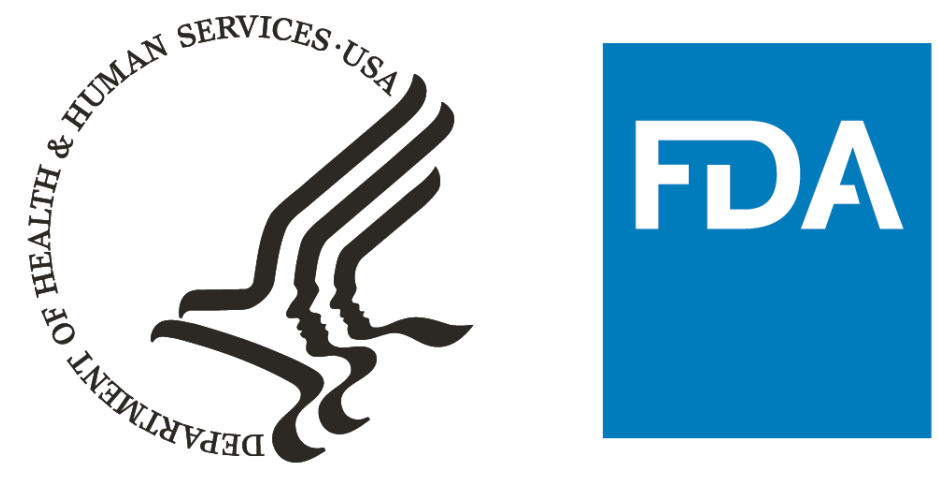


Enhancing Public Health and Regulatory Efficiency with Microsoft's Power Platform

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Abstract

Microsoft Power Platform can be used in incredible ways to support FDA's mission and improve public health. This platform has tools available to all at FDA and can display information and automate processes. These tools are easy to use, save time, improve efficiency, and require little to no technical experience. This poster will show how these apps have been implemented to streamline processes at FDA's Center for Tobacco Products (CTP).

Introduction

In the fast-paced field of public health and regulatory science, FDA employees often face the challenge of managing redundant tasks and overwhelming information flows. The Microsoft Power Platform tools require minimal coding knowledge or skills, making them accessible to FDA staff.

A brief description of each tool is below:

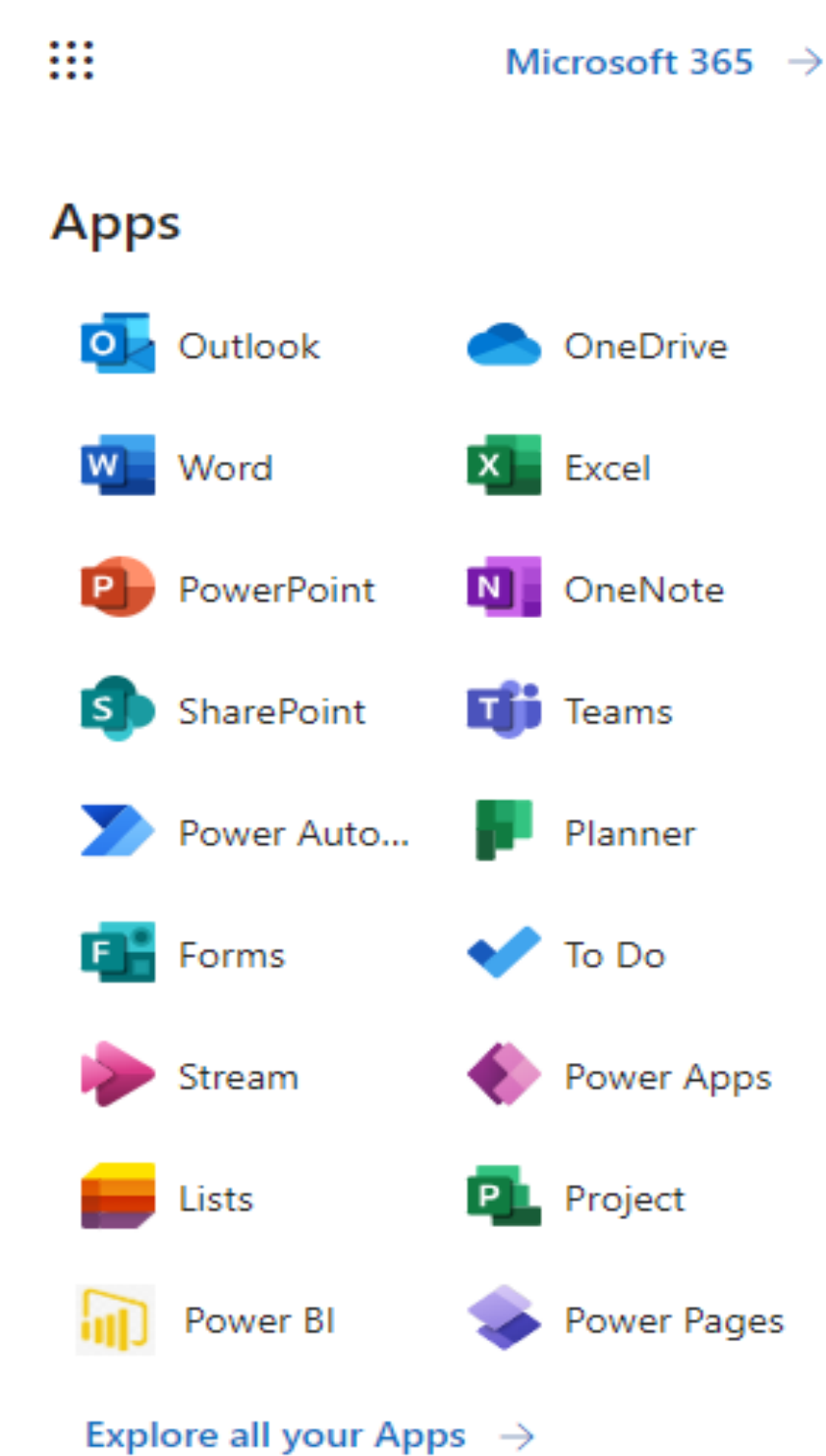
Power Apps: Build mobile and web apps using your organization's data

Power Automate: Automate workflows across various MS Suite programs

Power BI: Create charts and visualizations to make data-driven decisions

Power Pages: Use Artificial Intelligence to create business external websites.

How to Access: Click on the App Launcher (nine dots arranged in a three by three square at the top left of any SharePoint Page). Then, click on "Explore all your apps" to find the icons for Power Apps, Power Automate, Power BI, and Power Pages. Left click on the icon to open the program.

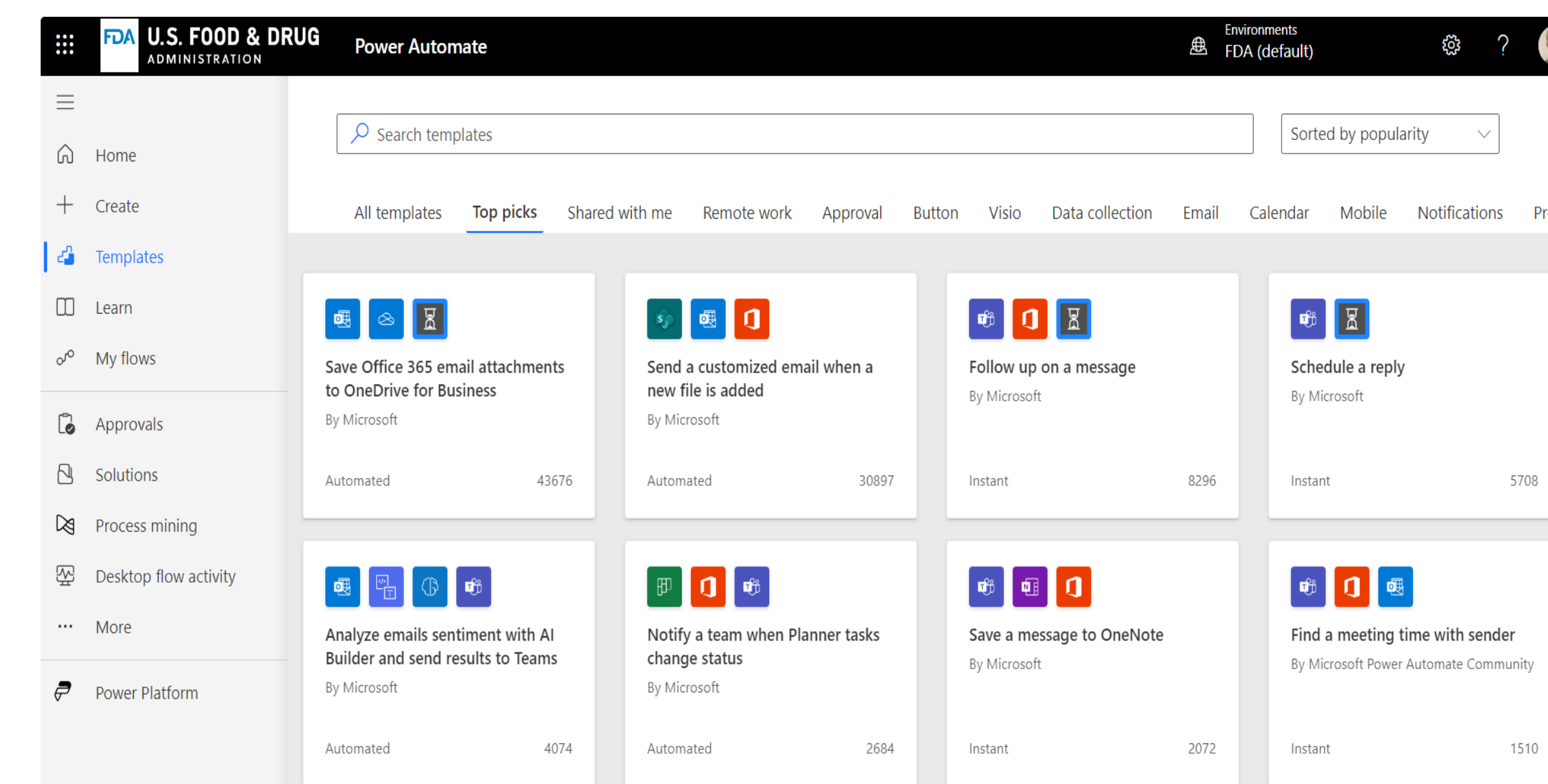


This poster will highlight **Power Automate** and **Power Apps** to streamline redundant processes. Power Automate processes (or flows) can be created to occur when someone presses a button (manual), based on a specific event or at a certain day or time. Power Automate flows have triggers (actions that start the flow) and actions that occur after the trigger. There are several different types of Power Apps – canvas apps do not require additional licensure costs (model-driven apps do).

Materials and Methods

At CTP, the deployment of various Power Apps has revolutionized how employees access critical information, secure necessary approvals, and streamline data collection. Power Automate enhances these applications by integrating and automating workflows, enabling notifications based on specific conditions, and facilitating the cleaning of data across systems.

When creating processes that will occur automatically, we recommend reviewing the list of Power Automate templates that are easier to use than starting from scratch. To access the templates, click on Templates (left hand side of screen), then you can search based on what you need to accomplish (some examples on screen below).



Several recommended training resources include Reza Dorrani's [YouTube channel](#), Shane Young's [YouTube channel](#), Alireza Aliabadi's courses on [Udemy](#).

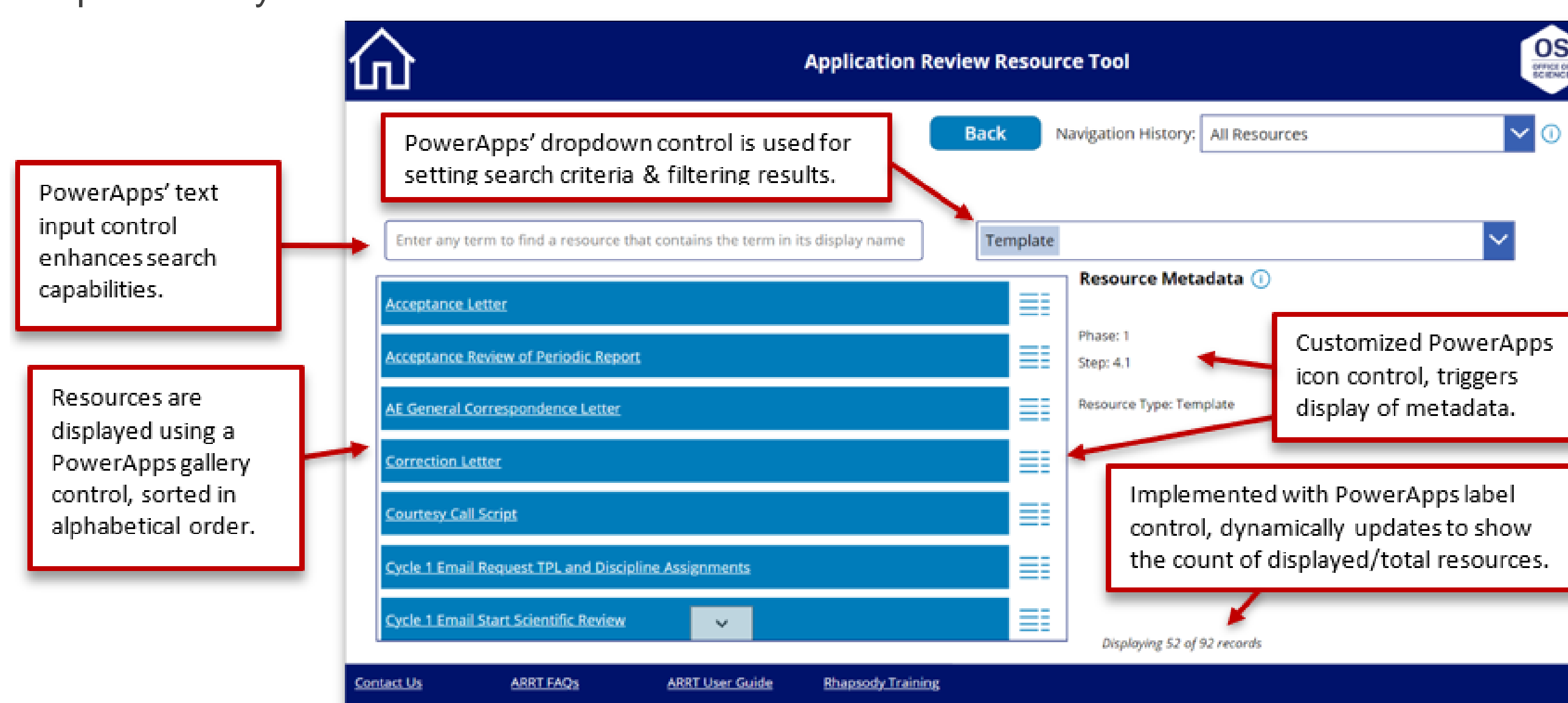
Results/Discussion

There are innumerable strategies to leverage Microsoft's Power Platform such as:

- Power Apps:** Consolidate critical information in one place
- Power Automate:** Move data between multiple locations automatically

Example #1: Consolidate Critical Information in One Place

CTP's Application Review Resource Tool (ARRT) exemplifies the platform's impact, aiding employees in CTP's Office of Science to efficiently locate key resources to complete reviews of tobacco product marketing applications since 2022. ARRT is particularly beneficial for new employees, reducing onboarding time and enhancing productivity.



Results/Discussion (Cont.)

Consolidate Critical Information in One Place (cont.)

The previous visualization highlights a functional screen within ARRT, demonstrating essential Power Apps components integral to its operation. Each feature is strategically implemented to optimize user experience and streamline resource management. The interactive elements, labeled in the visualization, facilitate efficient navigation and quick access to resources, enabling reviewers to engage with the data effectively.

Example #2: Move Data Between Locations Automatically

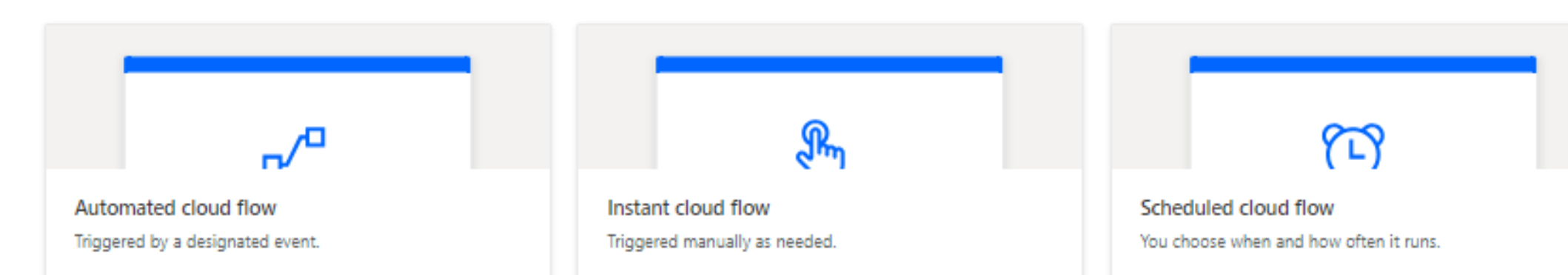
It is common to use the same information in multiple online locations. Power Automate can take information from any number of locations (often Excel and/or SharePoint) and automatically copy it to different locations.

Implementation at FDA:

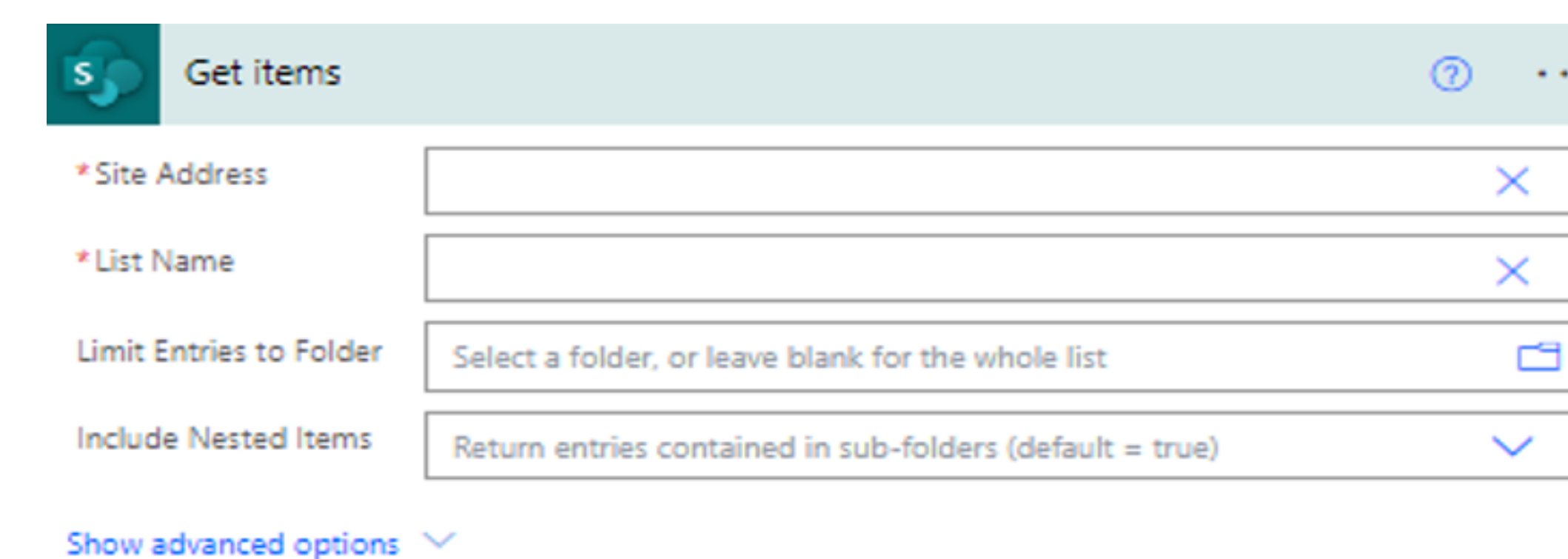
The transition from Stream (Classic) to Stream on SharePoint meant URLs had to be updated due to length restrictions in SharePoint. The new URLs were longer than the previous 255-character limit, necessitating the addition of a new column in SharePoint to accommodate them. Power Automate was employed to move the old links to the new column, a task that would have taken at least 2.5 hours if done manually.

Automated Process Steps (see below and in the column to the right):

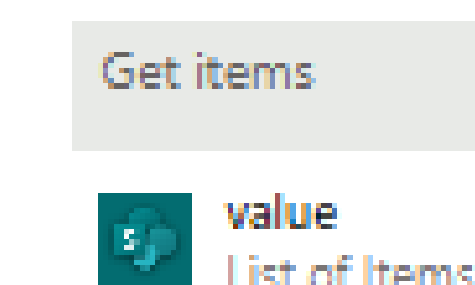
- Decide when you want the data to move: either in real-time, with the click of a button, or on a set schedule
- Open Power Automate and choose the appropriate trigger based on your answer to the prior question
 - If desire to move in real time: Use Automated cloud flow
 - If desire to move with click of a button: Use Instant cloud flow
 - If desire a set schedule: Use Scheduled cloud flow



- Identify where your data is located and where you want it to move
- Add actions for Power Automate to view original data (example below uses the "Get Items" action in Power Automate – include your site address and list name)



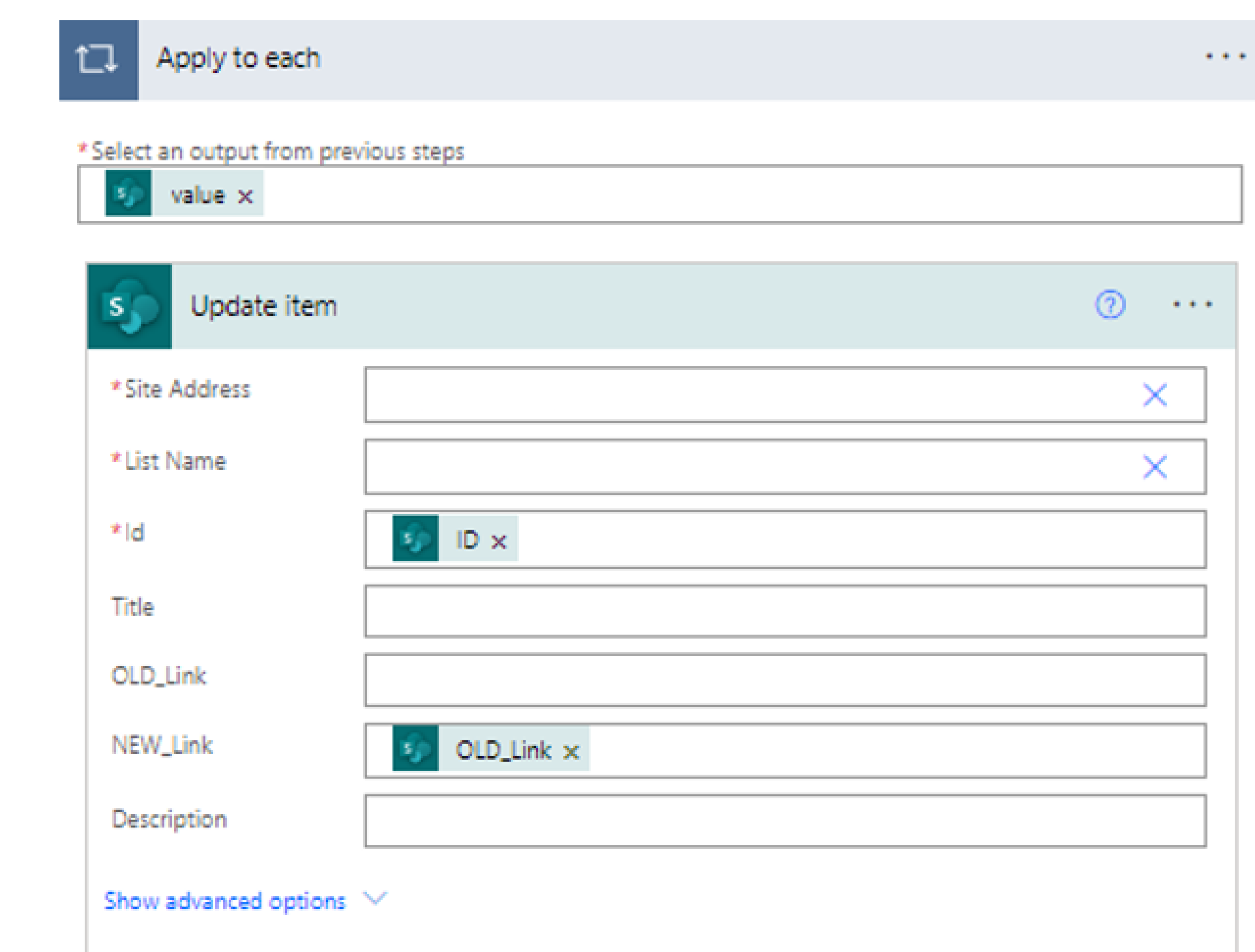
- Add actions to update each item in the list using "Apply to each" and "Update Item" (either in same or different locations)
 - Select the value (screenshot below) as the output in your "Apply to each" loop



Results/Discussion (Cont.)

Move Data Between Locations Automatically (cont.)

b) Enter the site address, list name, item ID and add the dynamic content to the column (information that was in the OLD_Link column is now being added to the NEW_Link column)



Additional Examples of Using the Power Platform

Some ideas that the authors have implemented or seen used are below:

- Example Video: [Send email based on Microsoft Forms result](#)
- Example Video: [Inspection App to collect information to more easily find](#)
- Example Video: [Search Multiple locations on same Power App screen](#)
- Example Video: [Make it easier to search/filter SharePoint list](#)
- Example Video: [Collect information via adaptive cards in Microsoft Teams](#)

Conclusion

The adoption of Microsoft's Power Platform at the FDA has demonstrated significant improvements in process efficiency, error reduction, and operational streamlining. These tools require a minimal time investment to learn and offer substantial time savings and operational benefits, enabling staff to focus more on strategic tasks and less on routine processes. Please reach out to LaToya.Crabbe@fda.hhs.gov or Gavin.OBrien@fda.hhs.gov with questions you may have.

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