Leveraging Microsoft Flow & PowerApps

Presented by: Christine (Chrissy) Geluk MSLIS, Principal & Founder, Librarian At Your Service LLC

Processes and procedure are part of any business operation; whether that operation is a corporate office, government office, hospital or public library. These systems help keep an operation in check. While these operations can be slow and inefficient, incorporating automated processes like Microsoft Flow and/or PowerApps can him optimize performance of any organization. Further, many of the Microsoft Flow & PowerApps solutions are no-code!

After being available in preview on 30 November 2015, Microsoft released PowerApps for public use on 29 April 2016. "Microsoft PowerApps allows anybody to build basic business apps without having to touch any code. These apps can run on the web and on mobile (through the PowerApps apps for iOS and Android)[1]

Similarly, Microsoft launched Microsoft Flow later that year on 1 November 2016. Flow is Microsoft's version of IFTTT (If this, than that). "Flow simplifies workflows by connecting different apps and internet services."[2]

Microsoft Flow and PowerApps are flexible that the average business end-user can develop Microsoft Flows and PowerApps; as well as hard-core software developers. "Microsoft's long been aware of the demand for programming tools for power users. You only have to look at how powerful Excel's macros are and how Microsoft has tried to bring back modern-day versions of those early Basic development tools. Even Access has continued to change and adapt, most recently adding tools to quickly build and deploy simple web apps on an intranet."[3] Flow and PowerApps comprise the "…suite of automation tools, , linking cloud data and application APIs and building on a set of new services that are designed to work with business data…"[4]

These automation tools can be leveraged whenever there is a process or procedure that can be optimized for efficiency. Examples of these processes or procedures that can typically found in a corporate or library setting are discussed below from simple to complex.

Simple Flow – push notifications of messages received into a shared mailbox

[1] Lardinois, Frederic. "Microsoft's New Tool for Building Line-of-Business Apps is Now in public preview." AOL Inc, last modified Apr 29.

[2] Dalton, Andrew. "Microsoft Flow and PowerApps Get a Public Launch November 1st." AOL Inc, last modified Oct 31.

[3] Bisson, Simon. 2017. Business Analysts: Go no-Code with Microsoft PowerApps InfoWorld Media Group, Inc. https://dialog.proquest.com/professional/docview/1881878974?accountid=173976.
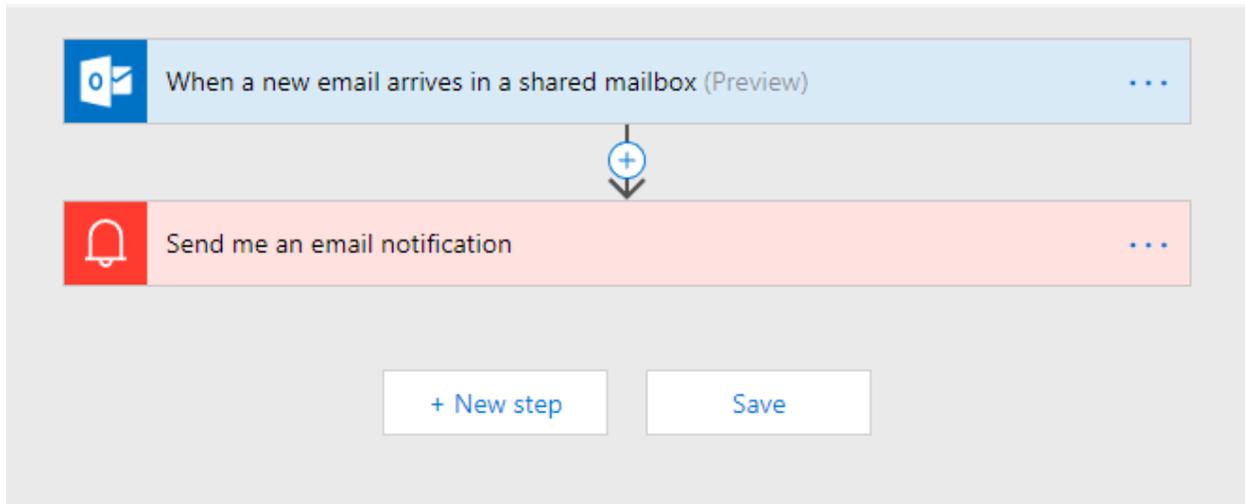
[4] Ibid

Figure 1

This flow is an example of one of the simplest Flows. The flow triggers an email notification to certain recipients when a message is received in a shared mailbox. This keeps a process smooth so that members do not have to manually check the shared mailbox. Further, this example of a Flow is a "Team Flow". Any Flow can be shared with another individual where each member is able to modify a Flow's settings.

Flows with Connectors such as Twitter

Using any available connectors (and there are a number of them with the list growing) like Twitter, it is possible to develop a Flow that monitors tweets according to a topic.
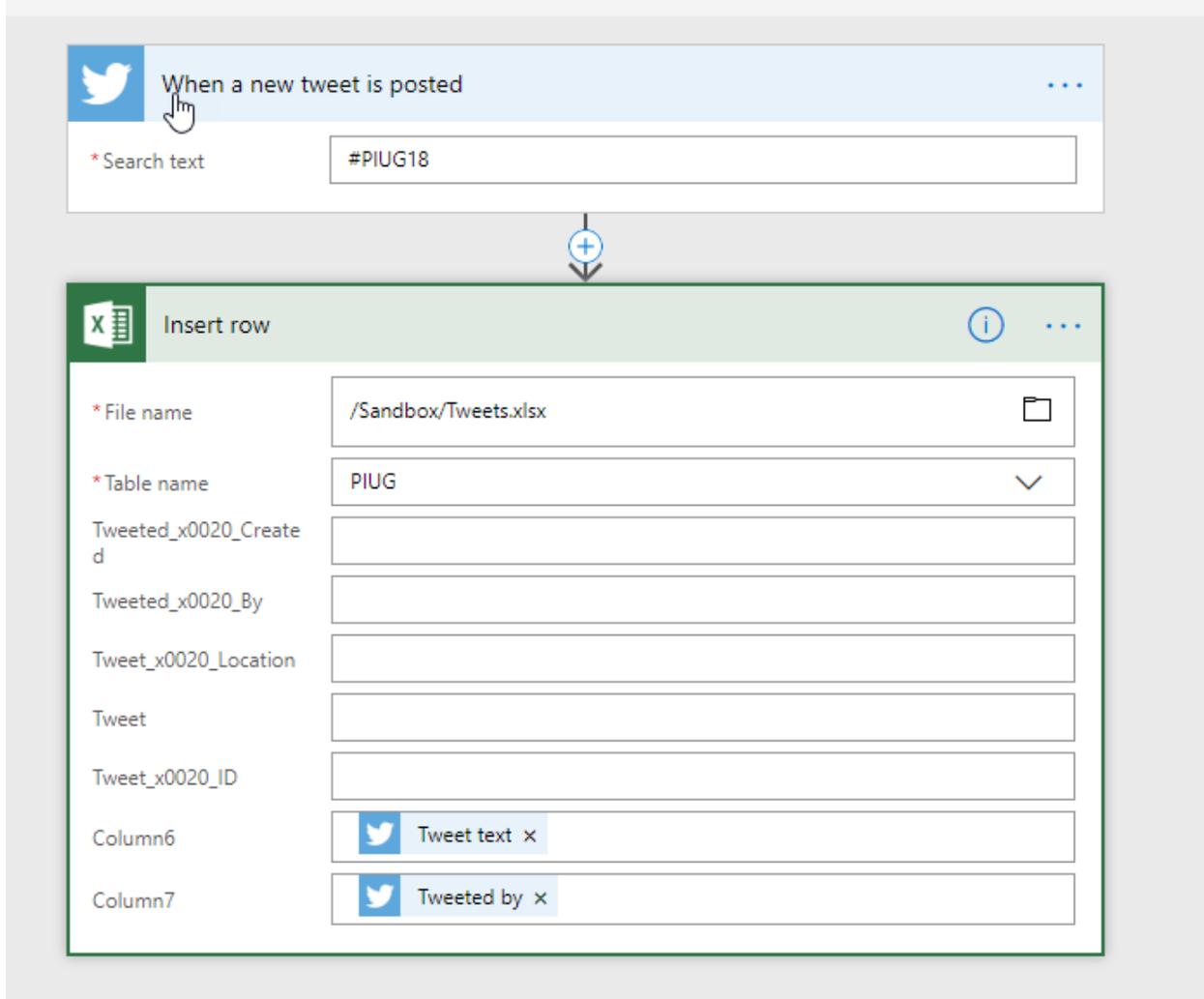
Figure 2

This flow is triggered when someone uses the #PIUG18 hashtag and sends information from the tweet to an Excel file. What is sent to the Excel file is customizable.

Like I mentioned, there are a number of connectors available that you can use in your Flows. Whether it is monitoring tweets or emails and sending them to an Excel file, OneDrive or even Sharepoint, a Flow can be established to help make your life easier.
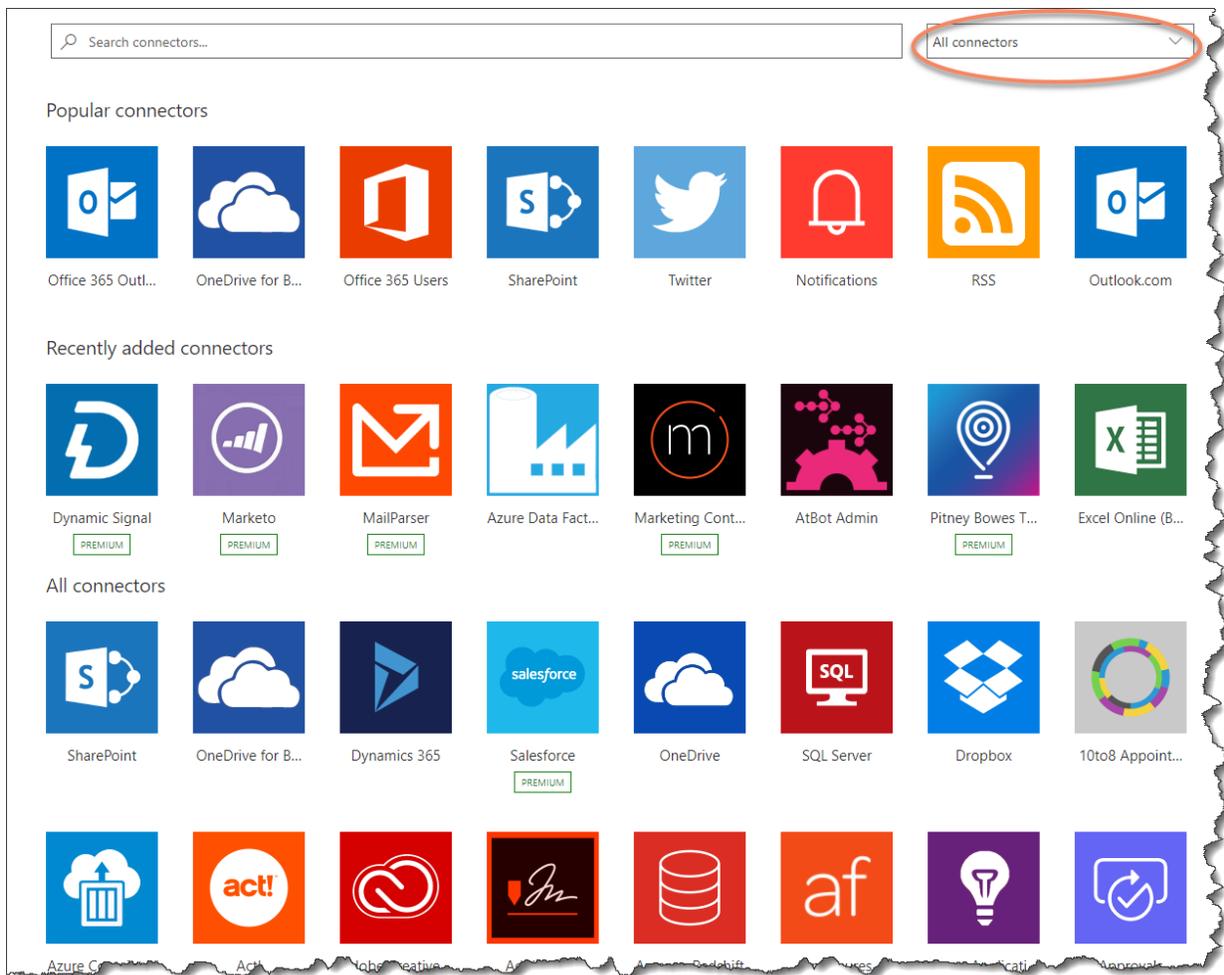
Figure 3

Besides connectors and if you are a developer, you can program your own custom Flow. The possibilities are endless.

Whenever you create a Flow, you do have the option of saving it as a template. This can be useful when you need to recreate the same methodology or when your team wants to recreate the same methodology.

When an individual or team flow is created, the flows are accessible at any time for review or modification:

Figure 4

Further there is a mobile app for Microsoft Flow that allows you to view or modify the Flow on the go using your smartphone or tablet. Further you can even program a flow to run with the click of a button.

Microsoft PowerApps

We talked about Flows yet there is more with PowerApps! Microsoft Flows and PowerApps can either work independently or together. Again, it depends on the need and process that determines if you need both. As the name implies, PowerApps provides the ability of creating an app (mobile or desktop) that initiates a process and that process could be a flow.

With PowerApps, you can develop your own customized apps for your organization that allows your users to initiate a task from the click of the app. The app can be accessible from both a mobile device or your computer.

The illustration below shows how to build an app that is specifically design for mobile devices. When creating apps, you can develop with a standard design or one that is truly optimized for mobile devices. The first step with developing apps is connecting to the data source.
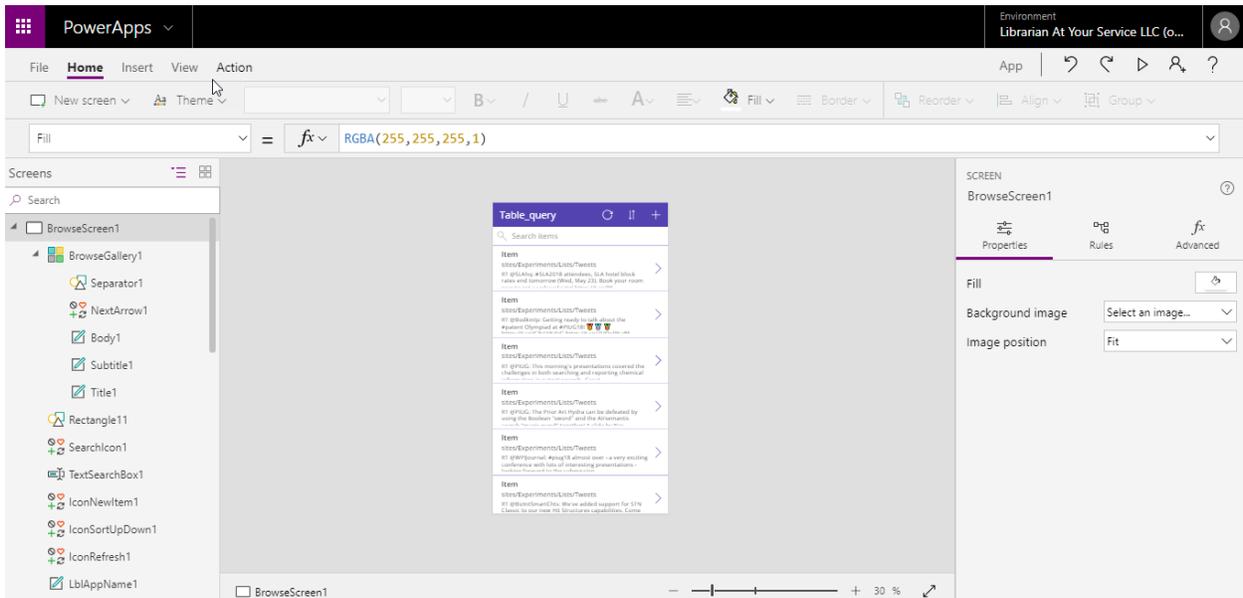

Figure 5

Once the data is in the PowerApps studio, you have the ability to design and customize the browse, detail and edit screens. This is simple example showing that you can hide select fields from the data source and design each screen according to your specifications.
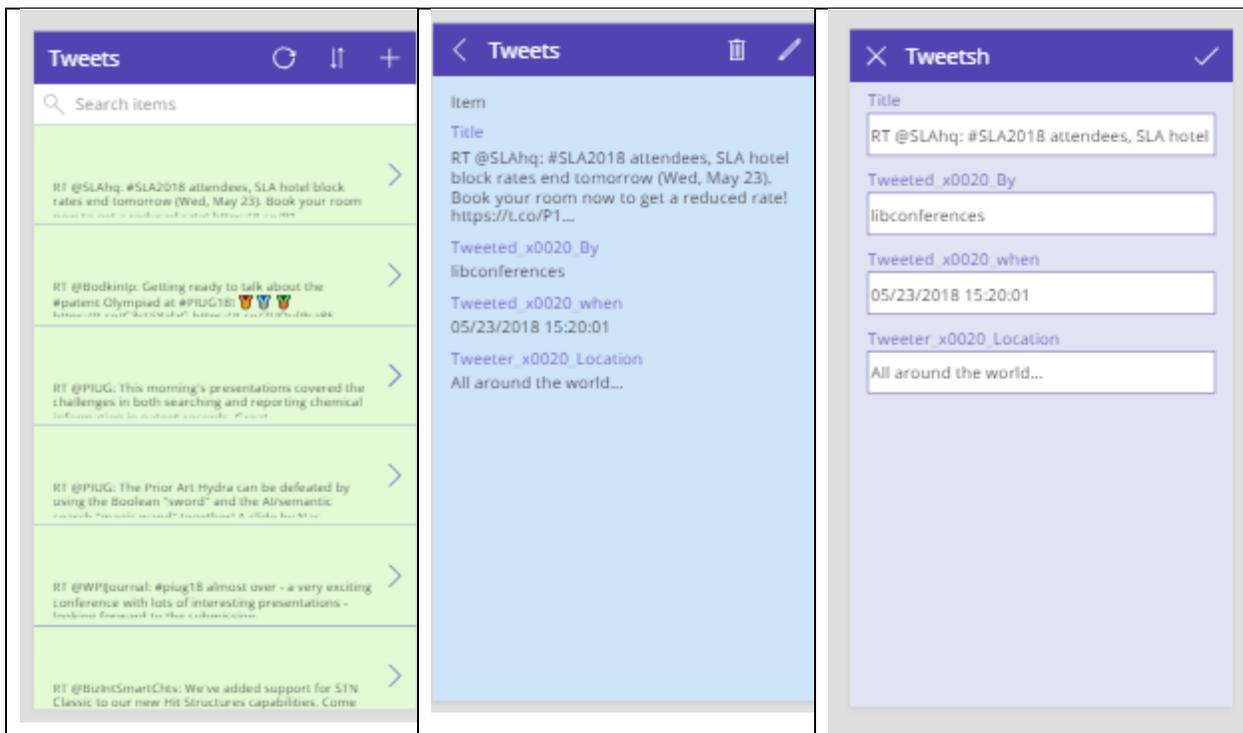

Figure 6

Once you are a ready to promote the app, you can save it and share it. You can add the custom PowerApp on your intranet site; or make it available from the PowerApps mobile app for your organization. PowerApps are compatible for multiple platforms like Android and iOS.
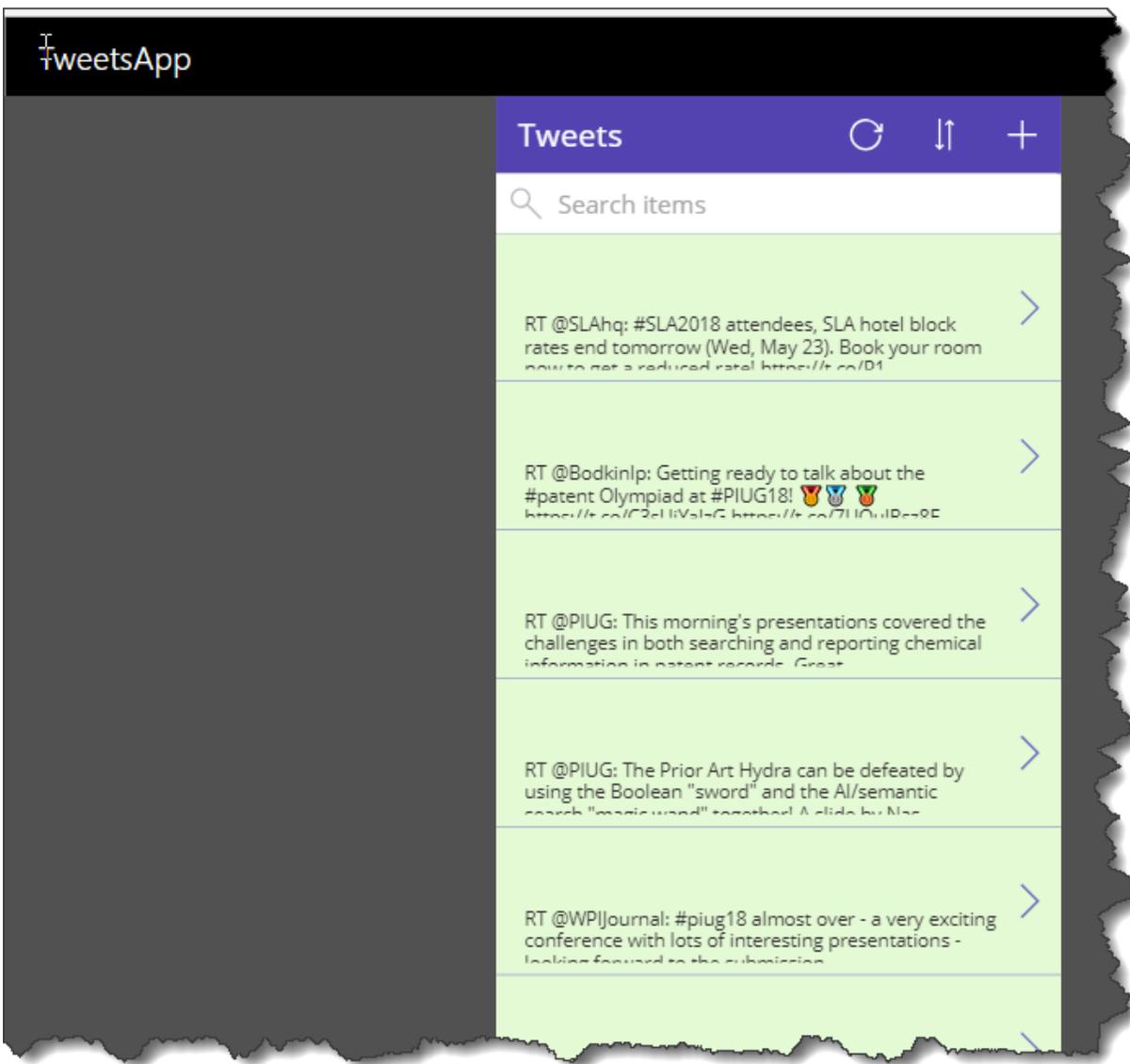

Figure 7

This was an example of a very simple app that extract data from a data source and makes it available for those on the go. PowerApps can be customized for advanced functions that support the business need.

Conclusion and Resources

If you are ready to get started, there is a multitude of learning documentation and training videos as well as courses. Depending on your comfort level, you can find the best resource for you. Besides traditional learning resources, a lot can be gained from the user community of Microsoft Flows and PowerApps.

These communities can be founds through Meetups and even Sharepoint Saturdays, both of which are free.

I have included a list of free resources that can provide a starting point. Note that this is not a definitive list.

Microsoft Flow Guided Learning. Retrieved from https://docs.microsoft.com/en-us/flow/guided-learning/

Microsoft Flow Documentation. Retrieved from https://docs.microsoft.com/en-us/flow/

PowerApps Documentation. Retrieved from https://docs.microsoft.com/en-us/powerapps/

Microsoft PowerApps Guided Learning. Retrieved from https://docs.microsoft.com/en-us/powerapps/guided-learning/

Microsoft's Blog on Flow. Retrieved from https://flow.microsoft.com/en-us/blog/

Microsoft's Blog on PowerApps. Retrieved from https://powerapps.microsoft.com/en-us/blog/

PowerApps YouTube Channel. Retrieved from https://www.youtube.com/channel/UCGfWR2ekfRFckLjev6eQYLg

Microsoft Flow YouTube Channel. Retrieved from https://www.youtube.com/channel/UCG98S4lL7nwlN8dxSF322bA

User Voice for Microsoft Flow. Retrieved from https://flow.microsoft.com/en-us/connectors/shared_uservoice/uservoice/

PowerApps Community. Retrieved from https://powerusers.microsoft.com/t5/PowerApps-Community/ct-p/PowerApps1

Find a Sharepoint Saturday event near you. Many Sharepoint Saturday meetings will have a session or two on Microsoft Flow or PowerApps. Retrieved from http://www.spsevents.org/

Alternatively, find a local Meetup group that focues on Sharepoint, O365 or even specific to Flow or PowerApps. Retrieve from https://www.meetup.com/.

The sole requirement with using Microsoft Flow or PowerApps is having a business need or process that needs optimization for your organization. While having a technical or development background is helpful, it is not necessary. Any end-user can do this!