Microsoft

Robotic Process Automation in a Day

Lab 8 – Use Microsoft Teams to integrate approvals

30 mins

April 2021

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Lab Overview

You will complete the following tasks in this lab, which will complete the end-to-end invoice processing solution:

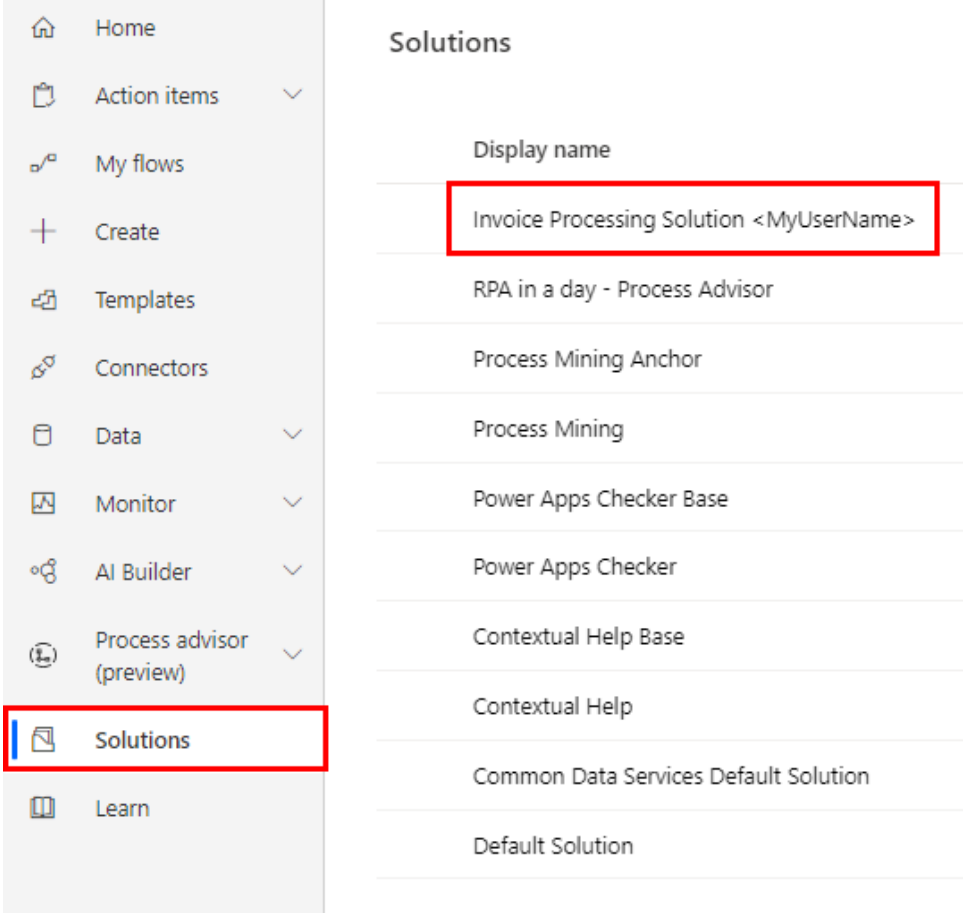
- Integrate a Microsoft Teams-based approval model and the associated conditional logic into the invoice processing Cloud flow
- Integrate the Desktop flow for entering the invoice information into the approval process
- Integrate Outlook-based approval/rejection notifications into the invoice process
- Perform a test of the end-to-end invoice processing Cloud flow

Prerequisites

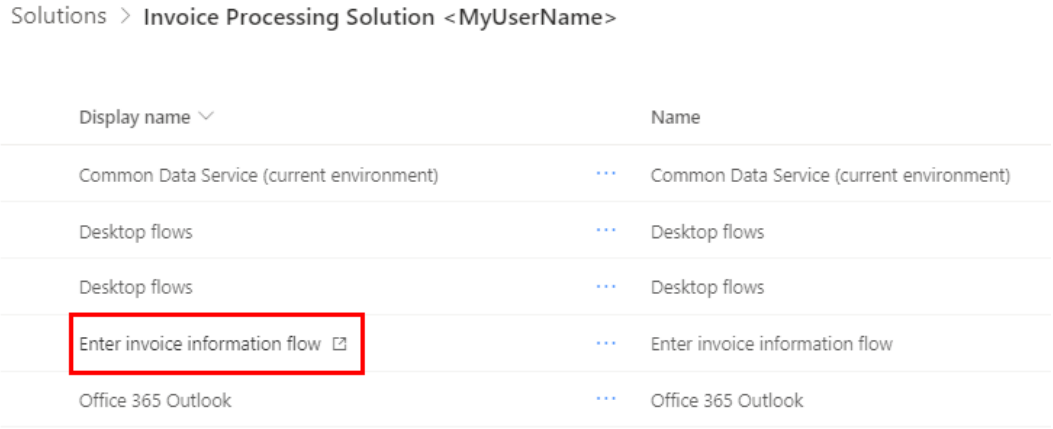
This lab builds on the initial setup lab (lab 1), and labs 3-7 – ensure these labs are complete.

Use Microsoft Teams to get approval. End to end integration

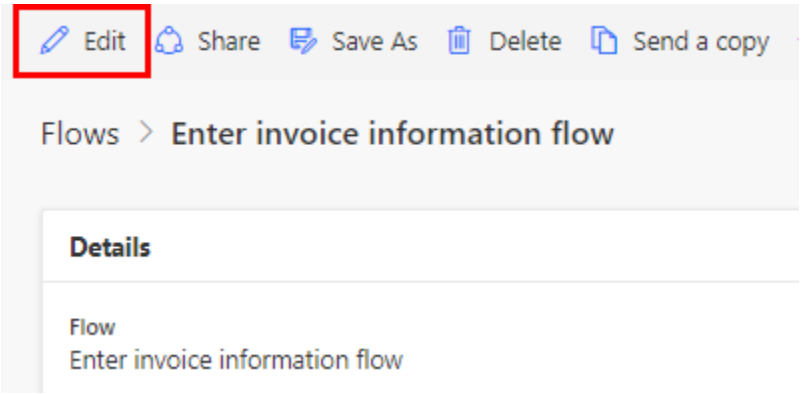
1. Open the test profile in a browser and navigate to flow.microsoft.com
2. Select **Solutions** from the navigation bar, then open **Invoice processing solution.**



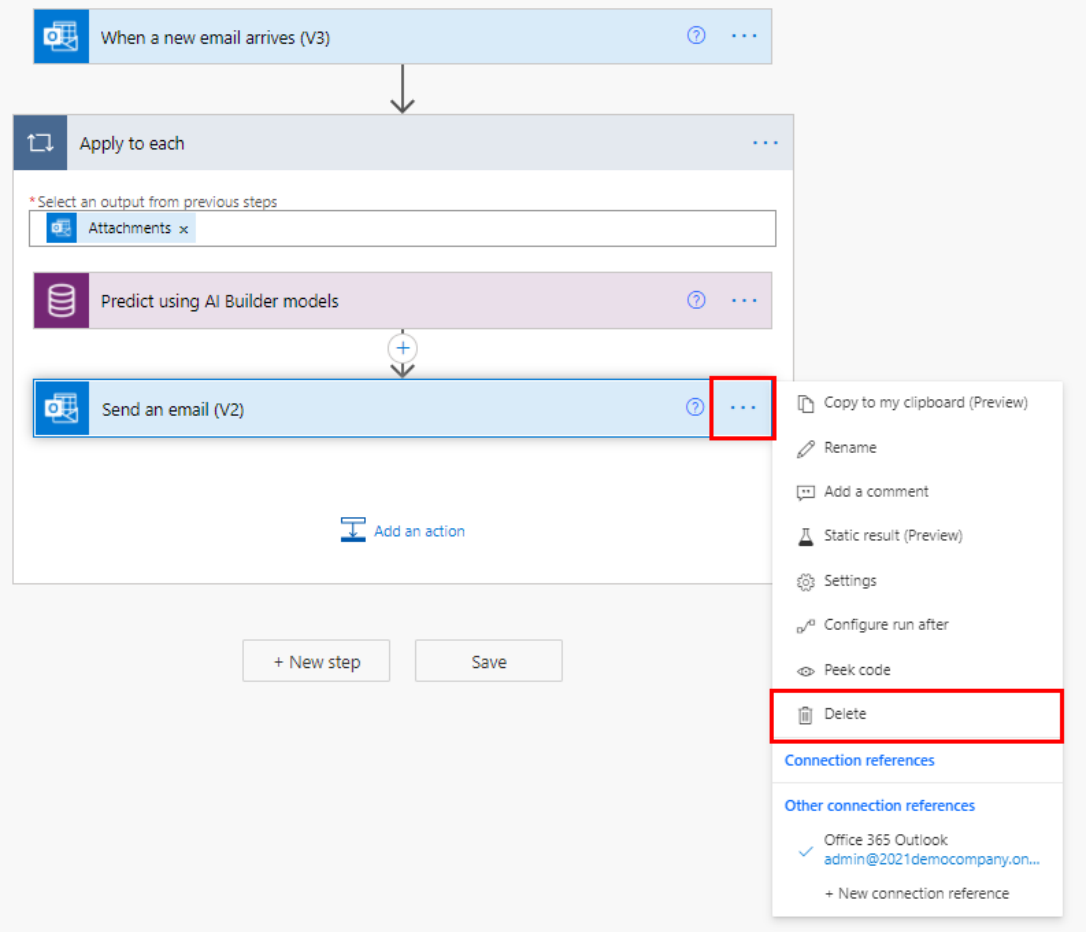
3. Open **Enter invoice information flow** that you created in Lab 6.



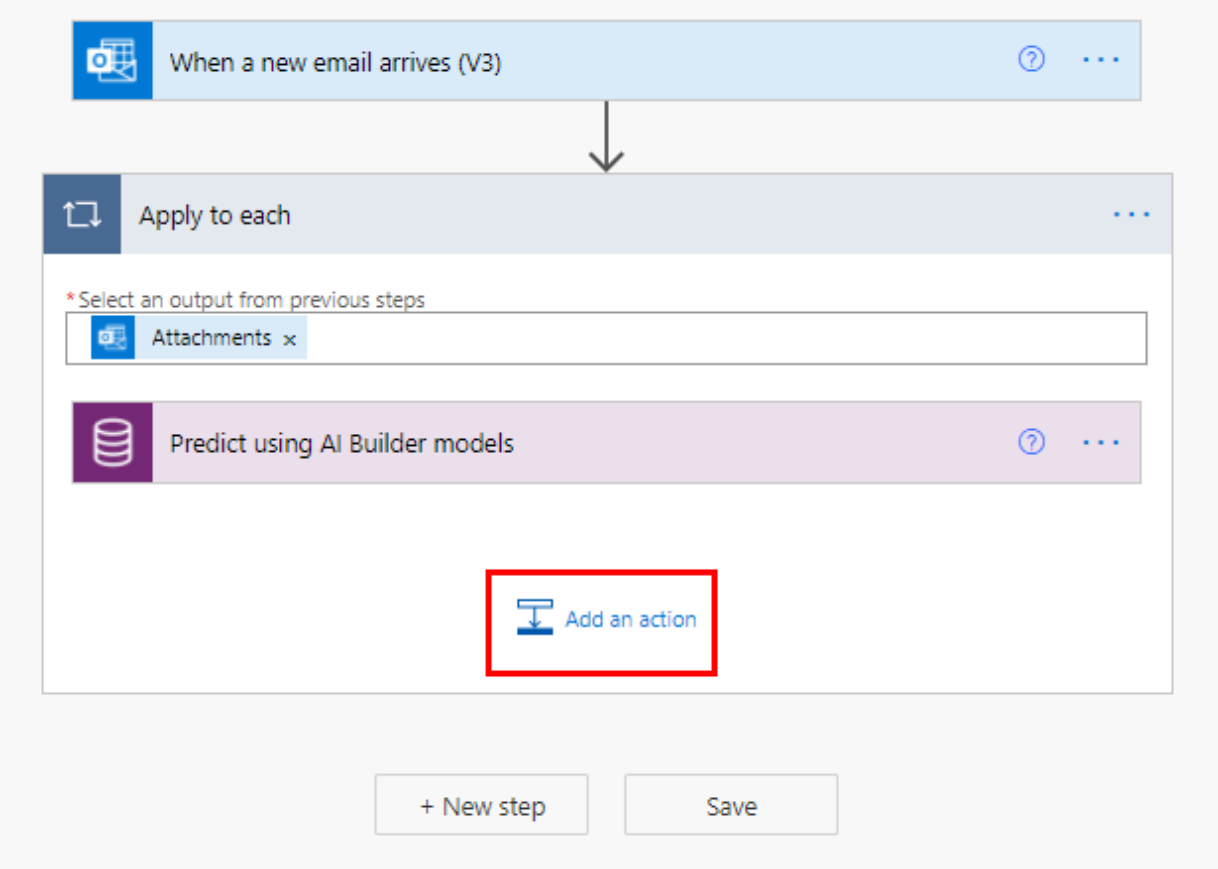
4. Click **Edit**.



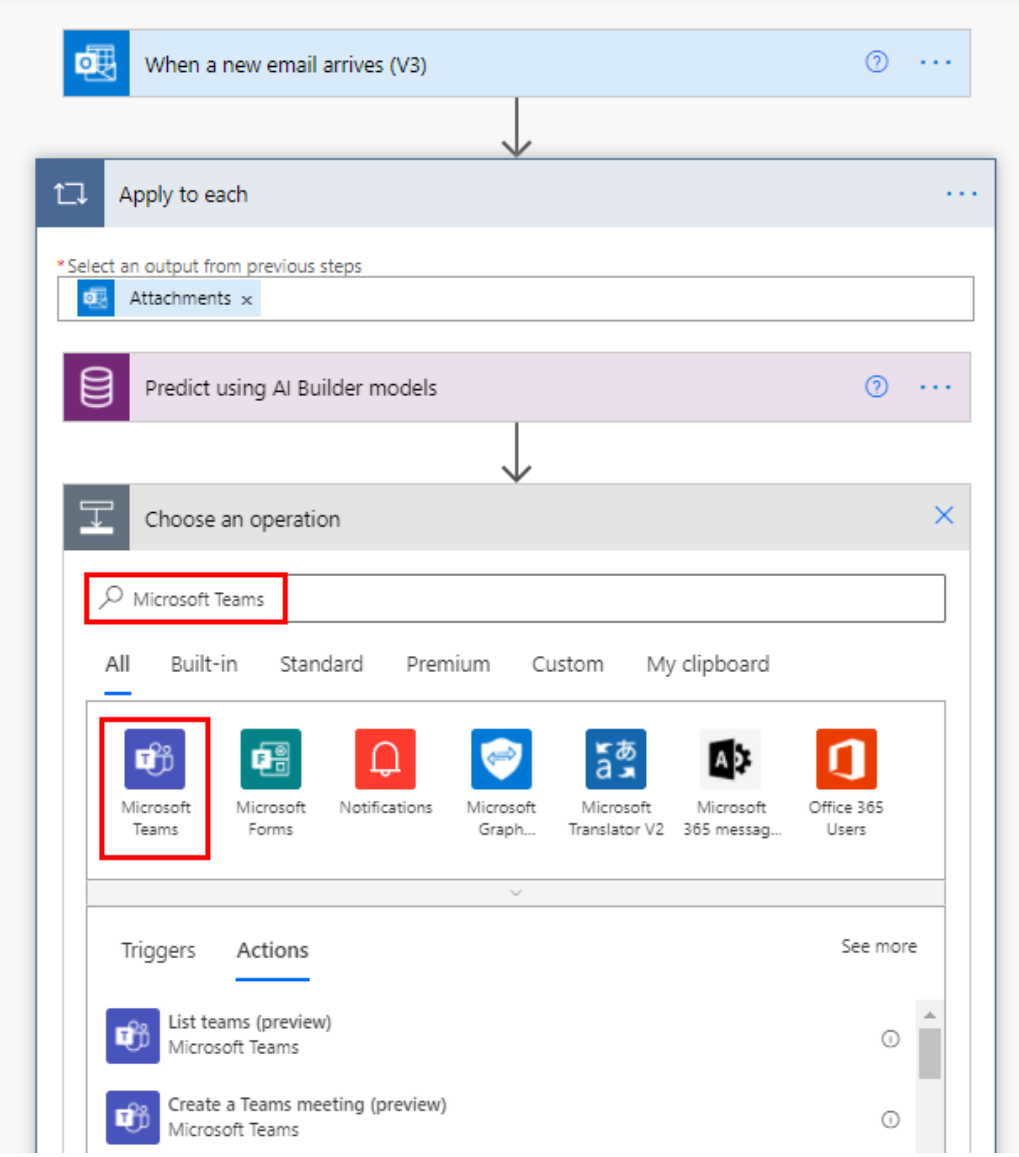
5. Expand **Apply to each** box the delete **Send an email (V2)** you created.



6. Click **Add an action.**



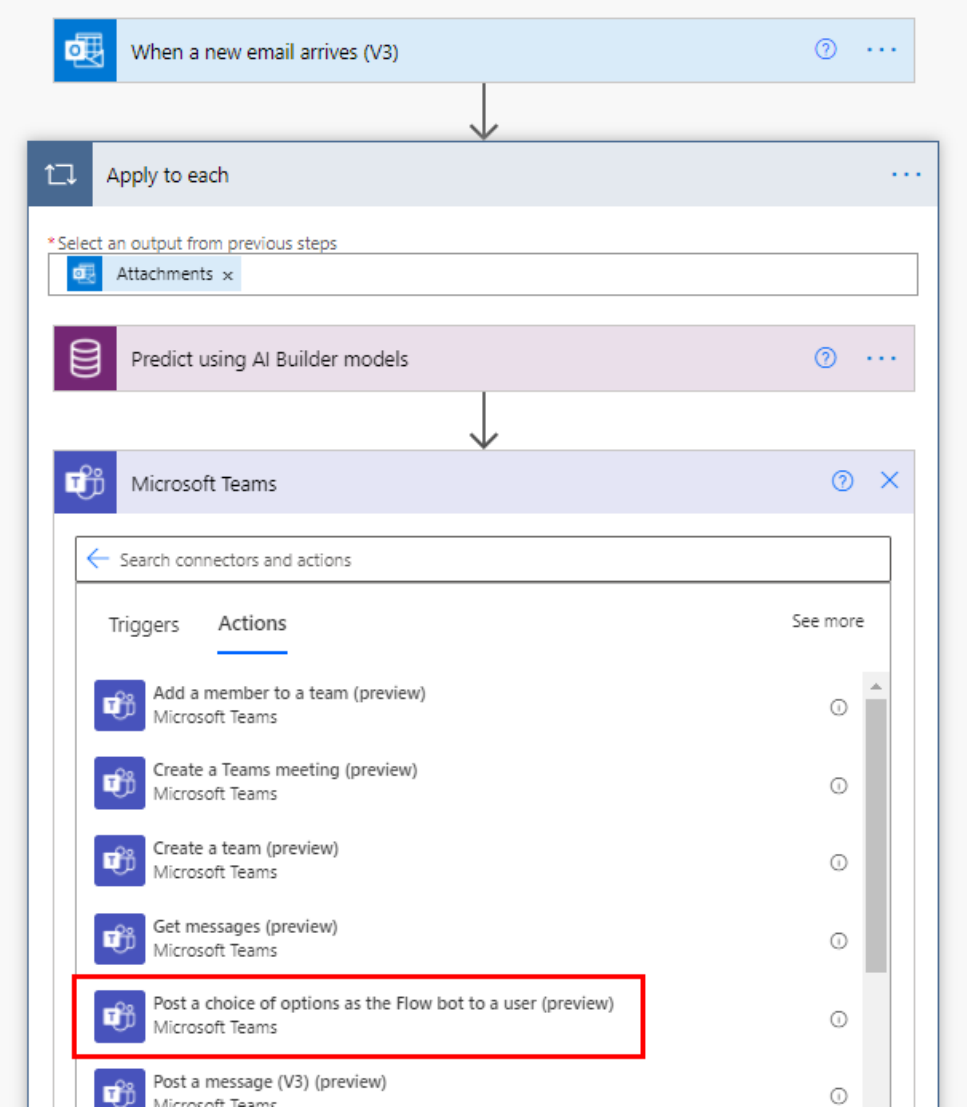
7. Search teams in the search bar, select **Microsoft Teams.**



Important: The next actions can be done following either of the two approaches. 1) Using either very simple method, that requires action "Post a choice of options as the Flow bot to a user" or 2) A richer and innovative approach that requires action "Post an Adaptive Card to Teams user and wait for a response", that utilizes Microsoft's technology called Adaptive Cards.

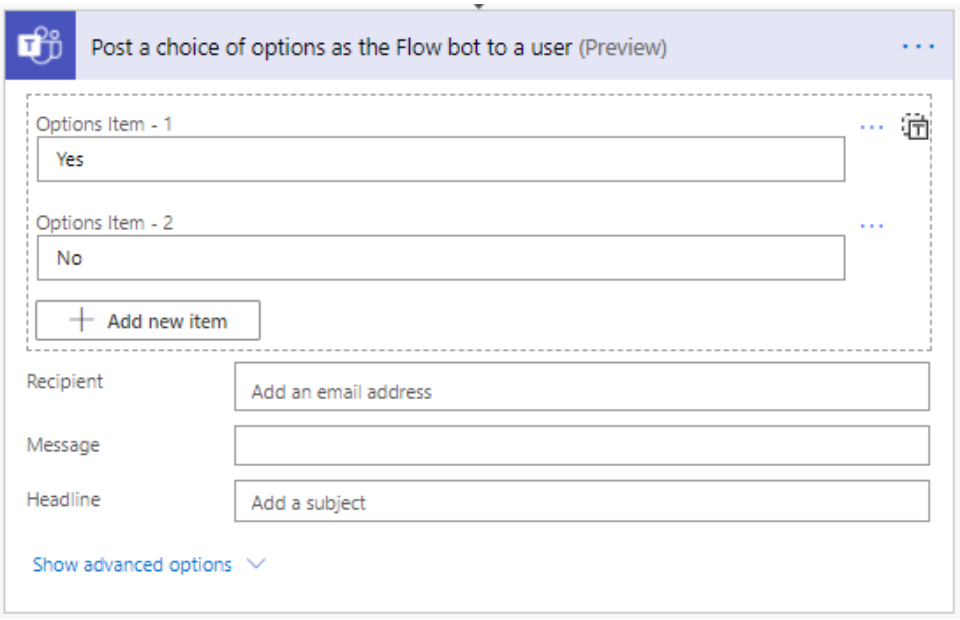
Note: If you'd like to learn the more advanced: Adaptive Cards approach instead of using the basic choice action, go to **Advanced learning chapter** at the end of this Lab document. Otherwise please continue here.

8. Select **Post a choice of options as the Flow bot to a user (preview).**

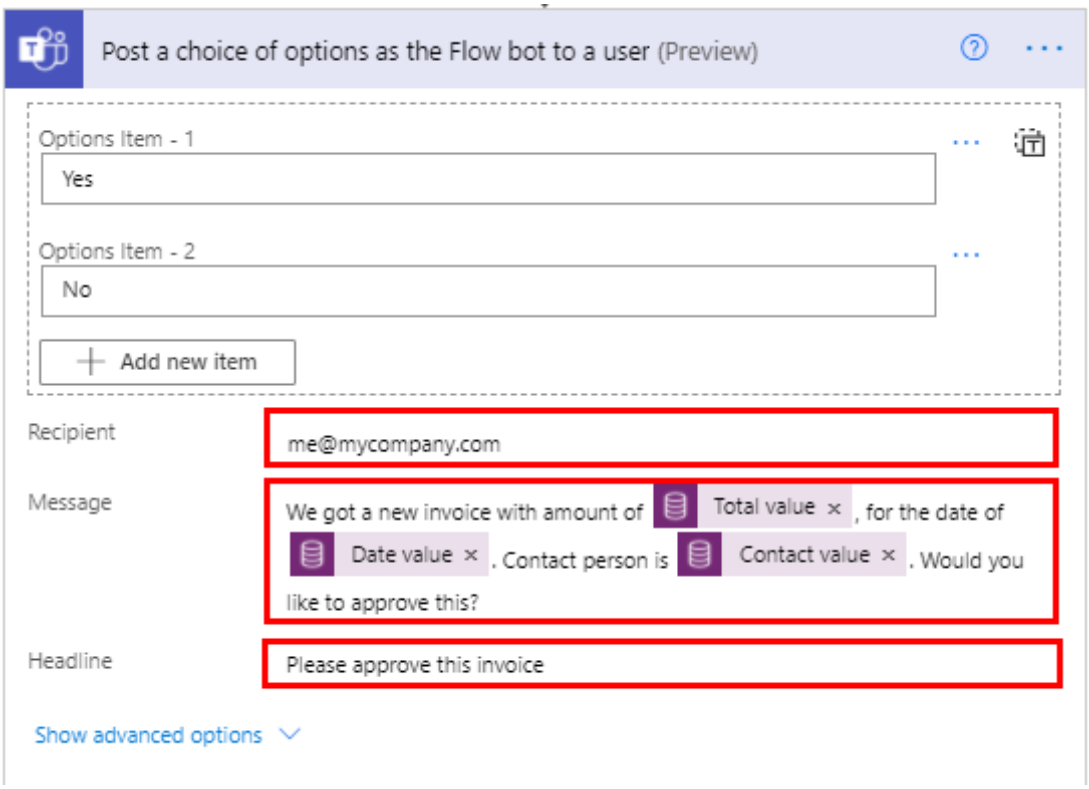


9. Establish your connection to Teams.

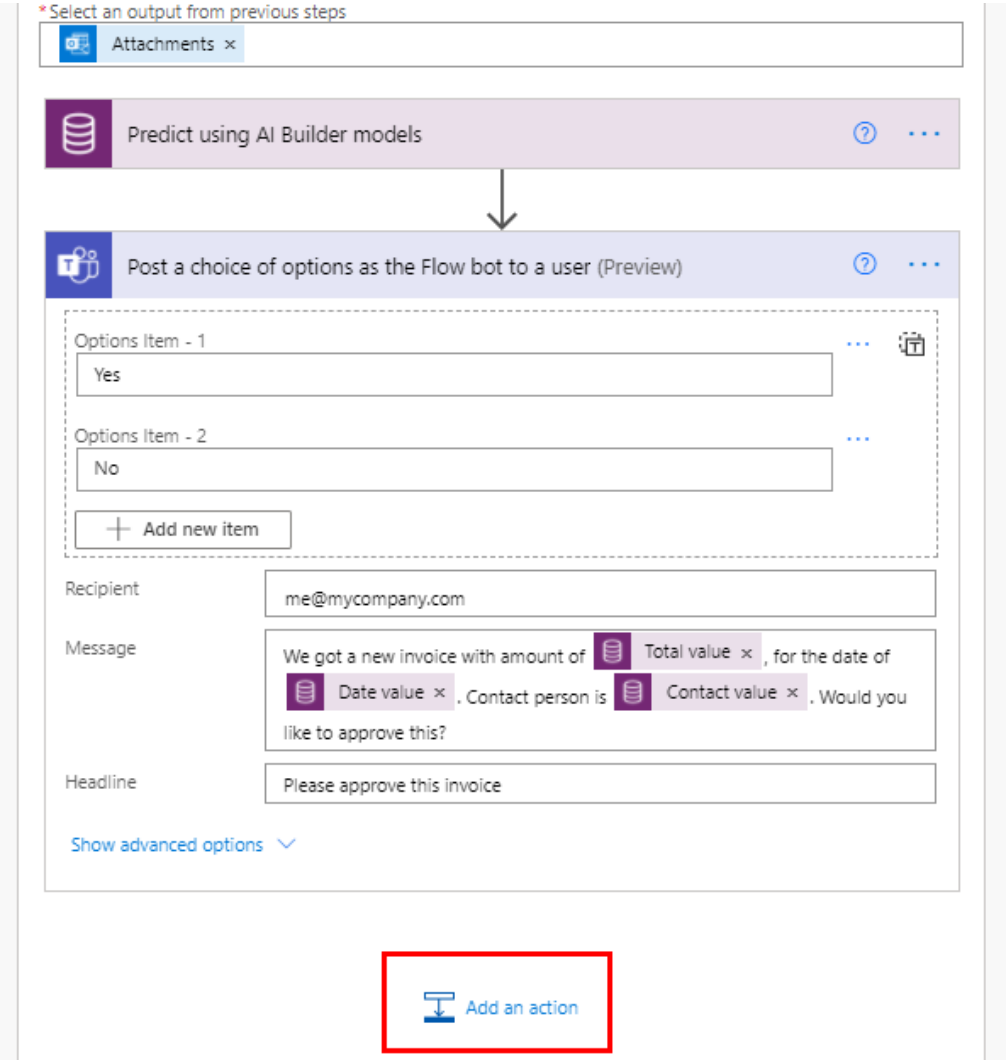
10. Add 2 options: **Yes** and **No**.



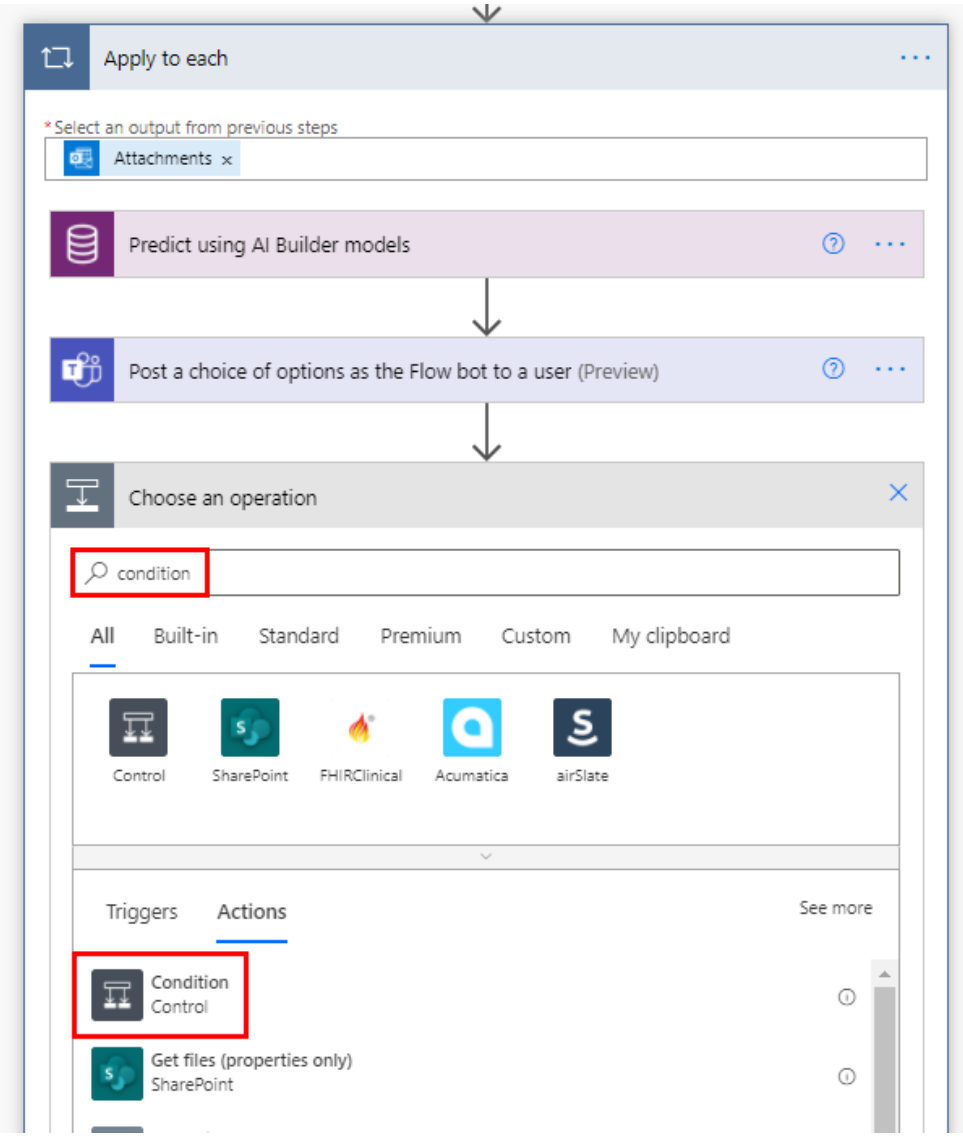
11. Use following values:
    - **Headline:** Please approve this invoice
    - **Recipient**: Your email address (User ID)
    - **Message**: We got a new invoice with amount of **Total value** *(from dynamic content for **Predict** action),* for the date of **Date value** *(from dynamic content for action **Predict**)*. Contact person is **Contact value** *(from dynamic content for action **Predict**)*. Would you like to approve this?



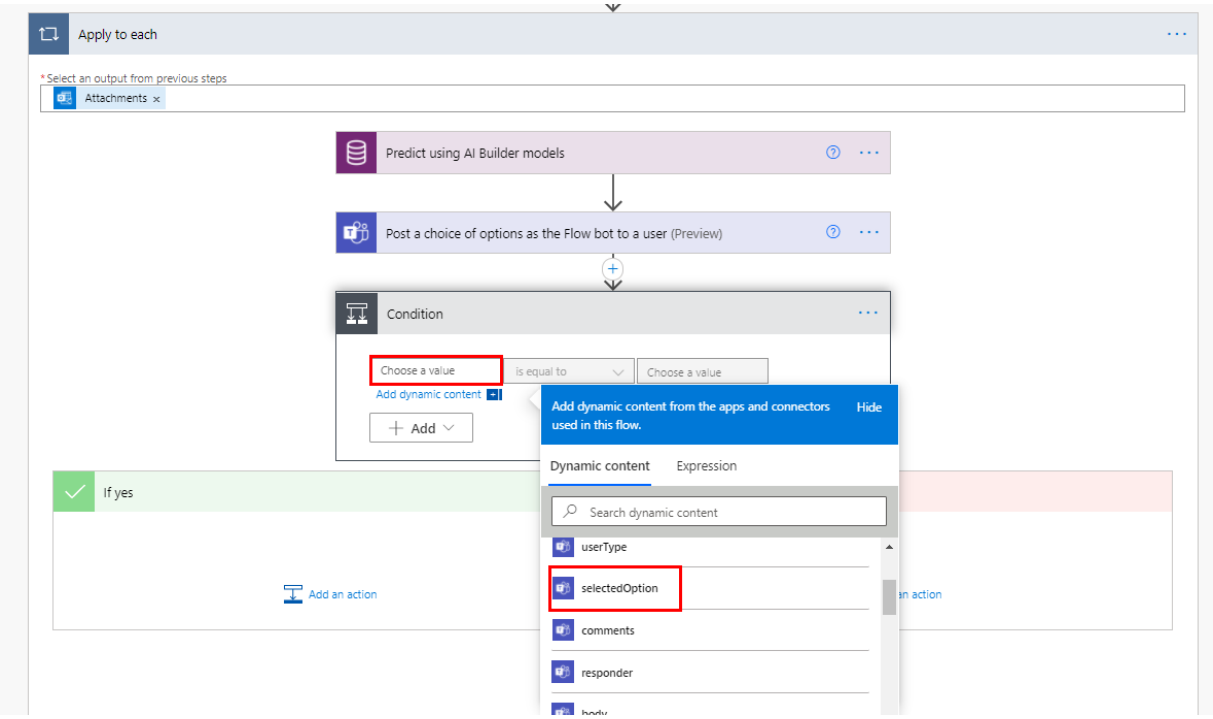
12. Click **Add an action**.



13. Search condition in the search bar and select **Condition** in Actions.

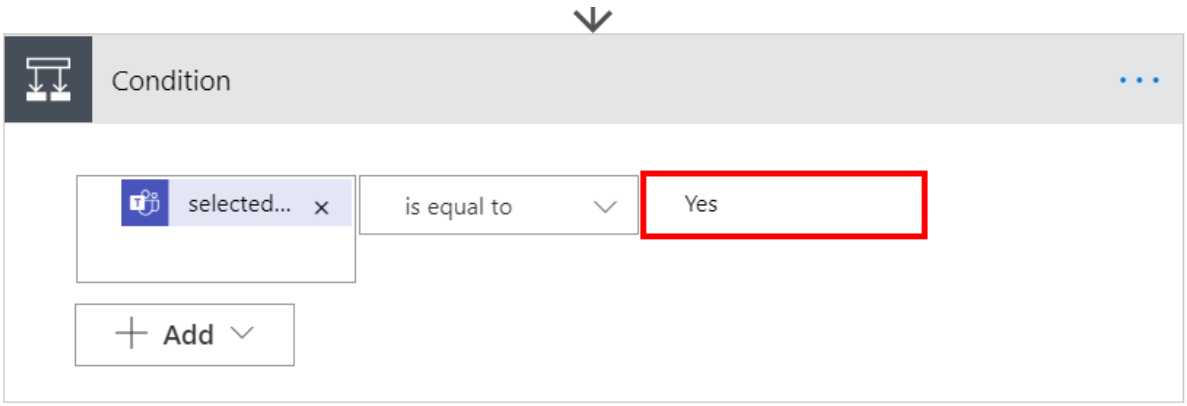


14. Select **selectedOption** (from dynamic content for action ***Post a choice of options as the Flow bot to a user***) in the **Choose a value** field.

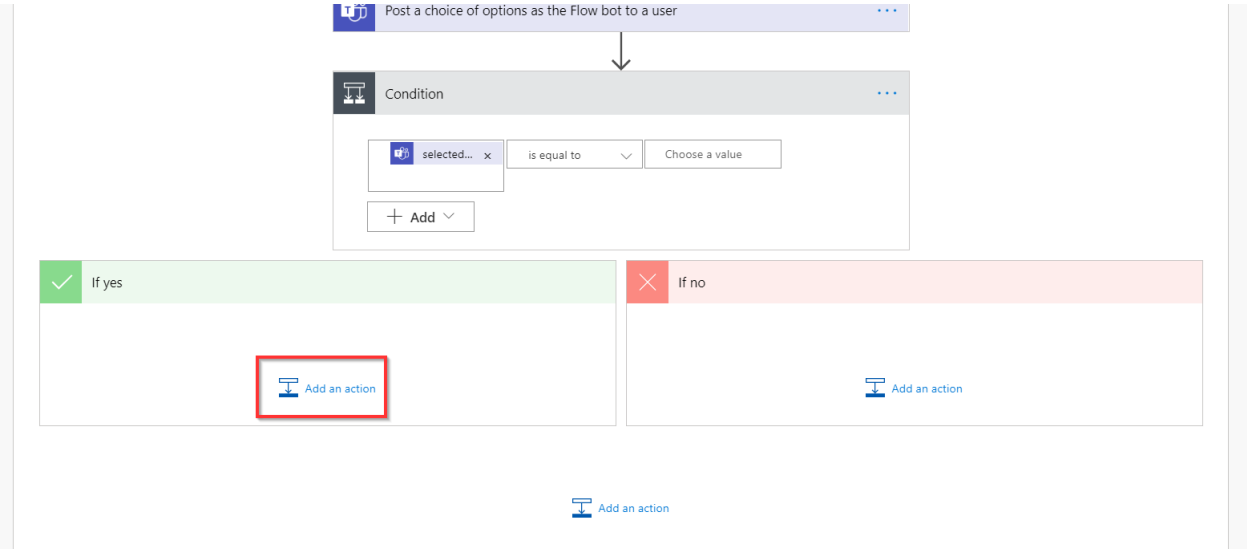


15. Enter **Yes** in choose a value field.

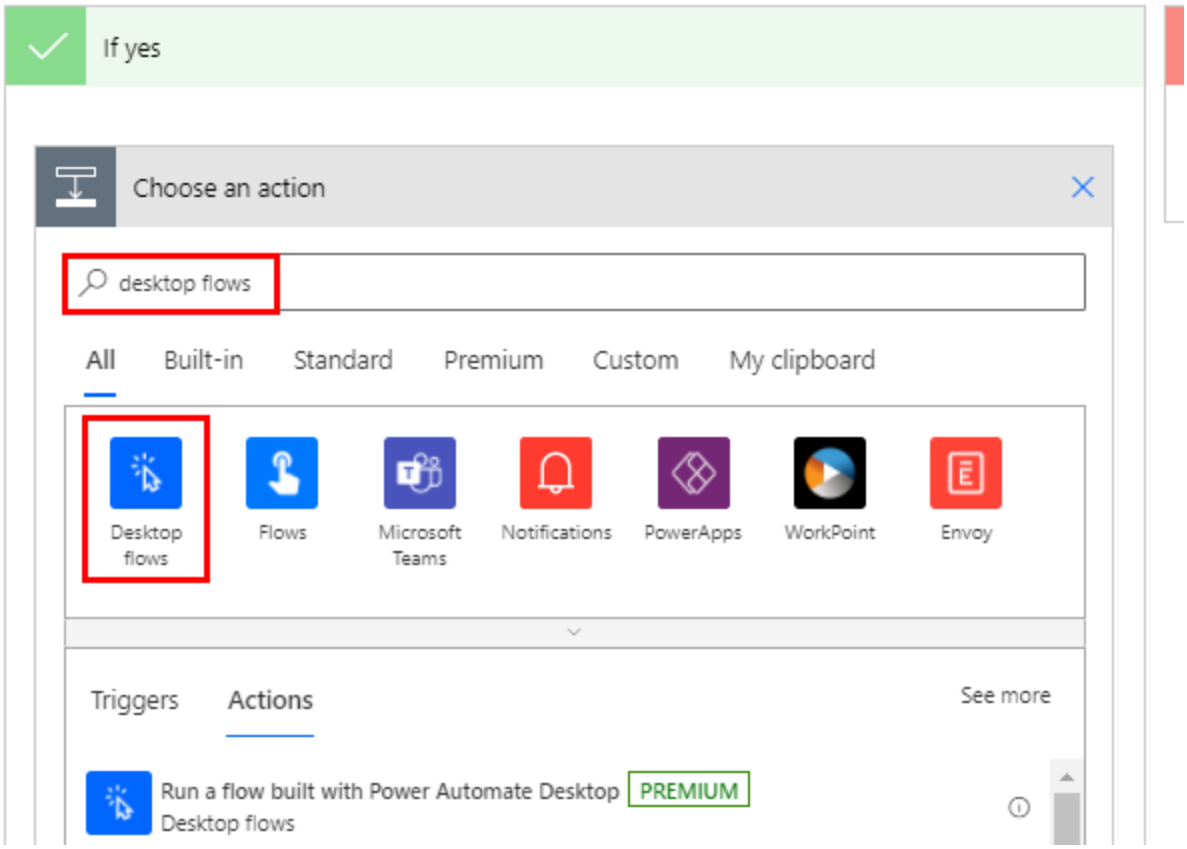
Note: Case sensitive. Make sure the capitalization is same as step 10.



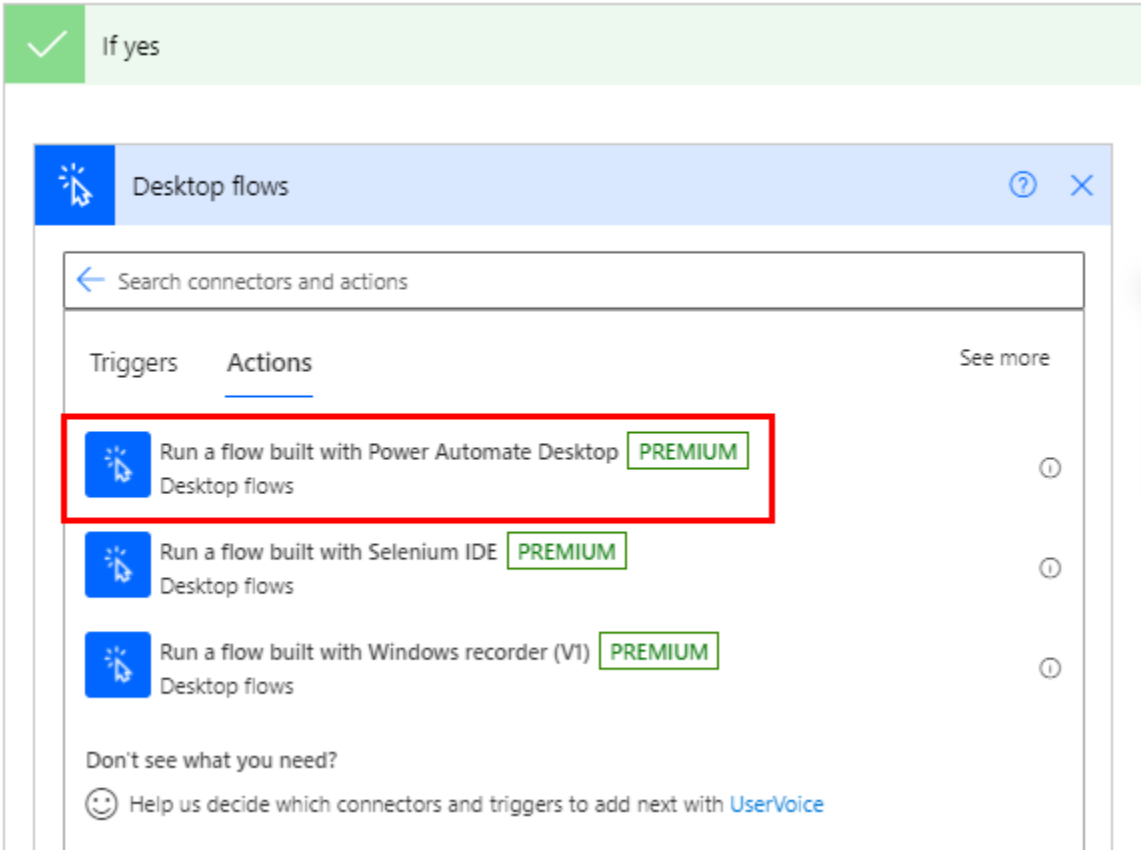
16. Click **Add an action** under If Yes branch.



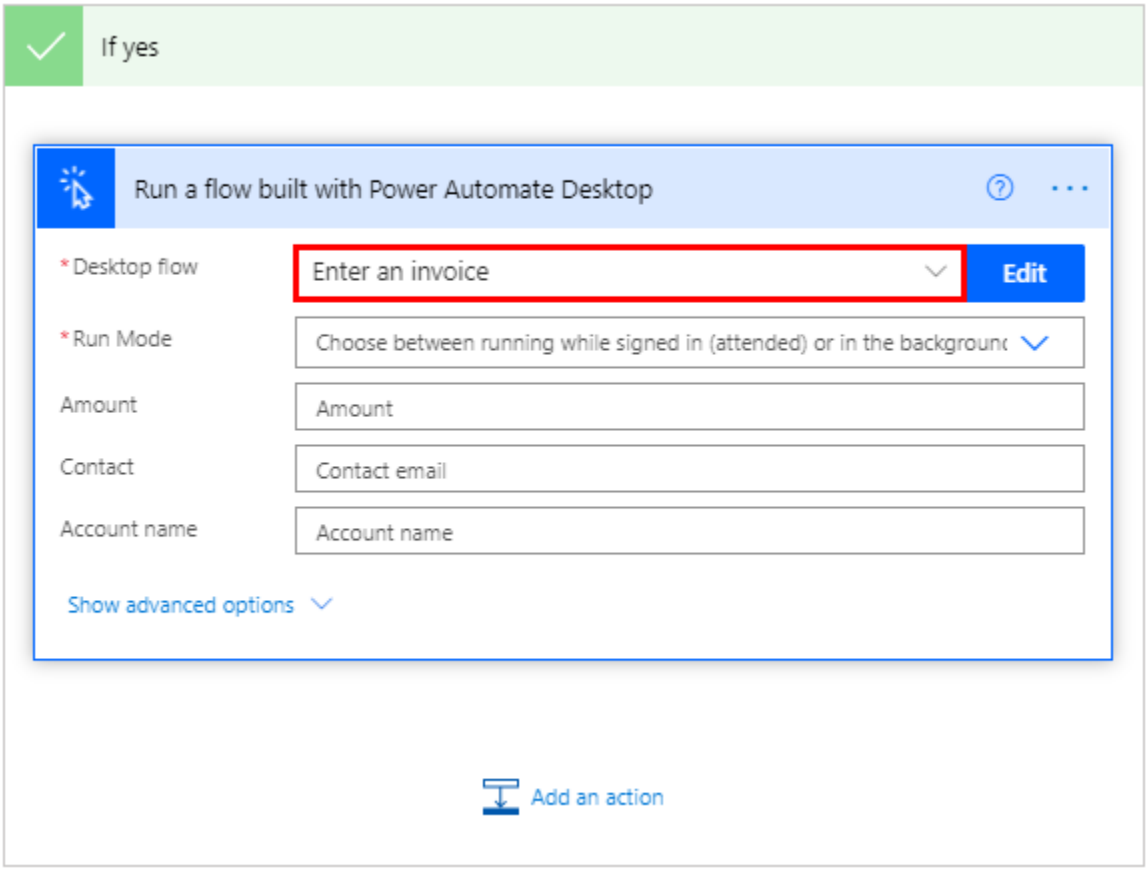
17. Select **Desktop flows**.



18. Select **Run a flow built with Power Automate Desktop**.



19. Select **Enter an invoice** flow.



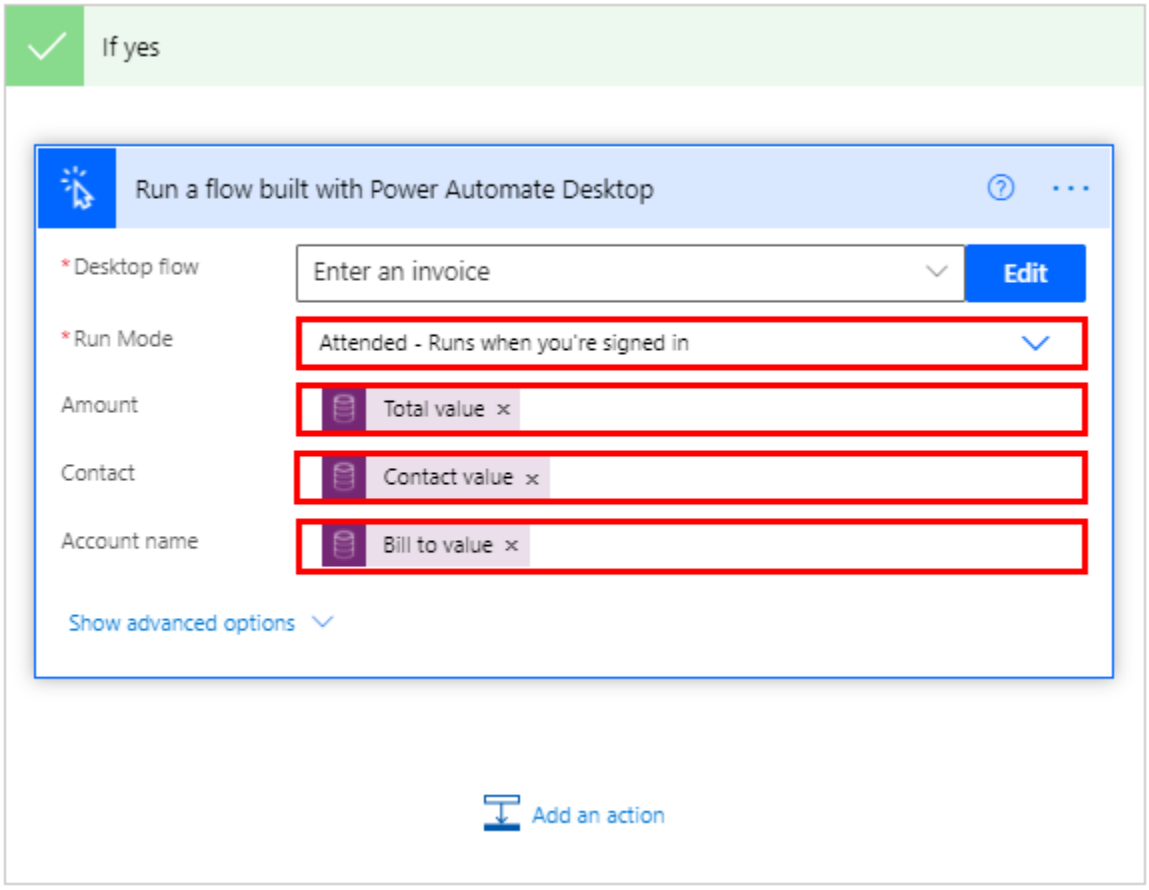
20. Use these values:

Run Mode: Attended – Runs when you are logged into device

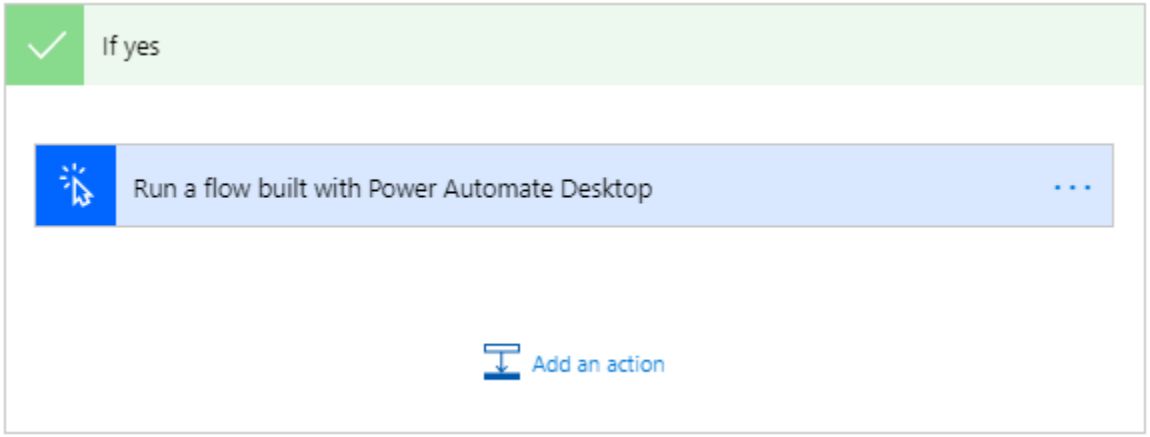
Amount: Total value (from dynamic content for action **Predict**)

Contact: Contact value (from dynamic content for action **Predict**)

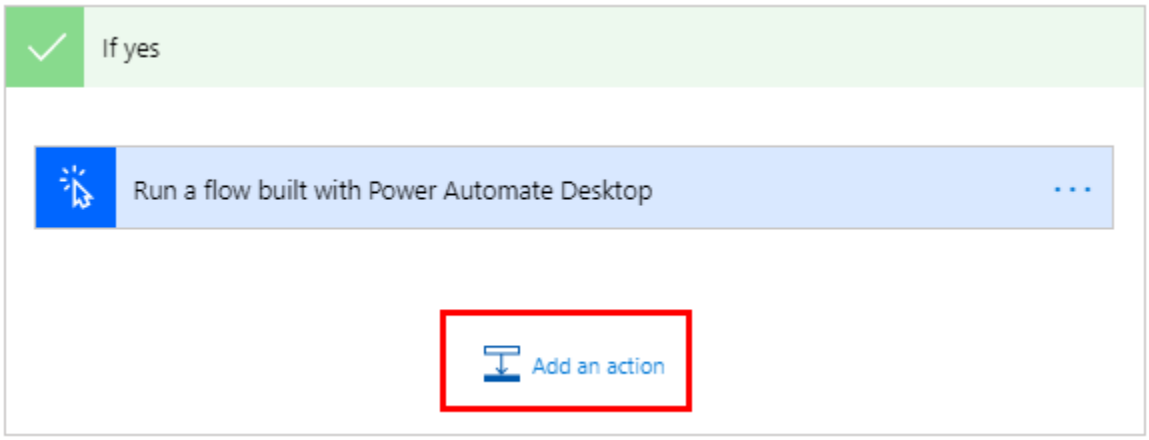
Account name: Bill to value (from dynamic content for action **Predict**)



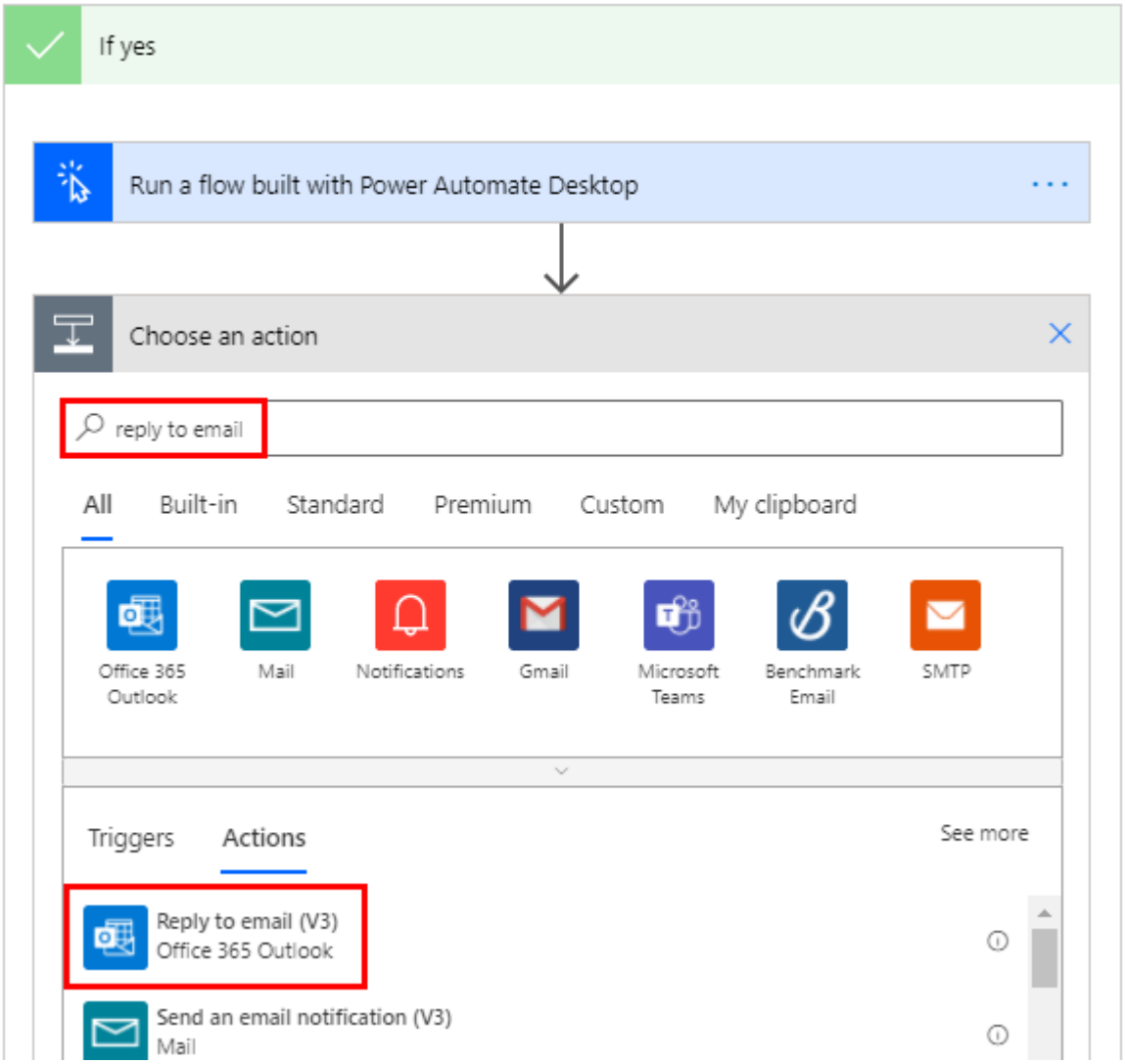
21. You can click the Desktop flow action title to collapse the action view



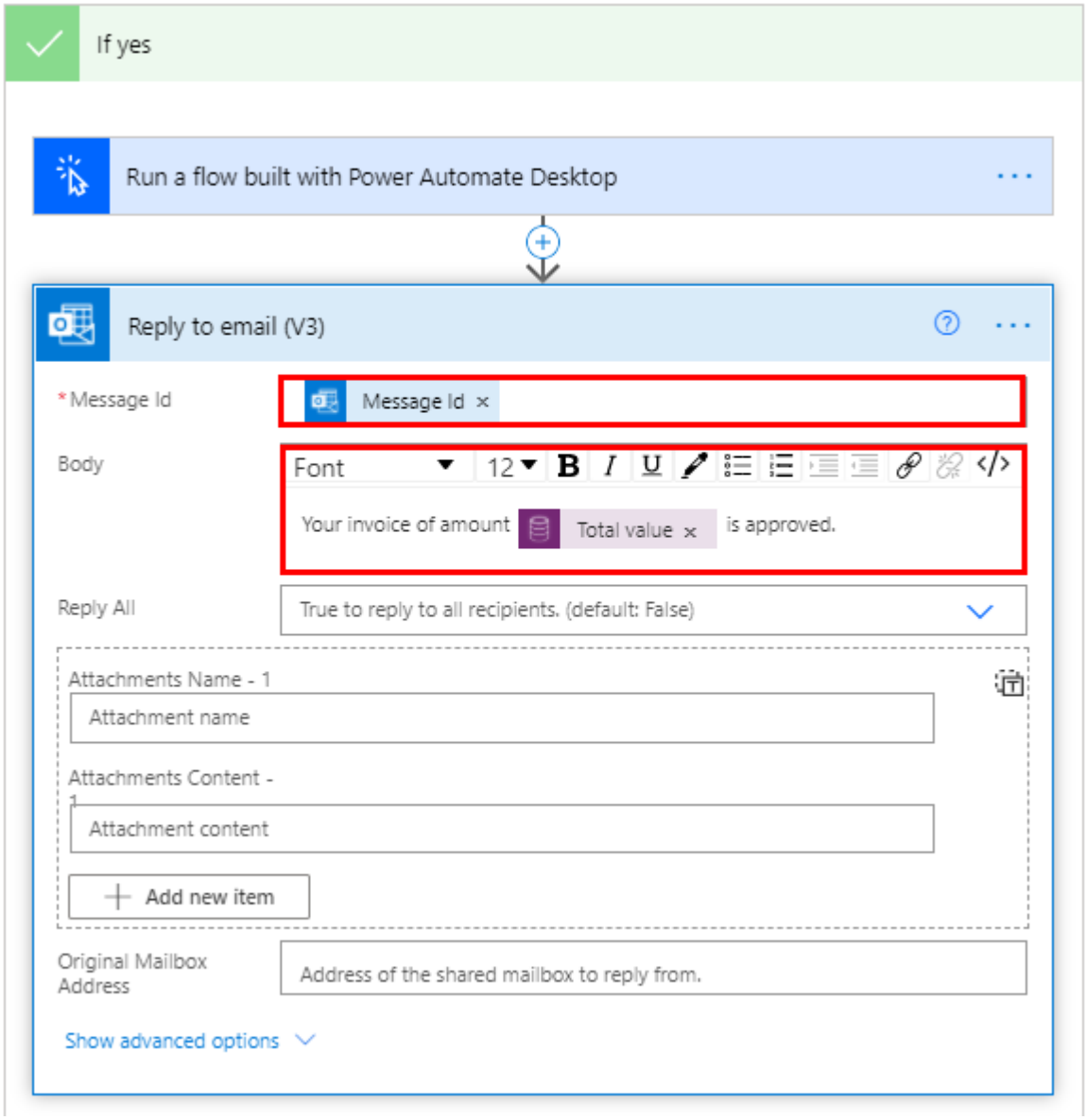
22. Click **Add an action** inside the **If yes** branch.



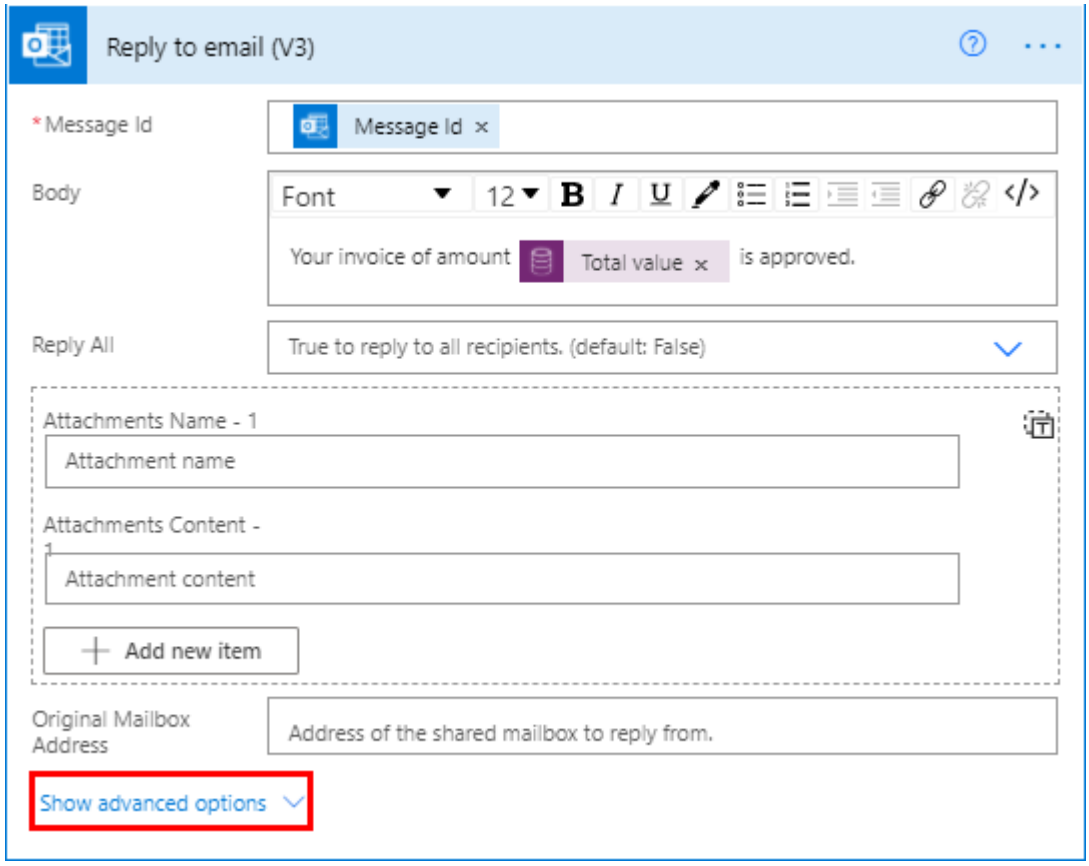
23. Select **Reply to email (V3)** action.



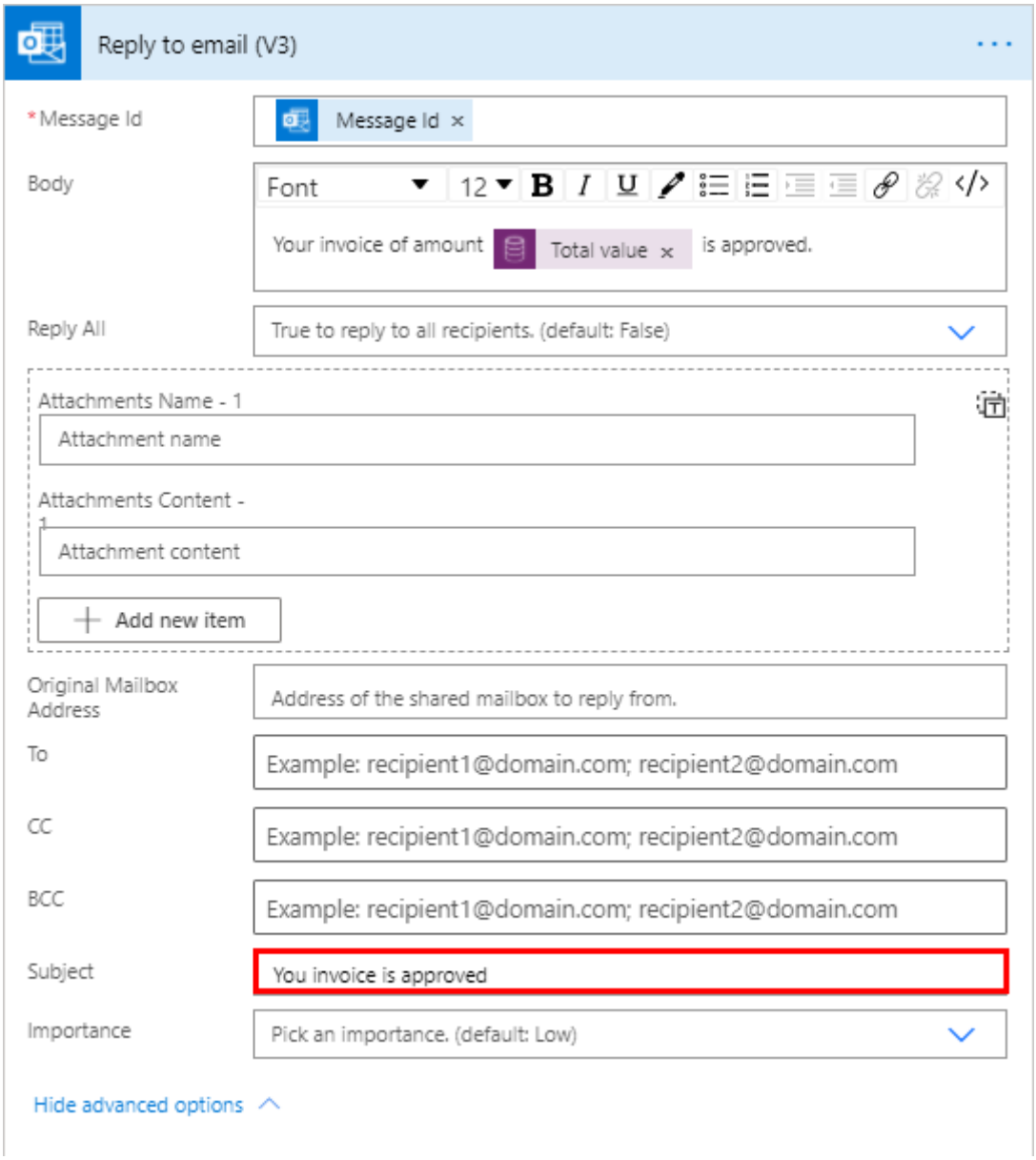
24. **Message id**: Message Id (from dynamic content for action **When a new email arrives (V3)**)
    - **Body**: Your invoice of amount **Total value** (from dynamic content for action ***Predict***) is approved.



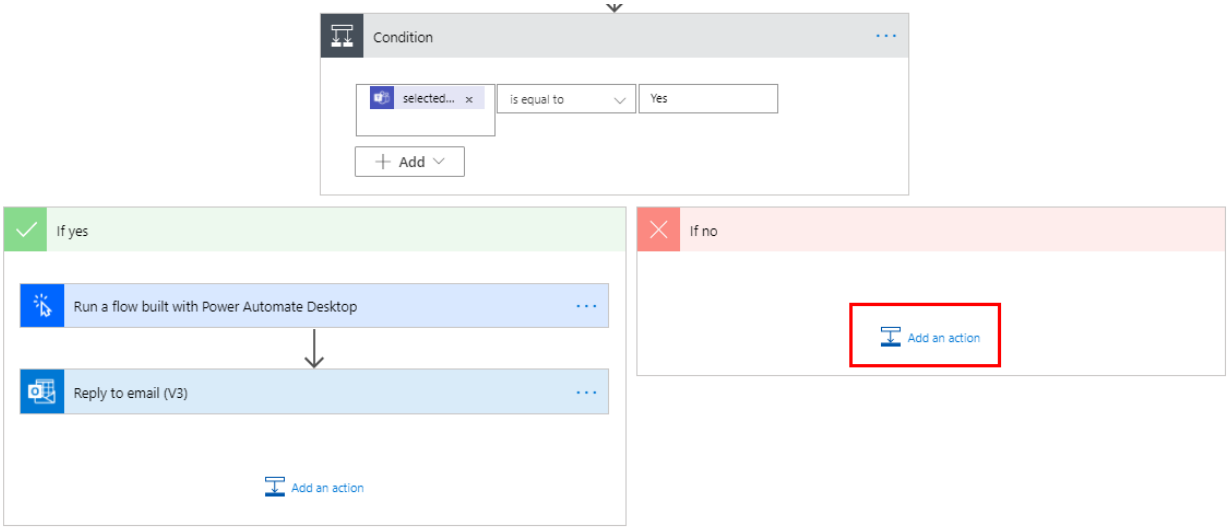
25. Click **Show advanced options**.



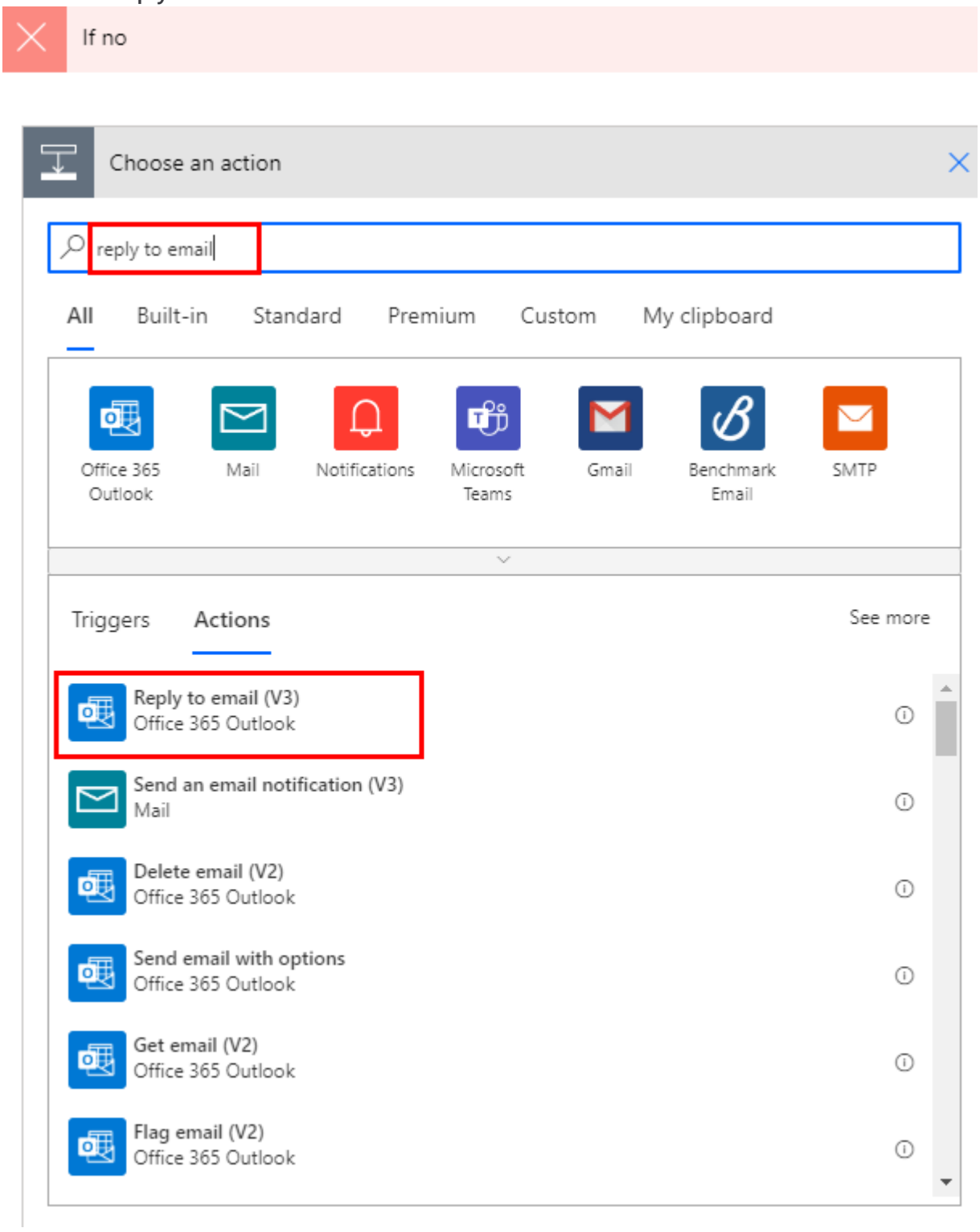
26. Enter **Your invoice is approved** in **Subject** column.



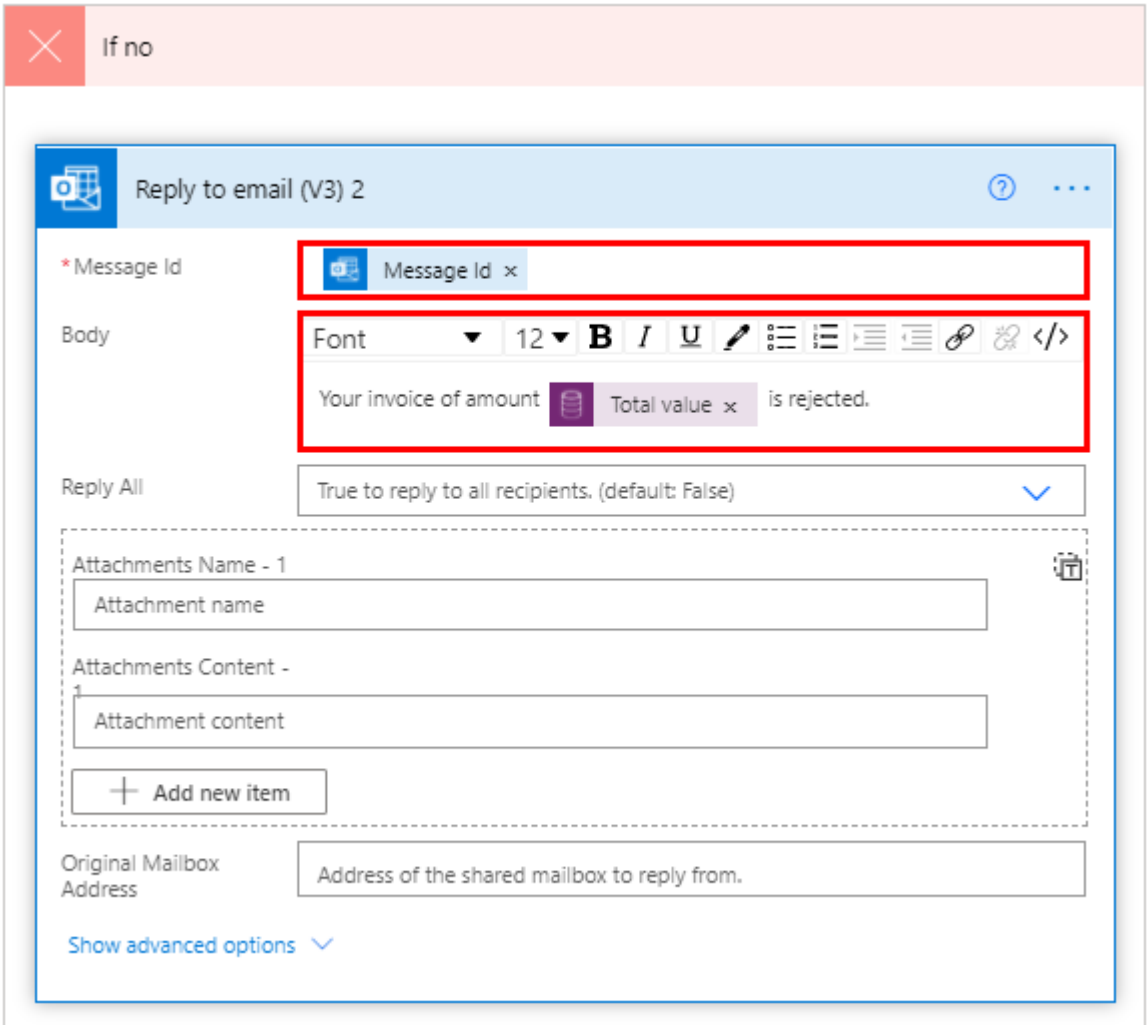
27. Click **Add an action** under If no branch.



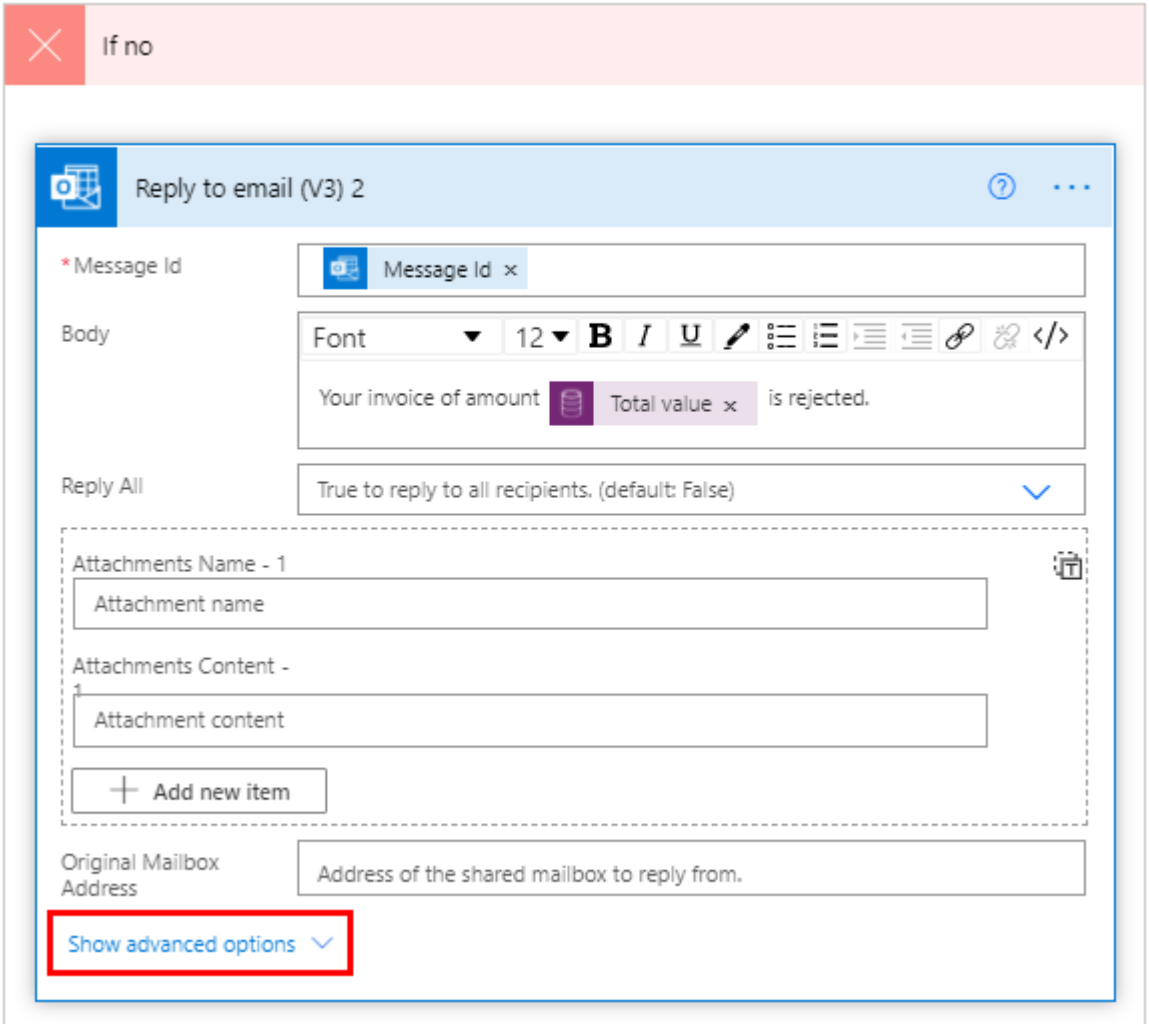
Select **Reply to email** action.



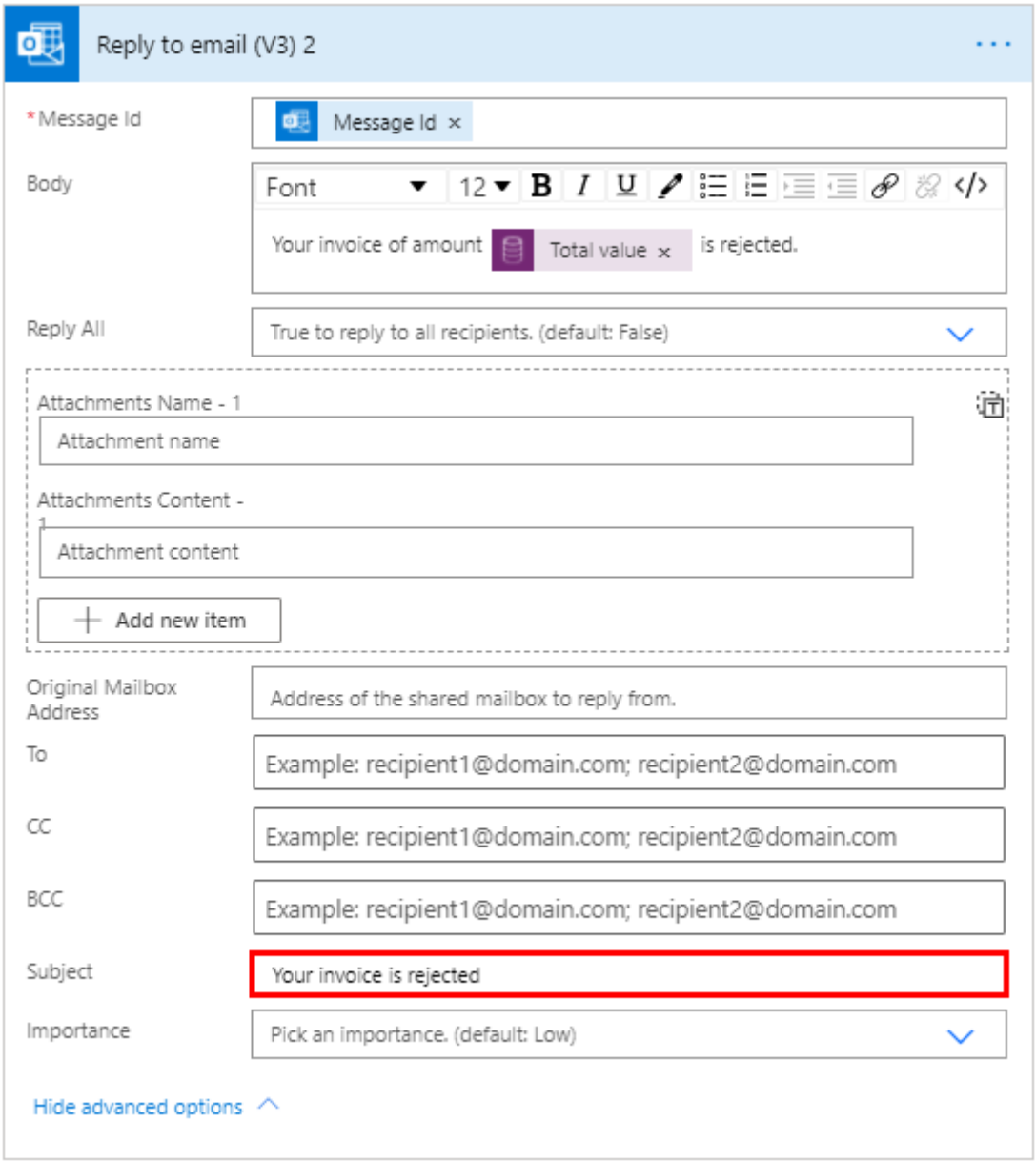
28. Enter the values as the screenshot below:
    - **Message id**: Message Id (from dynamic content for action **When a new email arrives (V3)**)
    - **Body**: Your invoice of amount **Total value** (from dynamic content for action ***Predict***) is rejected.



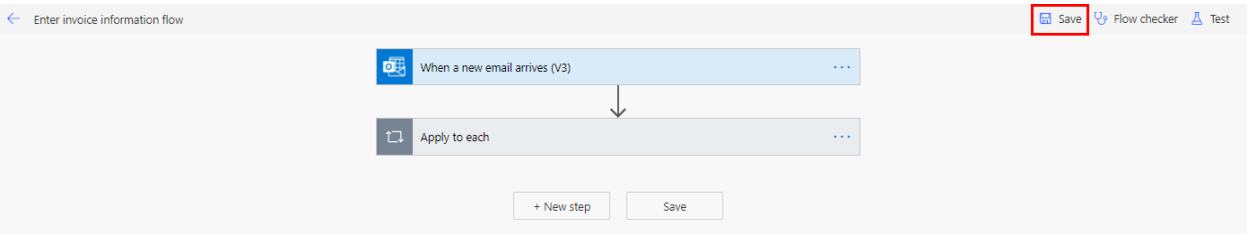
29. Click **Show advanced options**.



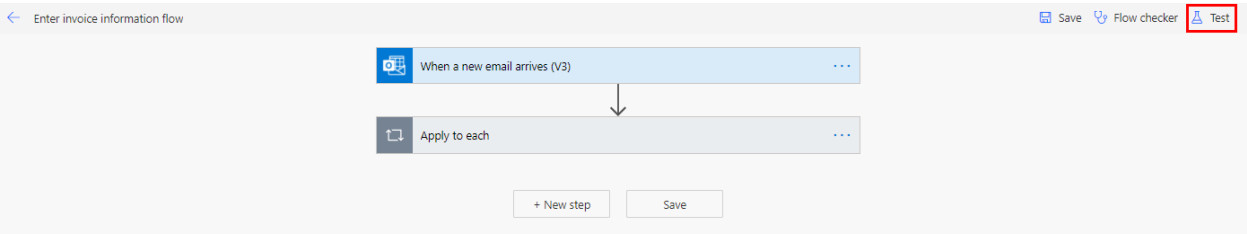
30. Enter **Your invoice is rejected** in **Subject** column.



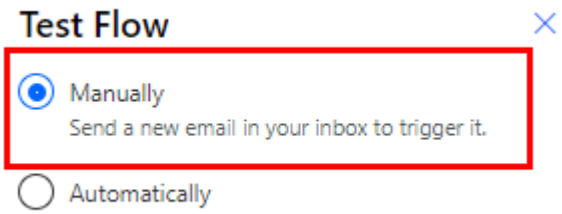
31. Click **Save.**



32. Click **Test**.



33. Select **Manually**, then click **Test**.



34. In a separate tab, open the Teams app (open it in the browser, not the app). The web version of Microsoft Teams is available at: https://teams.microsoft.com/

35. In another separate tab, open the Office 365 Outlook app. The web version of Microsoft Outlook is available at: https://outlook.office.com/mail/

36. Compose a new email with the following settings:
    a. To: *{email address of the user identity you are using in this lab}*
    b. Subject: **new invoice**
    c. Attachments: **newinvoice.jpg** *(from the lab resource files)*

37. Send the email and wait for the flow to run.

38. Wait for an approval request Adaptive Card to you in the Teams tab – Select "Yes" or "No" and then select "Submit" to approve or reject the invoice as desired.

39. In the Outlook tab, check for a confirmation email that matches the option you selected.

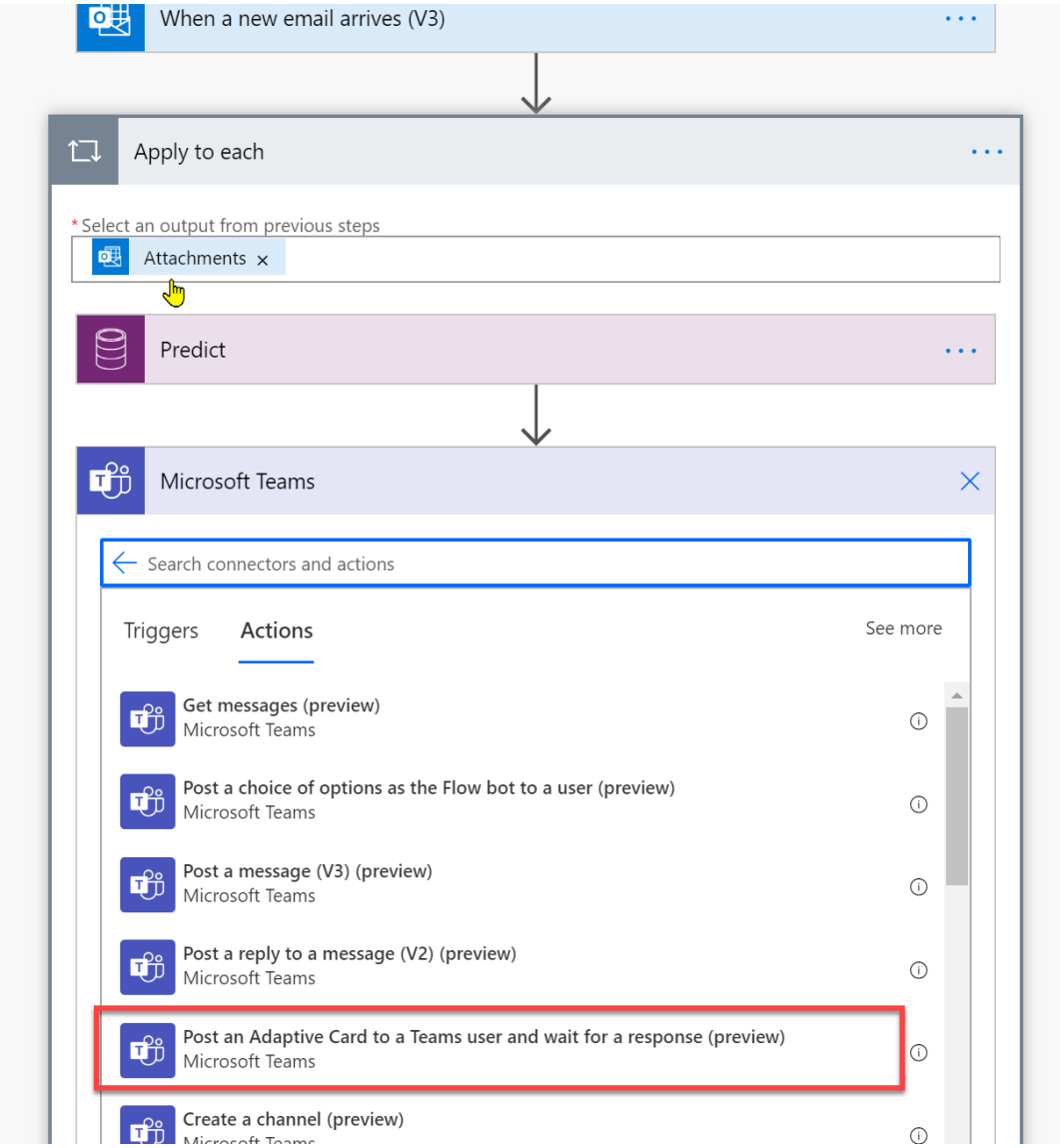
40. Repeat the test with the other test case (accept or reject).

Advanced learning

Note: for this example, we will use technology called **Adaptive Cards**. Its aim is to let users to design layout for their content that will be displayed in apps (for example Microsoft Teams, Cortana, Outlook) using these apps' User Experience. For more information please visit: https://aka.ms/adaptivecards.

For the purposes of this lab, we will provide you with JSON that can be used in our Adaptive Card action. If you are interested in designing your own Adaptive Card, please visit the designer experience at: https://adaptivecards.io/designer/.

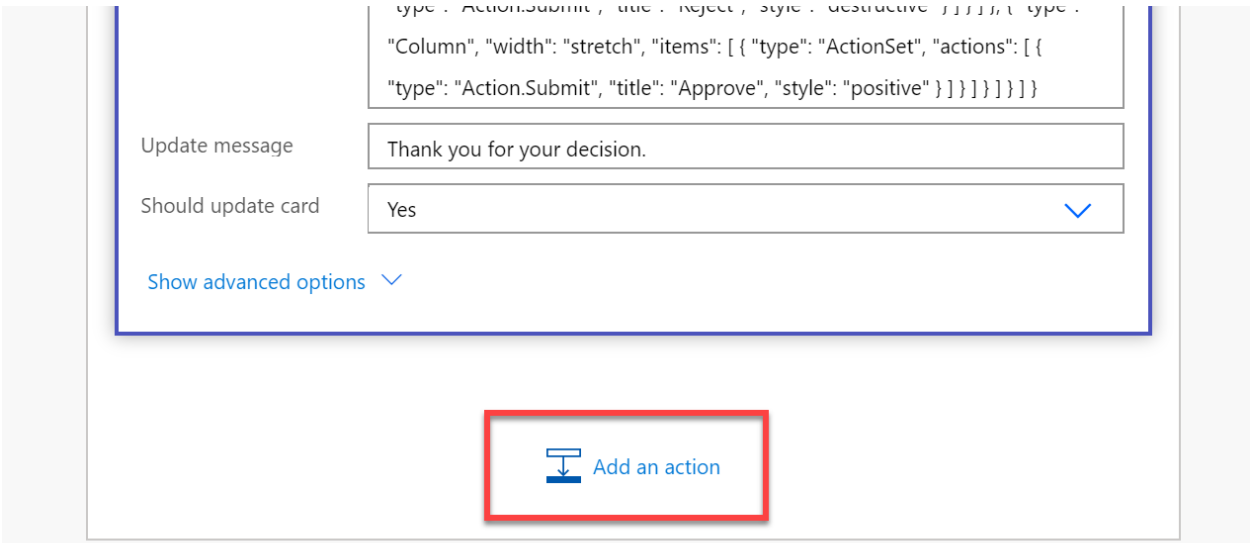
A. Select **Post an Adaptive Card to a Teams user and wait for a response.**



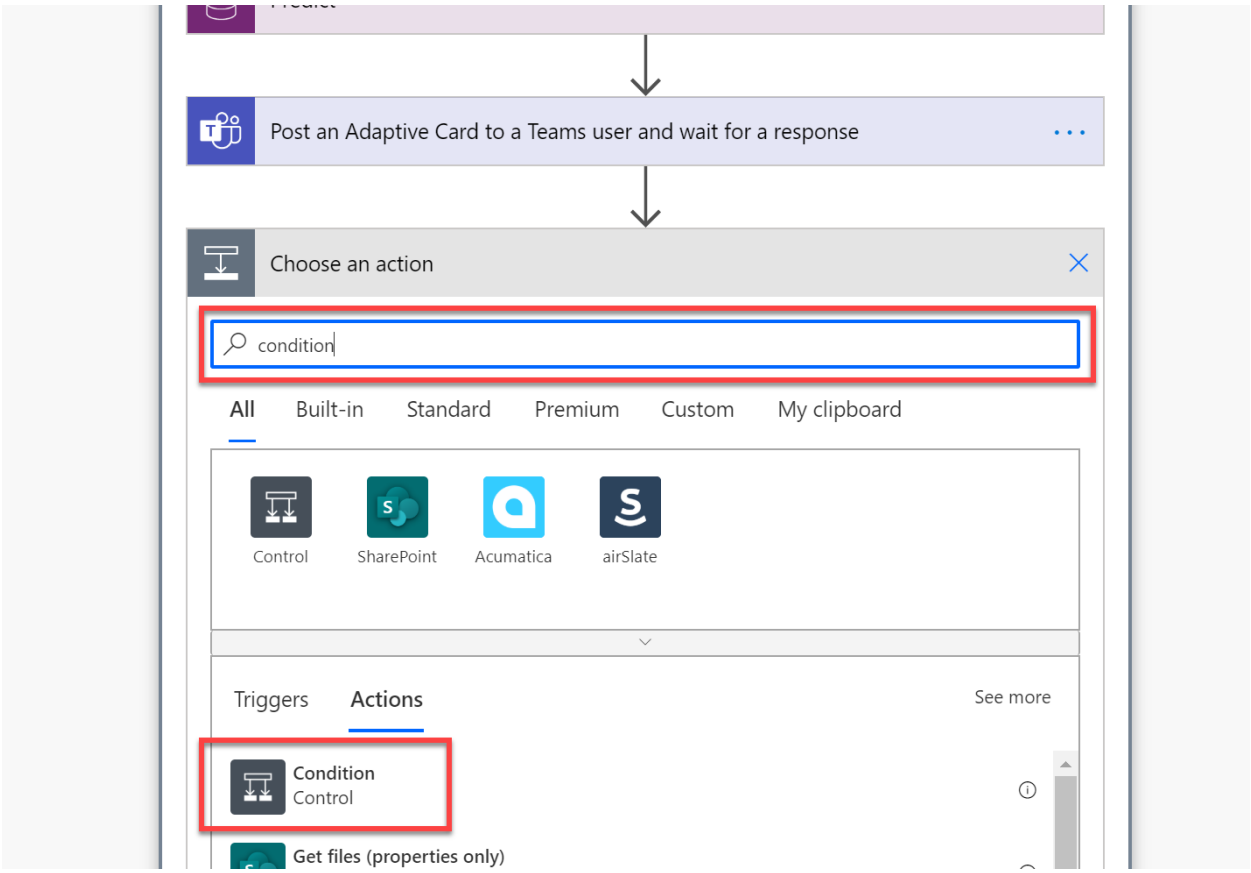
B. Establish your connection to Microsoft Teams.
C. Use following values:
   - **Recipient**: Your email address (User ID)
   - **Message**: Input the JSON code from the file: **AdaptiveCard-lab8.json** found in the student lab data packages.
   - After you copy paste the JSON code, replace the following data in the message content:
      a. #BILL TO# with **Bill to value** *(from dynamic content for action* **Predict***)*
      b. #CONTACT# with **Contact value** *(from dynamic content for action* **Predict***)*
      c. #DATE# with **Date value** *(from dynamic content for action* **Predict***)*
      d. #TOTAL# with **Total value** *(from dynamic content for action* **Predict***)*

- **Update message:** Thank you for your decision
- **Should update card:** Yes

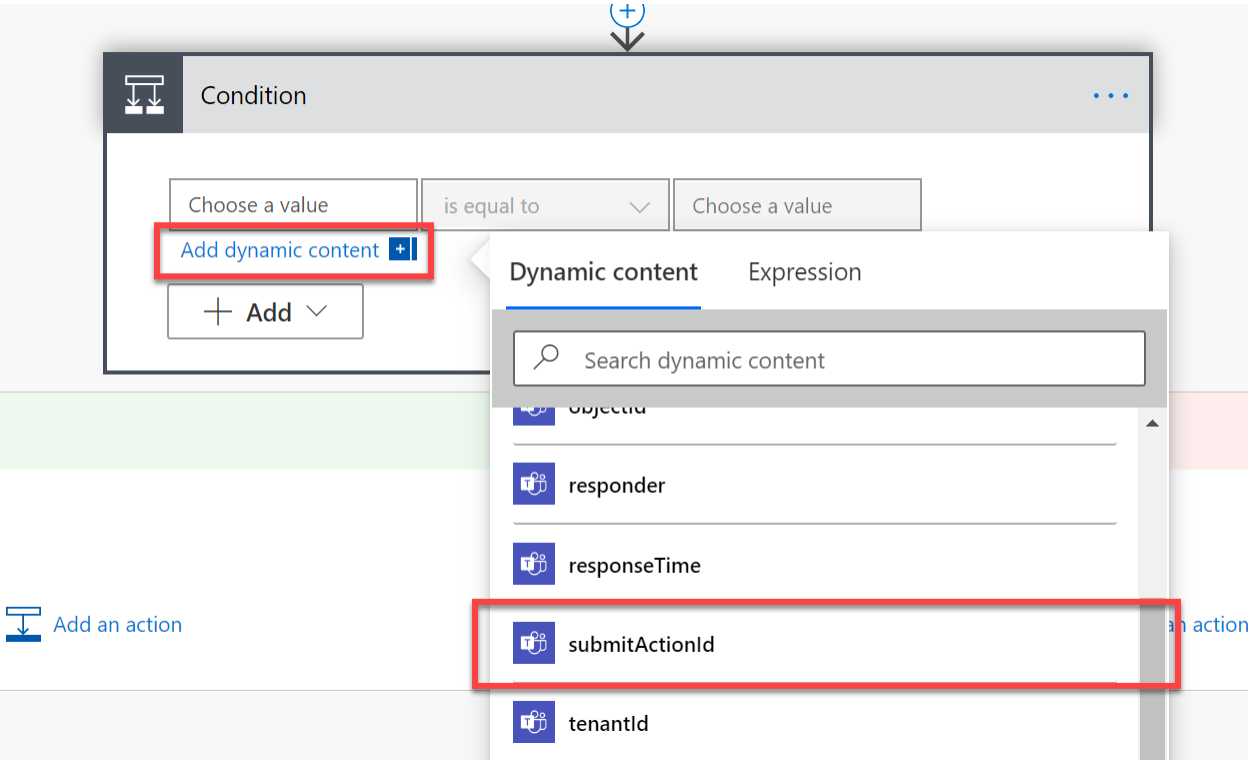
D. Click **Add an action**.



E. Search for **condition** in the search bar and select **Condition** in Actions.

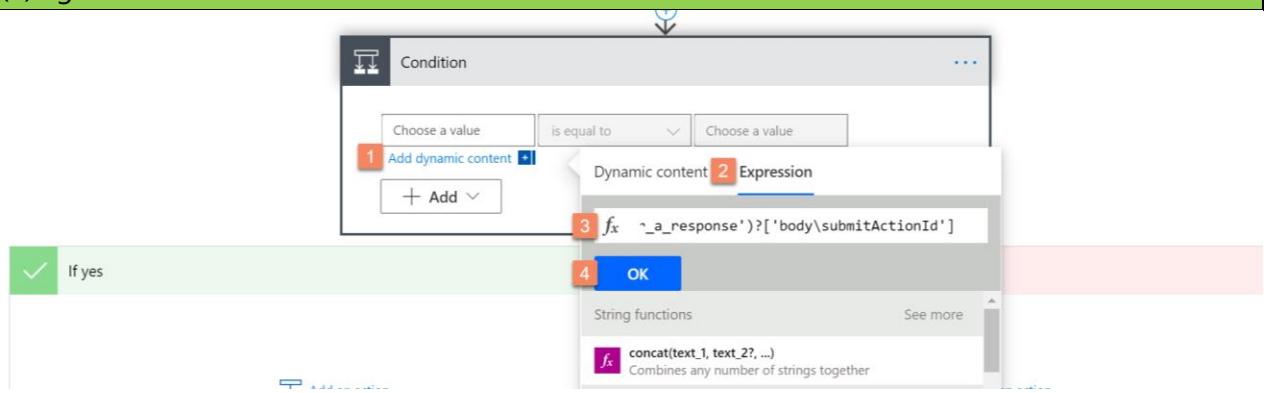


F. Click on **Add dynamic content** and select **submitActionId** from **Post an Adaptive Card to a Teams user and wait for a response** outcomes:



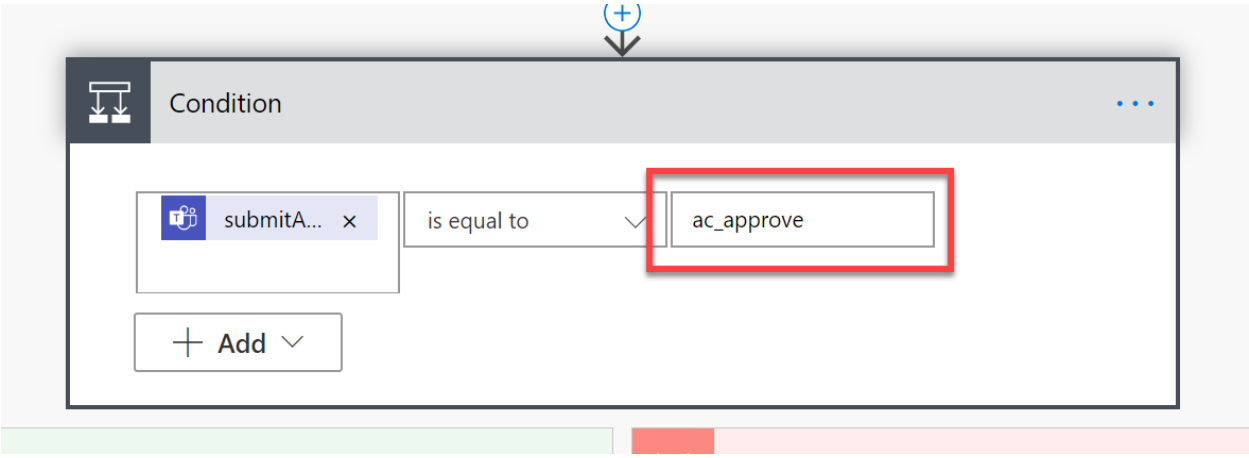
Tip 1: If no outcomes for the Teams action can be found, then click on "Add dynamic content" link (1) and then "Expression" (2). **Insert:**
`body('Post_an_Adaptive_Card_to_a_Teams_user_and_wait_for_a_response')?['submitActionId']`
in the field (3) and click "OK" (4).

Tip 2: If you are prompted that the expression is invalid, simply close the prompt and hit "OK" (4) again.



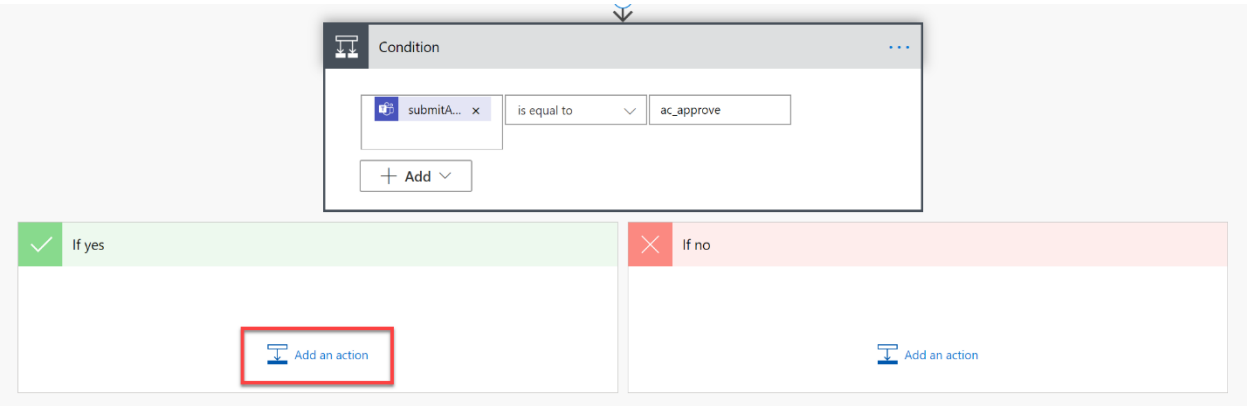
G. Enter **ac_approve** in choose a value field.

Note: Case sensitive. Make sure the capitalization is same as above.



Note: The **ac_approve** value was defined in our Adaptive Card JSON payload and represents our **Approve** button that is rendered at runtime.

H. Click **Add an action** under If Yes branch.



Important: Now return to step 16 above.

Check your knowledge

Lab 8

10 mins

1. When we want to send an approval to a user inside of Microsoft Teams, which is the appropriate action, from the Microsoft Teams connector, for us to choose?

   A. Post a choice of options as the Flow bot to a user
   B. Post an Adaptive Card to Teams user and wait for a response
   C. None of the above
   D. Either A or B

   Answer: D. Post a choice of options as the Flow bot to a user or Post an Adaptive Card to Teams user and wait for a response

2. When we are entering ''Yes'' in "choose a value field" in the Condition action, we need to make sure the capitalization is same as the options in the Teams action

   A. True
   B. False

   Answer: A True – If the capitalization is different, the condition will not met.

3. After clicking Add an action under If No branch, we need to communicate to our email recipient that their invoice has not been approved. What action do we need to select _____?

   A. Reply to email
   B. Send an email notification
   C. Run a flow built with Power Automate Desktop
   D. Run a flow built with Selenium IDE

   Answer: A. Reply to email. This will allow our email to look like a reply to the original email, giving it a personal touch.

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