

Robotic Process Automation in a Day

Lab 2 – How to generate insights to optimize and automate your process using Process advisor

45 mins

December 2020



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Lab Overview

Process advisor records and analyzes your manual business tasks. It discovers inefficiencies and shows optimization and automation opportunities. For example: in a healthcare facility, you can use Process advisor to record patient check-in procedures. Process advisor automatically produces a process map that visualizes the check-in process. You can see which activities take the longest, how many variations of the check-in process there are, and what variations and actions take the most time. Using this information and the powerful features in Process advisor, you can drive improvements to make a difference for business.

Prerequisites

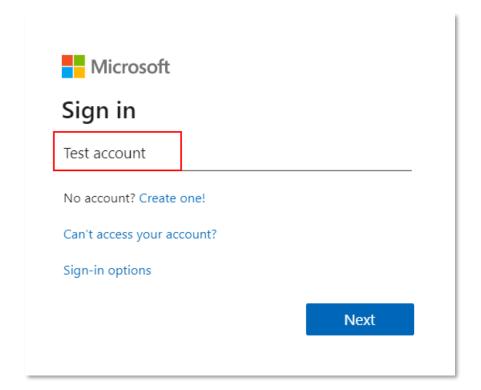
Before you start using Process advisor, make sure you have completed Lab 1.1 and 1.3 prerequisites.

Getting Familiar with Process advisor

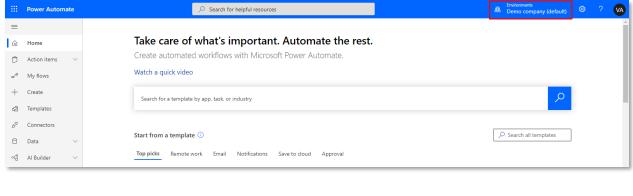
1. Navigate to <u>flow.microsoft.com</u> and click **Sign in**



2. Sign in with your test account



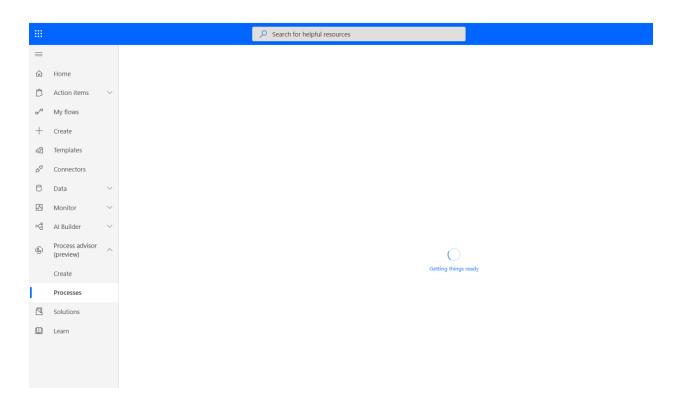
Note: Please make sure you have selected the correct environment (with database) when completing the labs. Either use the environment you created in lab 1.1, or the environment provided to you by your instructor. You can switch between different environments by clicking on the environment picker on the title bar.



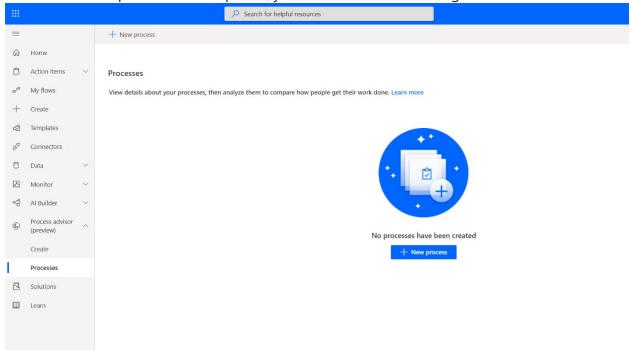


Note: To enhance the lab experience, we are going to import an existing solution that includes Process advisor recordings. If you are in a shared environment, your instructor has already imported this solution for the class to use. Proceed to step #11 (click Process advisor) if your instructor has already imported this solution. Otherwise, please proceed with the next step.

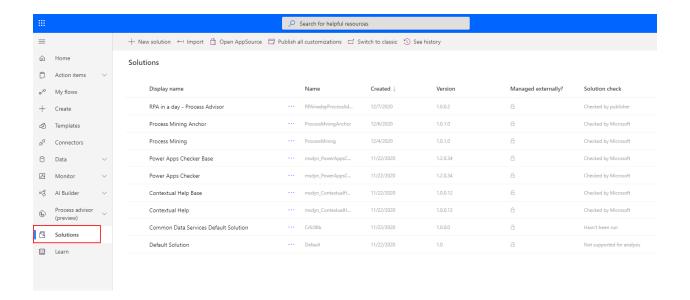
3. Click on **Process advisor (preview)** and then **Processes**. You will subsequently see a **Getting things ready** message. Allow this process to complete, it will take a few minutes.



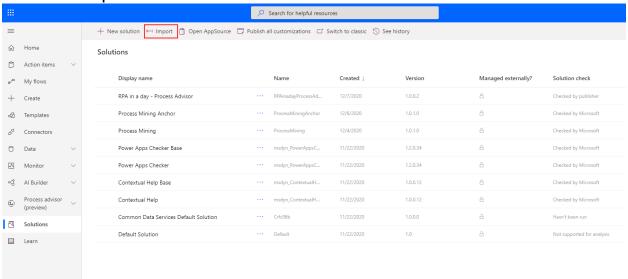
Once this process has completed, you should see the following screen:



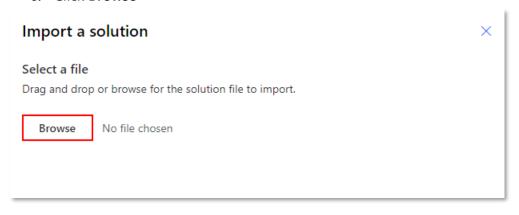
4. Click Solutions



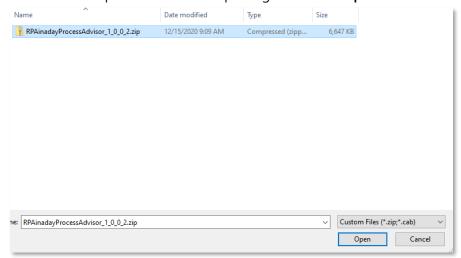
5. Click **Import**



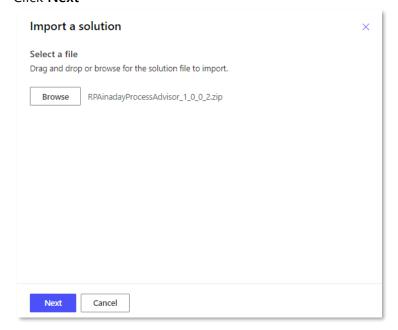
6. Click Browse



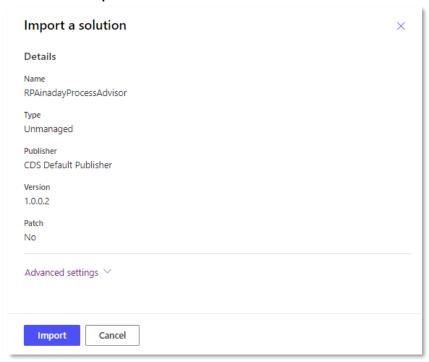
7. Select the zip file from the lab package and click **Open**



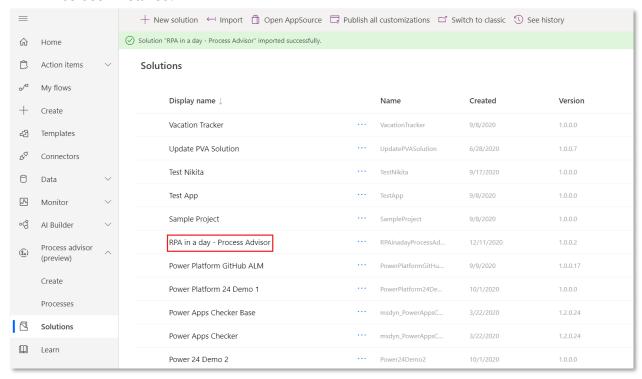
8. Click Next



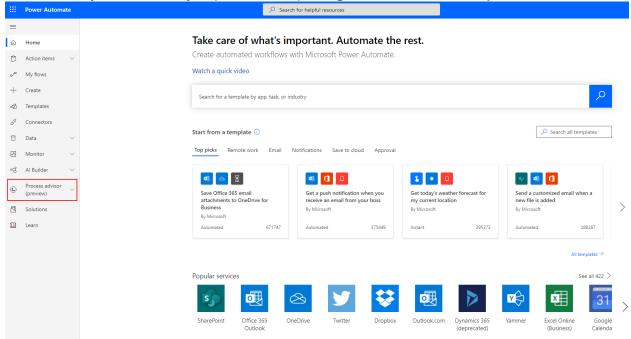
9. Click the **Import** button



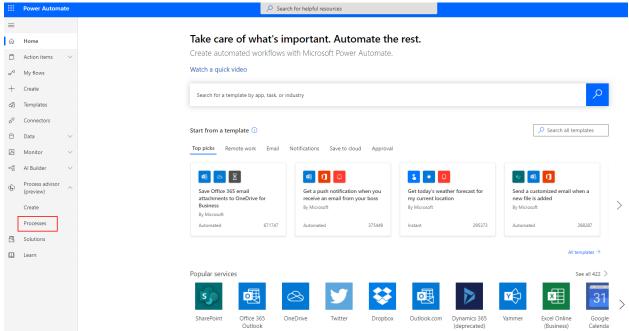
 After a couple minutes, you should see a confirmation message that your solution has been imported successfully and a new solution called RPA in a day – Process Advisor has been installed.



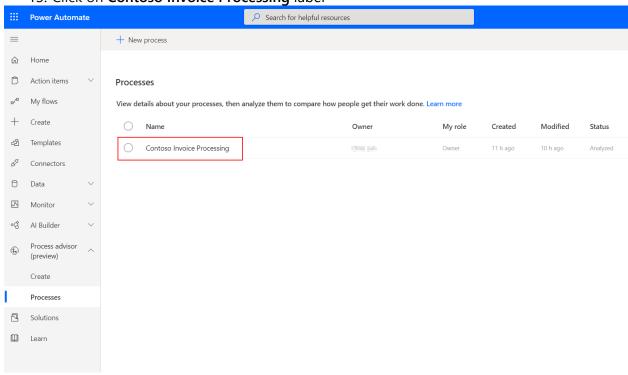
11. Once you successfully imported the zip file, go to Process advisor (preview)



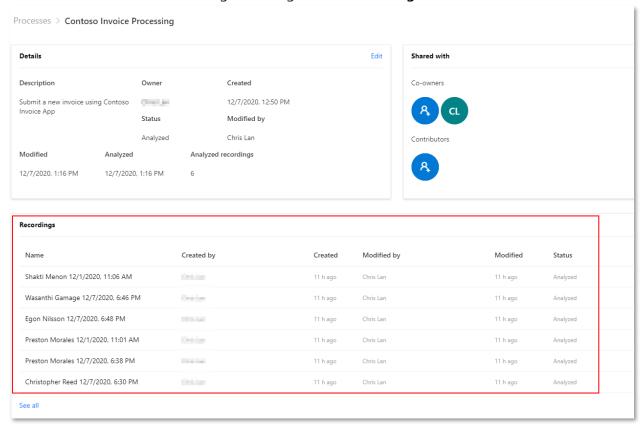
12. Click Processes



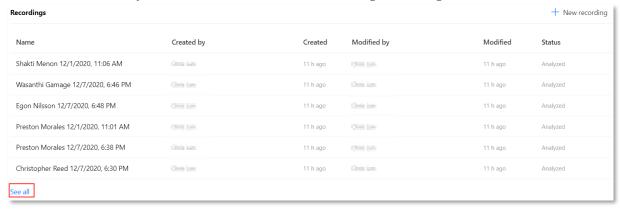
13. Click on Contoso Invoice Processing label



14. You can see all the existing recordings under Recordings



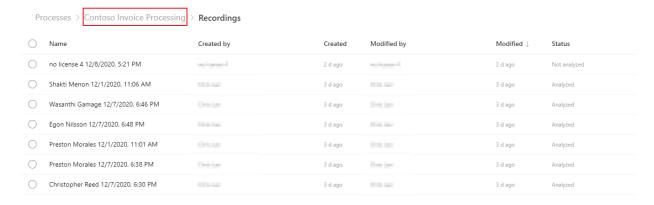
15. Click See all, you will be able to see all the existing recordings



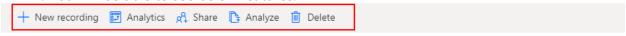
Processes > Contoso Invoice Processing > Recordings

O 1	Name	Created by	Created	Modified by	Modified	Status
O 9	Shakti Menon 12/1/2020, 11:06 AM	Selection (see	11 h ago	Orbital	11 h ago	Analyzed
0 1	Wasanthi Gamage 12/7/2020, 6:46 PM	F10.50	11 h ago	Deblar	11 h ago	Analyzed
O 6	Egon Nilsson 12/7/2020, 6:48 PM	Delta San	11 h ago	11114	11 h ago	Analyzed
O 1	Preston Morales 12/1/2020, 11:01 AM	0.00	11 h ago	Debias	11 h ago	Analyzed
O 1	Preston Morales 12/7/2020, 6:38 PM		11 h ago	TO SECUL	11 h ago	Analyzed
\bigcirc	Christopher Reed 12/7/2020, 6:30 PM	the term	11 h ago	Ortiza	11 h ago	Analyzed

16. Let's go back to Contoso Invoice Processing Processes by clicking **Contoso Invoice Processing**



17. You will be able to see below features:



Processes > Contoso Invoice Processing

• + New Recording - You can create a new recording by clicking + New Recording (We will create a new recording in an upcoming exercise)



Analytics - You can see the process map and insights by clicking Analytics



Share - You can share your processes with your team members by clicking Share



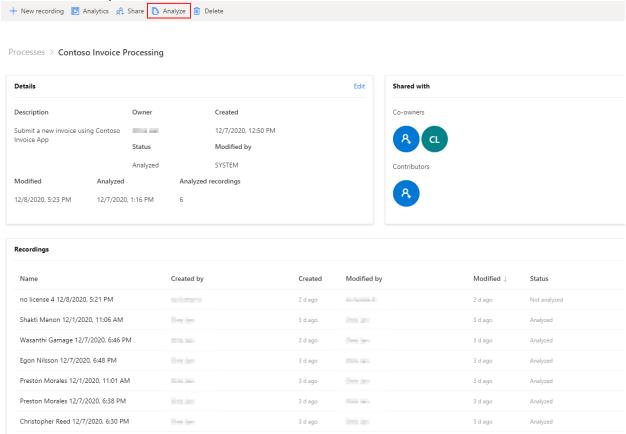
• Analyze - You can click Analyze to analyze your processes



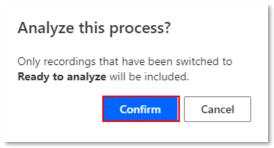
Delete - You can delete your Processes by clicking Delete



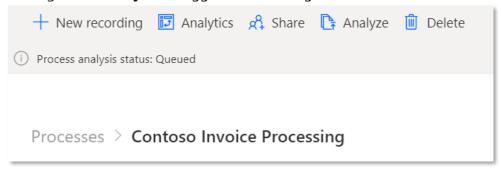
18. Now, let's click **Analyze** to analyze our processes. When we perform this action, Process advisor is going to analyze existing recordings to identify any bottlenecks within the business process.



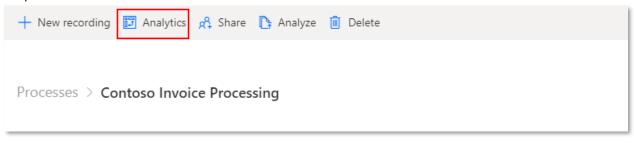
19. Click **Confirm** to proceed.



20. The analysis will take a few minutes to complete. During this process, a status message is displayed under the **New recording** button. If you run into an error during the analysis stage, click **Analyze** to trigger this action again.



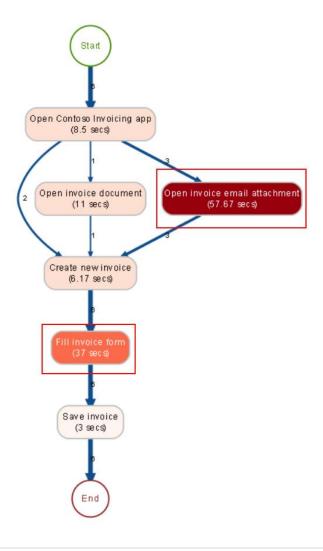
21. Once it is done, click **Analytics** to see Contoso Invoice Processing process map and insights. This step may take a couple minutes to complete after the analysis has been performed.



- 22. We can see the various steps in our business process and their related durations. These steps include:
 - a. Open Contoso Invoicing app (8.5 seconds)
 - b. Open invoice email attachment (57.67 seconds)
 - c. Open invoice document (11 seconds)
 - d. Create new invoice (6.17 seconds)
 - e. Fill invoice form (37 seconds)
 - f. Save invoice (3 seconds)

The process map makes it possible to visualize and analyze processes. By looking at a graphical representation of how your business processes are performed, you can gather insights about where improvement opportunities exist. To get to the process map, go to Analytics and select Process map tab.

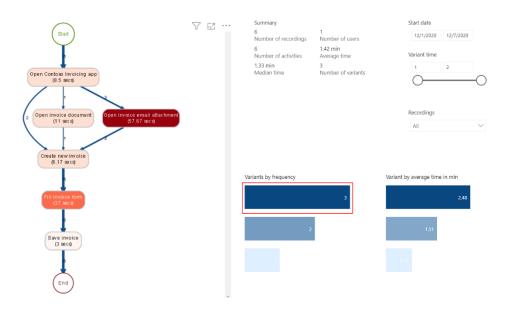
Different activity combinations and variants are shown separately on the process map. A process variant is a unique path from the very beginning to the very end of the process. In other words, a process variant is a specific activity sequence, like a "trace" through the process, from start to end. Each variant differs from the others by at least one activity. You can see additional metrics, frequency of the activities, as well as throughput time, on the process map. Frequency shows you the total number of recordings/cases passing through it. Throughput time is the time between the very first event of the case and the very last.



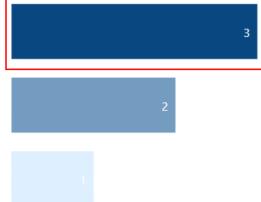
23. Click on the most frequent variant (the 1st blue box under Variants by frequency)

Note: It might take a while for you to see the changes from the chart

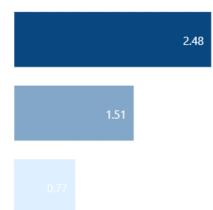
Processes > Contoso Invoice Processing > Analytics



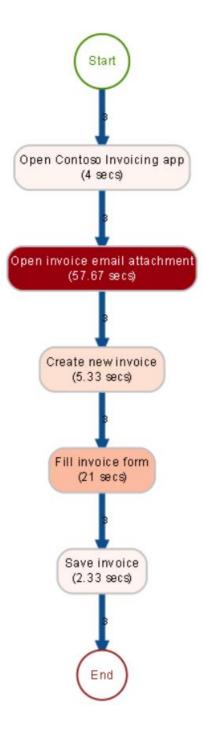
Variants by frequency



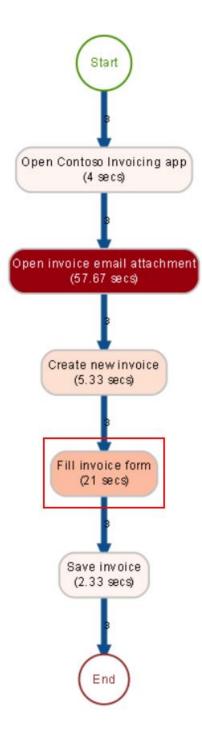
Variant by average time in min



24. You can see that the invoice coming through email is the most frequent process variant

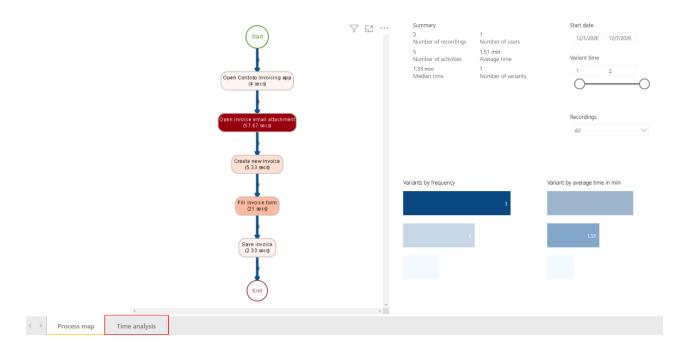


25. Additionally, we can see people spend a lot of their time in entering the information in the application. This helps identify the opportunity to automate the process.



26. Click **Time analysis**

Processes > Contoso Invoice Processing > Analytics



27. You can see the different time-based metrics.



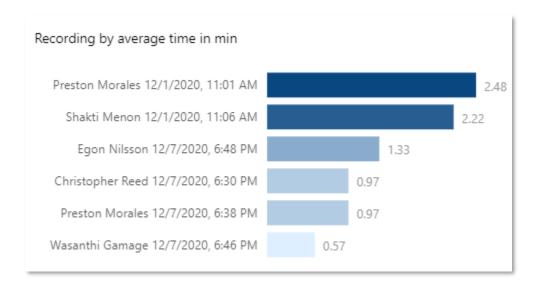
- 28. You can take a closer look on the following chart:
 - Activity by average time in sec
 You will notice that Open invoice email attachment

You will notice that Open invoice email attachment and Fill invoice Form are taking the most time



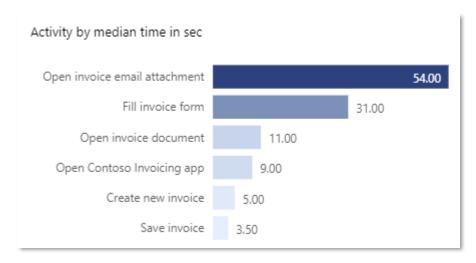
Recording by average time in min

You will notice that Preston Morales and Shakti Menon are taking more time than others



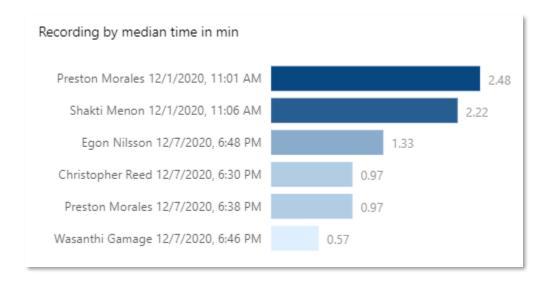
Activity by median time in sec

You will notice that Fill invoice Form and Open invoice email attachment are taking the most time



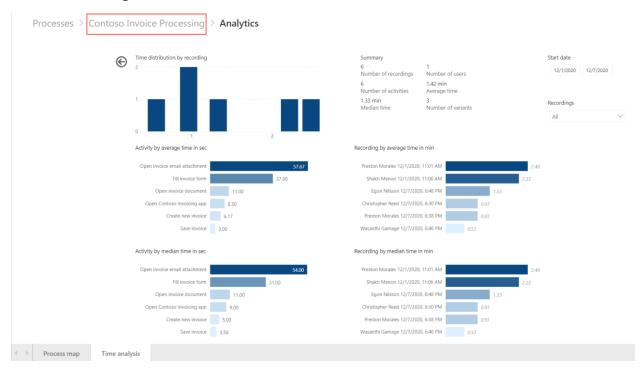
Recording by median time in min

You will notice that Preston Morales and Shakti Menon are taking more time than others

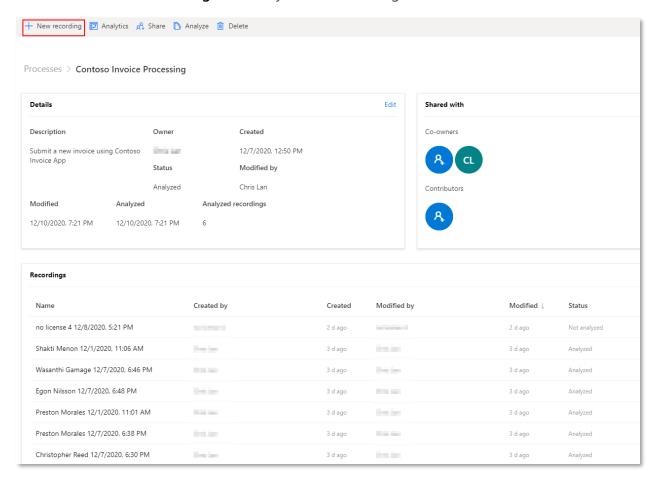


Create your first recording

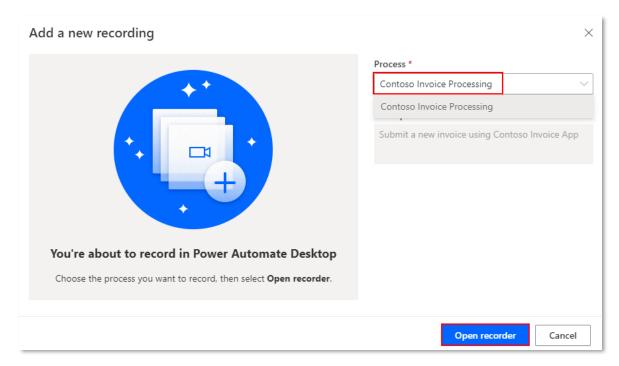
 Now, let's go back to Contoso Invoice Processing Processes by clicking Contoso Invoice Processing



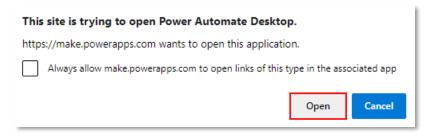
2. Click + New Recording to create your first recording



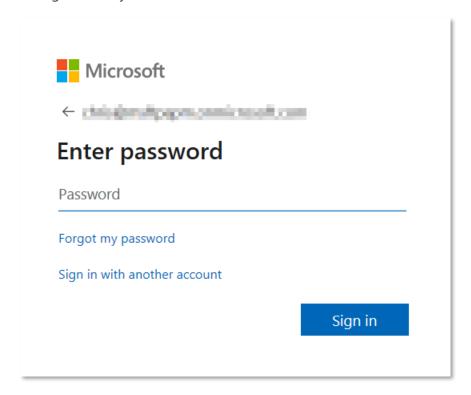
3. Select Contoso Invoice Processing under Process, then click Open recorder



4. You will see this pop-up window, click Open



5. Sign in with your test account



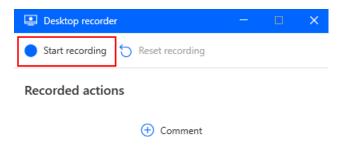
6. Open Contoso Invoicing app you downloaded in Lab 1



7. Click **Start recording**

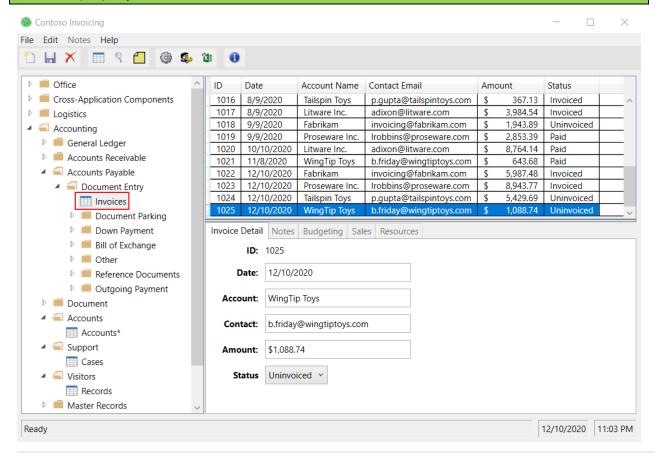
Tip 1: We are going to start recording. It is strongly recommended you get familiar with steps below before you begin recording. This allows you to finish the recording in one shot without the need to go back and forth with this manually which may alter results. If your first few recordings were not very good. Feel free to delete the recording after (using the ... icon) and practice more until you have a good recording

Tip 2: to help with the resilience of UI automation playbacks, it is recommended to minimize other apps from your desktop

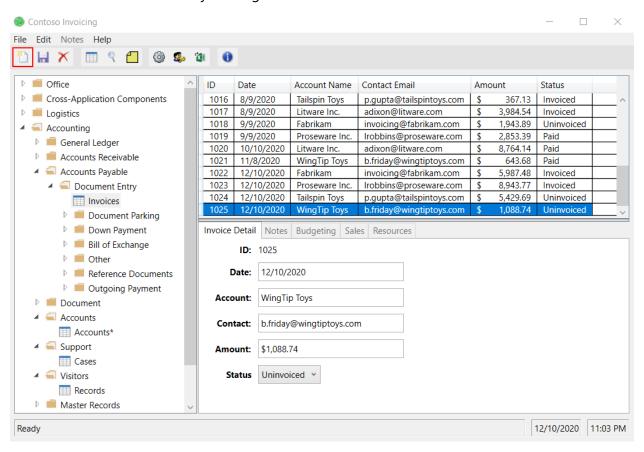


8. In Contoso Invoicing, Click Invoices

Tip: As your mouse hovers over controls in the app, you'll notice that a **red outline** highlights each control. Don't record at very fast speed and always wait a bit between each mouse move and click, until you see the blue highlight rectangle around the control first, before you click to select the control. If the red highlight did not show up before you click, the action might not be recorded properly



9. Create a new record by clicking New record icon on the left



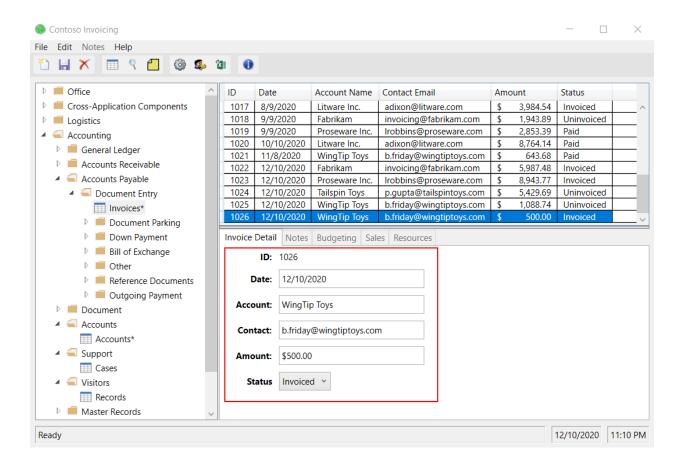
10. Use these values to complete the recording (Note you can also use any arbitrary values)

• Date: Current date

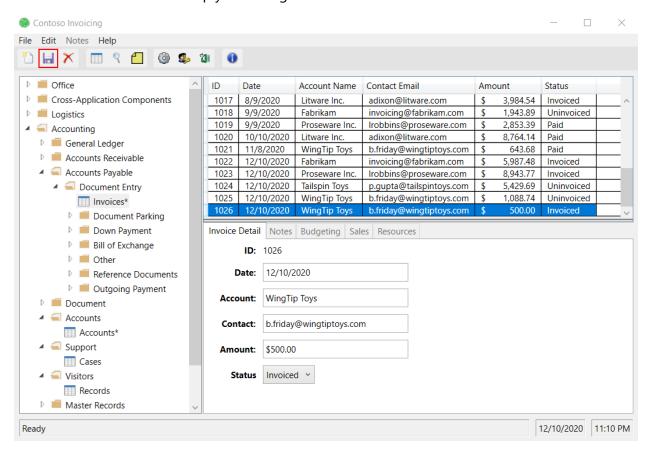
Account: WingTip Toys

• Contact: b.friday@wingtiptoys.com

Amount: \$500Status: Invoiced



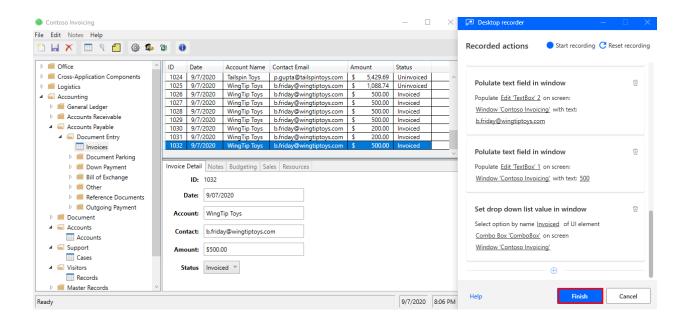
11. Click Save icon to keep your changes



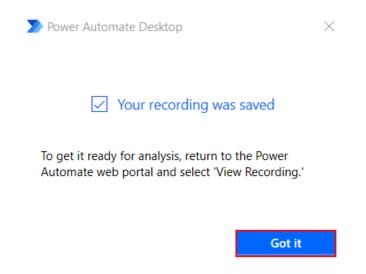
12. Click **Finish** in the Desktop recorder and close the **Contoso Invoicing** app.

Note: We did not record closing the app. This is for simplicity to view the result as the Contoso app will remain open after we test the Desktop flow. In a real-world use case, you can decide to record the closing action or not.

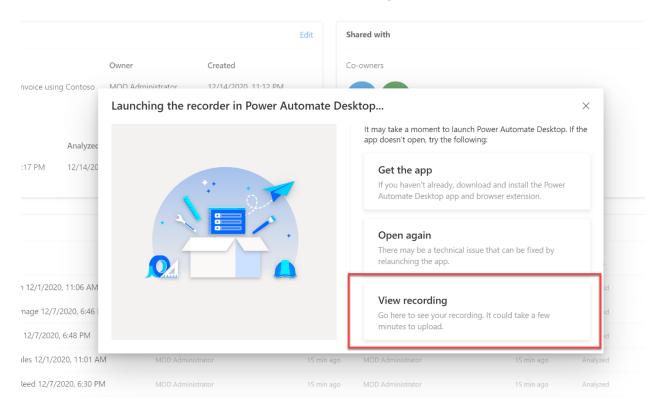
Note 2: By default, the Desktop flow will launch a new instance of the app every time when it runs. Even if you leave the app open, the next Desktop flow run will launch another new app window. You can also change this behavior to only attach to existing app instead of launching another new instance from the portal (details see following steps).



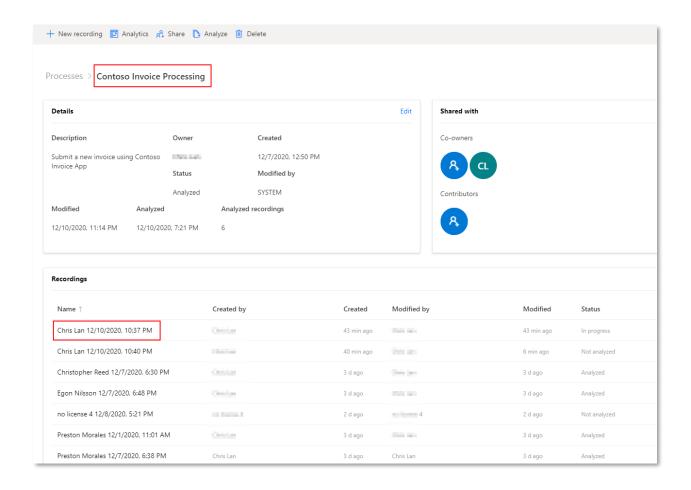
13. You will see that your recording has been saved, click Got it



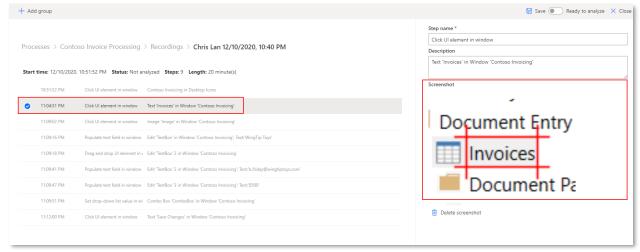
14. Go back to Process advisor and select View recording.



If the windows is not present, navigate back to "Processes" and open "Contoso Invoice Processing". Then click the last recording.

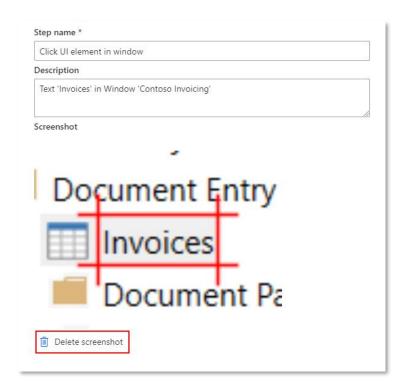


15. When you click on a specific action, you will be able to see a screenshot of that corresponding action.



16. If you don't want to save the screenshot, you can also delete your screenshots by clicking **Delete screenshot** on the right corner

Note: It will not affect your recordings analysis by deleting the screenshots.



17. Long business processes may require the need to group related tasks to document or describe the overall business process. We can use a feature called **groups** that allows us to break-up a large business process into smaller groups which enables better management. To label your first group. Select + **Add group** to add a group header

Tip1: Since we are adding a recording to an existing process, we have some existing groups that are available for us to use. It is recommended you use existing group name; this creates a more consistent and accurate process map.

Tip2: Group names will be available in the dropdown list whenever a recording is saved. To remove group names from the dropdown list after it was removed from all recordings that used that group name, you need to analyze the recording.

Tips3: To analyze, you need at least two groups. Otherwise, the process map would not be very meaningful.

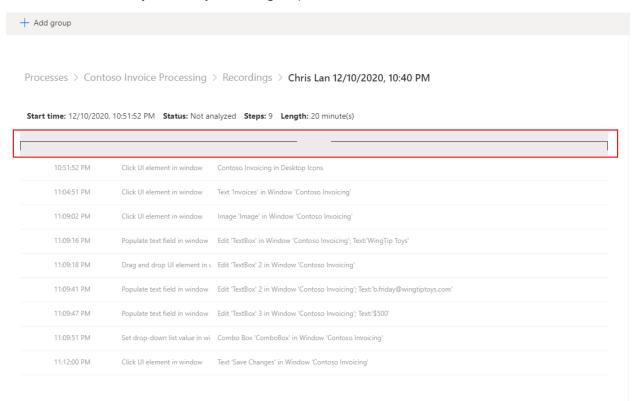


Processes > Contoso Invoice Processing > Recordings > Chris Lan 12/10/2020, 10:40 PM

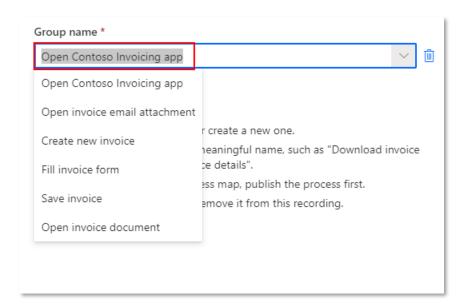
Start time: 12/10/2020	10.51.52 PM	Statue: Not analyzed	Stone: 9	Langth: 20 minuta(s)

10:51:52 PM	Click UI element in window	Contoso Invoicing in Desktop Icons
11:04:51 PM	Click UI element in window	Text 'Invoices' in Window 'Contoso Invoicing'
11:09:02 PM	Click UI element in window	Image 'Image' in Window 'Contoso Invoicing'
11:09:16 PM	Populate text field in window	Edit 'TextBox' in Window 'Contoso Invoicing'; Text:'WingTip Toys'
11:09:18 PM	Drag and drop UI element in v	Edit 'TextBox' 2 in Window 'Contoso Invoicing'
11:09:41 PM	Populate text field in window	Edit 'TextBox' 2 in Window 'Contoso Invoicing'; Text'b.friday@wingtiptoys.com'
11:09:47 PM	Populate text field in window	Edit 'TextBox' 3 in Window 'Contoso Invoicing'; Text:'\$500'
11:09:51 PM	Set drop-down list value in wi	Combo Box 'ComboBox' in Window 'Contoso Invoicing'
11:12:00 PM	Click UI element in window	Text 'Save Changes' in Window 'Contoso Invoicing'

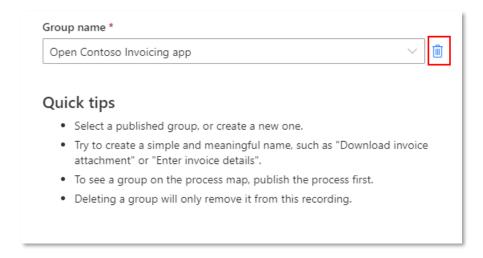
18. Let's label step 1 to 2 as your first group. Move the group header above the first step. Here's where you want your first group to start.



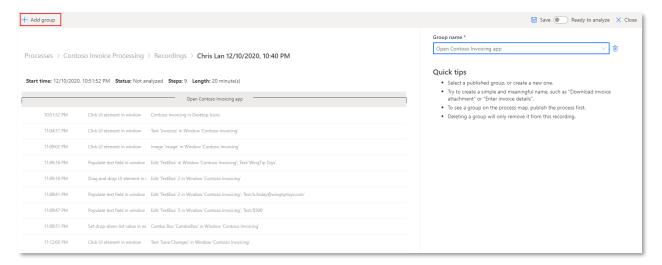
19. Name your group on the right side of the screen. You can use the dropdown menu to find group names that already exist for the process or create your own. For this Lab, we will use the existing group name **Open Contoso Invoicing app** from the dropdown menu to name our first group.



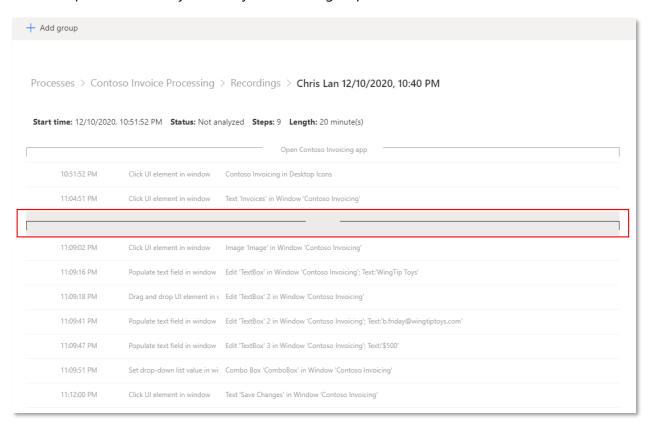
20. Should you make a mistake creating a group name, you can always delete it by clicking on the trash can icon next to the group name to delete a group name. Otherwise, proceed to next step.



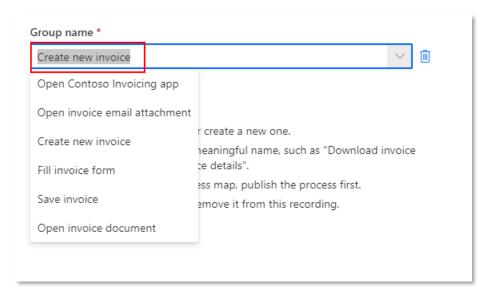
21. Select + Add group to label your second group



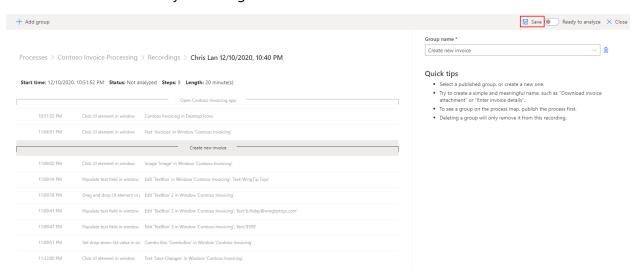
22. Let's label step 3 to 9 as your second group. Move the group header above the third step. Here's where you want your second group to start



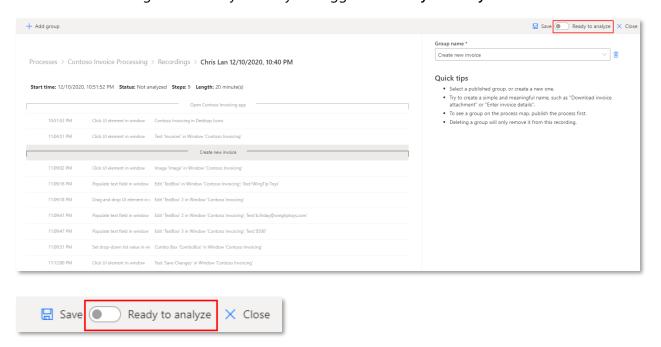
23. We are also going to use the existing group name **Create new invoice** from the dropdown menu to name our second group.



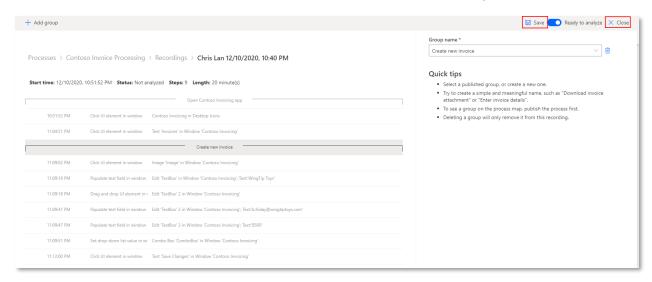
24. Click Save to save your changes



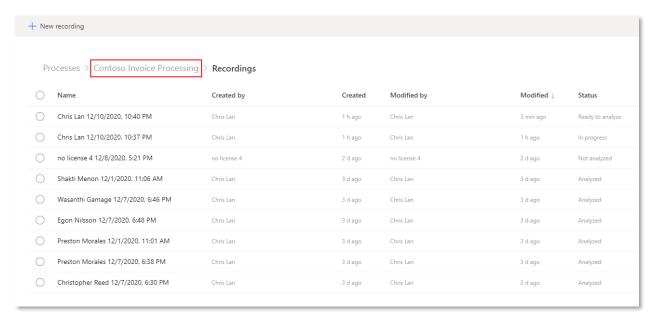
25. Your recoding is now ready to analyze. Toggle the Ready to analyze button.



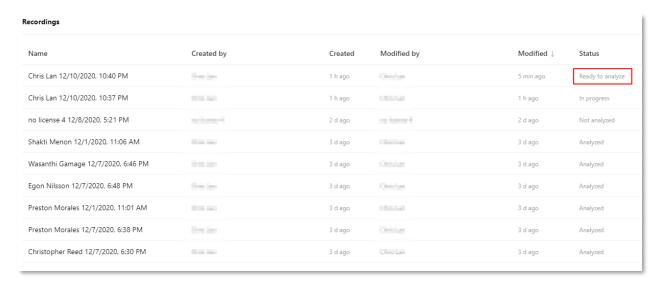
26. Click Save and then click Close to return to the process details page



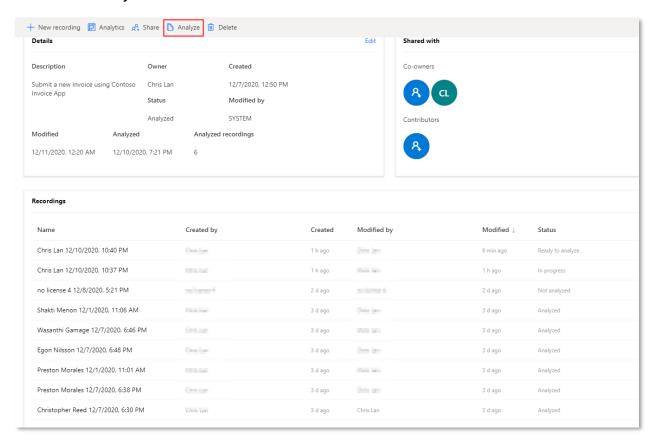
27. We are going to analyze your recording now, click Contoso Invoice Processing



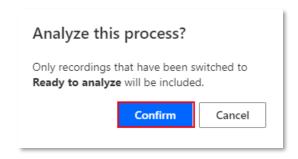
28. You can see that the status your recording has been changed to Ready to analyze



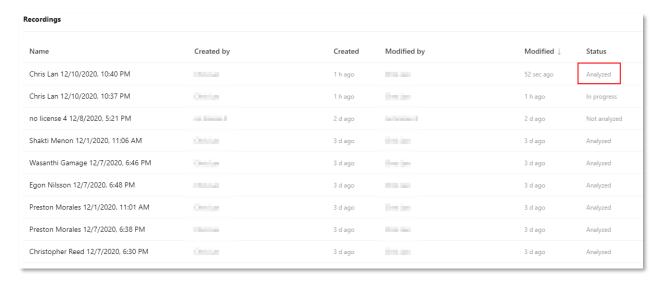
29. Click Analyze



30. Select Confirm

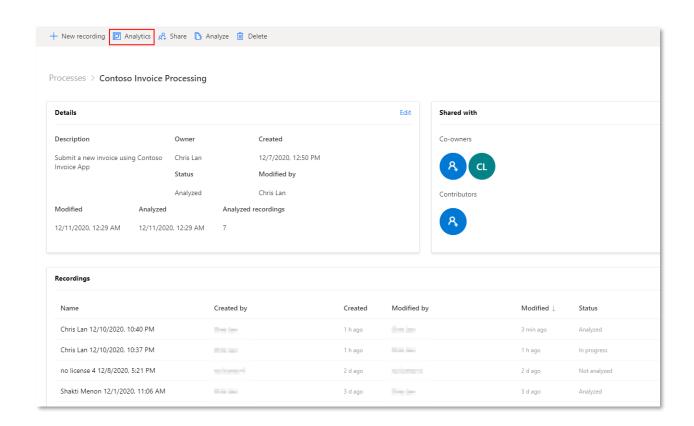


31. You can see that the status your recording has been changed to Analyzed

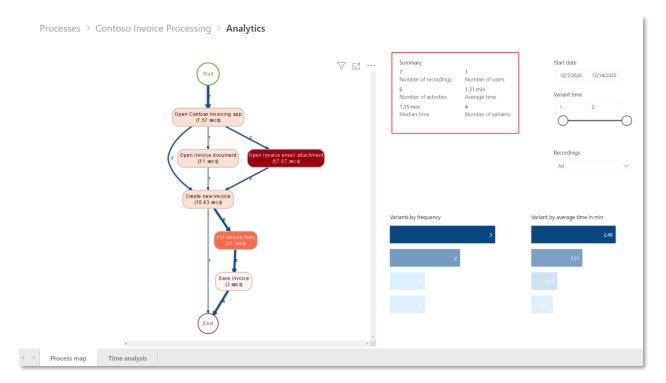


32. Click Analytics

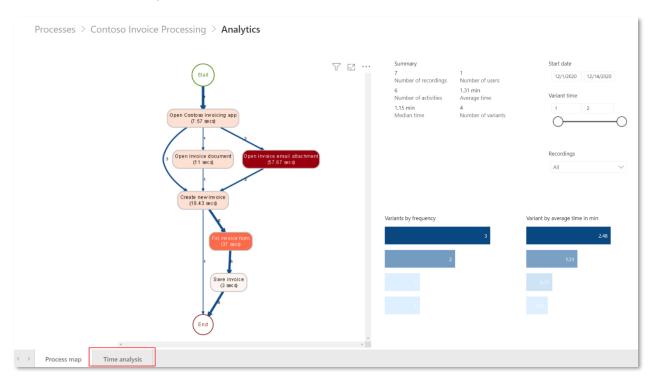
Note: This step may take a few minutes to load.



33. You can see your recording represented in the process map and the analysis.

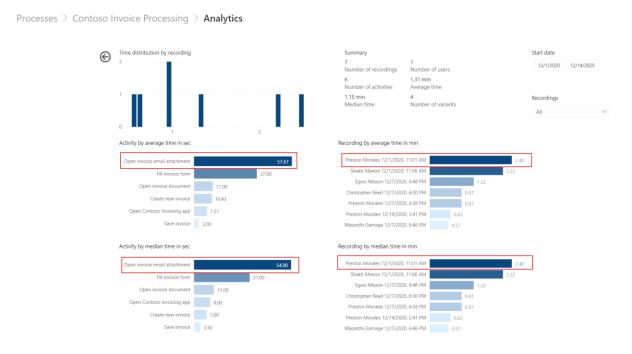


34. Click Time analysis



35. You can see your recording represented in Time analysis as well. This highlights the importance of including people who regularly participate in your business process to get a complete picture of the bottlenecks, but also the opportunities that emerge for automation.

Note: Depending upon how long it took you to complete the actions, will determine where your record is located in the list.



36. This completes the Process advisor lab. Now that we understand where all the bottlenecks exist in our business process, we can now go ahead and automate them in subsequent labs using Power Automate.

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