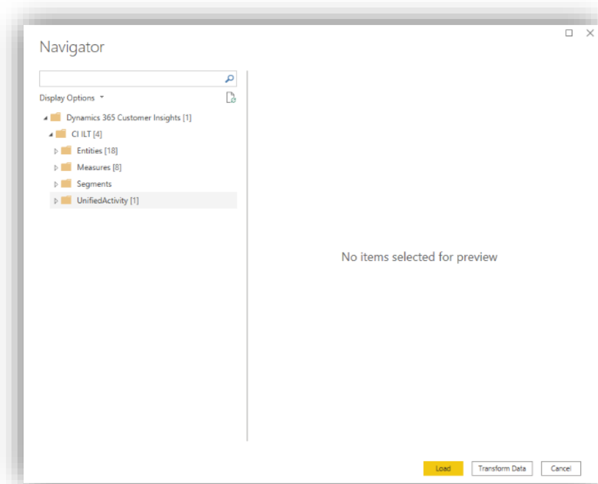




3. Select the connector and click **Connect.**

4. If presented with a notice, relating to connecting to Third Party Service, click **Continue.**

5. Connect to your Customer Insights instance using your credentials. Once connected, you will be presented with the **Navigator** page. Here you will see all the Entities, Measures and Unified Activity data objects that you are able to consume within Power BI.



6. Expand and select the following tables and then click **Load**

Measures:

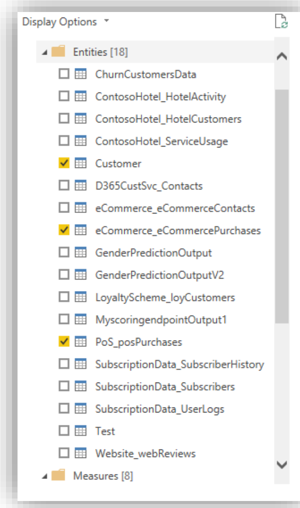
- AverageStorePurchaseAllCustomers
- AverageWebPurchaseAllCustomers
- Customer_Measure

Entities:

- Customer
- eCommerce_Purchases
- PoS_Purchases

UnifiedActivity:

- UnifiedActivity

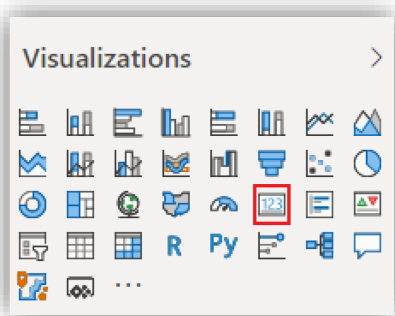


Task 2 – Add Visualizations

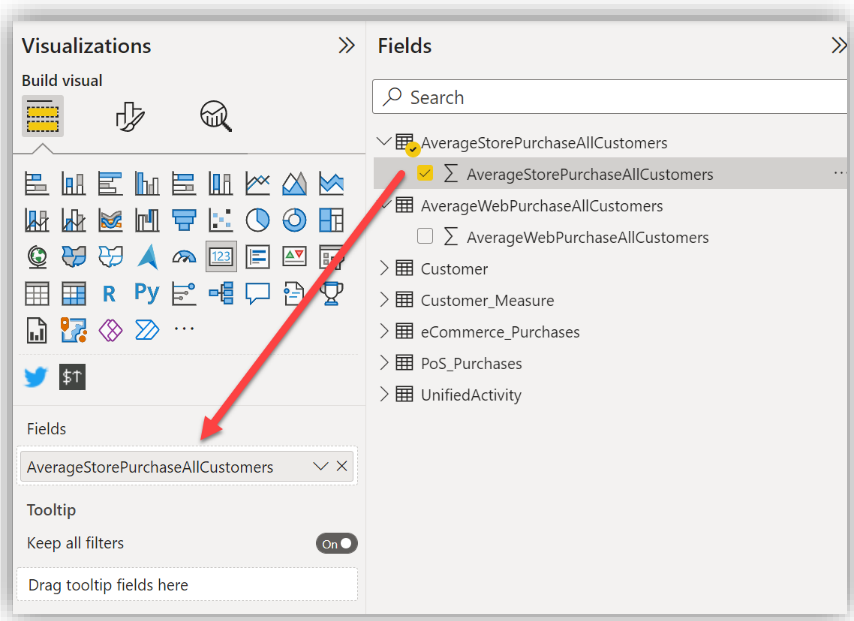
In this task, you'll add some simple visualizations to the report.

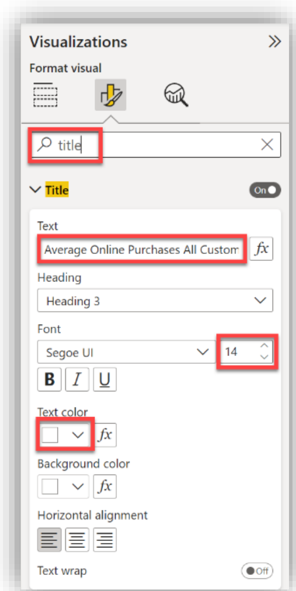
Average Store and Web Purchase Values

1. Go to the **Purchase** report page (bottom left). Then Add a **Card Control** from the **Visualizations** panel to the left side of the report.



2. With the card control selected, drag the **AverageWebPurchaseAllCustomers** sum from **AverageWebPurchaseAllCustomers** to the **Fields** list.

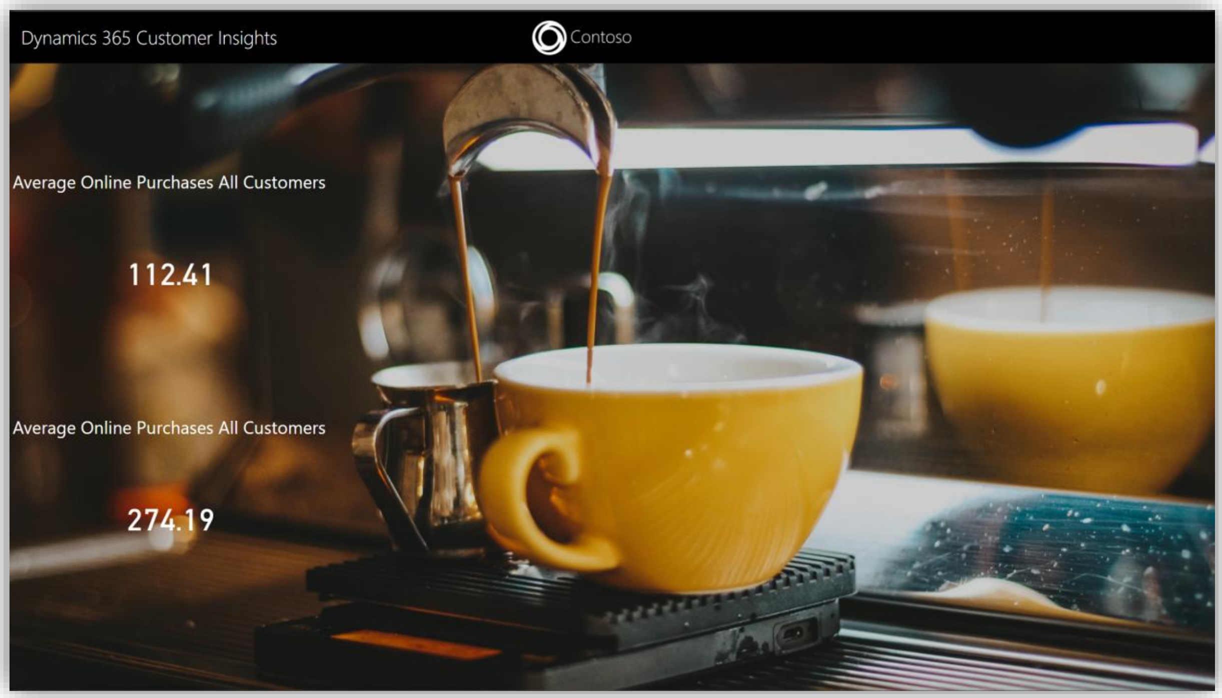




3. With the card control selected, click the **Format visual** button  and set the following properties. Use search to find each section:
   - Category label: **Off**
   - Title: **On**
   - Title: **Title Text = "Average Online Purchases All Customers"**
   - Title: **Text Color = White**
   - Title: **Font Size = 14 pt**
   - Callout value: **Color = White**

4. Select the Data Card, displaying **Average Web Purchase All Customers** that you just created and copy and paste it to add another data card onto the Canvas. Move it below the first card
   - Update the title to **Average Store Purchases All Customers**
   - Change the fields to **AverageStorePurchaseAllCustomers**

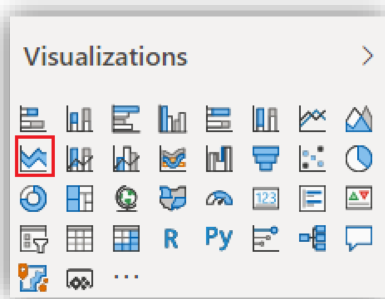
You should now have a screen that looks like this.



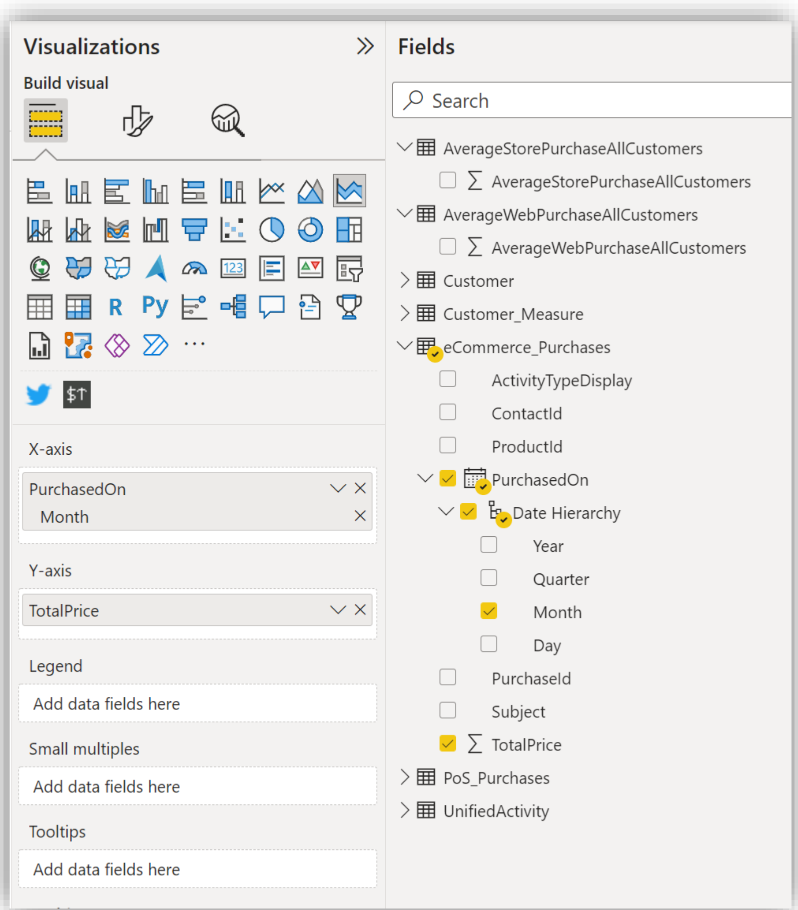
Store + Web Purchases by Month

Contoso Coffee wants to look for seasonality within their sales figures for both online and in-store sales.

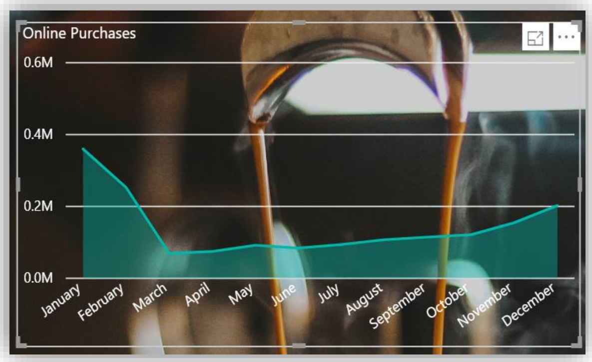
1. Make sure you don't have either of the Cards you've added selected, then add a **Stacked Area Chart** from the **Visualizations** panel next to the 'Average Online Purchases All Customers' card.



2. With the new chart selected, add the following under Fields:
   - **X-axis: eCommerce_Purchases -> PurchsedOn -> Date Hierarchy -> Month**
   - **Y-axis: eCommerce_Purchases -> TotalPrice**



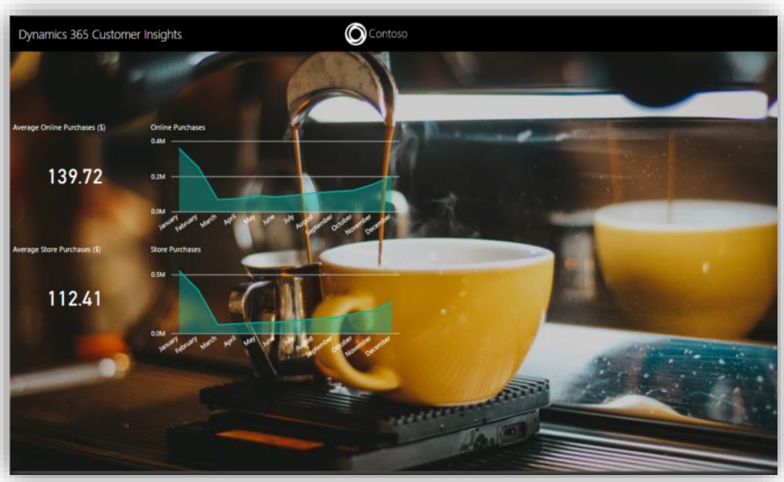
5. With the graph selected, click the **Format** button  and set the following properties:
   - X axis -> Values: **Color = White**
   - Y axis -> Values: **Color = White**
   - Title: **Title Text = Online Purchases**
   - Title: **Text Color = White**
   - Title: **Font Size = 14 pt**



6. Select the Stacked Area Chart visualization, copy & paste another copy.
   Edit the Data and formatting as follows (remove the current fields by selecting the X to the right of them):
   - **X-axis: PoS_posPurchases -> PurchsedOn -> Date Hierarchy -> Month**
   - **Y-axis: PoS_posPurchases -> TotalPrice**

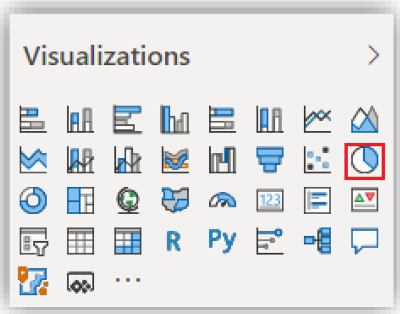
7. Update the title of your new chart to **Store Purchases**

Your dashboard will now look like this:

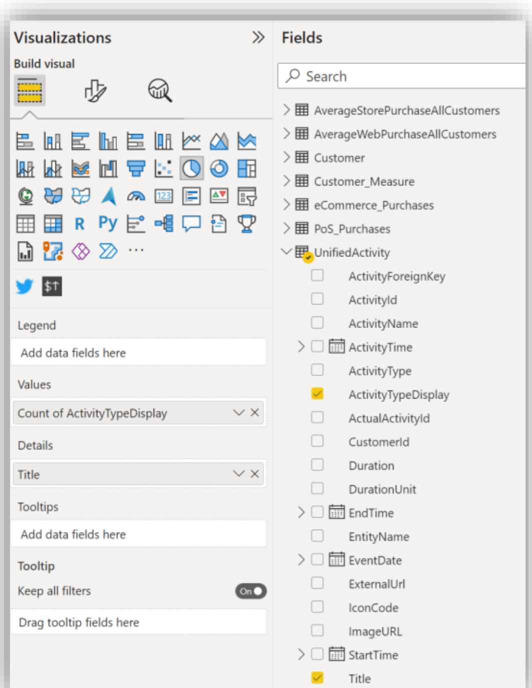


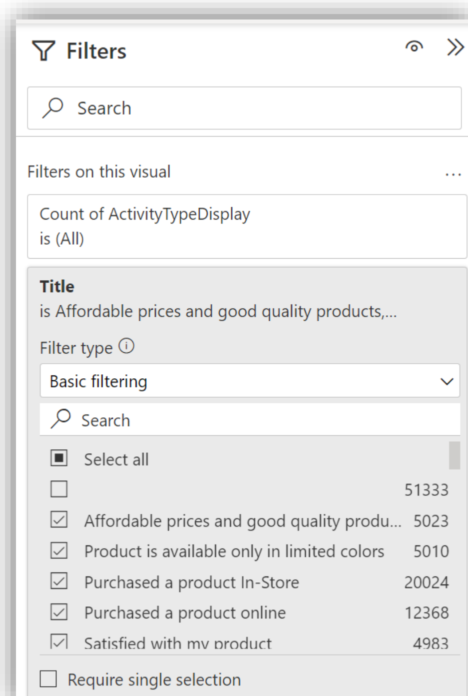
Activity Types by Volume

1. Make sure you don't have either of the Cards or charts you've added selected and add a Pie Chart **from** the **Visualizations** panel to the left side of the report.

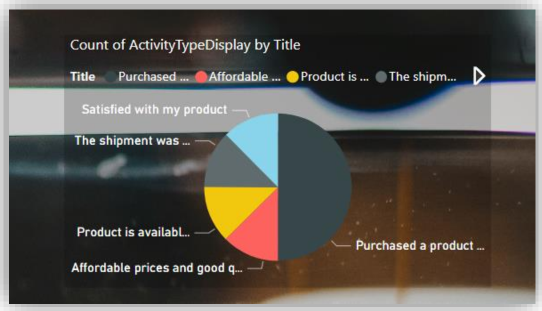


2. With the Pie Chart selected, drag the following values from the **UnifiedActivity** object.
   - Details: **Title**
     - Values: **ActivityTypeDisplay** (this will turn into **Count of ActivityTypeDisplay** when added)
   - In the **Filters** pane, under **Title** check the following:
     - **Affordable Prices and good quality products**
     - **Product is available only in limited colors**
     - **Purchased a product In-Store**
     - **Purchased a product online**
     - **Satisfied with my product**
     - **The shipment was delayed**



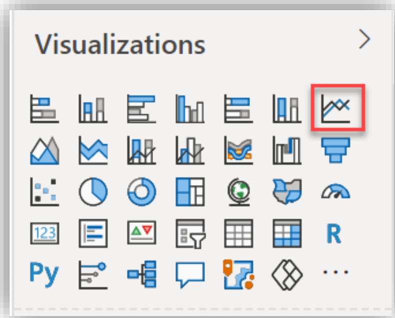


3. With the pie chart selected, click the **Format visual** button and set the following properties:
   - Legend: **On**
   - Legend -> Text: **Color = White**
   - Title -> Text: **Text Color = White**
   - Title -> Text: **Font = 14 pt**
   - Detail Labels -> Values: **Color = White**
   - Effects -> Background: **On**
   - Effects ->Background: **Black**
   - Effects -> Background: **Transparency: 80%**



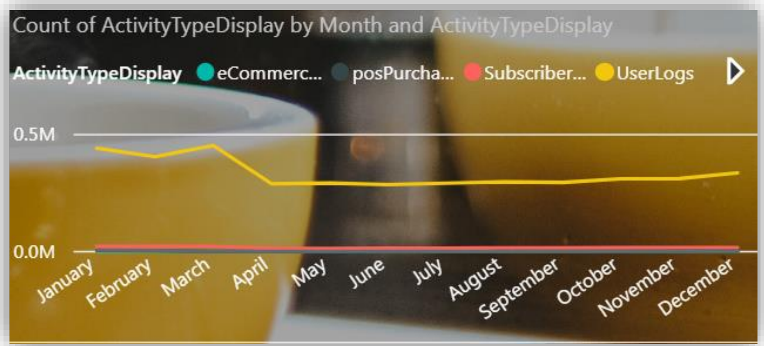
Activity Types by Month

1. Add a Line Chart **from** the **Visualizations** panel on to the report.



2. With the Line Chart selected, drag the following values to the **Fields** bellow
   - X-axis: **UnifiedActivity -> StartTime -> Date Hierarchy -> Month**
   - Legend: **UnifiedActivity -> ActivityTypeDisplay**
   - Y-axis: **UnifiedActivity -> ActivityTypeDisplay (**will turn into **Count of ActivityTypeDisplay** when added)

3. With the Line Chart selected, click the **Format visual** button and set the following properties:
   - Legend -> Text: **Color = White**
   - X-axis -> Values: **Color = White**
   - Y-axis -> Values: **Color = White**
   - Title: **Text Color = White**
   - Effects -> Background: **On**
   - Effects -> Background: **Black**
   - Effects -> Background: **Transparency: 80%**



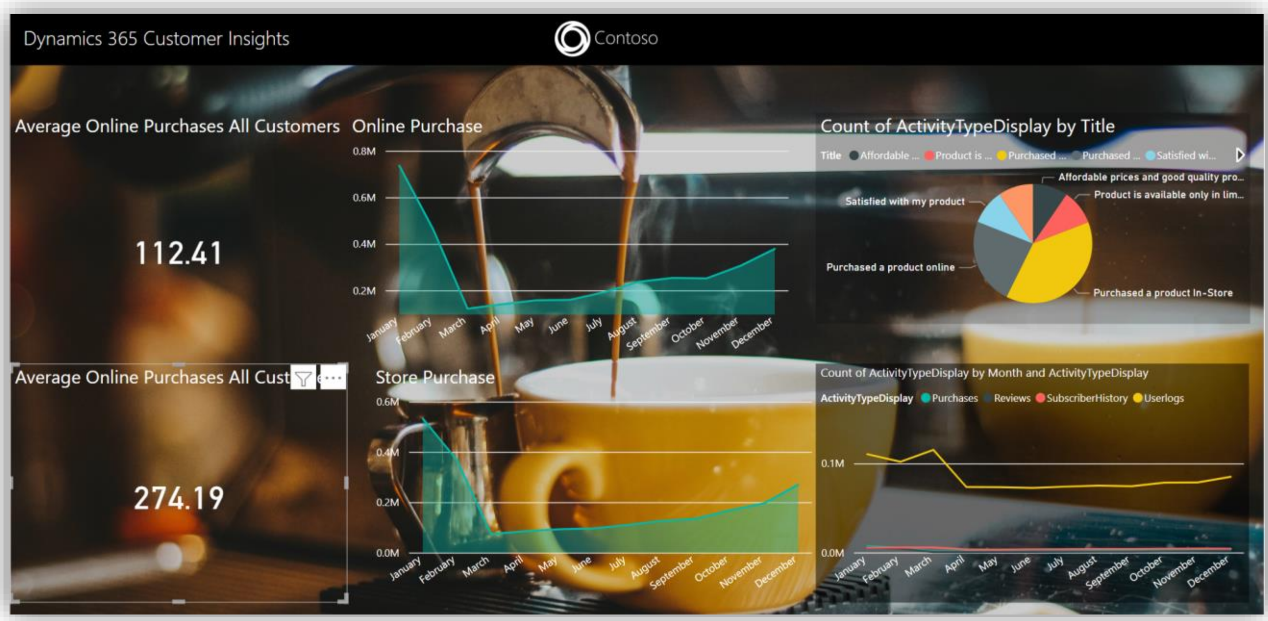
4. **Save** your report

Task 3 – Review Dashboard

Review your Power BI dashboard. This is simple example, pulling data from Customer Insights, further insight could be uncovered with more complex example.

This simple report highlights:

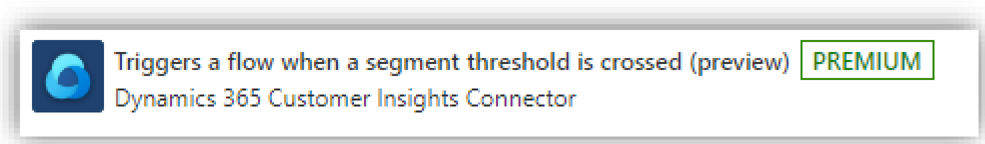
- Average Online Purchase value is higher than In Store
- There is a higher volume of In Store Purchases vs Online
- There may be some seasonal trends as sales drop around March and increase again from September.



Exercise 2 – Power Automate

In this task you will create a Flow, which will be triggered in a later Module from a PowerApp by Contoso Retail staff who interact with Contoso Coffee Customers, in order to capture a record of that customer having visited.

1. In a new Browser tab, navigate to https://flow.microsoft.com
2. Select the right environment on top right from the drop down. (sign in first and select your country region if prompted)
3. From the left hand menu, click **Create.**
4. Click **Instant cloud flow**
5. Click **Skip.**
6. Name your flow on the top by double clicking on **Untitled** as **ChurnCustomersSurgeAlert**
7. Within the Search connectors and triggers bar, search for Dynamics 365 Customer Insights and select it. Within triggers, select **Triggers a flow when segment threshold is crossed**.



8. If prompted start trial for Power Automate.
9. Sign in if prompted then select the following:

   - Instance Name: **Select your environment/instance from the drop down**
   - Segment : **HighRiskTransactionChurn**
   - Threshold: **1200**

   Note: Be sure to set the threshold to a number slightly larger than the current number of members in your segment so the trigger is hit later when we change the segment setting.
10. Click **New step.** Select the **Office 365 Outlook**, then in the *Choose an action step*, search for and select **Send an email (V2)**

11. Enter the following:

    To: Email address (admin email address)

    Subject: Churn Customers Surge Alert !!!

    Body: Customers in segment HighRiskForChurn has crossed the threshold. Review the customer list.

12. Click **Save**

13. To test your PowerAutomate, go back to your Customer Insights environment and edit your **High Risk For Churn** segment condition as ChurnScore greater than 0.5 instead of 0.6 which adds some more customers to your segment and triggers this Power Automate.

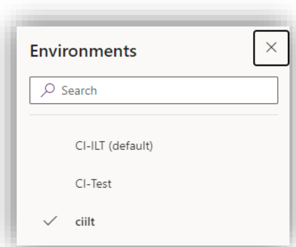
You should receive an email once the segment is refreshed.

Exercise 3 – Power App

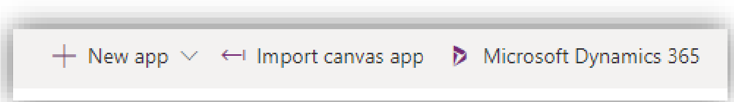
To create the Contoso Coffee Greeter App from this lab, you will import a templated app and connect the App to Customer Insights and Flow.

Task 1 – Import the Greeter App Template

1. Sign-In to https://make.powerapps.com and select the environment in which you are working (This should be the same environment that you used to create your Flows in the previous Lab).

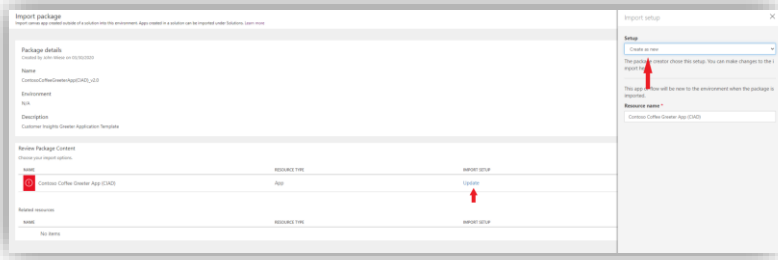


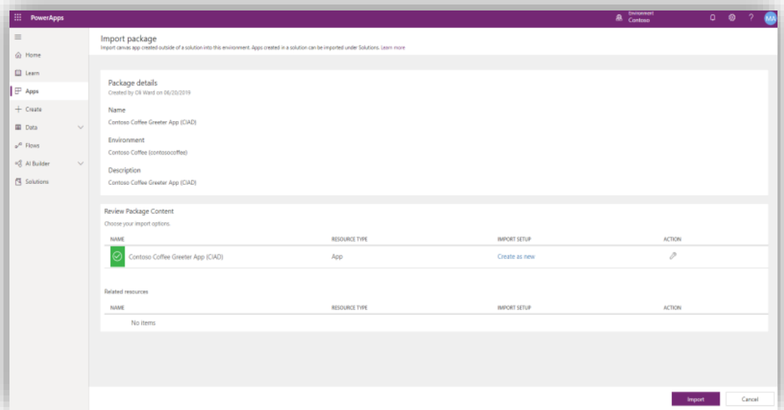
2. Click **Apps** in the left-hand menu, and then click **Import Canvas App** from the top menu bar.



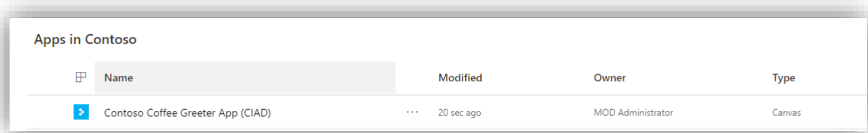
3. Click the **Upload** button and select the **CustomerInsightsGreeterApp.zip** included with the module content, then **Upload.**

4. On the next page, select **Import.** If **Import** is grayed out and **Import Setup** says **Update**, then click **Update** under **Import Setup** and change to **Create as new.**





5. Once the package has completed its import, click **Apps** in the left menu, you should see your imported app listed.

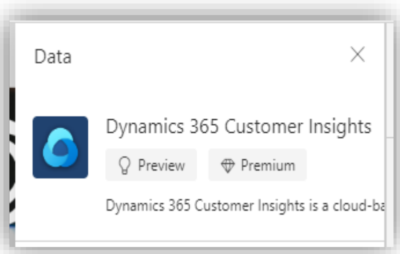


6. Click the '**…**' icon next to its Name and select **Edit** to load the app in Edit Mode.

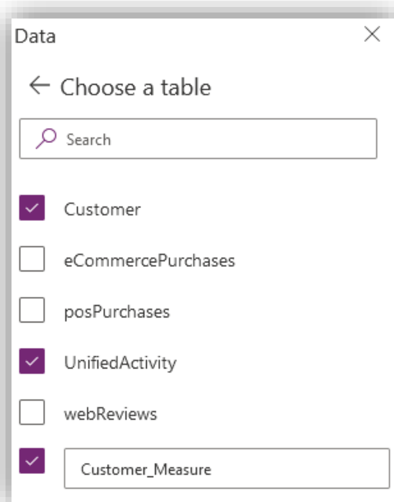
Task 2 – Connect to Data Source(s)

In this task, we will use the Customer Insights Connector, to connect the Greeter Power App to your Customer Insights Instance.

1. In the top menu bar, click **View** then select **Data Sources**
2. In the **Data** menu that opens on the right, click **Add data source**
3. Click **New Connection** and search for the **Dynamics 365 Customer Insights** connector
4. Select the connector and then click **Connect.** If prompted, sign-in with your credentials for your Customer Insights

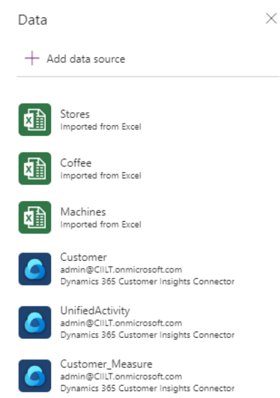


5. Select **Customer, UnifiedActivity** and type **Customer_Measure** into the *Enter custom table name* box. Then click **Connect**



6. You should see these three tables listed as data connections within your Greeter App.

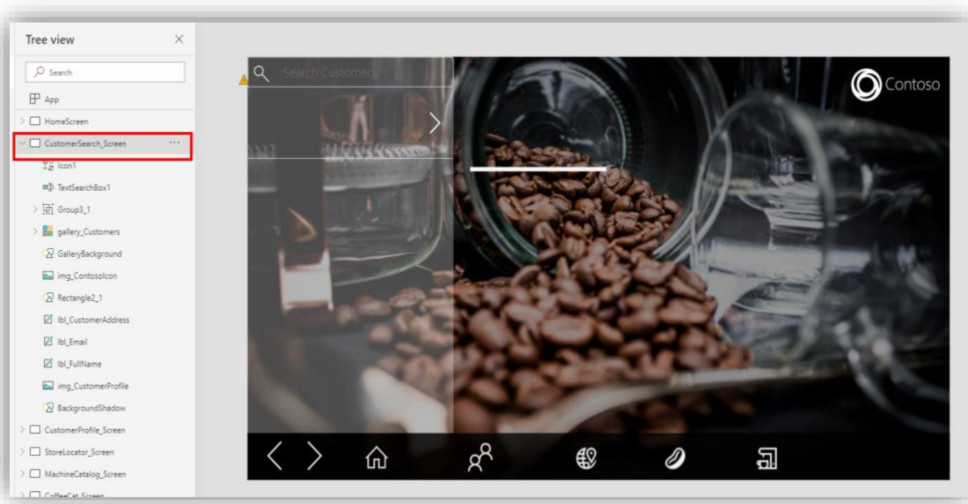
Congratulations! You have established a connection to Customer Insights within your Power App.



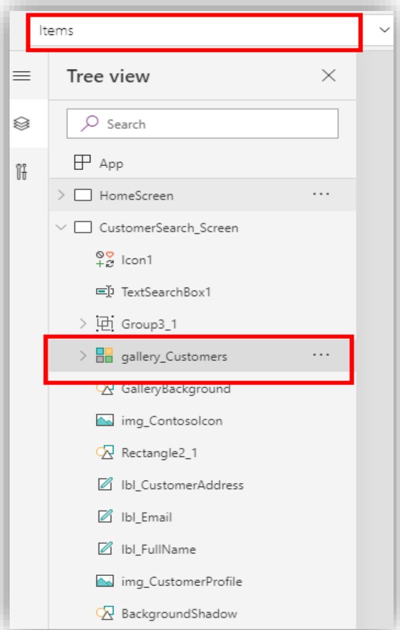
Task 3 – Configure the Customer Search Screen

In this task you are going to connect Customer Insights data to the Customer Search and Customer Profile screens within the greeter app. This will enable Contoso Coffee Retail staff to find and view customer information when they greet them in store.

1. Within the Greeter Power App in Edit mode, open the **CustomerSearch_Screen** screen via the Tree View



2. From within the Tree View, select **gallery_Customers**.



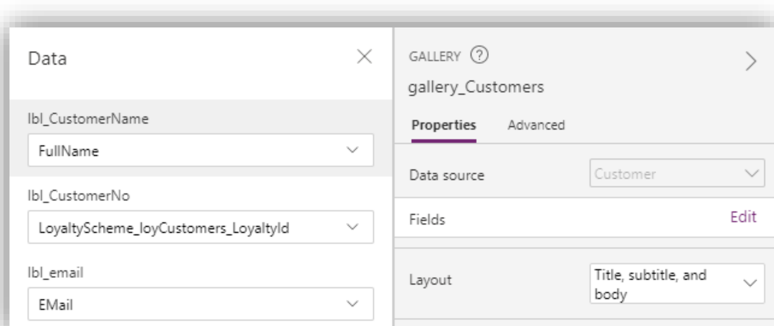
3. Select **Items** from within the *Property* drop down and set the value to:

   SortByColumns(Search(Customer, TextSearchBox1.Text, "FullName"), "Loyalty_Customers_LoyaltyId")

   This is connecting to the **Customer** data entity we created the previous Task. The data for this gallery is being pulled from the Unified Customer Profile. There is a formula attached to Items property to filter using the search bar text.

4. You are going to update the Customer gallery to show customers Full Name, email address and Contoso Club ID.

   With the *gallery_Customers* gallery selected, set the properties shown by clicking **Fields->Edit** under **Properties** as shown below…

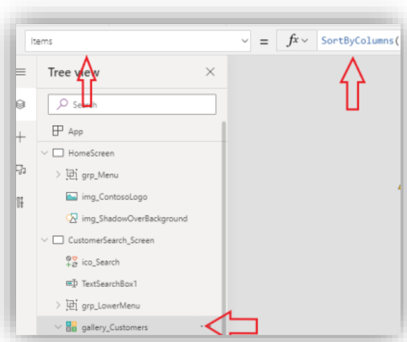


Property	Value
Layout	**Title, Subtitle and body**
Field(click Edit)	lbl_CustomerName - **FullName**
Field(click Edit)	lbl_CustomerNo - **Loyalty_Customers_LoyaltyId**
Field(click Edit)	lbl_email - **EMail**

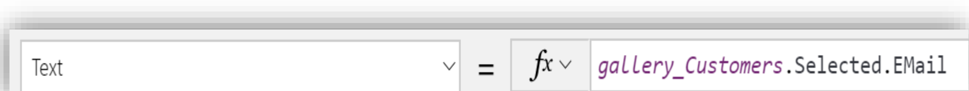
You should now see that the Customer Gallery is populated with the names, email and loyalty scheme IDs of Contoso Coffee customers, using our Unified Profiles from Customer Insights.

5. Next, we will setup the Customer Search screen to show some key info from the customers profile when the greeter selects them in the gallery.

   Note: The **Text** property of any control can be selected by first selecting the respective control and picking the **Text** property from the drop down on the top. We will do these changes throughout the lab.



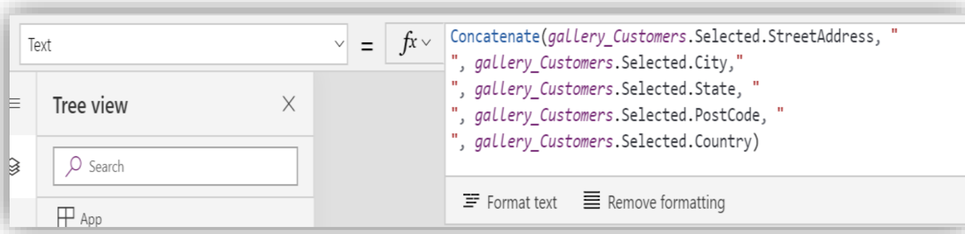
   Within the *Tree View* select **lbl_Email** (outside of the gallery) and set the **Text** Property of the label to **gallery_Customers.Selected.EMail**



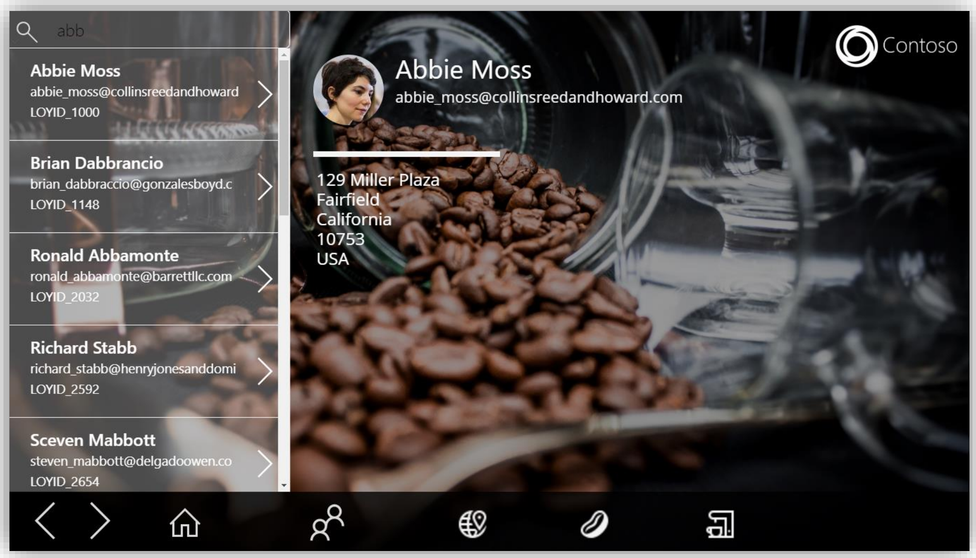
6. Within the *Tree View* select **lbl_FullName** and set the **Text** Property of the label to **gallery_Customers.Selected.FullName**

7. Within the *Tree View* select **lbl_CustomerAddress** and set the **Text** property of the label to
   **Concatenate(gallery_Customers.Selected.StreetAddress, "
   ", gallery_Customers.Selected.City,"**

", gallery_Customers.Selected.State, "
", gallery_Customers.Selected.PostCode, "
", gallery_Customers.Selected.Country)



8. Finally, within the *Tree View* select the **img_CustomerProfile** image and set the **Image** property to **gallery_Customers.Selected.Headshot**

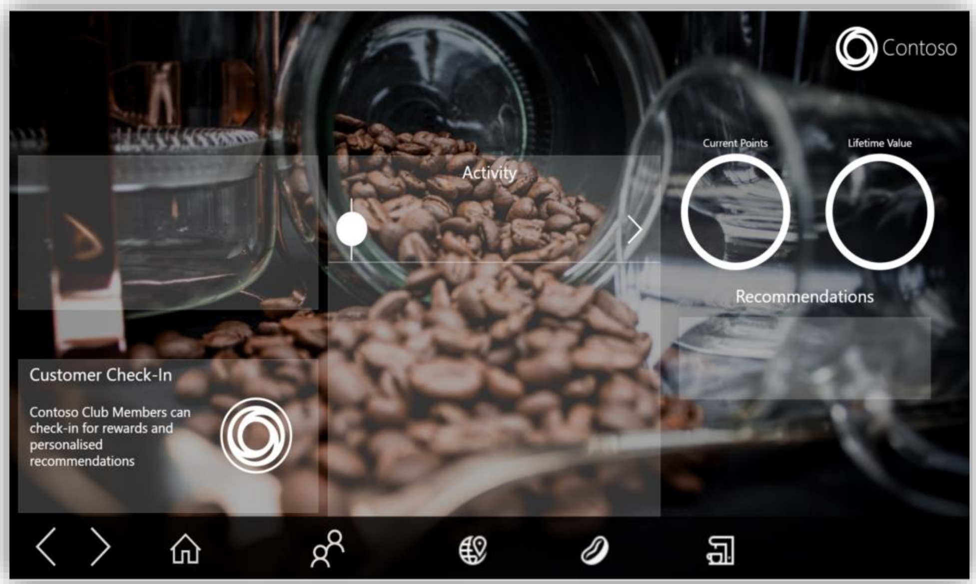


Congratulations, you have now configured the Customer Search screen within the Greeter App. In the next Task, we will configure different aspects of the Customer Profile Screen.

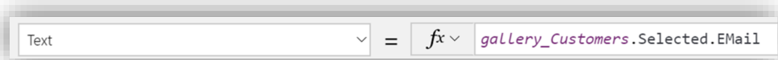
Task 4 – Configure the Customer Profile Screen

Here we will embed the same Customer Profile data as we did in the Customer Search screen, before moving on to embed a unified view of interactions as well as KPIs and recommendations.

1. With the Power App in Edit mode, select the **CustomerProfile_Screen** from the Tree View on the left menu.



2. First, you'll add customer information from the Unified Profile as per the Customer Search Screen.
    a. Within the *Tree View* select **lbl_emailAddress** and set the **Text** Property of the label to **gallery_Customers.Selected.EMail**



    b. Within the *Tree View* select **lbl_CustomerFullname** and set the **Text** Property of the label to **gallery_Customers.Selected.FullName**

    c. Within the *Tree View* select **lbl_LoyaltyID** and set the **Text** property of the label to **gallery_Customers.Selected. Loyalty_Customers_LoyaltyId**

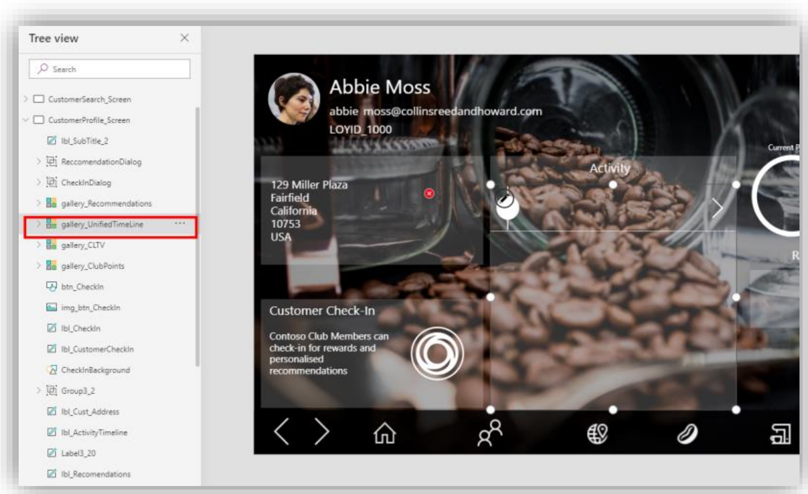
    d. Within the *Tree View* select **lbl_Cust_Address** and set the **Text** property of the label to
    Concatenate(gallery_Customers.Selected.StreetAddress, "
    ", gallery_Customers.Selected.City,"
    ", gallery_Customers.Selected.State, "
    ", gallery_Customers.Selected.PostCode, "
    ", gallery_Customers.Selected.Country)

3. Finally, within the *Tree View* select the **img_CustomerProfileImage** image and set the **Image** property to **gallery_Customers.Selected.Headshot**

Task 5 - Embed Unified Activities

In this task we will embed a unified timeline of activities ingested into Customer Insights within the Customer Profile Screen. This will give Contoso Coffee retail staff visibility of any recent interactions.

1. Within the Greeter Power App in Edit mode, open the **CustomerProfile_Screen** screen via the Tree View and select the gallery **gallery_UnfiedTimeLine**



2. With the gallery selected, select the **Items** property from the property drop-down and enter the following within the formula bar to filter all Unified Customer Activity records to only display the top 100 for the current Customer Profile

   FirstN(Filter(UnifiedActivity, CustomerId = gallery_Customers.Selected.CustomerId),100)

3. Set the properties shown by selecting them within the tree under the *gallery_UnifiedTimeLine* and setting the **Text** property using the Property dropdown

Title2	**ThisItem.Title**
Title2	**ThisItem.Title**
Subtitle2	**Text(DateTimeValue(ThisItem.ActivityTime, "en-US"), DateTimeFormat.ShortDate)** Use your own locale.

Task 6 – Embed KPIs to Profile Page

In this task you will embed key customer KPIs that we calculated as 'Customer Measures' in Lab 4A. Namely, **Total Club Points** (Loyalty Scheme Points) and **Customer Lifetime Spend.**

Contoso Club Loyalty Points

1. Within the Greeter Power App in Edit mode, open the **CustomerProfile_Screen** screen via the Tree View and select the gallery **gallery_ClubPoints**

2. Set the **Items** value using the property selector to the below value:

   Filter(Customer_Measure, CustomerId = gallery_Customers.Selected.CustomerId)

3. Expand the **gallery_ClubPoints** and select **lbl_Points** inside the gallery. Select the **Text** property from the drop down. Set the formula as follows to display the contacts corresponding TotalClubPoints:

   ThisItem.TotalClubPoints

Contoso Lifetime Value / Spend

1. Within the Greeter Power App in Edit mode, open the **CustomerProfile_Screen** screen via the Tree View and select the gallery **gallery_CLTV**

2. Set the **Items** value using the property selector to:

   Filter(Customer_Measure, CustomerId = gallery_Customers.Selected.CustomerId)

3. Expand the **gallery_CLTV gallery** and select **lbl_CLTV** inside the gallery. Select the **Text** property from the drop down and set the formula as follows to display the contacts corresponding LifetimeSpend:

   ThisItem.LifetimeSpend

From the **File** menu, click **Save** and **Publish**.

Task 7 – Test & Explore the Greeter App Experience

Congratulations! You have now configured a simple greeter app for Contoso Coffee Retail staff. In this task, you will explore the Greeter App experience

1. In a browser tab, navigate to **https://make.powerapps.com**. If required sign-in.

2. Click **Apps** in the left-hand menu, and then run your **Contoso Coffee Greeter App** by selecting it and clicking **Play** on the top.

3. Imagine you are a member of Contoso Coffee Retail staff and you greet them within the store...
   a. Look up Abbie Moss' record (LOYID_1000)

   b. Open Abbie Moss' record:
      - **Review Activity History**
        Note that you can identify Abbie's recent purchase history, and that she has made several in-store purchases of brew-at-home coffee.

        Review Abbie's Club Balance and Lifetime Value
      - Combining her purchase history with insight on her 'Current Points' and 'Lifetime Value', you are able to ascertain that Abbie is both a frequent and high-value customer.

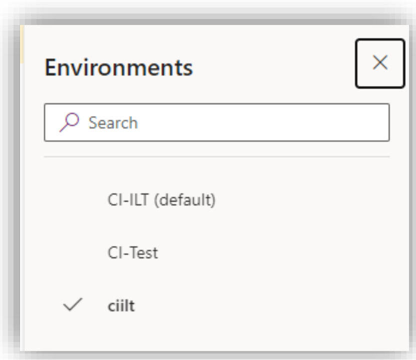
Optional – Connect PowerAutomate, PowerApps and CI

Task 1 – Import the 'Customer Check-In' Activity Solution

The first task is to create a Custom Activity Type within Dynamics 365 that can be used to store details of 'Customer Check Ins' when customers visit Contoso Coffee stores and cafes.

We will use a pre-created activity solution.

1. In a browser window, browser to https://make.powerapps.com
2. In the top right-hand corner, select the Environment in which you have been working.



Note: This will be the environment containing your Dynamics 365 Instance where you previously deployed the Dynamics 365 Customer Insights Card Add-In

3. Select **Solutions** from the left-hand menu
4. On the Solutions page, choose **Import** at the top of the page
5. Click **Choose File** and select the **CheckIn Activity Solution**., which can be found with your CI ILT course Materials.

   CheckInActivity_<versionnumber>_managed.zip

6. Click **Next,** then **Import**

   Once published, you will have a solution named **CheckIn Activity**.

Task 2 – Create the 'Check-In' Flow

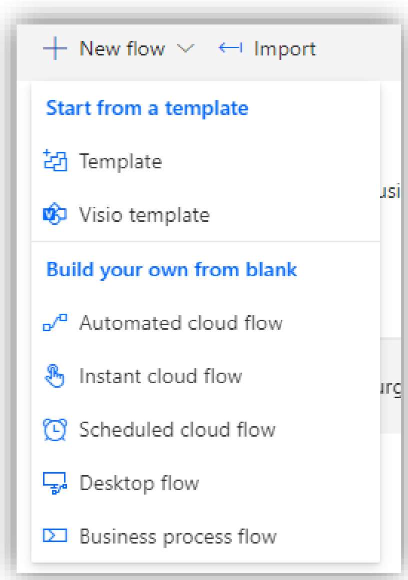
In this task you will create a Flow, which will be triggered in a later Module from a PowerApp by Contoso Retail staff who interact with Contoso Coffee Customers, in order to capture a record of that customer having visited.

1. In a new Browser tab, navigate to https://flow.microsoft.com

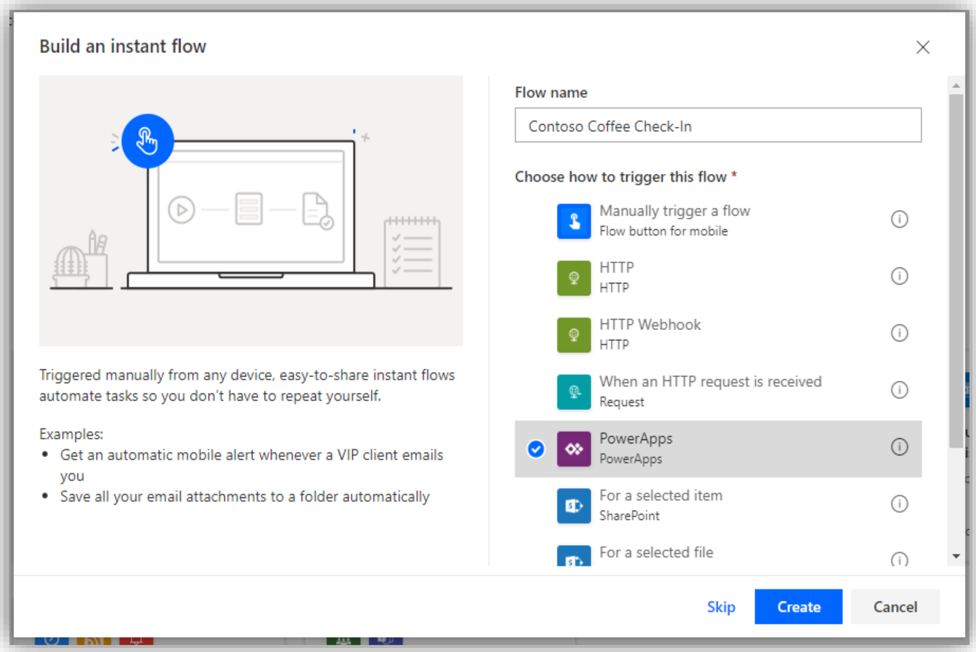
2. Select the environment you used for Task 1 (Installing the Check-In Solution).
   To do this, click your name in the top right-hand corner and select the environment from the drop down.

3. From the left hand menu, select **My Flows**

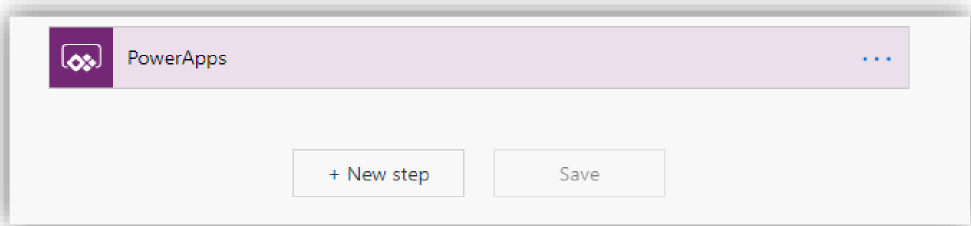
4. Click **New → Instant cloud flow**



5. On the Build an Instant Flow page, choose **PowerApps** and name your Flow **Contoso Coffee Check-In** and click **Create.**

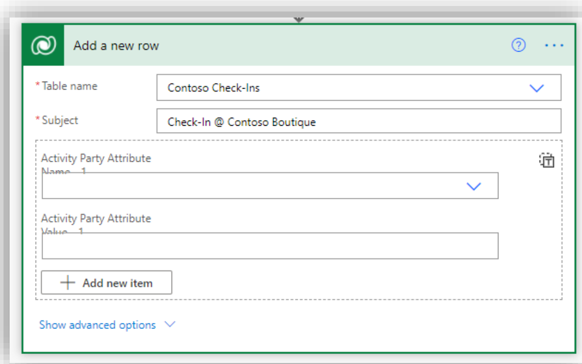


6. Click on **New Step**



7. In the *Choose an action step*, search for **Microsoft Dataverse** and choose the action **Add a new row**

8. For *Table Name* choose **Contoso Check-Ins**, and for *Subject* use **Check-In @ Contoso Boutique**

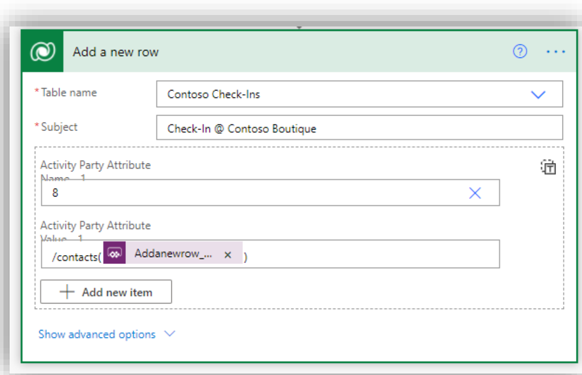


9. Set the **Activity Party Attribute Name 1** to **8** for "regarding"

   You can find the type references here: https://docs.microsoft.com/enus/dynamics365/customerengagement/on-premises/developer/activityparty-entity

10. Set the **Activity Party Attribute Value 1** to **/contacts()**

11. Place your cursor inside the parens you just typed, then in the pop-up on the Dynamic content tab select **Ask in PowerApps**



12. Click *Show advanced options* and complete the following attributes as below:

Attribute	Value
Actual Start	Click **Expression** and use the expression: **utcNow()** This will populate the 'Actual Start Date' with the current Date+Time at the point of capture.

Contoso Club	Select enter custom value, then ***Ask in PowerApps*** *within Dynamic content tab*
Contoso Subscription	***Ask in PowerApps*** (you may need to click ***See more***)
Description	***Ask in PowerApps*** (you may need to click ***See more***)
Personalised Recommendation	***Ask in PowerApps*** (you may need to click ***See more***)
Start Date	Click **Expression** and use the expression: **utcNow()** This will populate the 'Start Date' with the current Date+Time at the point of capture.

13. Click **Save**

We will connect this flow with a Greeter Power App to enable Contoso Retail staff to capture customer check-ins.

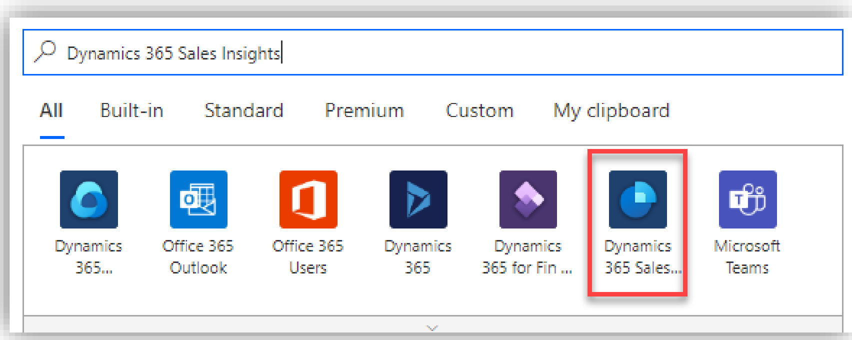
Task 3 – Creating and testing the 'Recommendations' Flow

Now we will create a simple Flow that will generate some sample Action Cards for us to consume within the Power App and Dynamics 365, which will represent intelligent insights for personalization such as a product recommendation.

Note: At the time of writing Power Apps, Power Automate and Power BI connectors for Customer Insights are in BETA and so have limited connectivity. Going forward, it will be possible to generate Action Cards using Customer Insights Measures, Segments or from an Intelligent Prediction using Machine Learning.

In this example, we will simulate the creation of these cards using a simple Flow trigger.

1. In a new Browser tab, navigate to https://flow.microsoft.com
2. Select the environment you used for Task 1 (Installing the Check-In Solution).
   To do this, click your name in the top right-hand corner and select the environment from the drop down.
3. From the left hand menu, select **My Flows**
4. Click **New → Instant cloud flow**
5. On the Build an Instant cloud flow page, choose **Manually Trigger a Flow** and name your Flow **Contoso Coffee Recommendations** then click **Create.**
6. Click **New step** and search for the **Dynamics 365 Sales Insights** connector. Then choose the **Create card for Assistant V3 (Preview)** action.



7. If prompted, sign-in using your tenants admin credentials and grant permissions to the app.

8. Populate the properties on the step as below (be sure to click *Show Advanced*)

Property	Value
Environment	*<Dynamics 365 Instance used through-out this lab>*
Card Name	Product Recommendation
Card Header	Product Recommendation: Cold Brew Coffee
Card Text	Personalised Recommendation for Contoso Coffee Cold Brew (Segmentation) for Abbie Moss. *Be careful if you copy/paste the text and remove any line breaks.*
Primary Action Type	Open Url
Display Entity	contacts
Display Record ID	The GUID for Abbie Moss *The easiest way to get the url is to open your Dynamics application and view the contact **Abbie Moss**. You can copy the Contact ID from the url*
Primary Action Text	Make Recommendation
Primary Action URL	https://ciilt.crm.dynamics.com/main.aspx?appid=f2dda973-61e5-ea11-a817-000d3a1ab14b&pagetype=entityrecord&etn=contact&id= *The easiest way to get the url is to open your Dynamics application and view the contact **Abbie Moss**. You can remove the Contact ID from the url*

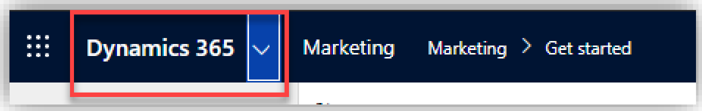
9. **Save** your Flow and then click **Test** to run your Flow.

Task 4 – Viewing the Recommendation Card Created by the Flow

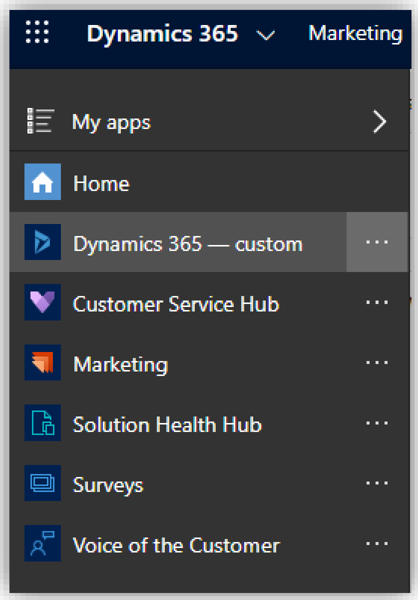
Because we are using Dynamics 365 Customer Service we can not see the results directly in the contact view within Dynamics. To do this we would need a license for Dynamics 365 Sales. What we can do is open the **Sales Activity Social Dashboard** to see the action card we just created.

1. Open you Dynamics instance by connecting to https://ciilt.crm.dynamics.com/ replacing the tenant with your tenant name, and logging in with your tenant admin account.

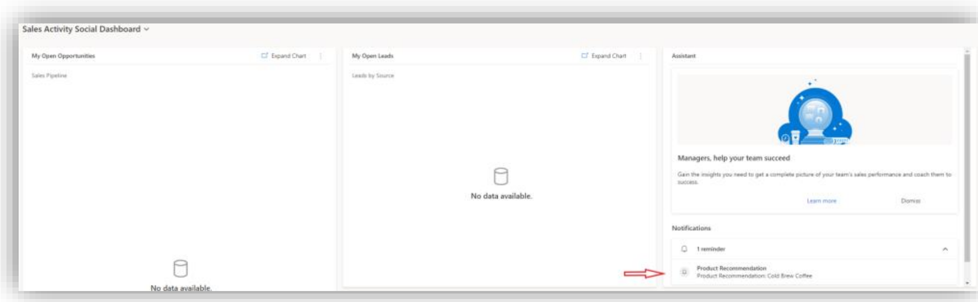
2. Click on the Dynamics application dropdown in the menu

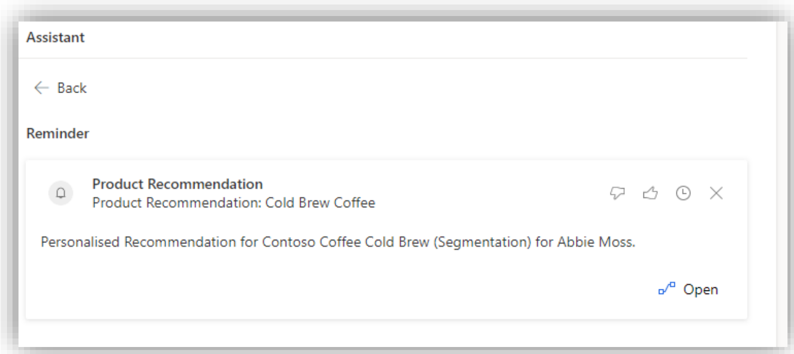


3. Select **Dynamics 365 – Custom** from the list



4. This opens the **Sales Activity Social Dashboard** view. In this view you will see the **Relationship Assistant** section, which should now contain a **Product Recommendation** card created by the Power Automate flow we created and tested in the last step. Click on it to see more details.



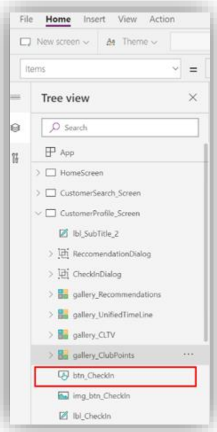


We will also see the recommendations on Power Apps where we will surface the recommendations from the underlying CDS entity where they are stored.

Task 5 – Connect Customer Check-In Flow

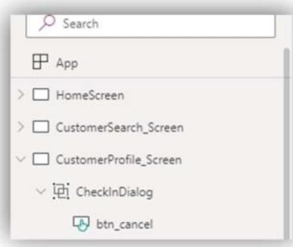
In this task, you will connect the **Customer Check-In Flow** to your greeter app so that Contoso Coffee Retail staff are able to capture the visit of a customer & details of topics/conversations they have had with customer.

1. Within the Greeter Power App in Edit mode, open the **CustomerProfile_Screen** screen via the Tree View and select the button **btn_CheckIn**

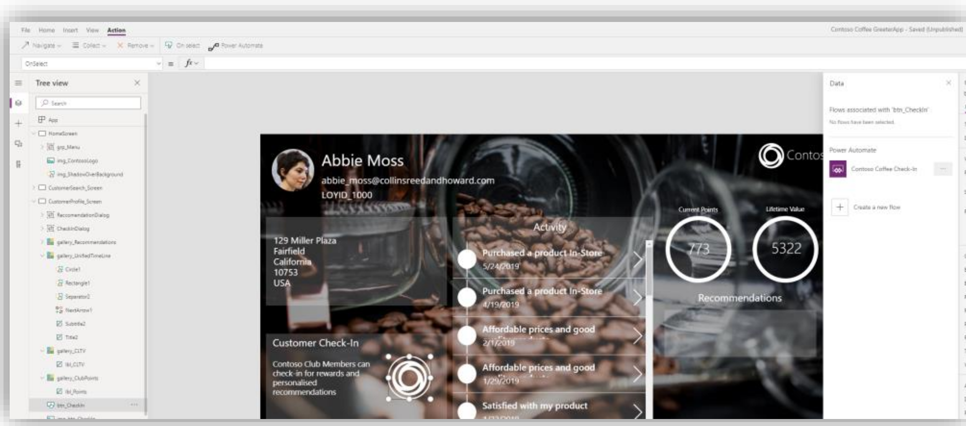


With the button **btn_CheckIn** selected, select the **On Select** property in the **Property** drop-down and set the value to **UpdateContext({showCheckIn:true})**

2. Expand the **CheckInDialog** group



3. Select the **btn_CheckInDialog**
4. Select the **OnSelect** property from the dropdown
5. Click the **Action** item in the top menu.
6. On the Action menu, click **Power Automate.** In the Data fly-out that appears, select your **Contoso Coffee CheckIn** Flow that you created in the earlier lab.



7. You should notice that you're prompted to complete the Flow's parameters within the formula bar. When you created the Flow in the Power Automate Lab, we determined that several attribute values would be asked for when the Flow was executed. Here we can pass these values as parameters to fulfill this need.

   - Contoso Club (Boolean), Contoso Subscription (Boolean), Description (Text), Personal Recommendations (Boolean, Regarding (Contacts GUID)

   Function should read as below:

   **'ContosoCoffeeCheck-In'.Run(
   gallery_Customers.Selected.D365_Contacts_contactid, tgl_ContosoClub,
   tgl_subscription, tgl_recommendations, DetailInput);
   UpdateContext({showCheckIn:false});
   Navigate(CustomerProfile_Screen, Fade);**

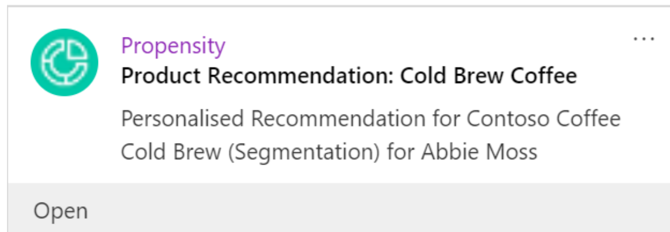
Task 6 – Surface Personalised Recommendations

Dynamics 365 includes the ability to create 'Insight Cards'. These cards highlight to users, timely, actionable insights gathered from Dynamics 365, Office 365 and LinkedIn – Three huge stores of business, interaction and relationship data that center around customers.

It is now possible to define and generate custom Insight Cards using Power Automate based on insights you obtain from other sources.

With Customer Insights, allowing you to generate insight through **Measures** and **Segments** as well as extend Customer Insights using **Azure Machine Learning** to make **predictions** such as next steps, churn or propensity to take up an offer – These are all insights that you may wish to drive an action with a customer.

In this task, we will surface the Insight Cards generated during Power Automate Module, within the Greeter App, allowing the Contoso Retail staff to have a more focused, personalized interaction with their customer.



Configure the Recommendations Gallery

1. Create a connection to **Common Data Service** (Dynamics 365). To do this, click **View** in the top menu bar and then **Data Sources.**

2. In the **Data** menu that appear to the right of your canvas, select **Add data source**

3. Click **New connection,** then search for the **Common Data Service** connector. Select the connector and click **Connect.**

4. In the **Choose an entity** page, select **Action Cards** then click **Connect**

Set the Recommendations Gallery to display Insight Cards associated to the current contact

1. Within the Greeter Power App in Edit mode, open the **CustomerProfile_Screen** screen via the Tree View and select the gallery **gallery_Recommendations**

2. Select the **Items** property from the property drop-down, then set the formula to return only Insight Cards relating to the current Customer Profile as below:

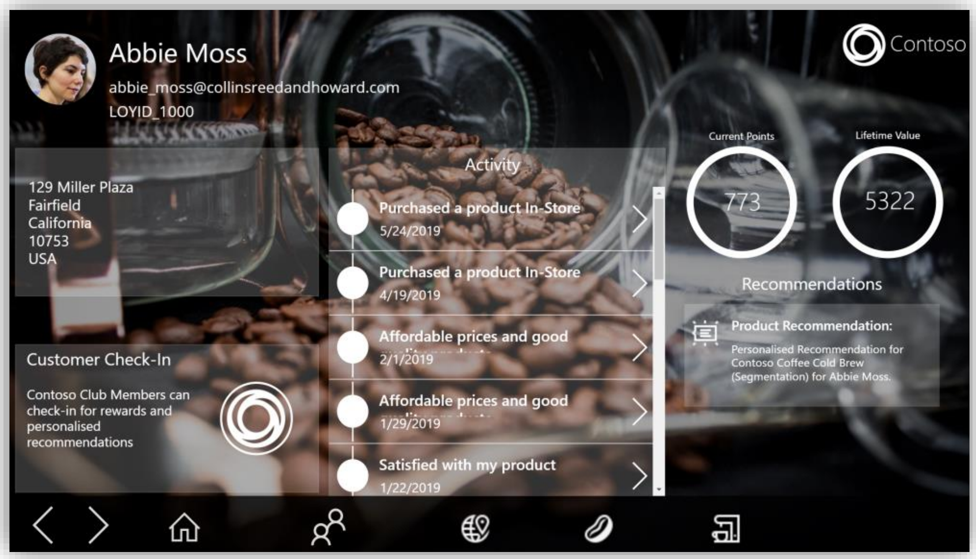
   Filter('Action Cards', regardingobjectid = gallery_Customers.Selected.D365_Contacts_contactid && 'CardType ENUM' <> 32)

3. In the tree view, expand the **gallery_Recommendations** and select **Title1.** Set its Text value to **ThisItem.Title**.

4. In the tree view, expand the **gallery_Recommendations** and select **Subtitle1.** Set its Text value to **ThisItem.'Card Description'**.

5. **Save** and **Publish** your App.

   You should now see that the 'Recommendations Gallery' contains some example Recommendations using the Insight Cards you generated in previous module, using Power Automate.



Task 7 – Test & Explore the Greeter App Experience

Congratulations! You have now configured a simple greeter app for Contoso Coffee Retail staff. In this task, you will explore the Greeter App experience

1. In a browser tab, navigate to https://powerapps.microsoft.com. If required sign-in. Click Apps in the left-hand menu, and then run your Contoso Coffee Greeter App

2. Imagine you are a member of Contoso Coffee Retail staff and you greet customers within the store…
3. Look up Abbie Moss' record (LOYID_1000)

4. Open Abbie Moss' record:
   a. Review Activity History
   b. Note that you can identify Abbie's recent purchase history, and that she has made several in-store purchases of brew-at-home coffee.
   c. Review Abbie's Club Balance and Lifetime Value
   d. Combining her purchase history with insight on her 'Current Points' and 'Lifetime Value', you are able to ascertain that Abbie is both a frequent and high-value customer.
   e. Review recommendations made for Abbie
   f. Looking at her personalized recommendations, you see that there is a recommendation for Abbie to take-up the 'Cold Brew Coffee' offer. This is Contoso Coffee's new Cold Brew coffee, which you can recommend to Abbie.
5. Finally, you click the 'Customer Check-In' button

6. This allows you to capture Abbie's visit to the store as well as details of the recommendations you discussed with Abbie and captures this detail against her record in Dynamics 365 as an activity.