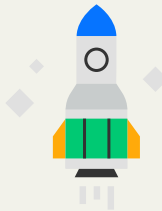


ARIS Process Mining

Starter demo for ARIS Process Mining Basic



ARIS Process Mining – Starter demo

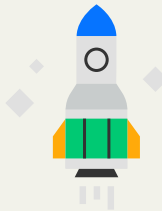


- ▶ This **Starter demo** is ideal for beginners using **ARIS Process Mining Basic**
- ▶ It is also suitable for **ARIS Process Mining Advanced & Enterprise**
- ▶ You will build your first project by analyzing a **parcel delivery** process
- ▶ Request a project room for free on <http://ARIS-Process-Mining.com>
- ▶ Invest 30 min to run this demo—no technical skills required

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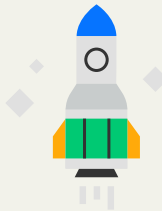
How this demo works best for you



- ▶ This procedure guides you to build your first ARIS Process Mining project
- ▶ Each of the 10 chapters provides you with step-by-step instructions
- ▶ After a procedure you will find screenshots of each step to check your progress
- ▶ You will end up with insights from analyzing the parcel delivery process



Your project – our solution

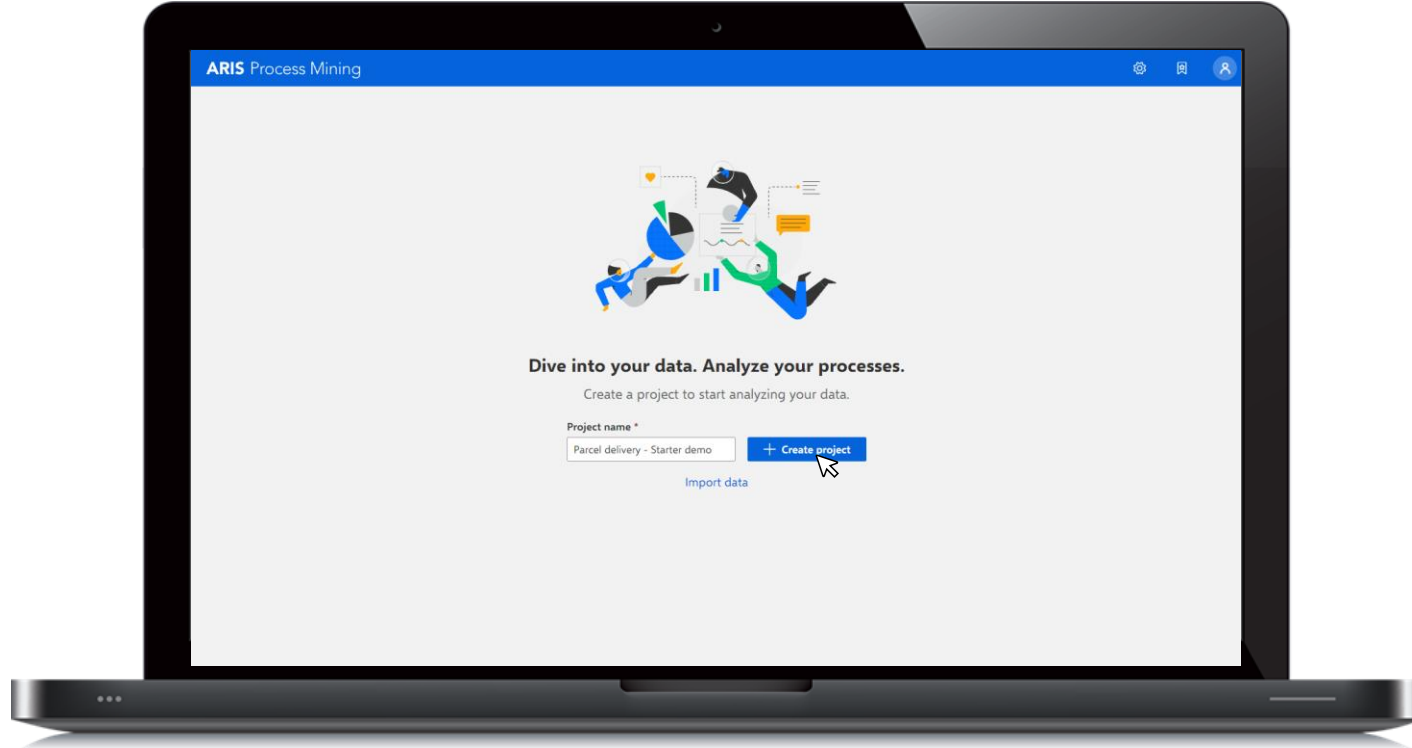


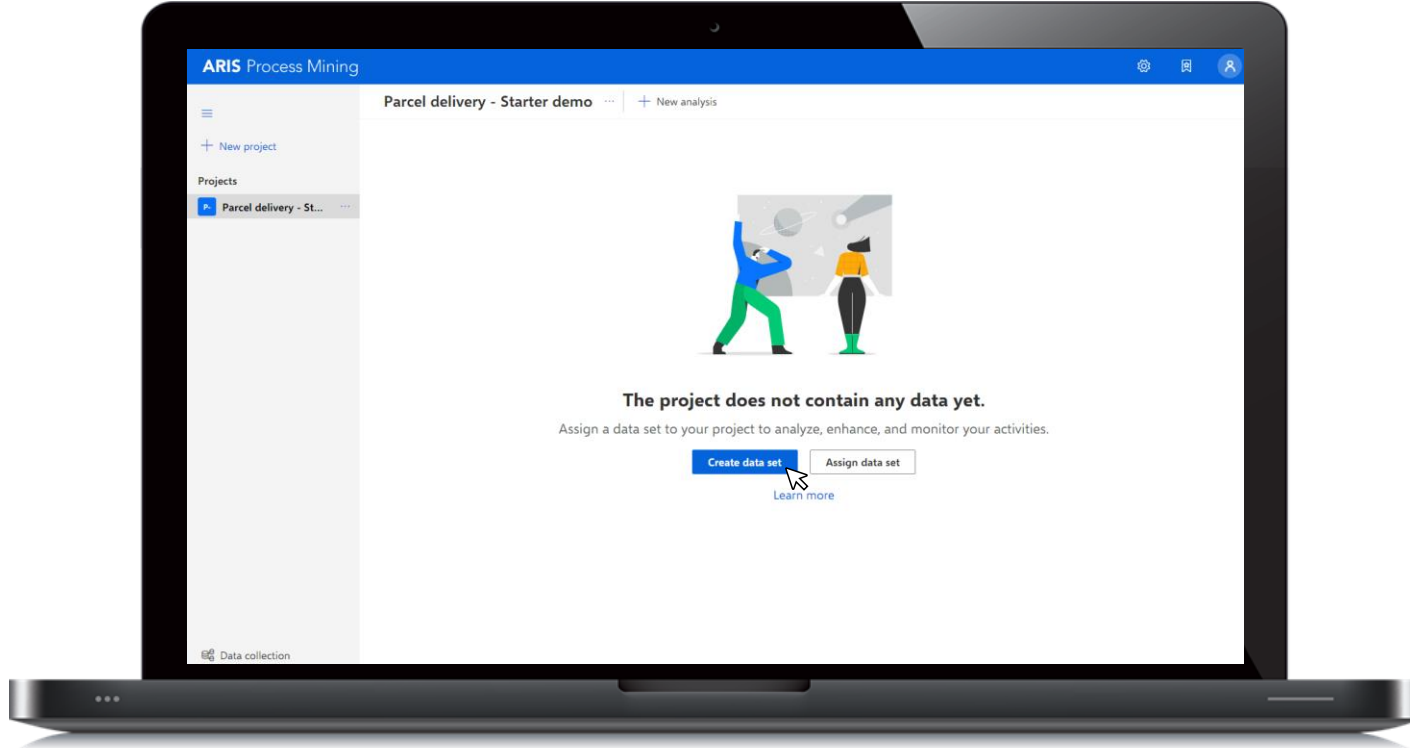
- ▶ Imagine you are responsible for the **parcel delivery process** in your company, and your manager asks you to present an analysis how well that process works within 30 min
- ▶ All you have is **log data from your runtime system** which consists of all deliveries with lots of time-stamped activities for each delivered item
- ▶ **ARIS Process Mining Basic** promises you to quickly and easily find out
 - ▶ How many parcels were delivered at what time
 - ▶ What was the average, fastest and slowest time for specific delivery items
 - ▶ Which activities caused bottlenecks

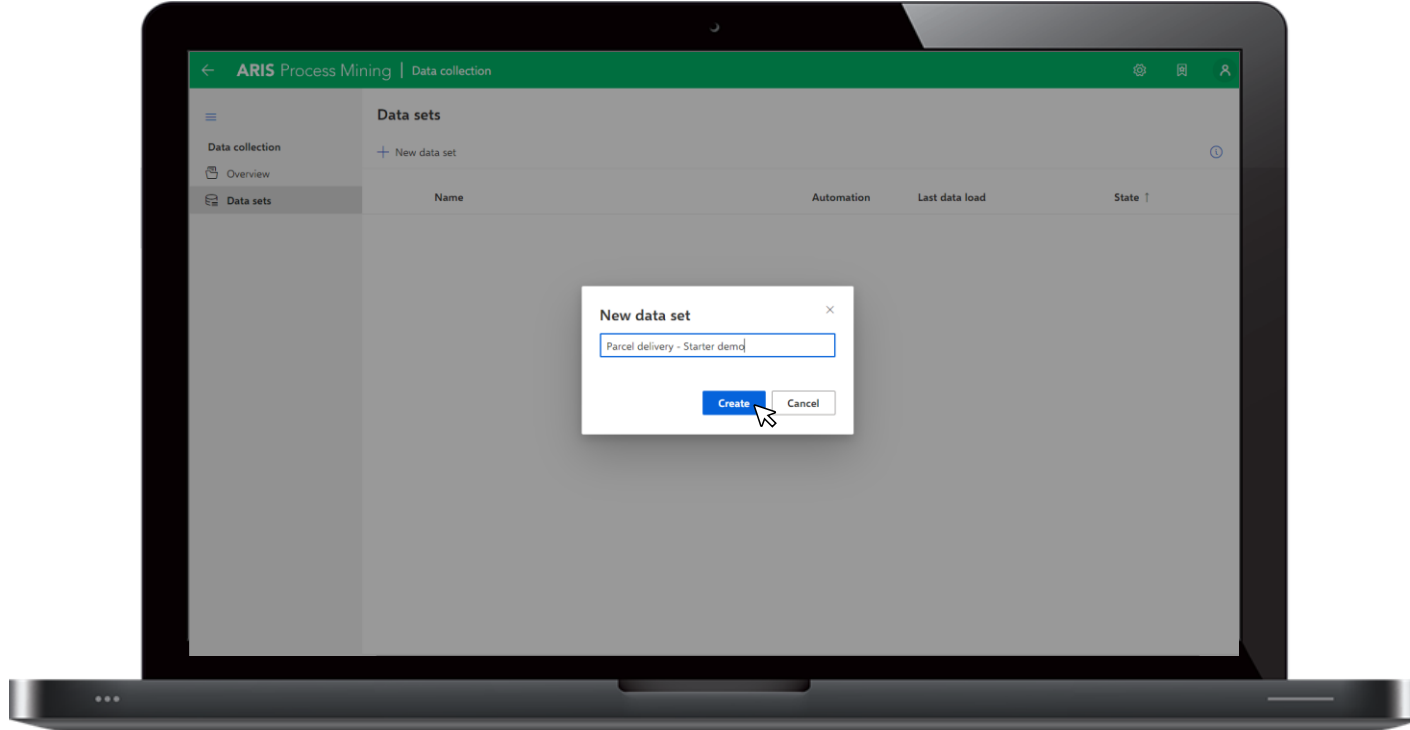
Create project and load data

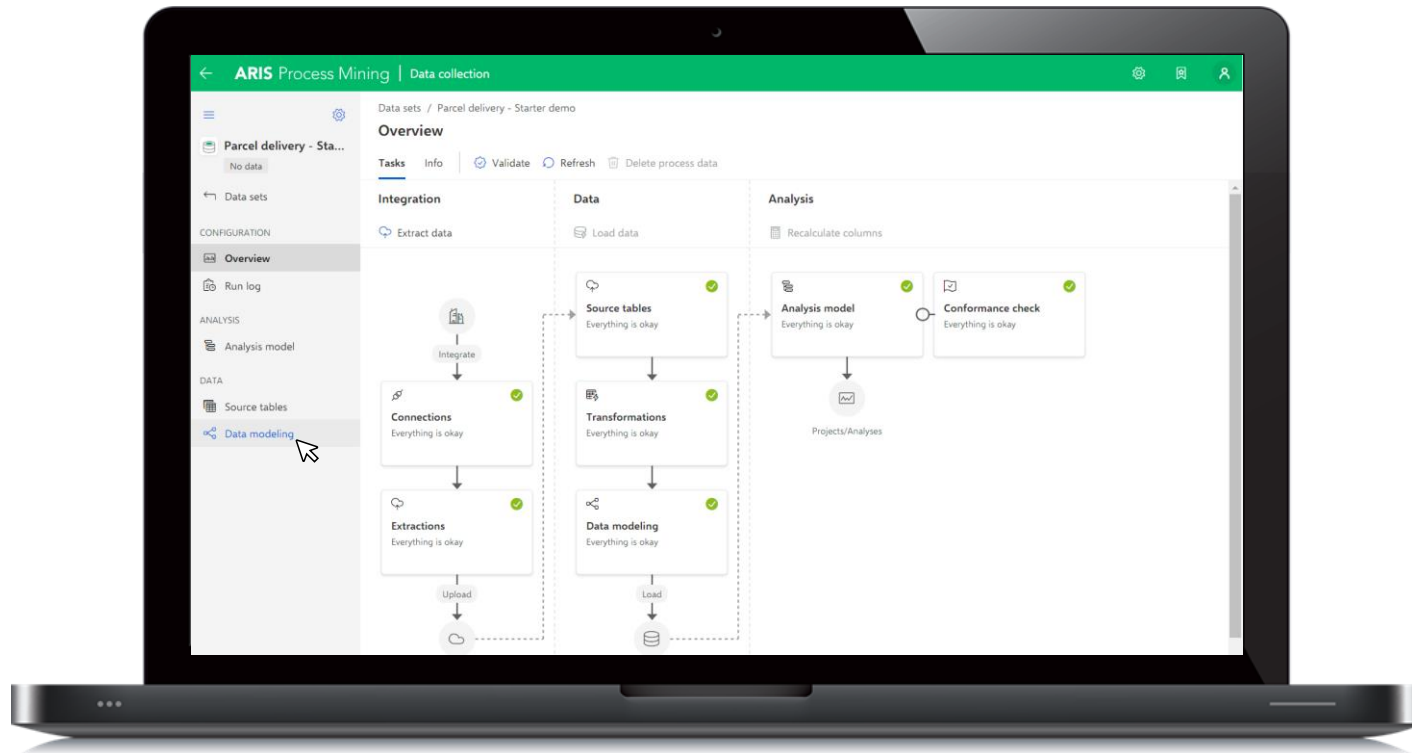


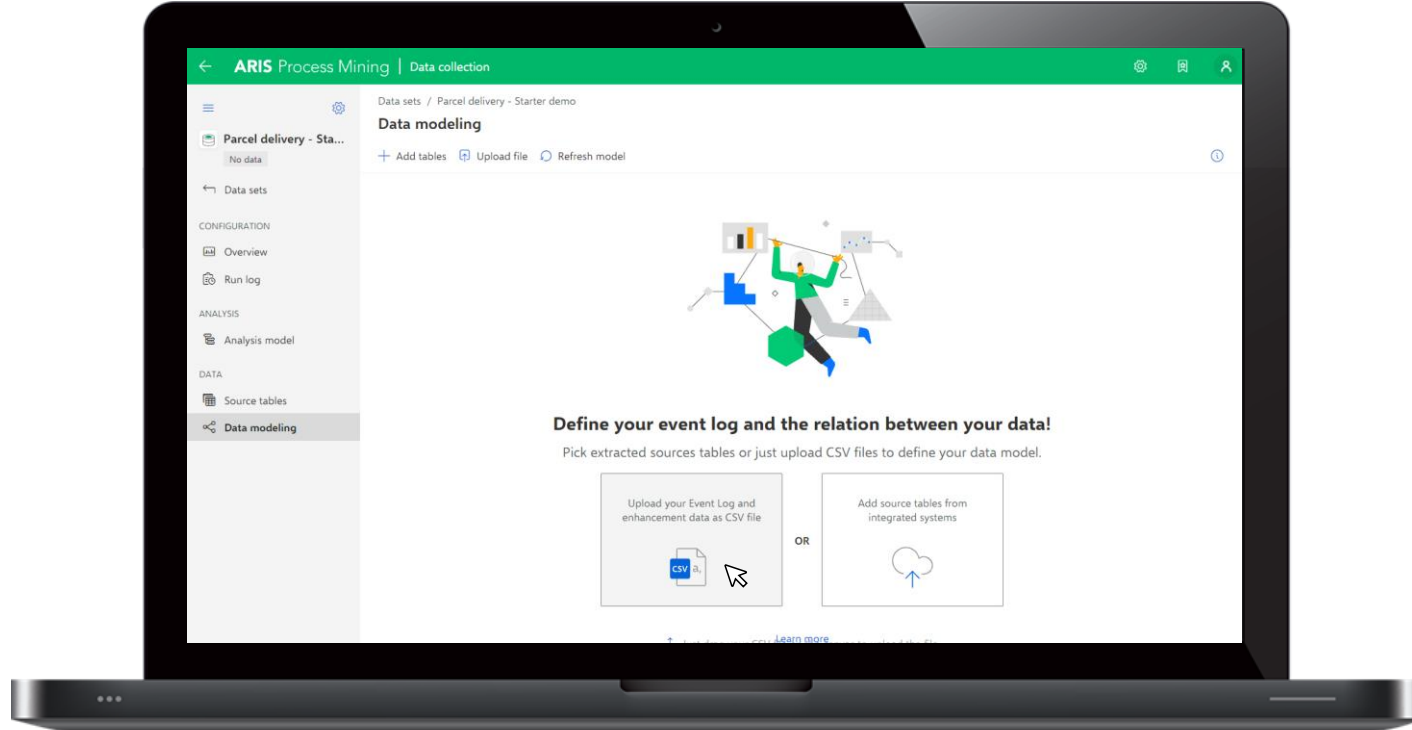
1. Enter the **project name** *Parcel delivery – Starter demo* and click **Create project**
2. In the yet empty project click **Create data set** to load data, and name it *Parcel delivery – Starter demo* and click **Create**
3. Click **Data modeling** and click **Upload your Event Log and enhancement data as CSV file** and go to the folder where you have downloaded the file *Parcel delivery – Starter demo.csv*
4. Click **Next** till you reach **Configure activity columns**, here you click on **Case ID** in the column to choose it, and go on with **Activity**, **Start time** and **End time**, then click **OK** to continue
5. Wait until your data is imported and the imported CSV file is shown
6. Go to **Overview** and click **Load data**, choose **Run** and wait until the data is **uploaded**
7. Wait until all boxes in column **Data** show a green check mark, then go back to the **Project**

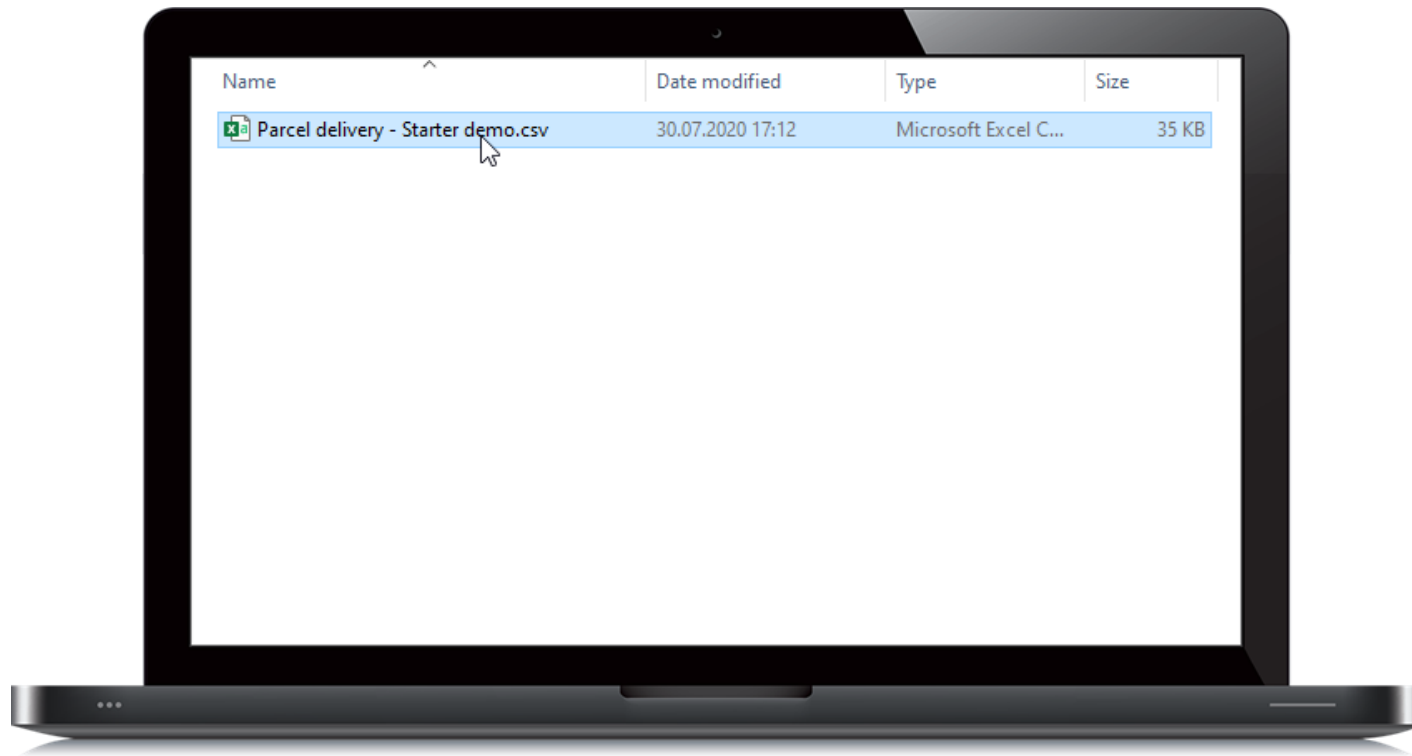


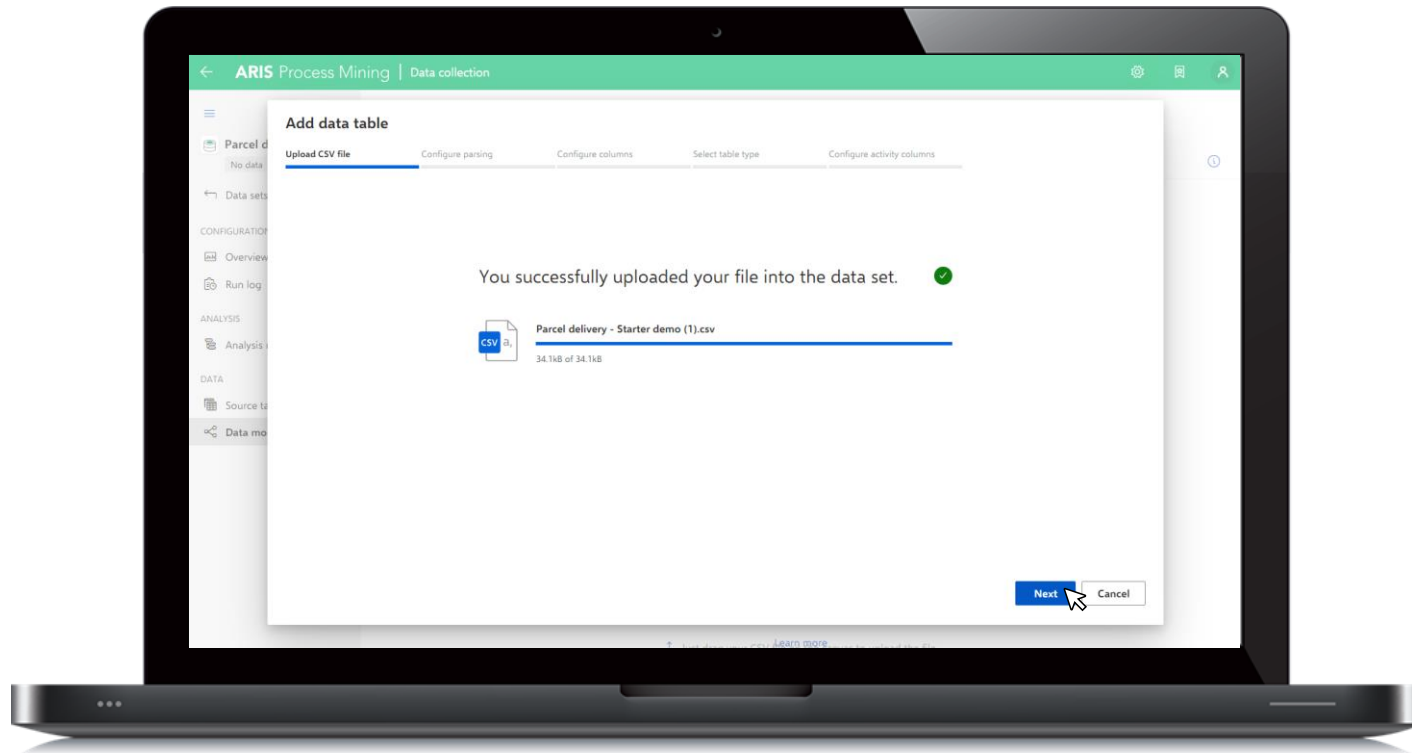


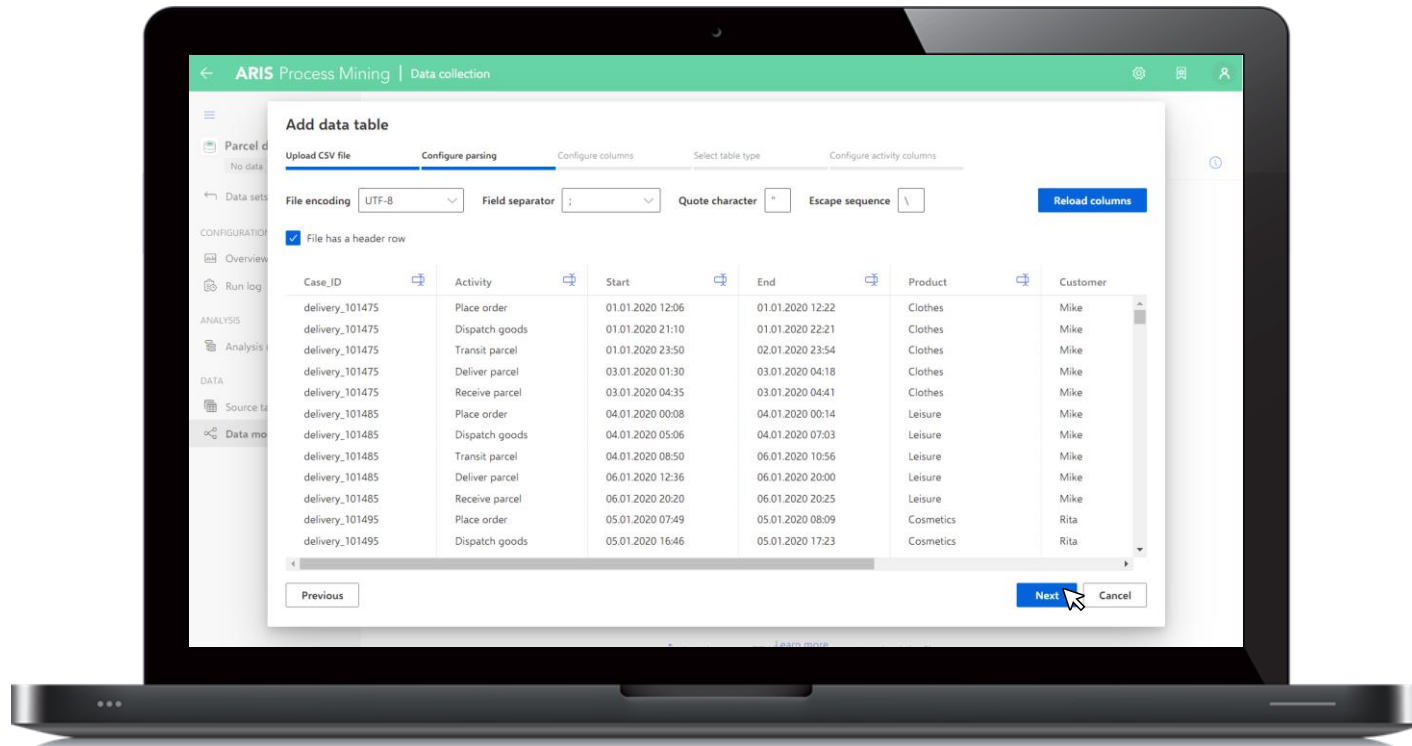


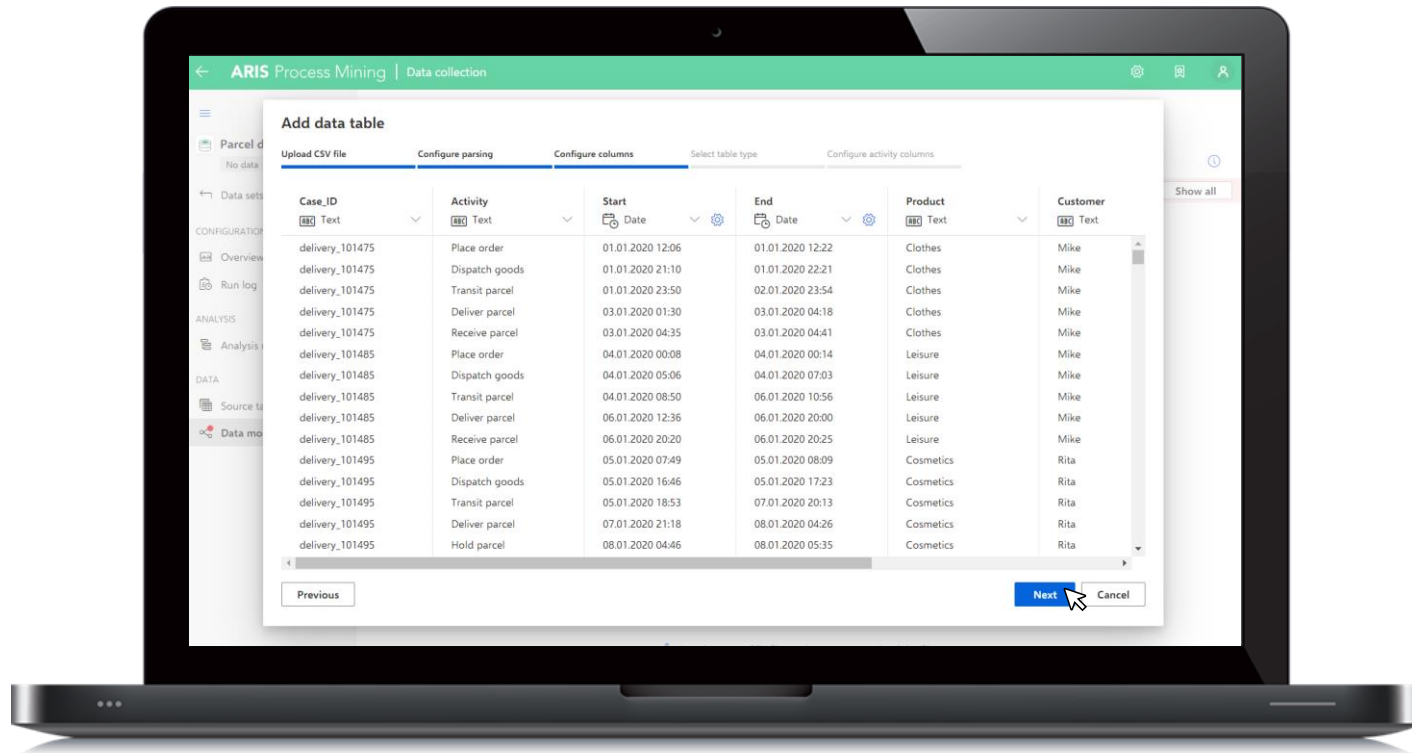


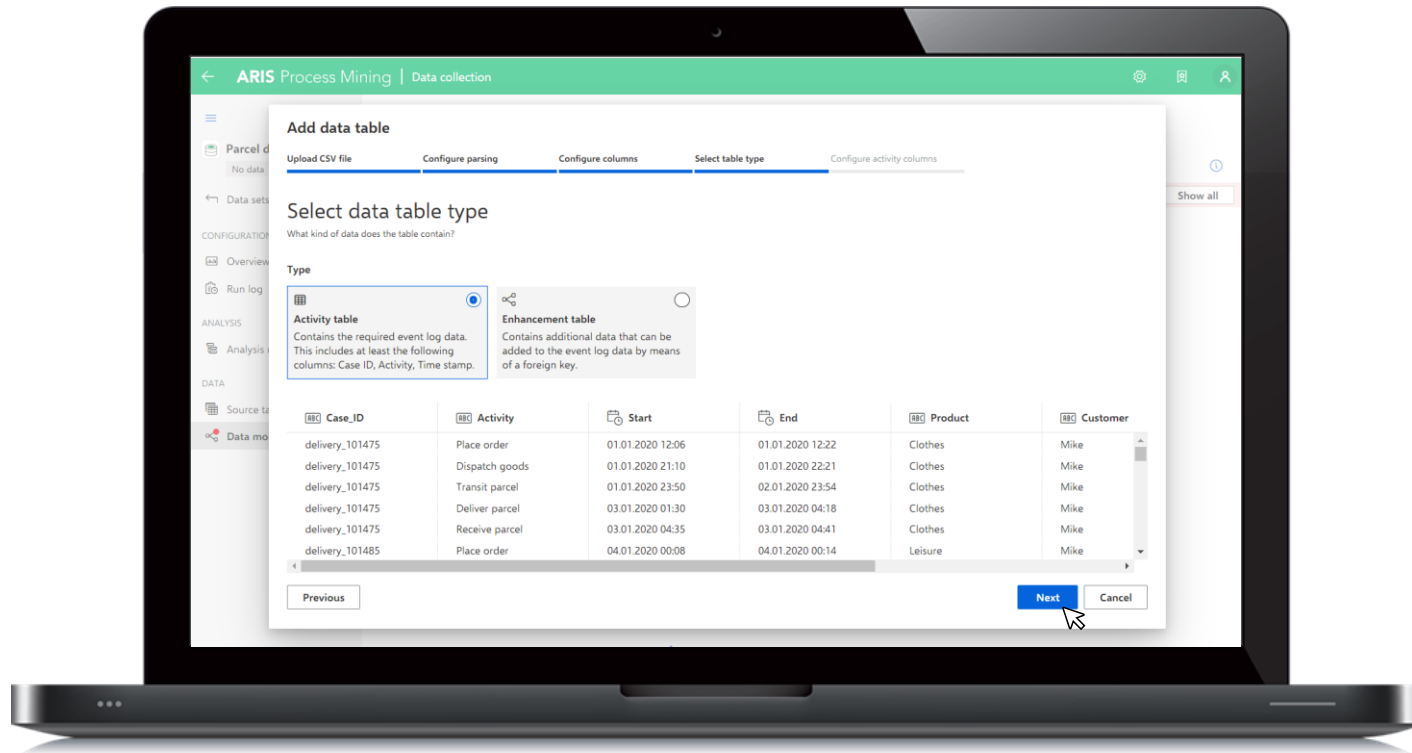


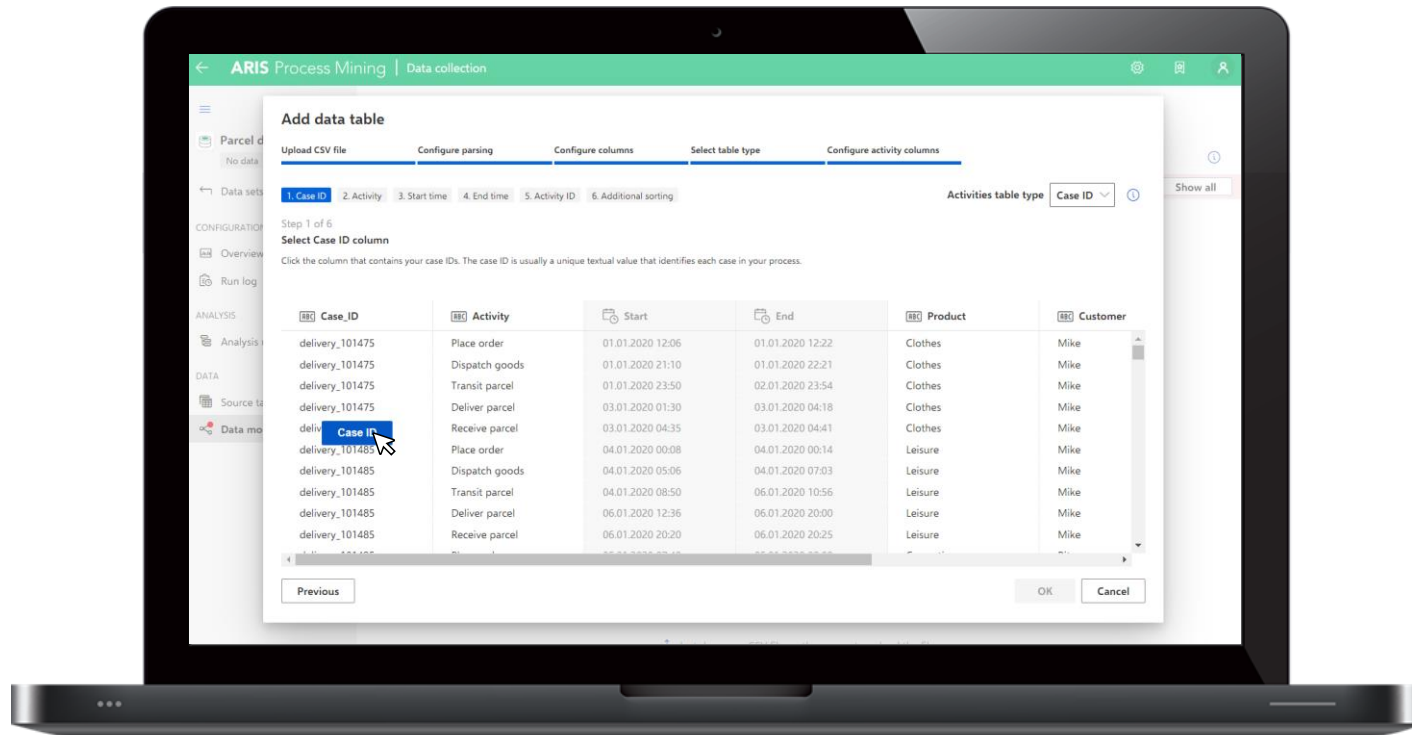












Add data table

Upload CSV file Configure parsing Configure columns **Select table type** Configure activity columns

1. Case ID 2. Activity 3. Start time 4. End time 5. Activity ID 6. Additional sorting

Activities table type Case ID

Step 1 of 6

Select Case ID column

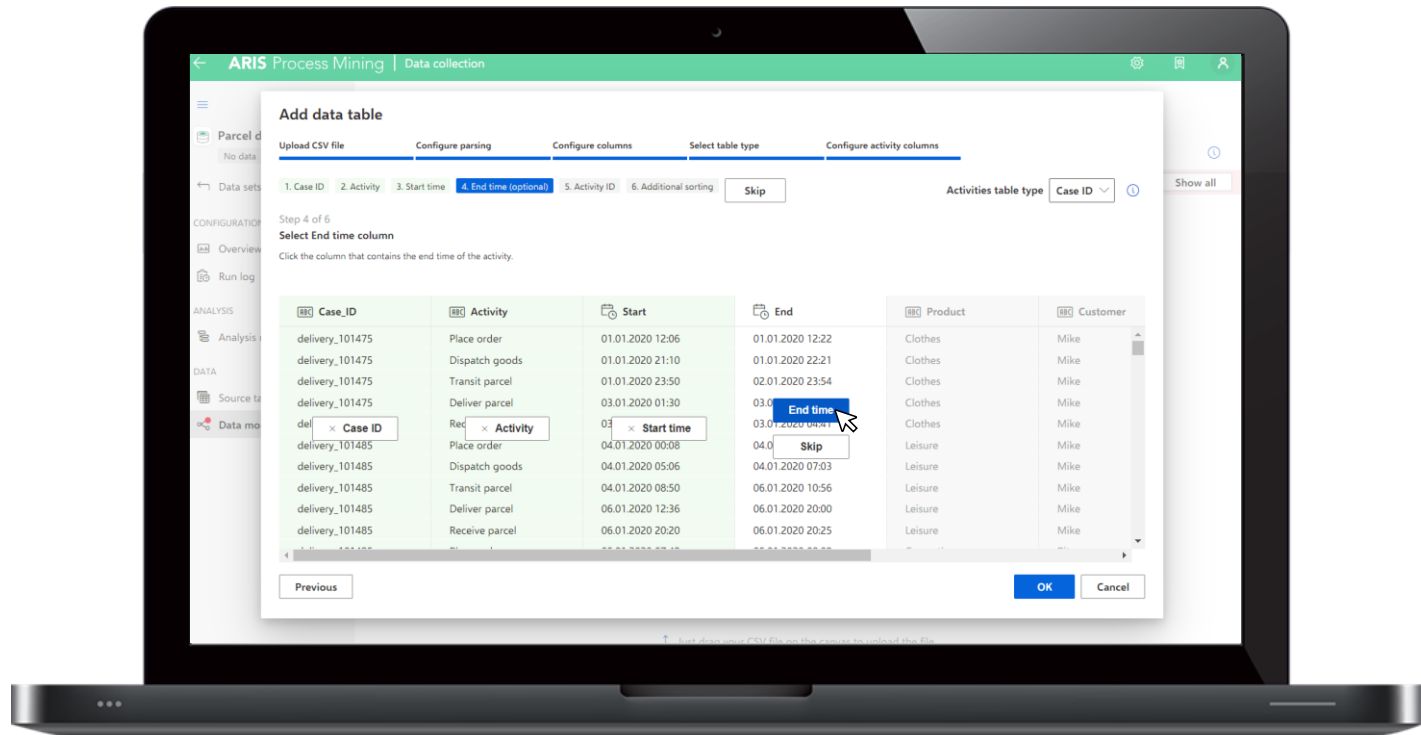
Click the column that contains your case IDs. The case ID is usually a unique textual value that identifies each case in your process.

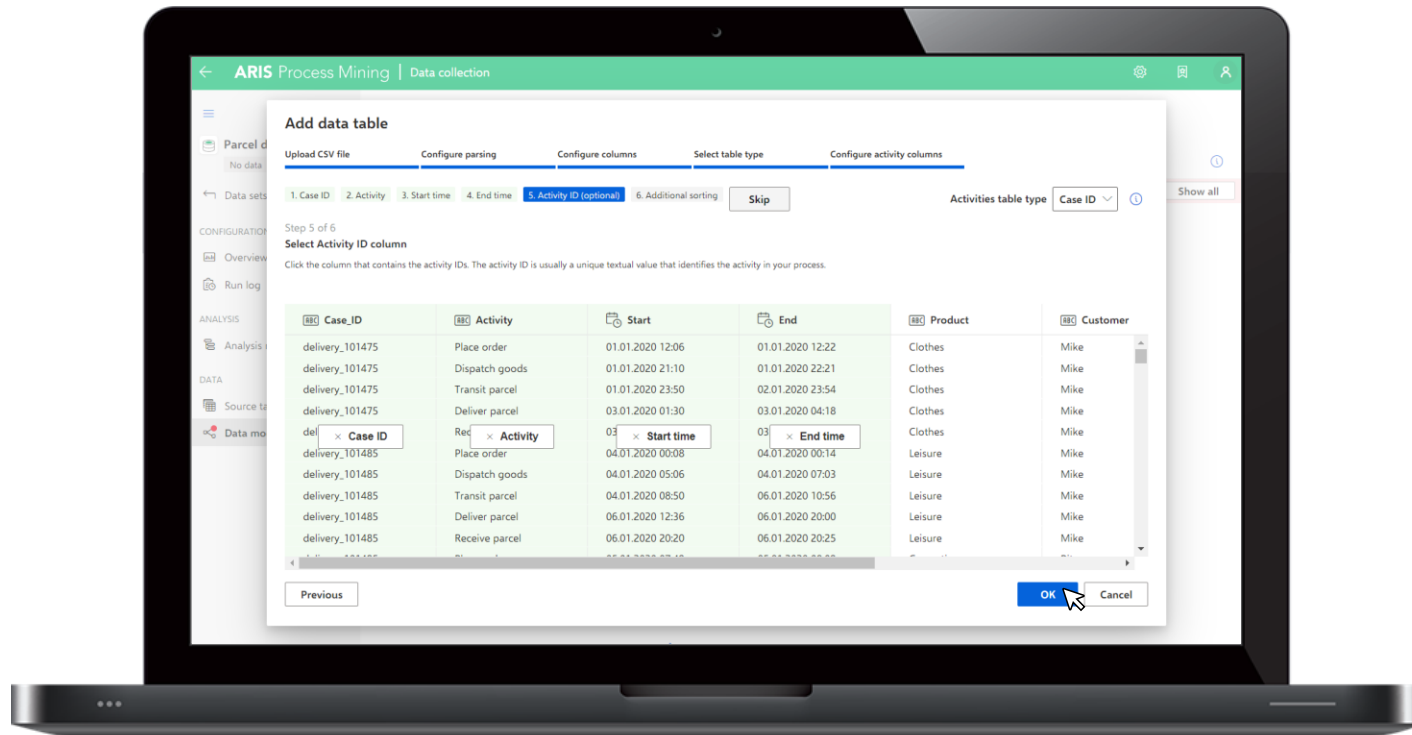
Case_ID	Activity	Start	End	Product	Customer
delivery_101475	Place order	01.01.2020 12:06	01.01.2020 12:22	Clothes	Mike
delivery_101475	Dispatch goods	01.01.2020 21:10	01.01.2020 22:21	Clothes	Mike
delivery_101475	Transit parcel	01.01.2020 23:50	02.01.2020 23:54	Clothes	Mike
delivery_101475	Deliver parcel	03.01.2020 01:30	03.01.2020 04:18	Clothes	Mike
delivery_101475	Receive parcel	03.01.2020 04:35	03.01.2020 04:41	Clothes	Mike
delivery_101485	Place order	04.01.2020 00:08	04.01.2020 00:14	Leisure	Mike
delivery_101485	Dispatch goods	04.01.2020 05:06	04.01.2020 07:03	Leisure	Mike
delivery_101485	Transit parcel	04.01.2020 08:50	06.01.2020 10:56	Leisure	Mike
delivery_101485	Deliver parcel	06.01.2020 12:36	06.01.2020 20:00	Leisure	Mike
delivery_101485	Receive parcel	06.01.2020 20:20	06.01.2020 20:25	Leisure	Mike

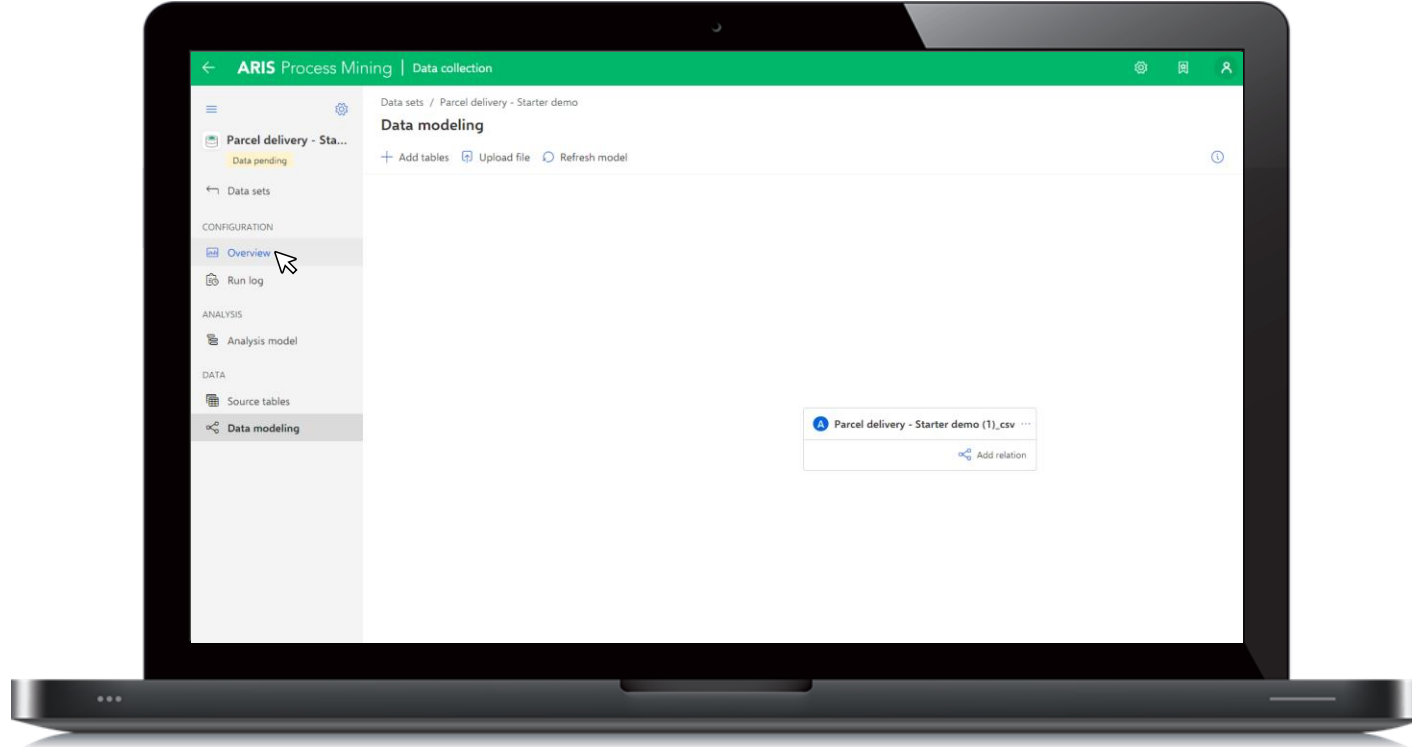
Previous

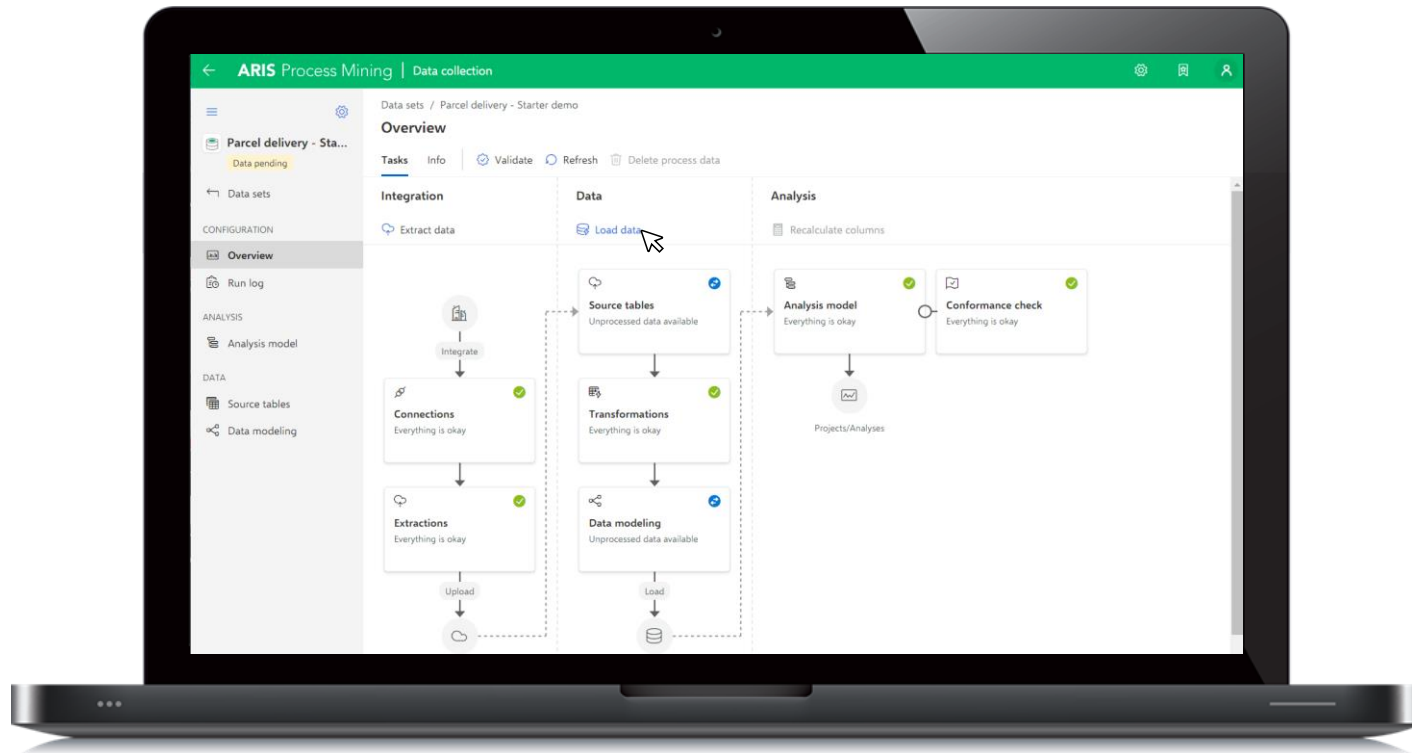
OK

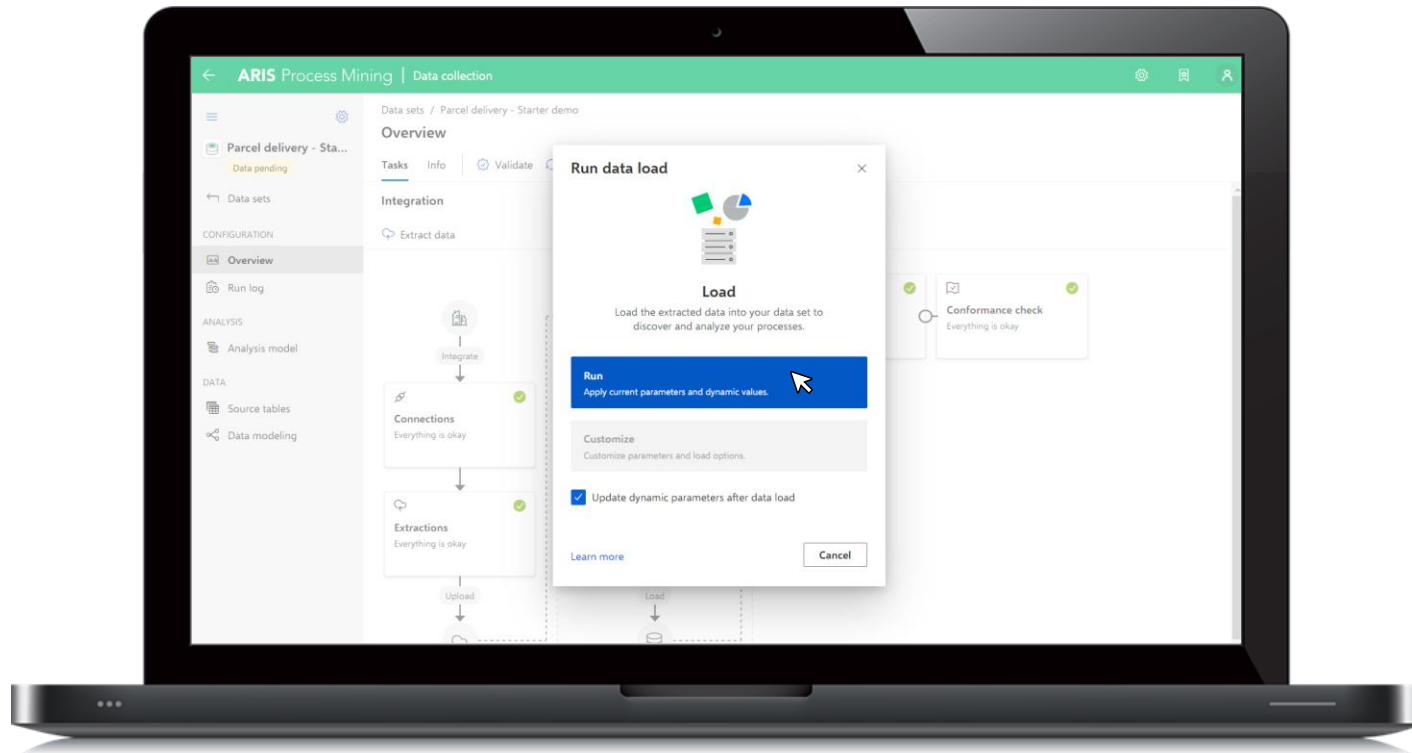
Cancel

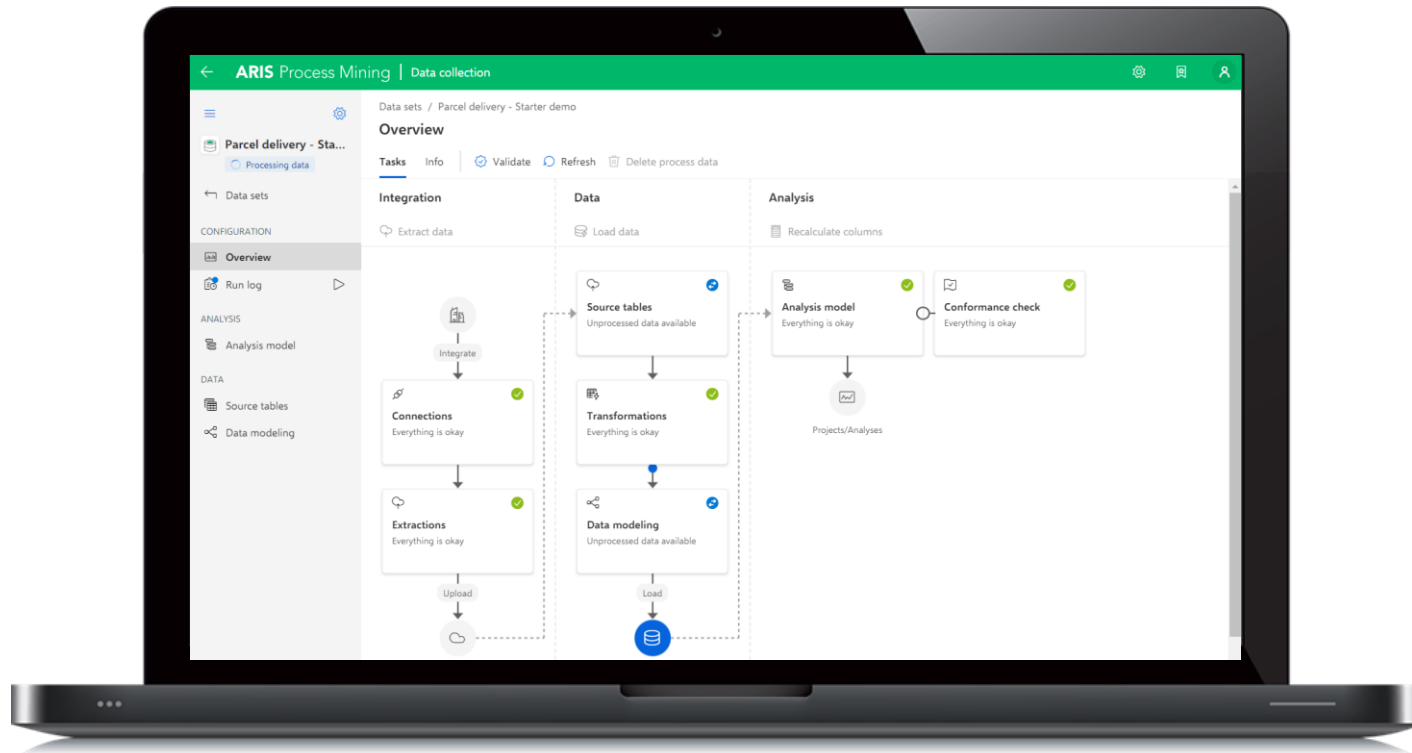


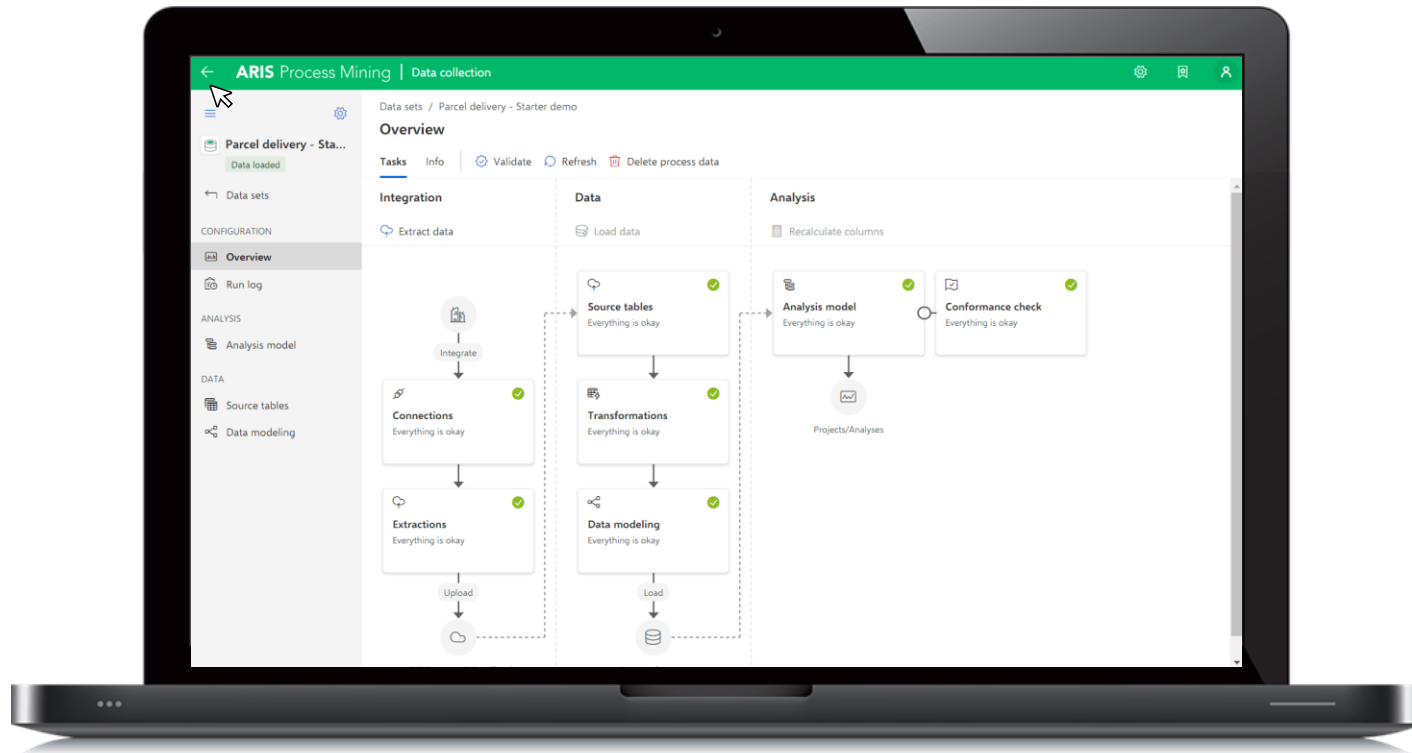








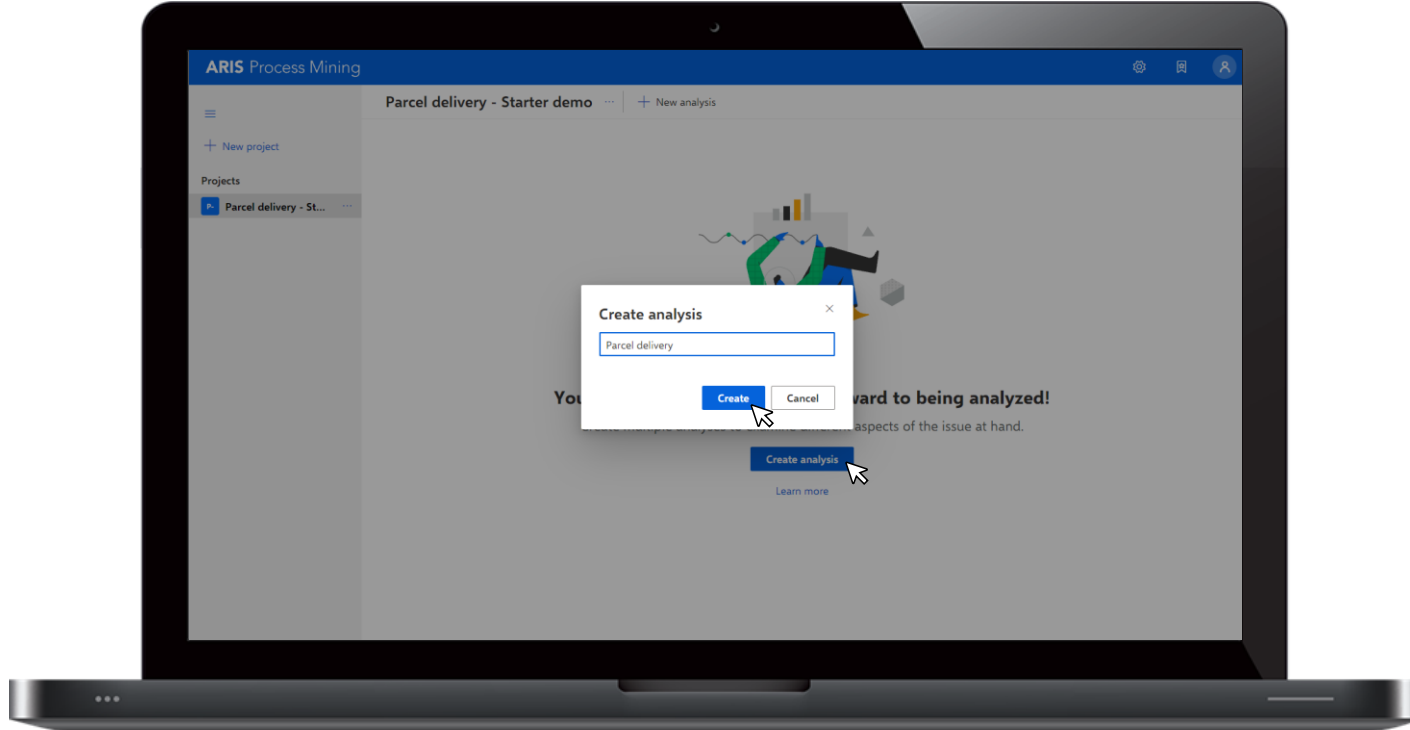


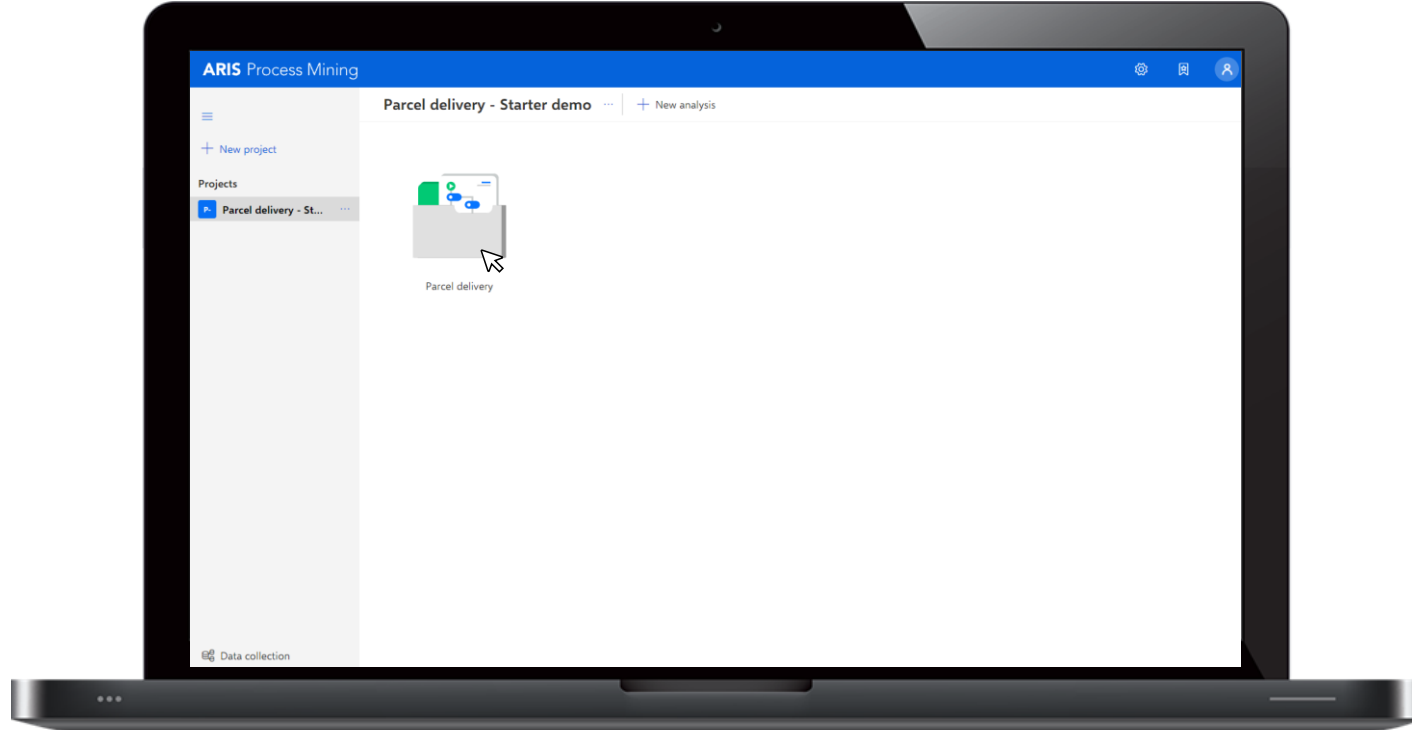


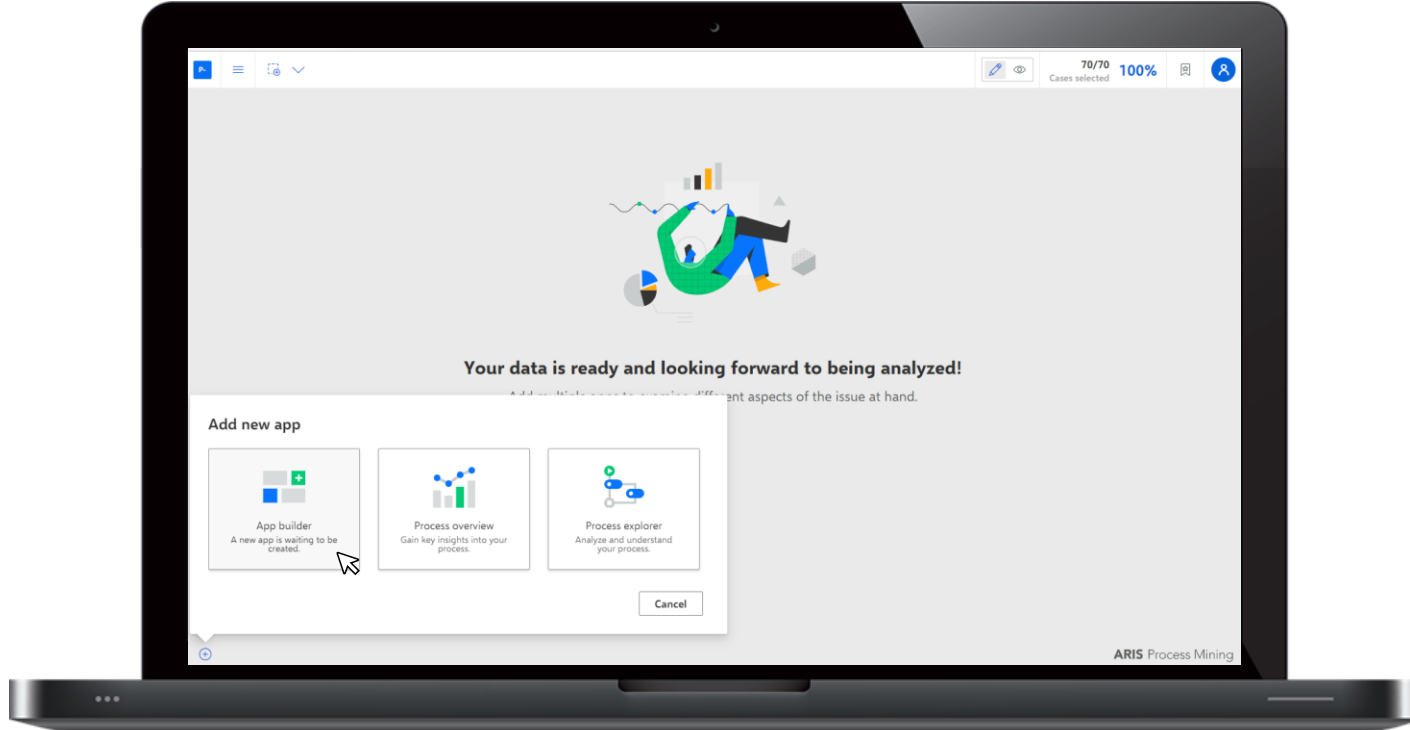
Create analysis and validate data [1/2]

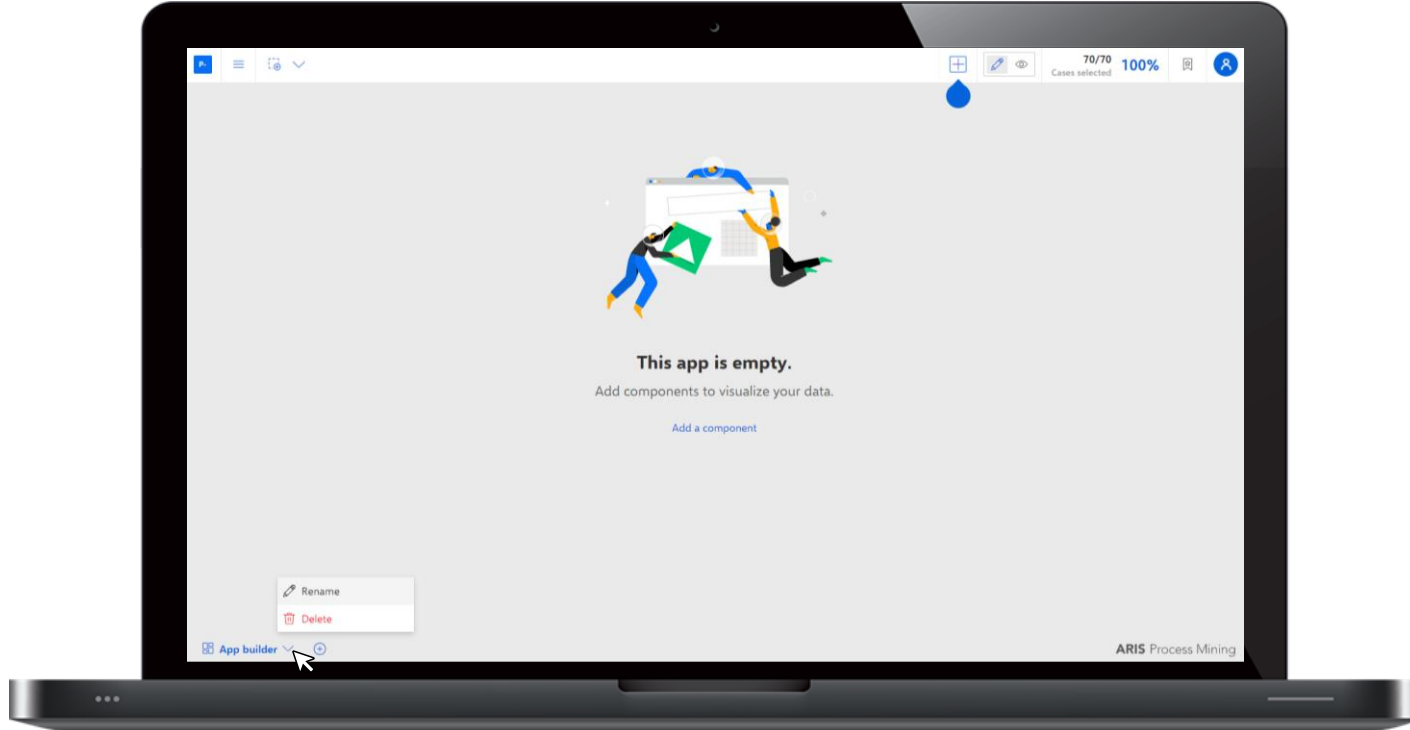


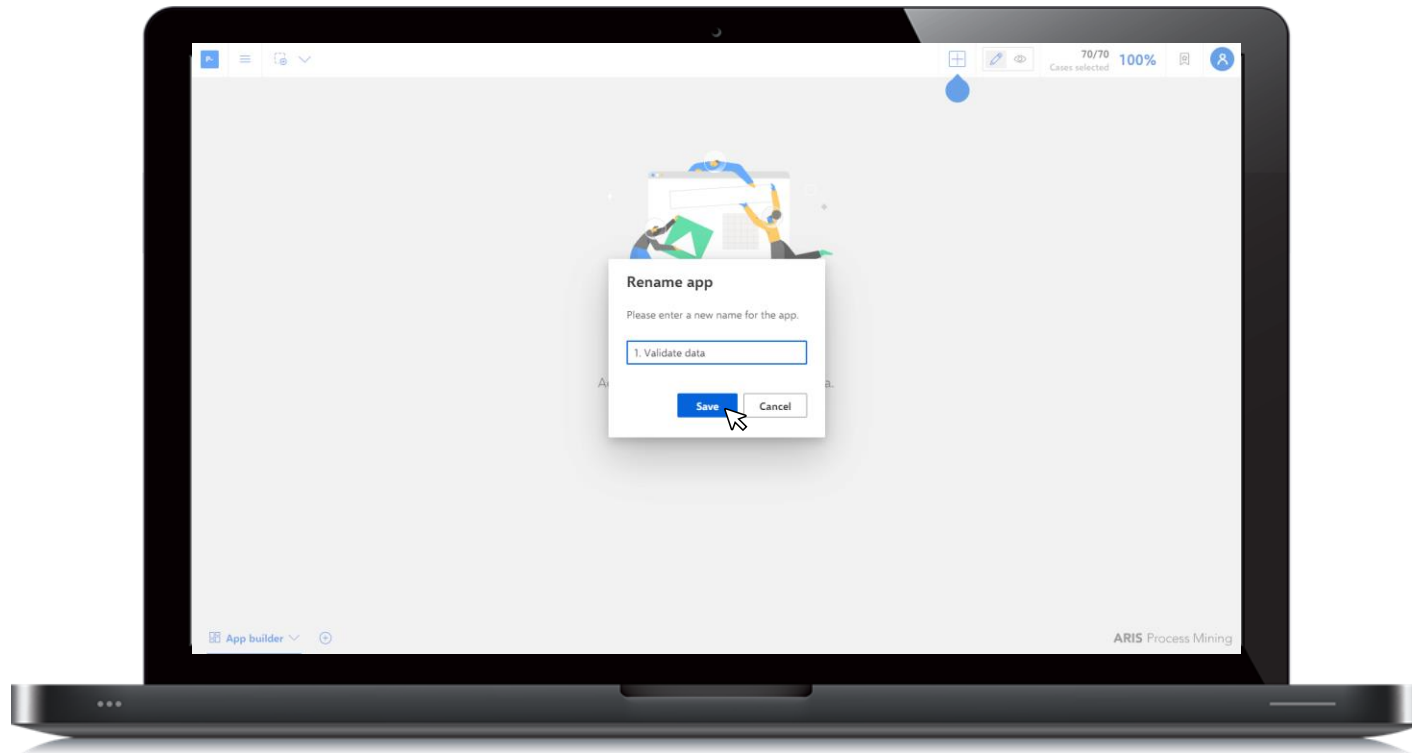
1. Click **New analysis** and enter *Parcel delivery*
2. Click the icon of the created *Parcel delivery*
3. Click **App builder** to create your first analysis which will be a data validation
4. On the tab **App builder** select **Rename app** and enter *1. Validate data*
5. Click the **[+]** symbol to add a new component and select **Table**
 - a. For the yet empty table click **Add measure** and select **Number of cases** in **Case columns** then click **Sum (SUM)**
This adds a column in the table showing 70 as the total number of cases
 - b. Click **Case duration** as another measure as **Average (AVG)**
This adds another column showing 6.46 days as average case duration
 - c. Click **Add dimension** and select **Customer, Product, Country, Delivery type** in **Activity columns**, then click **Done** to finish the selection
The added dimensions are criteria and split up the measure values
 - d. Drag the lower right corner, indicated by the **↙** symbol at the lower right corner of the **table** to increase its size to the bottom of the browser and halfway to the right side, then click **X** on the **Configuration** tab to close it

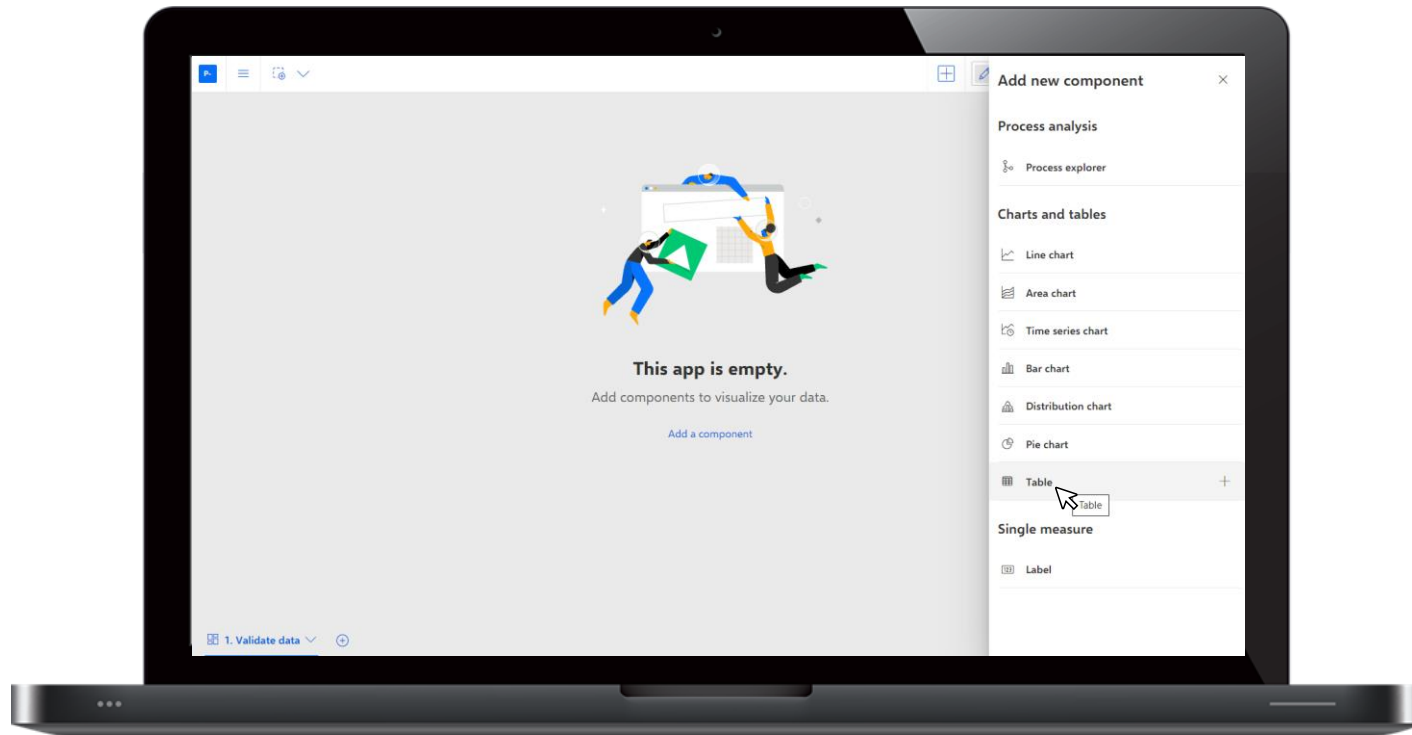


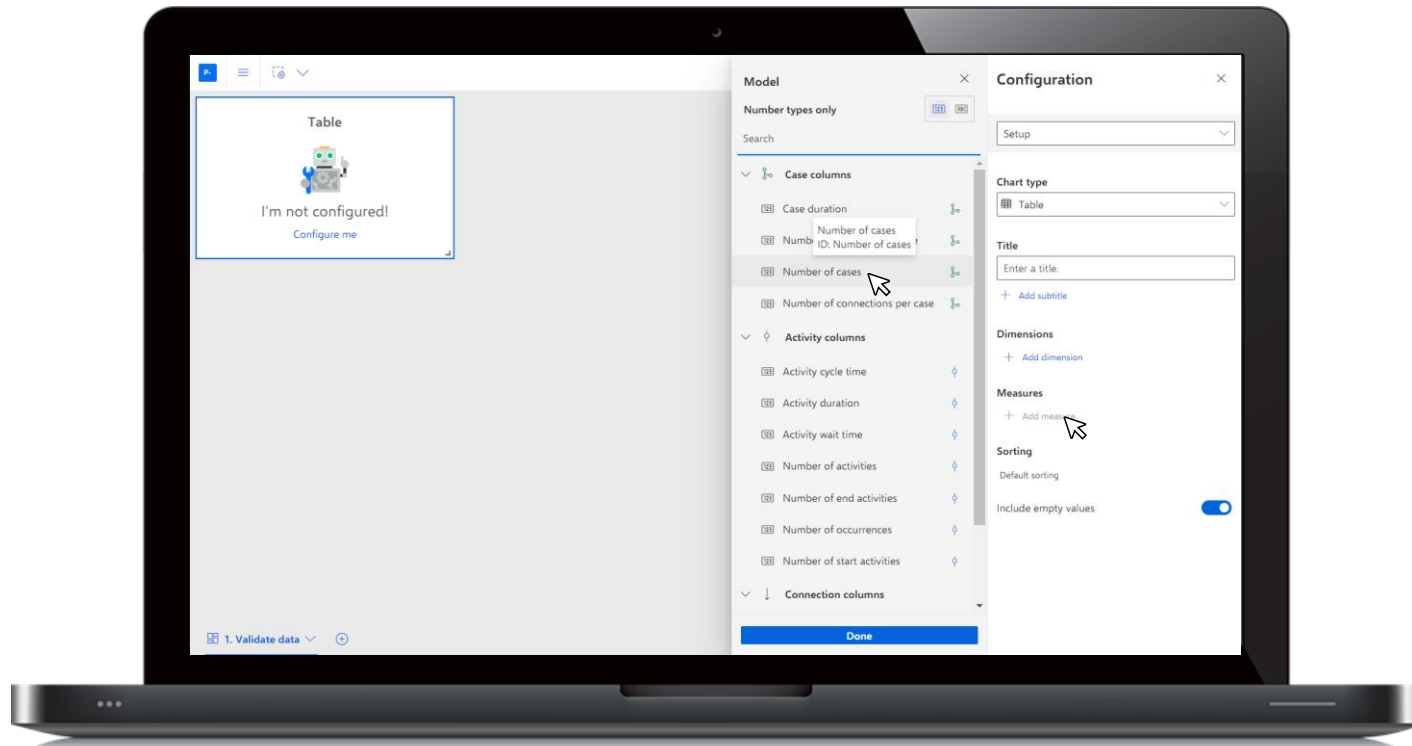


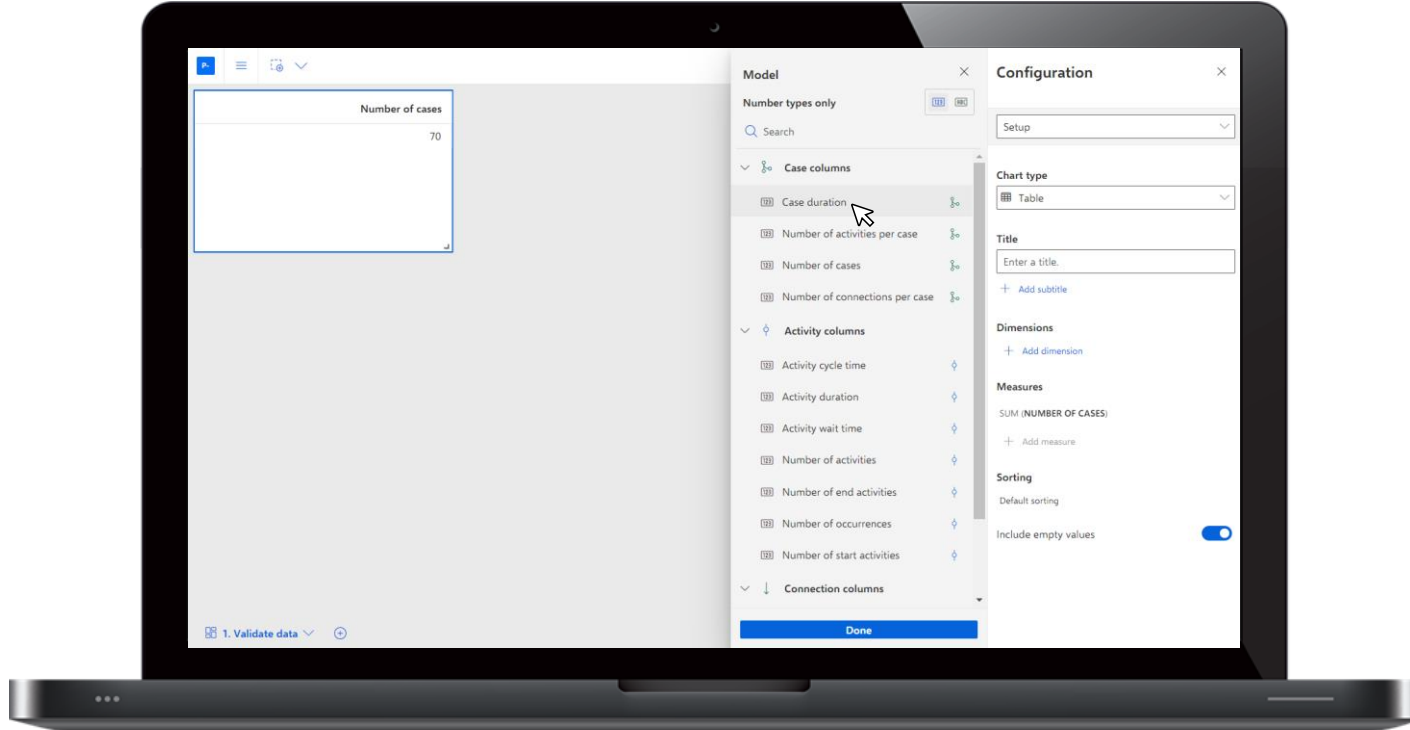


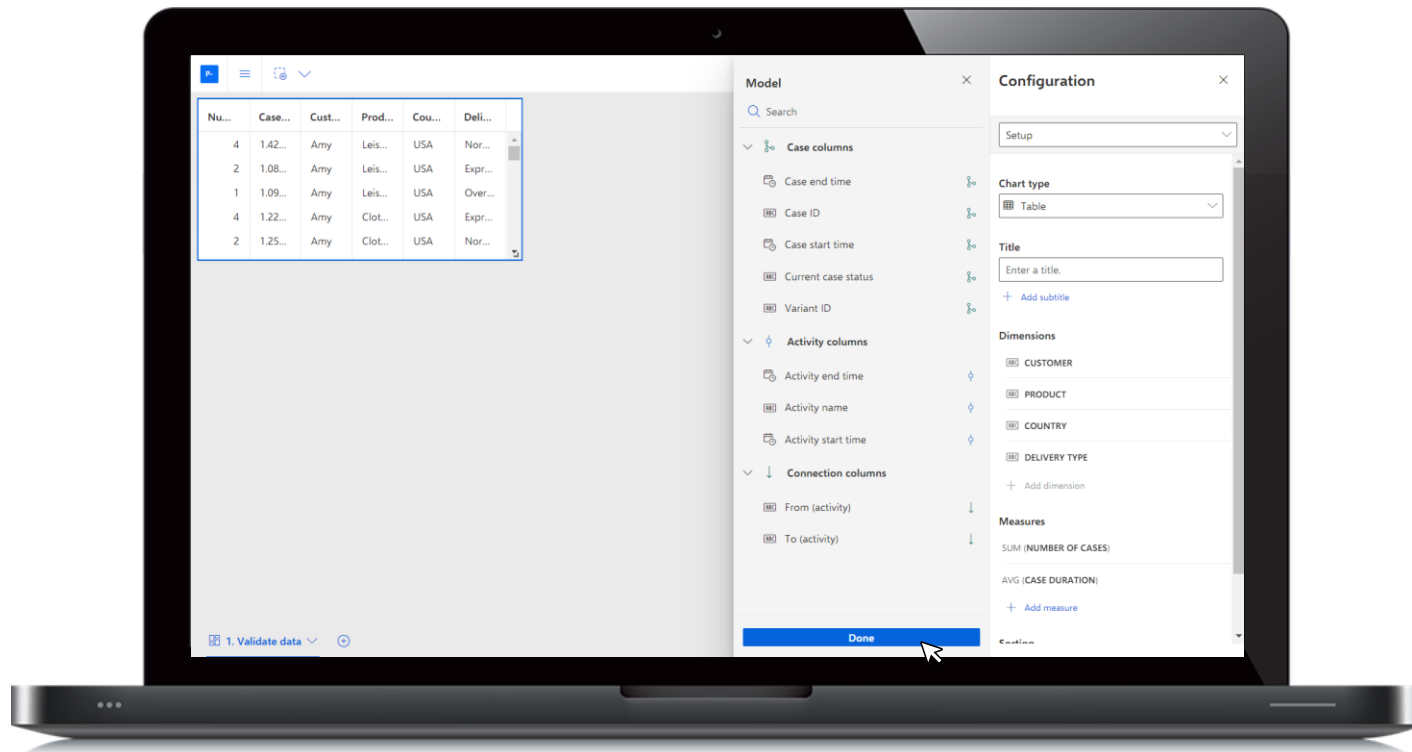




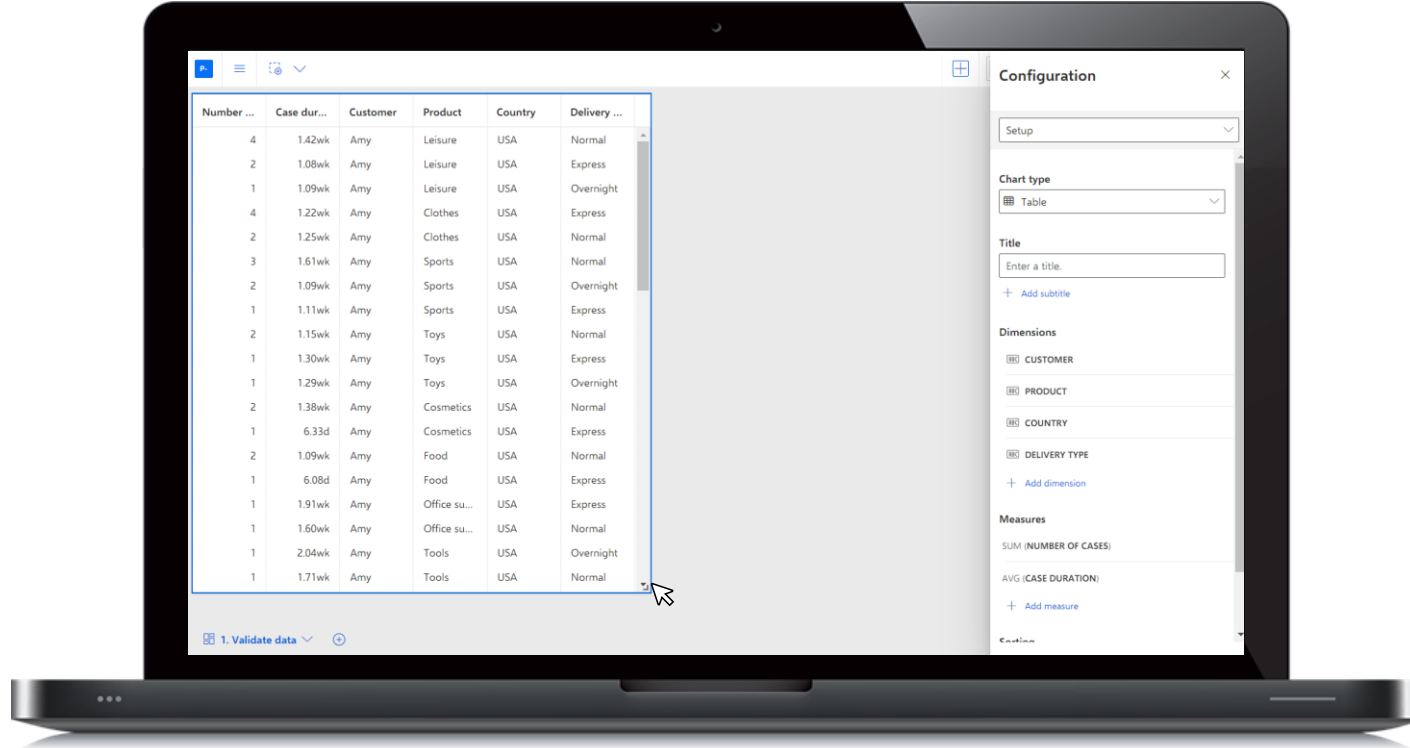








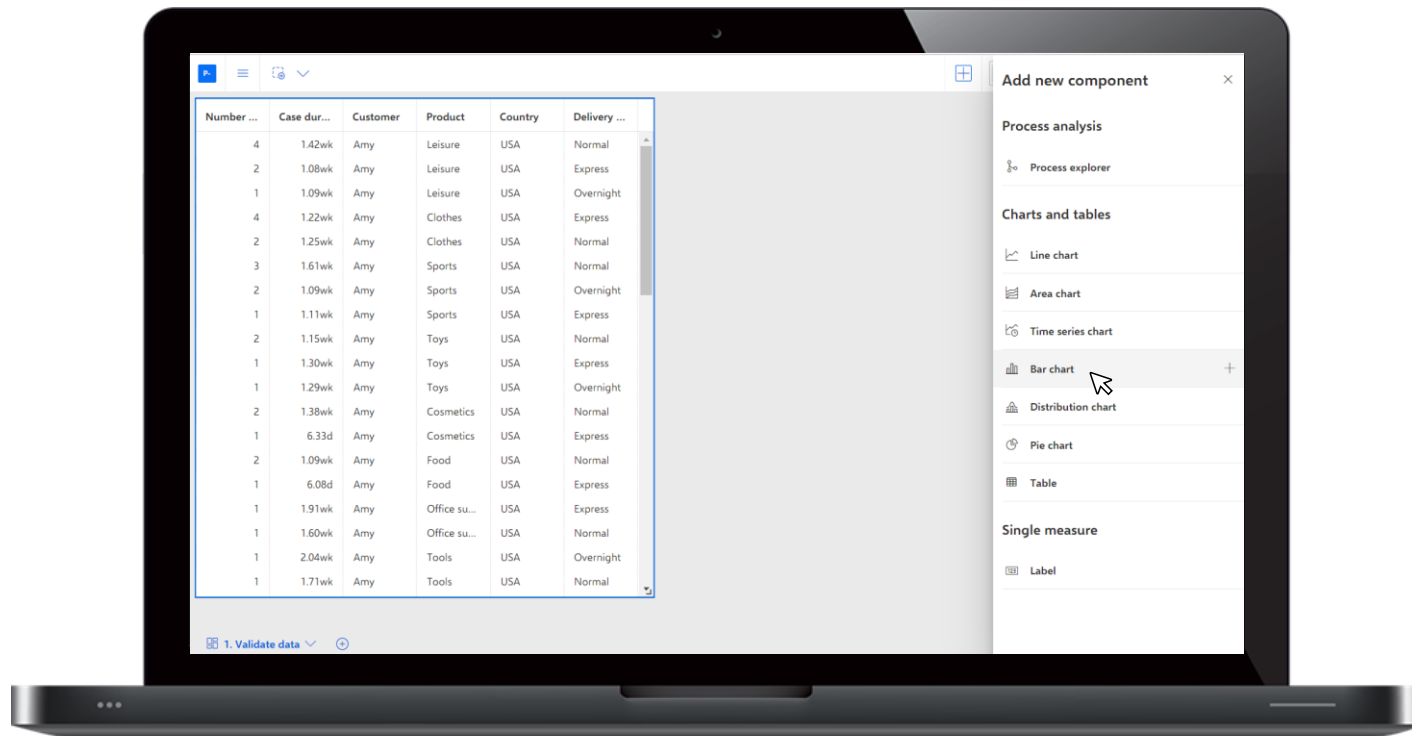
You have created an analysis to validate the imported data

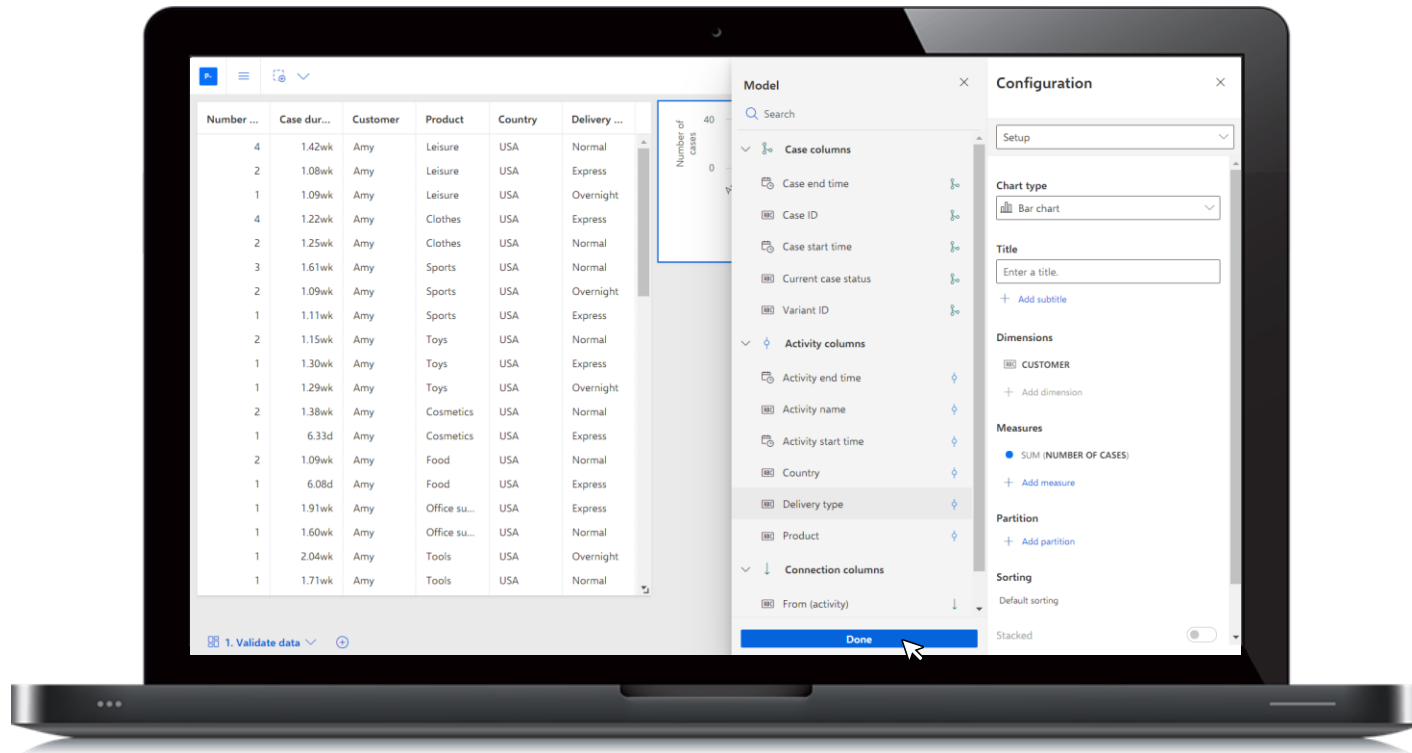


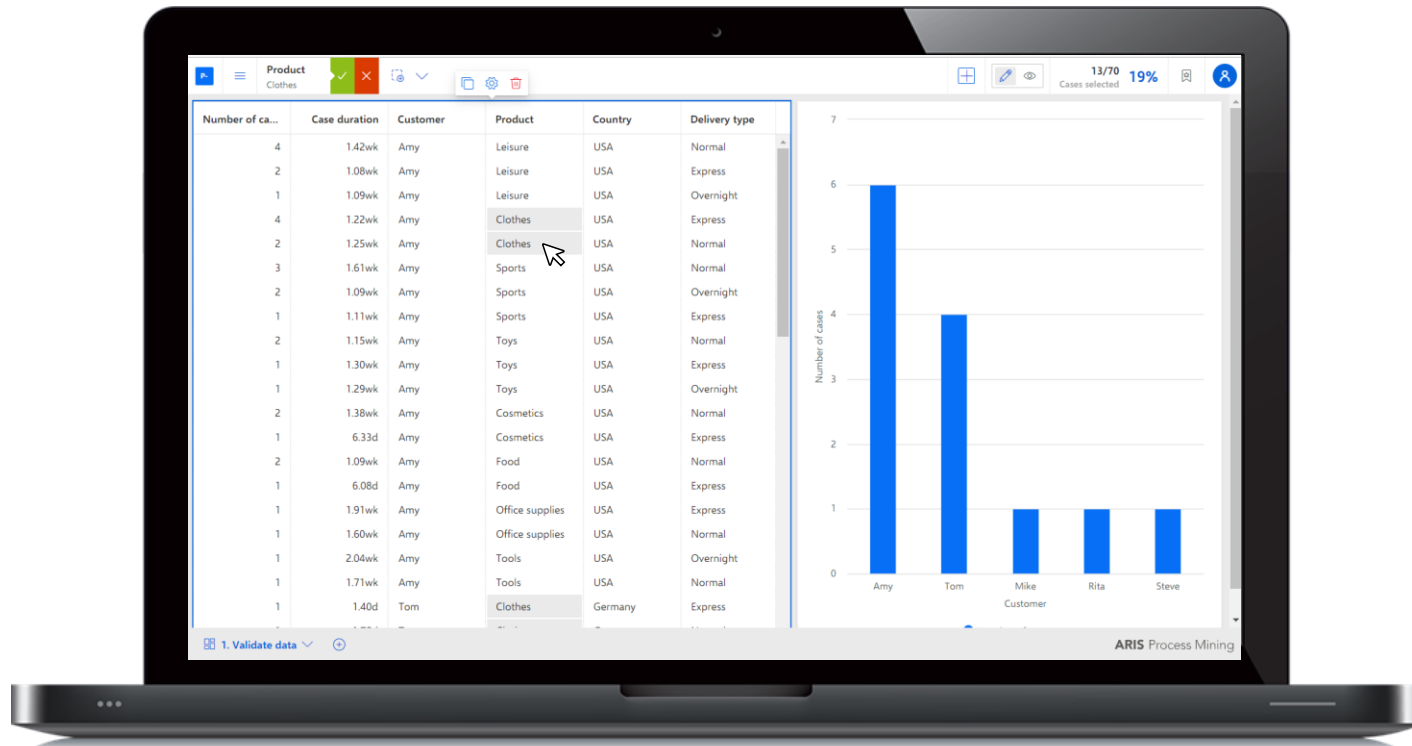
Create analysis and validate data [2/2]

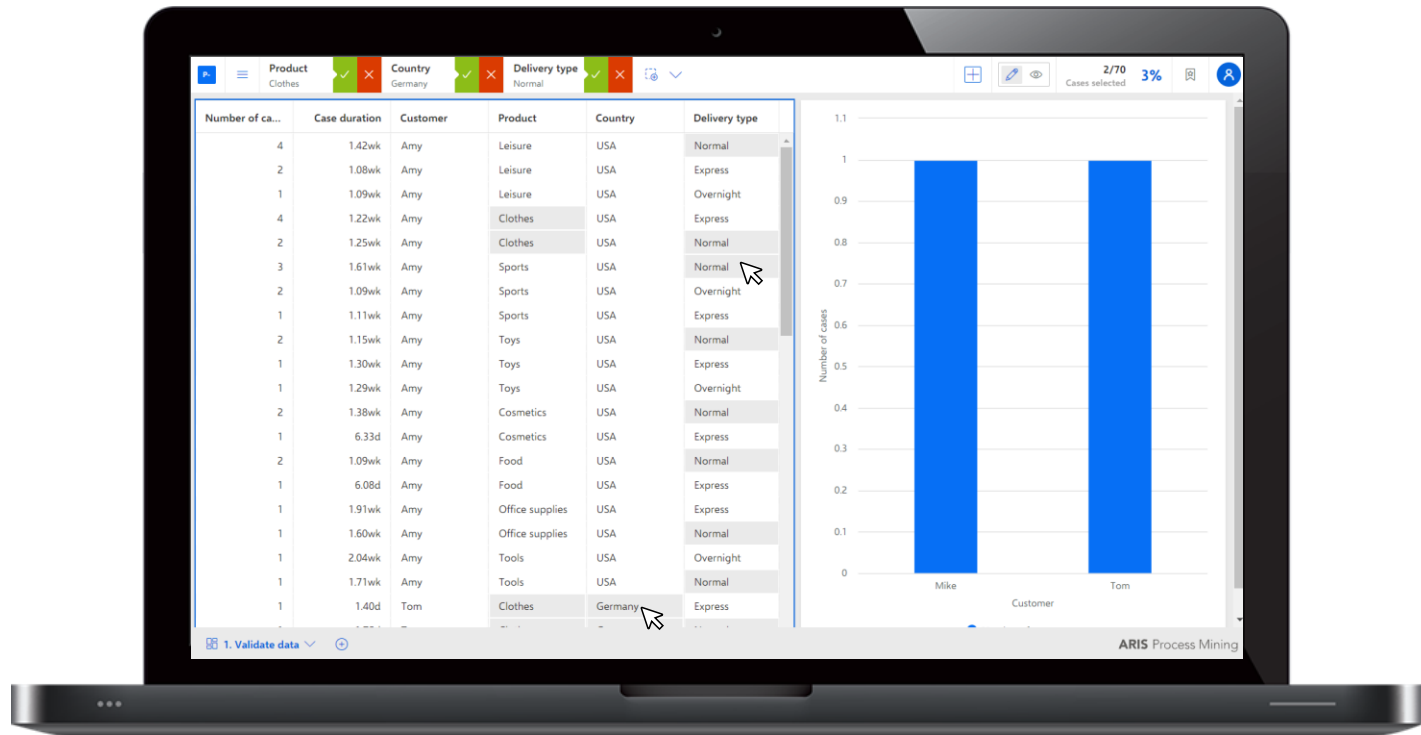


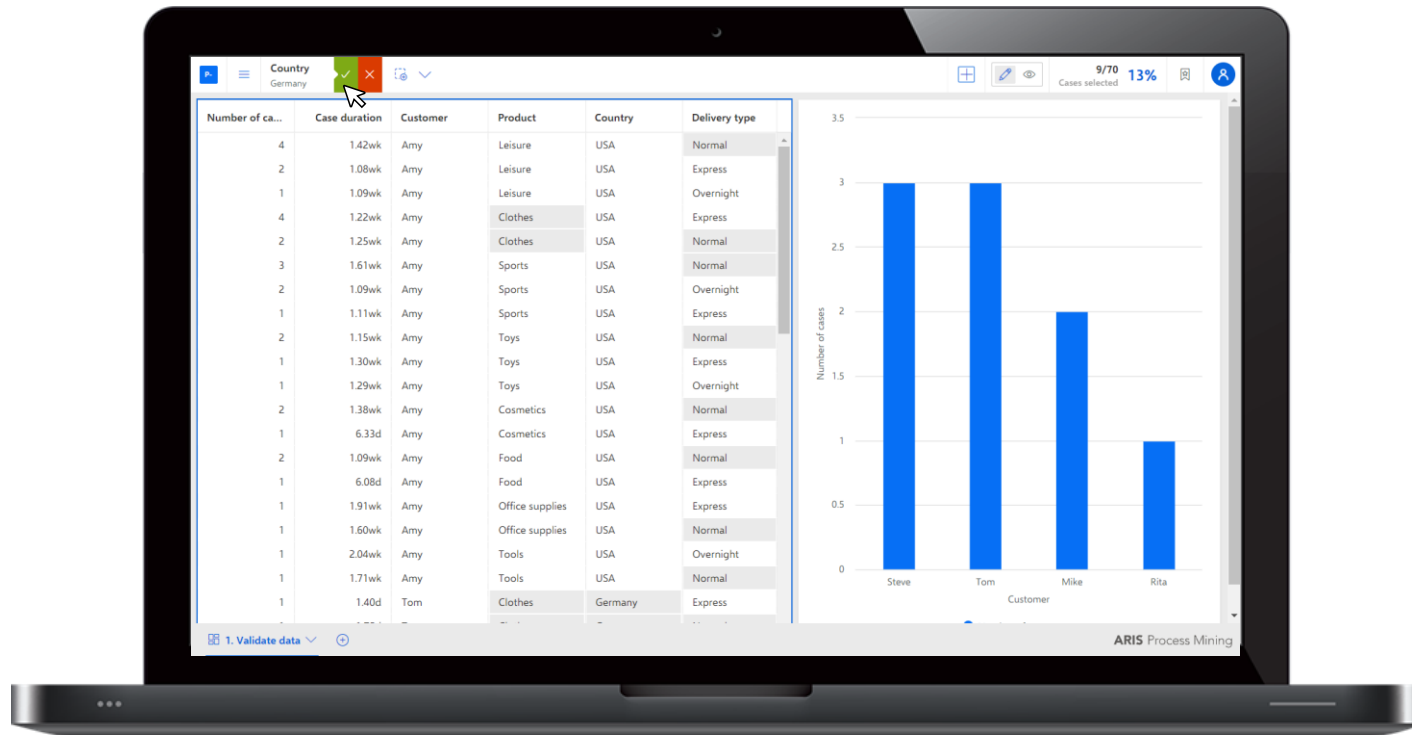
12. Click the **+** symbol to add a new component and select **Bar chart**
 - a. Click **Add measure** and select **Number of cases** and **Sum (SUM)** to add that measure
 - b. Click **Add dimension** and select **Customer**, then click **Done**
 - c. Increase the size of the **bar chart** by dragging the **↙** symbol to the lower right corner of the browser, then click **X** on the **Configure** tab to close it
13. In the column **Product** click on **Clothes** and notice that customer **Jenny** disappeared from the bar chart as the selection is filtering the chart
14. Hold the **Ctrl** key and click on **Germany** in the column **Country** and **Normal** in the column **Delivery type** which filters the bar chart for deliveries only to **Mike** and **Tom**
15. At the header click the red **X** next to **Delivery type** and **Product** to deactivate those filters, but click on the green **✓** symbol for **Country** to keep only this filter
16. Click on the filter **Country/Germany** and turn on the **Not** option, then click **Apply** to show all countries except Germany
17. Click the table column header **Case duration** twice to sort it descendent
18. In the **bar chart** click on **Amy** and notice that this filters also the **table**

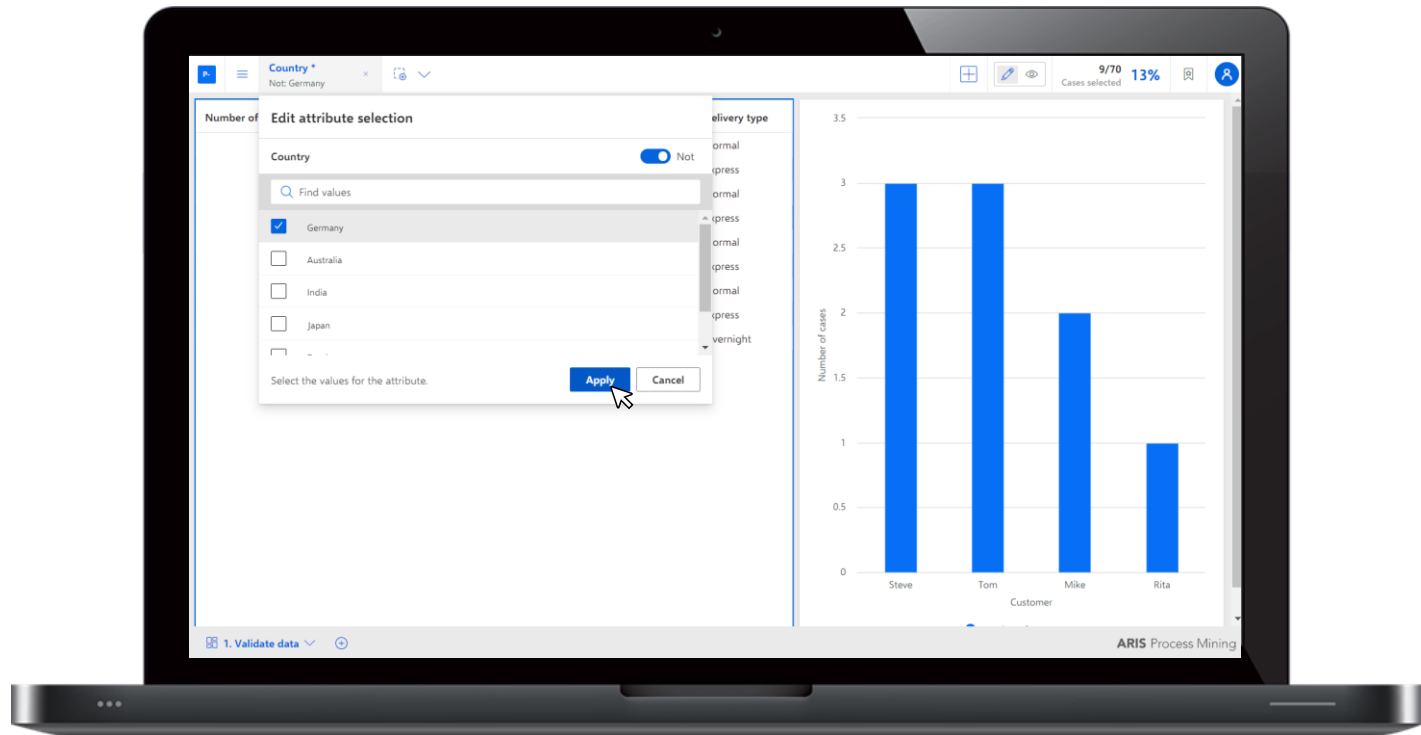


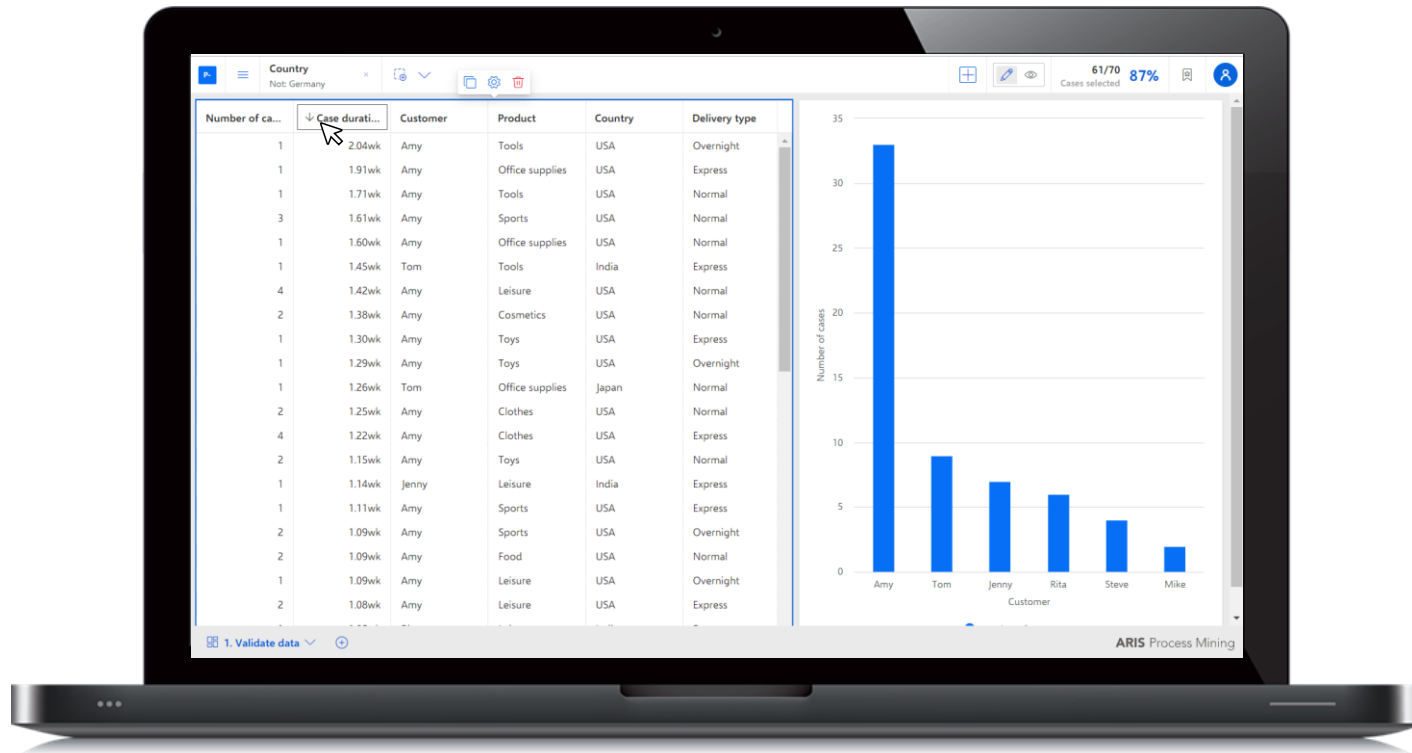


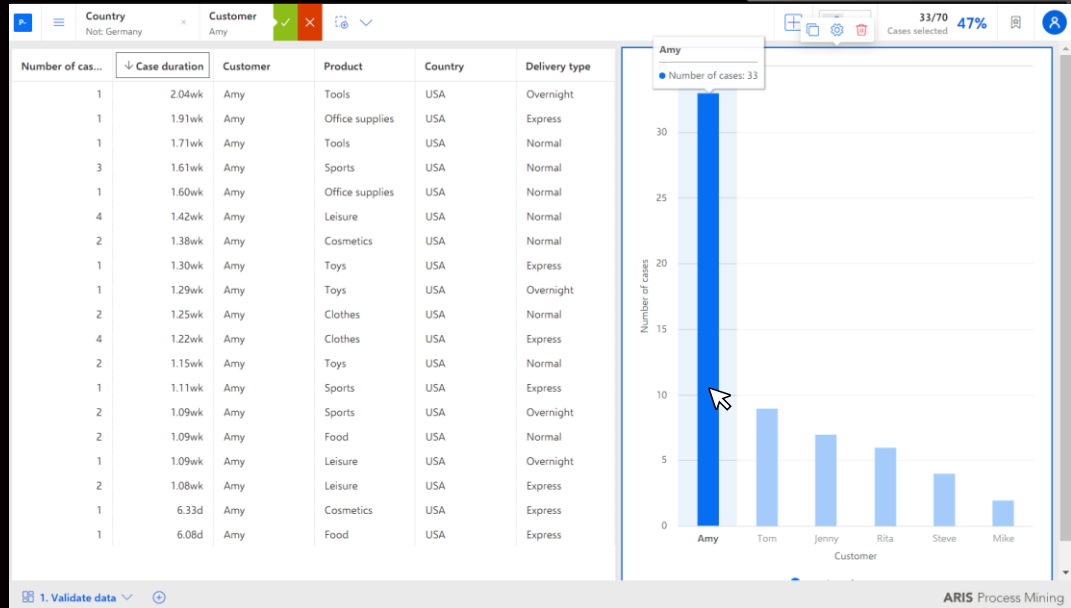










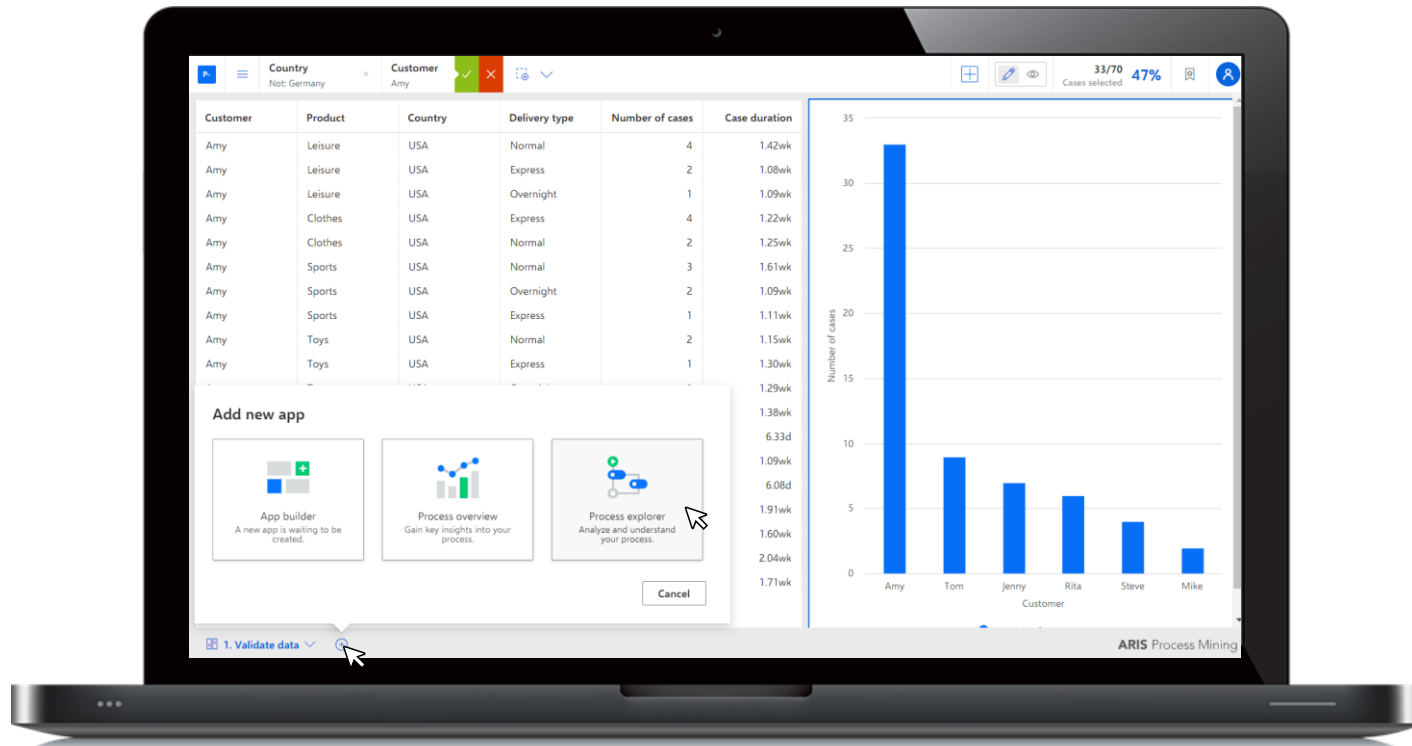


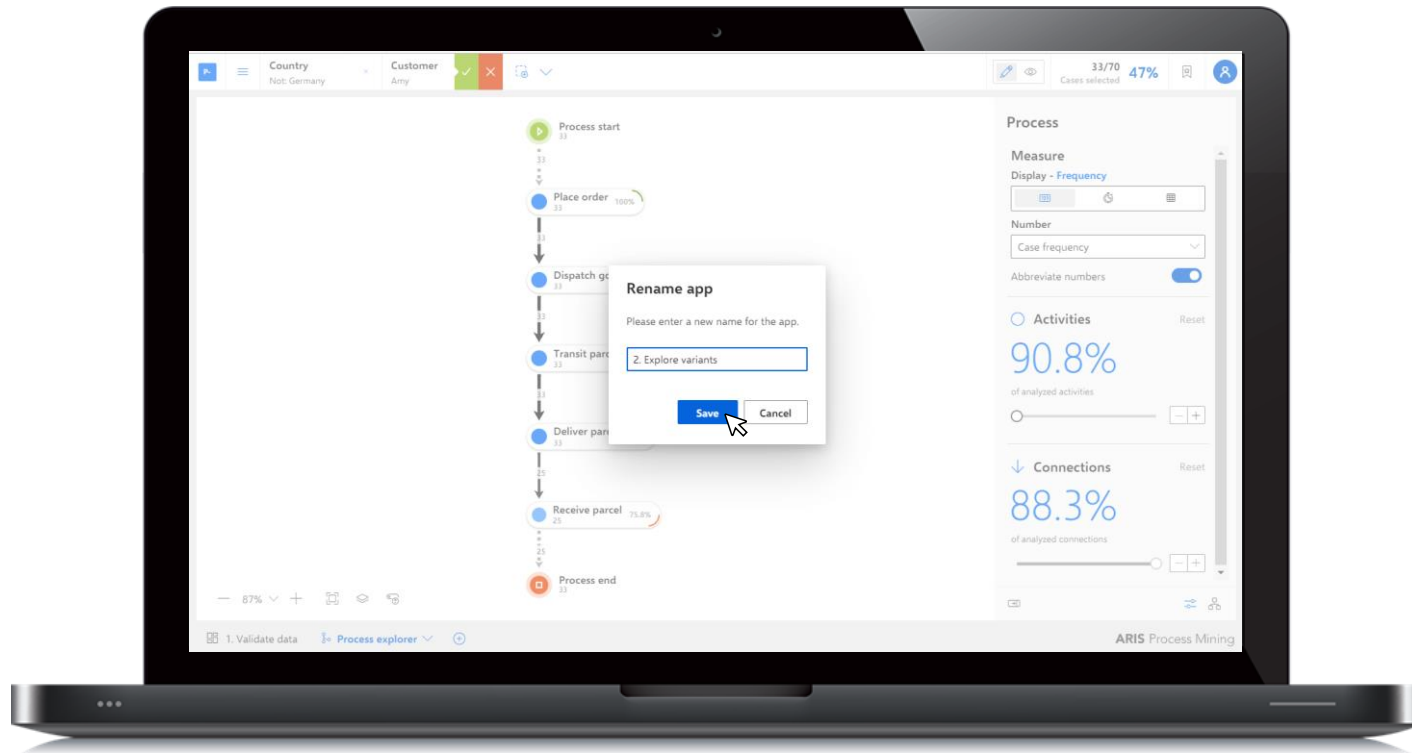
Explore process variants [1/4]

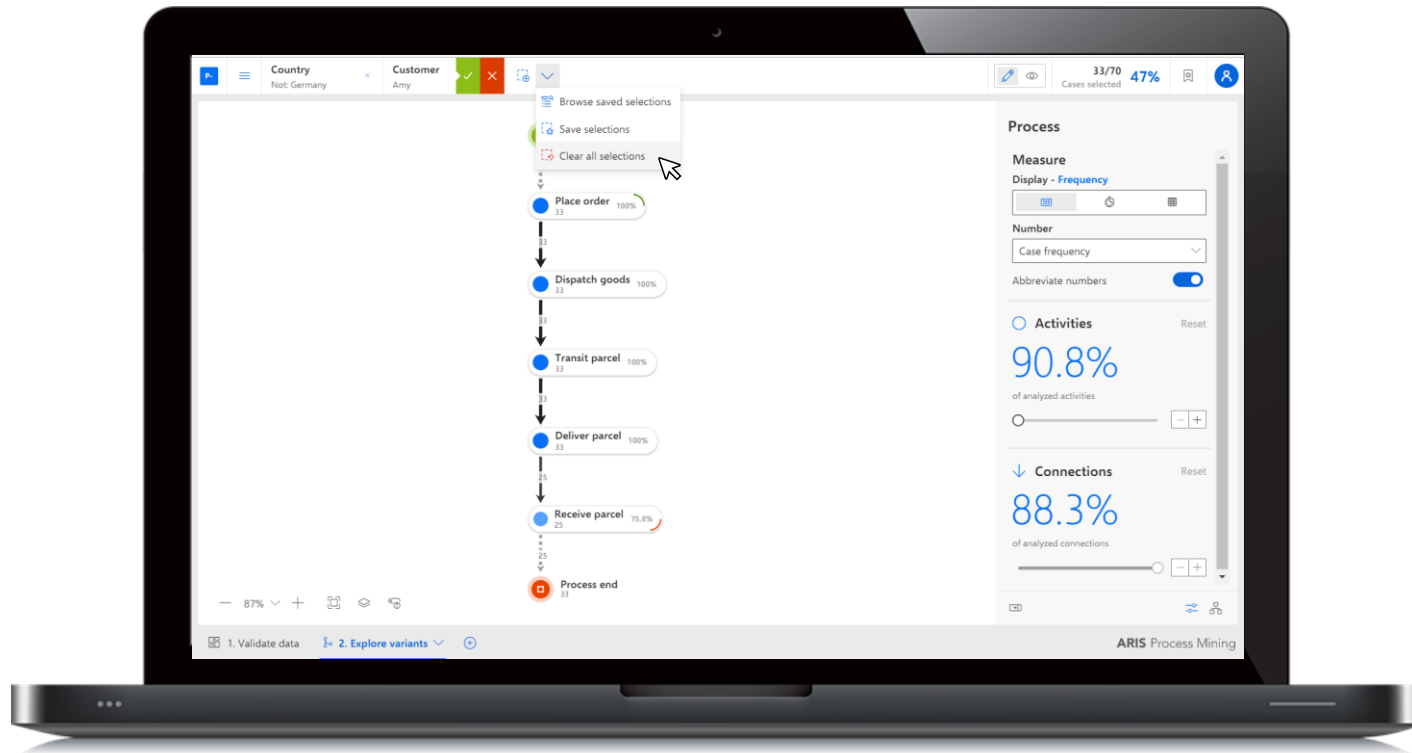


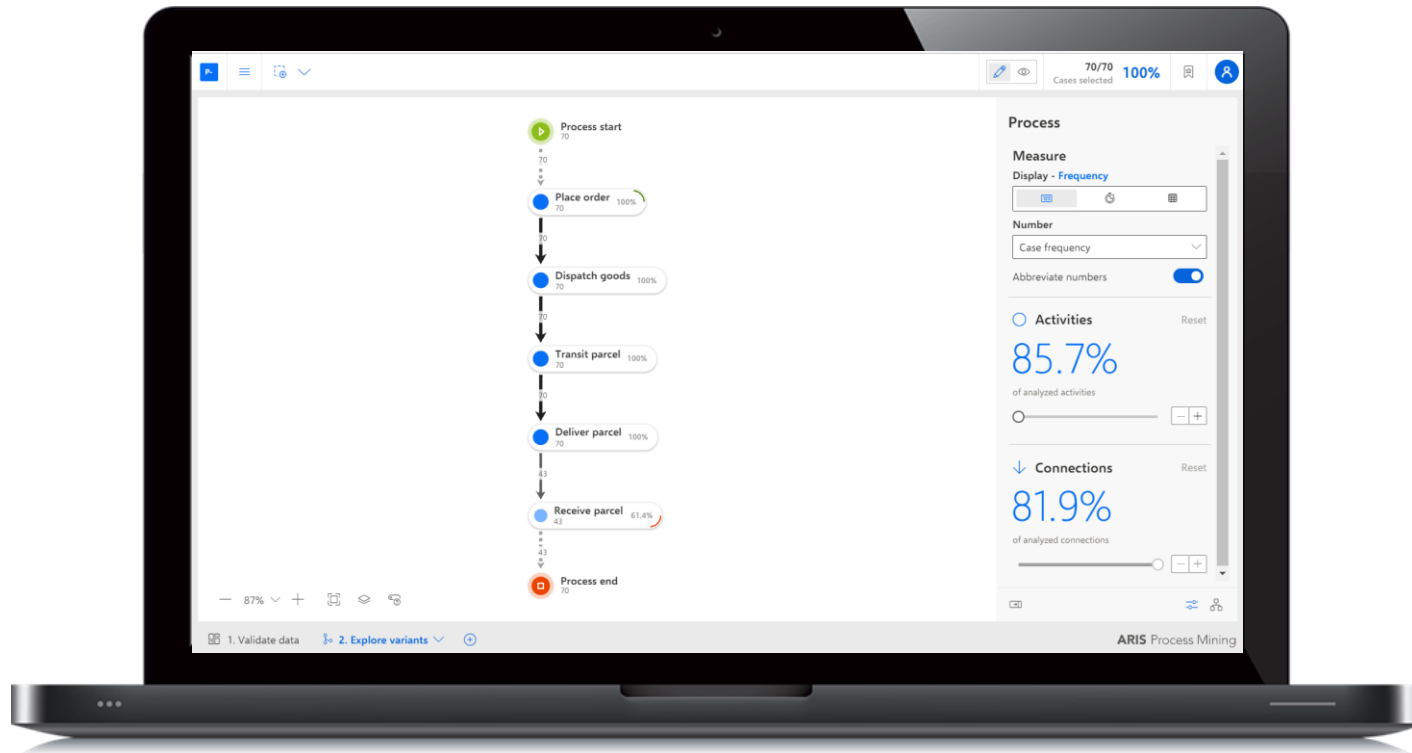
This procedure continues the analysis leveraging automatically discovered process flows using only the imported log data without any process design

1. At the bottom click the circled **(+)** symbol, select **Process explorer** and rename it to *2. Explore variants*
2. As the filters are automatically applied also to this new analysis the current number of 33 out of 70 cases equals to all deliveries **not from Germany** to customer **Amy**
But for a complete picture of all discovered processes all filters need to be reset
3. Next to the filter **Customer/Amy** click on the **V** icon and select **Clear all selections**, confirm the prompt to reset all filters for starting this dashboard from scratch
Notice that the number of processes is 70 out of 70 cases shown as 100% in the upper right corner









Explore process variants [2/4]



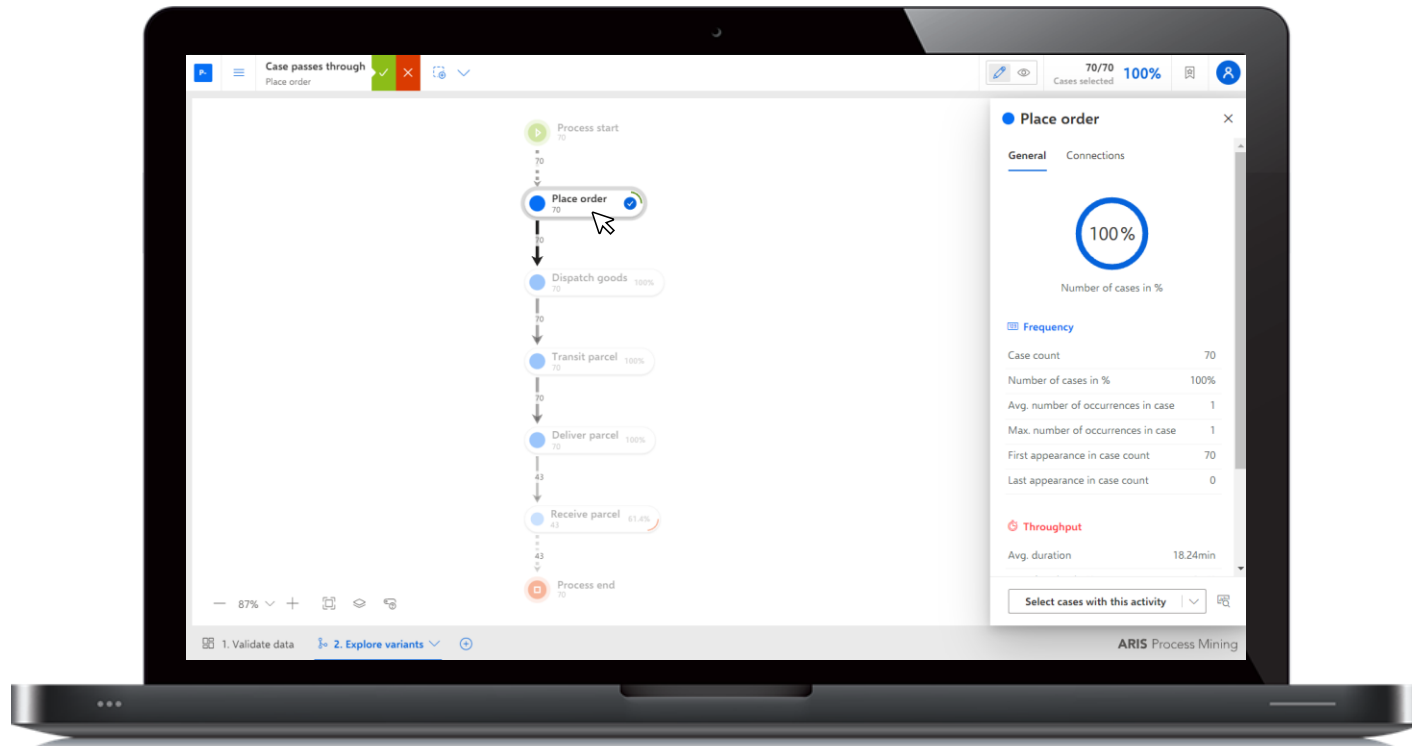
4. The process flow looks like a standard delivery process which runs straightforward at the first glance

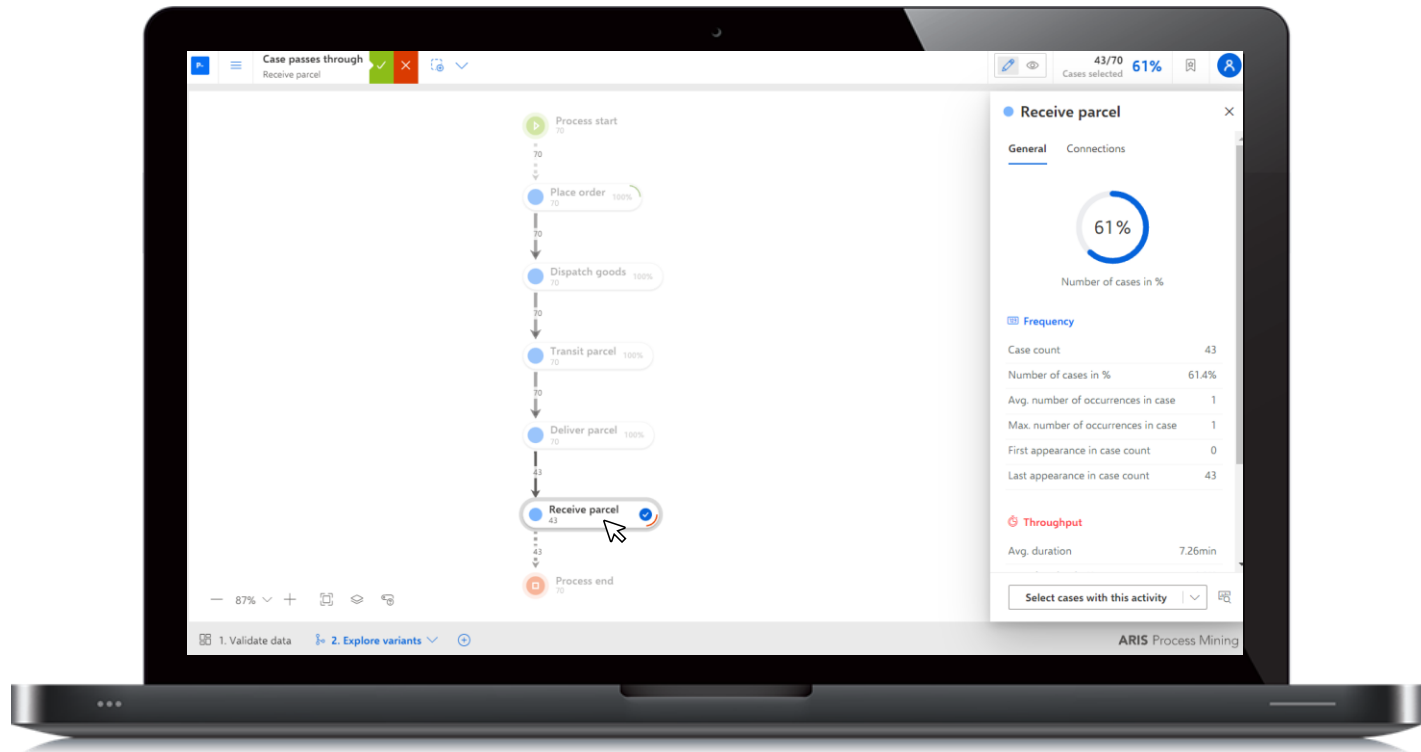
And by a click on **Place order** the side bar shows that all deliveries have passed that process step which consumed on average 18.24 min throughput time

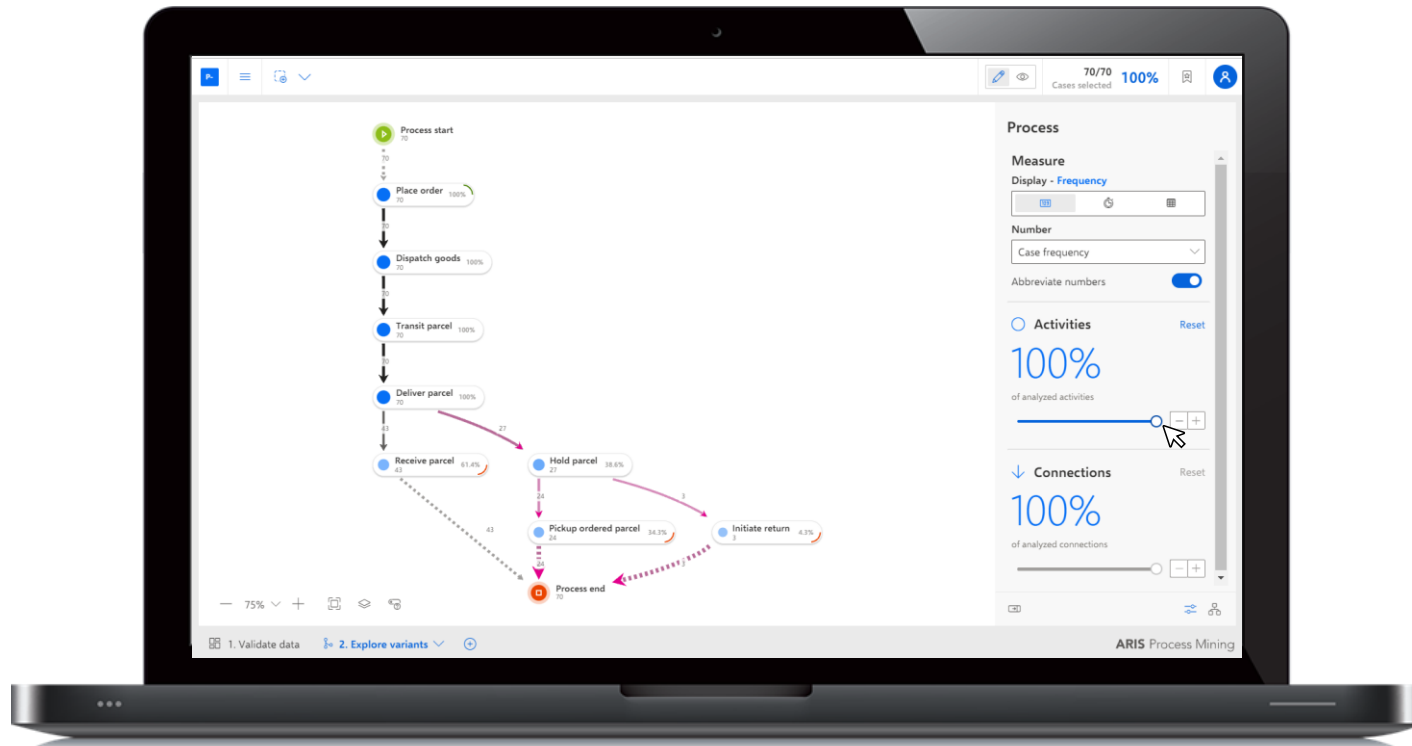
But a click on the last process step **Receive parcel** shows that only 43 cases have done this activity which equals only 61%

5. Close the side bar and move the **slider** under **Activities** all the way to the right ending with 100% activities

Notice that all activities are shown proving that not all deliveries were compliant with the standard process







Explore process variants [3/4]



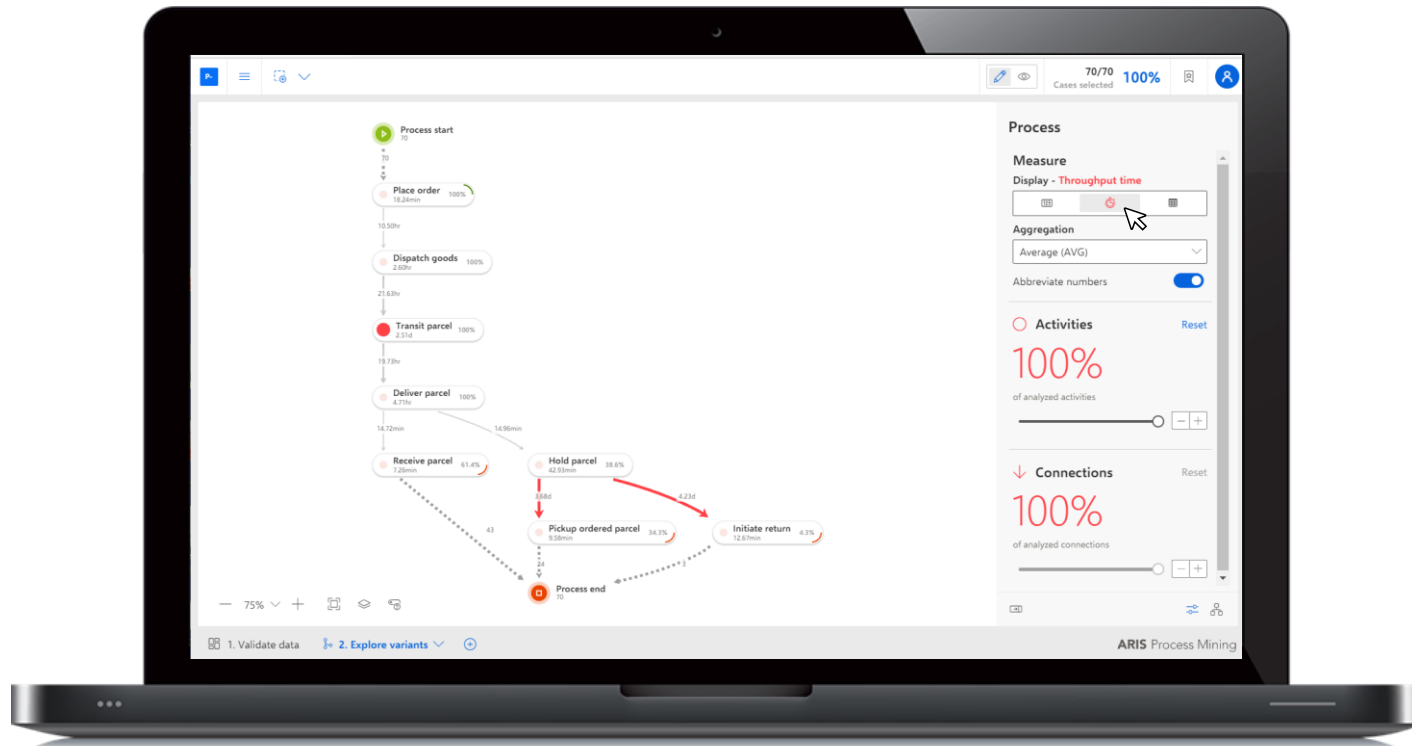
6. In the sidebar under **Measures** click the **clock icon** to switch from **Frequency** to **Throughput time**

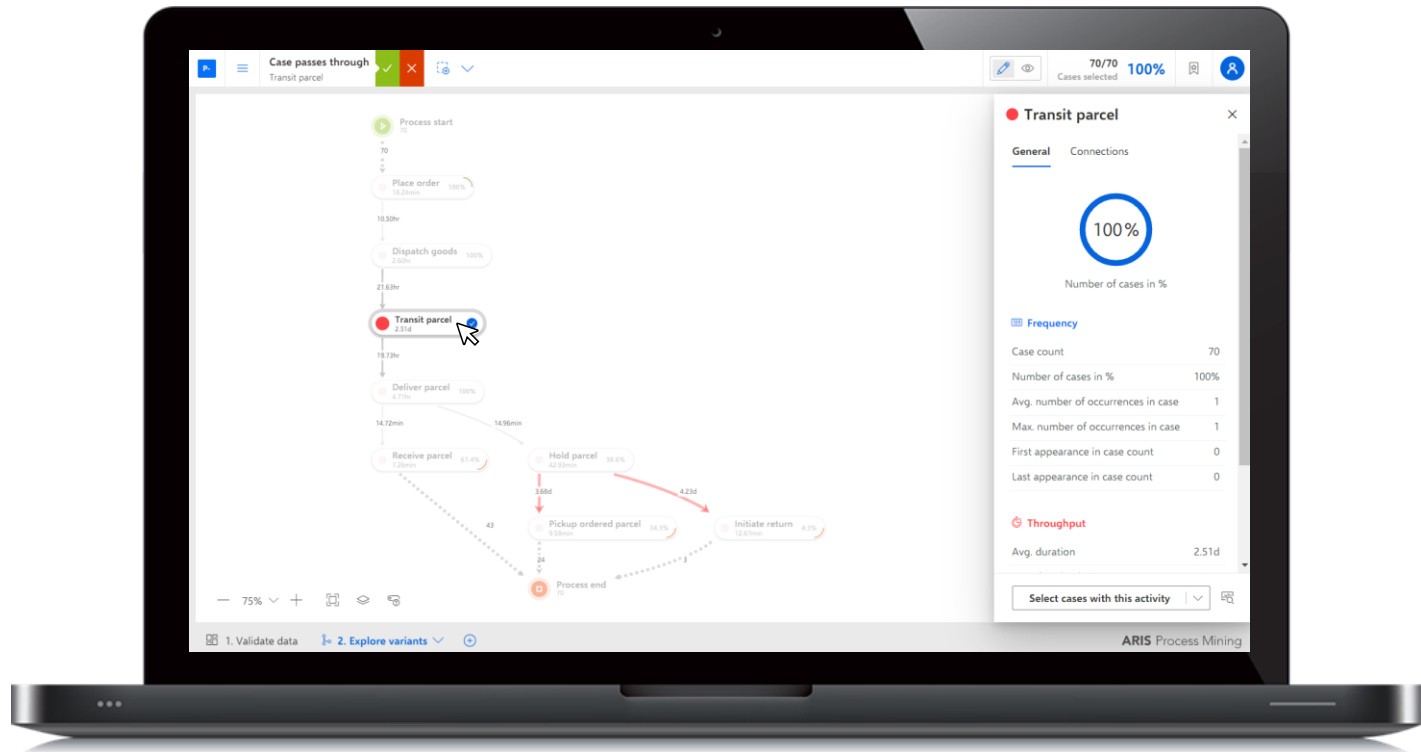
The large red icon on the activity **Transit parcel** indicates that this activity consumes the most time, precisely 2.51 days which is much higher than any other process step

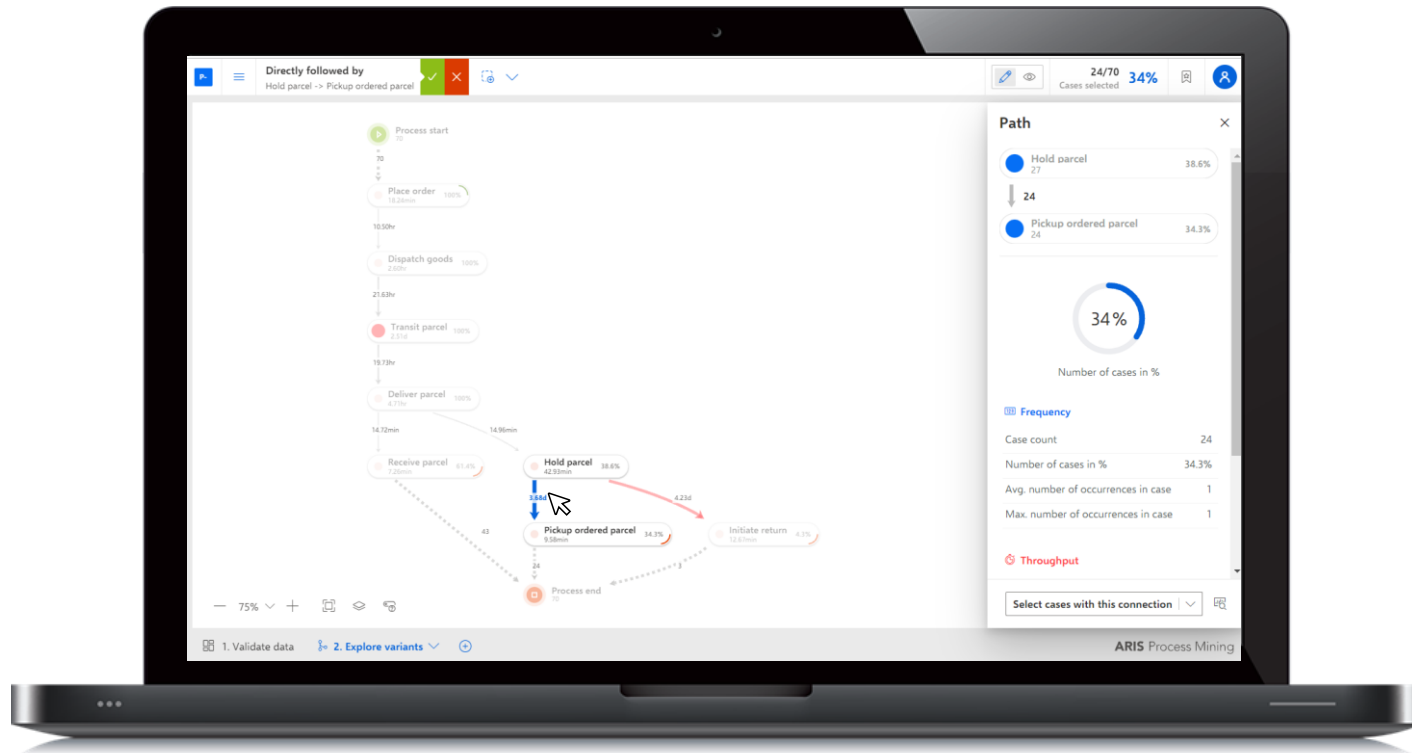
And the thick red connections starting from **Hold parcel** represent a high wait time before one of the following activities were started

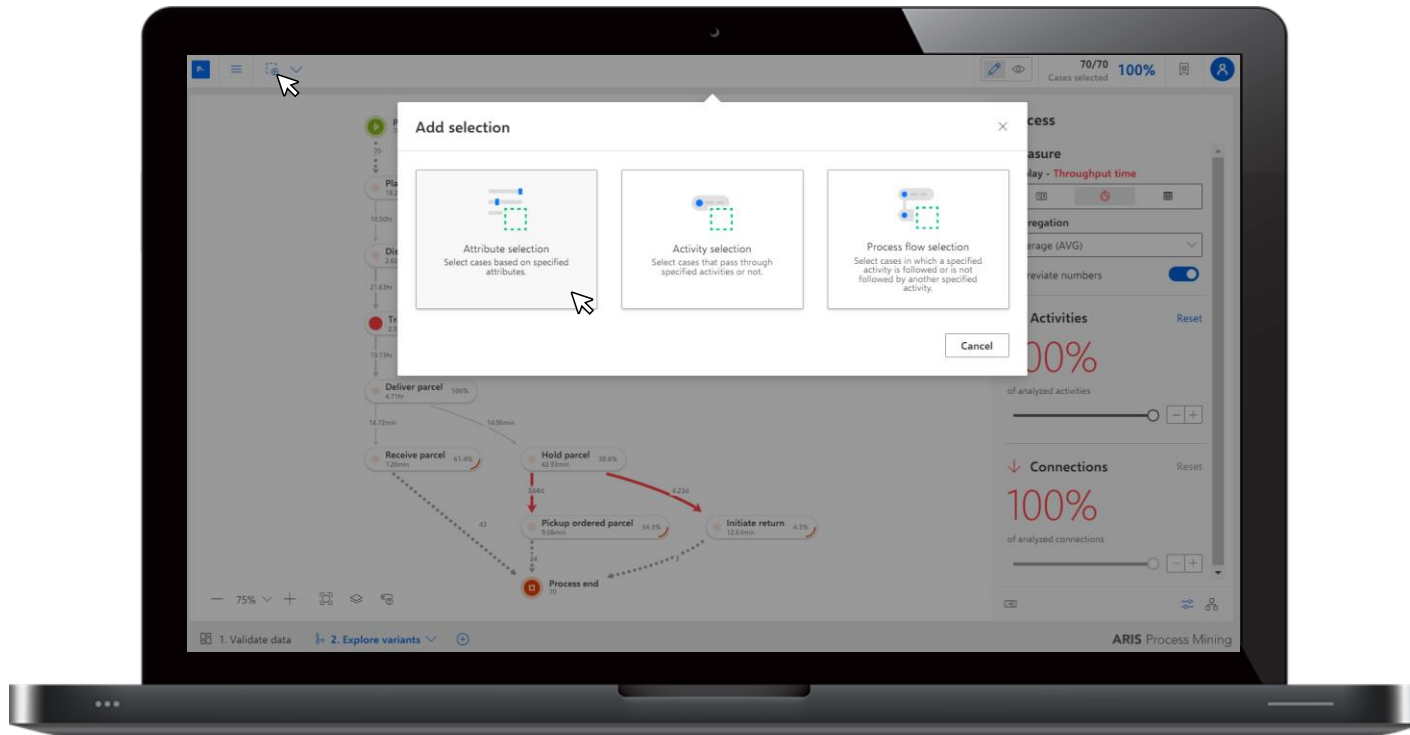
7. To filter a specific process flow click the **Add new selection** icon on the top left right next to the **≡ sandwich icon** and then click **Attribute selection**
8. Under **Activity columns** click **Customer** and select **Amy**, then click **Add** to filter only on those 33 deliveries done by that customer

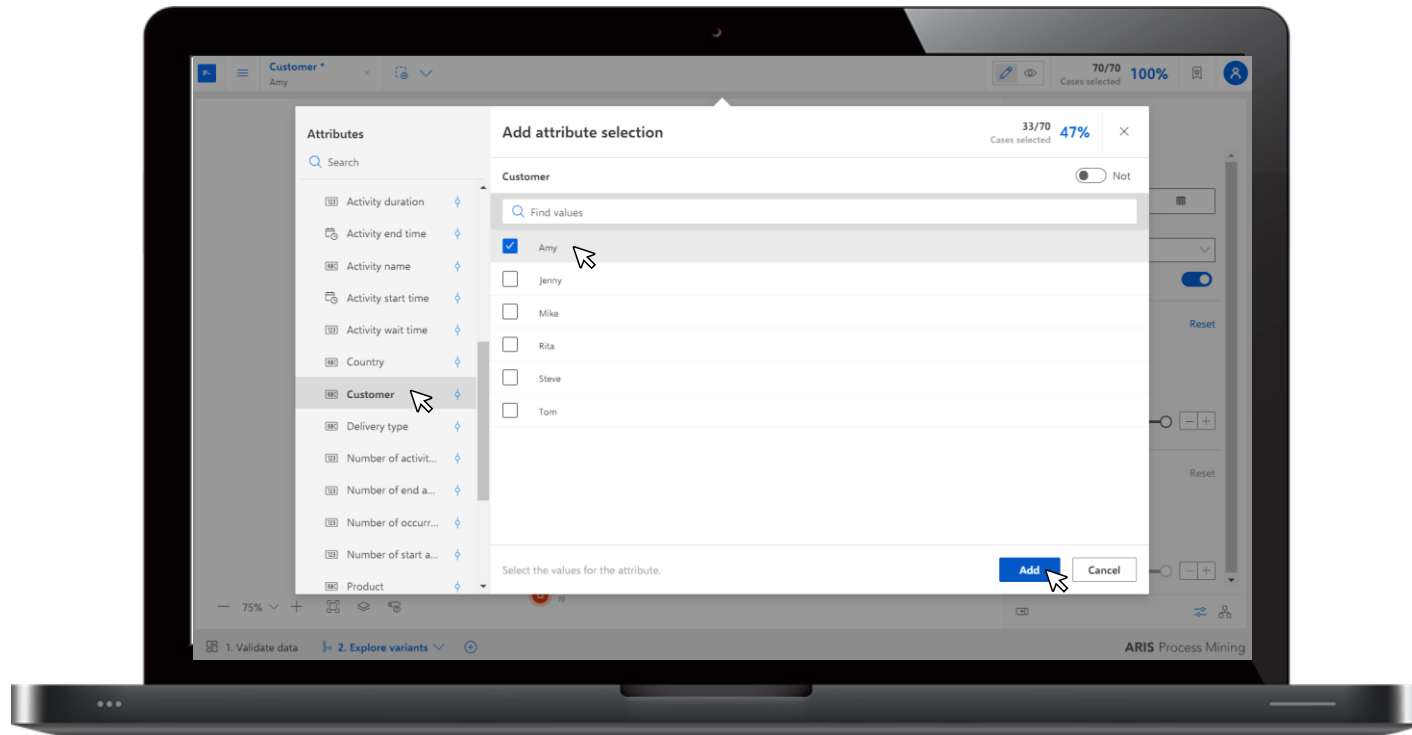
Interestingly, the throughput time of **Transit parcel** is now with 3.84 days even higher than before

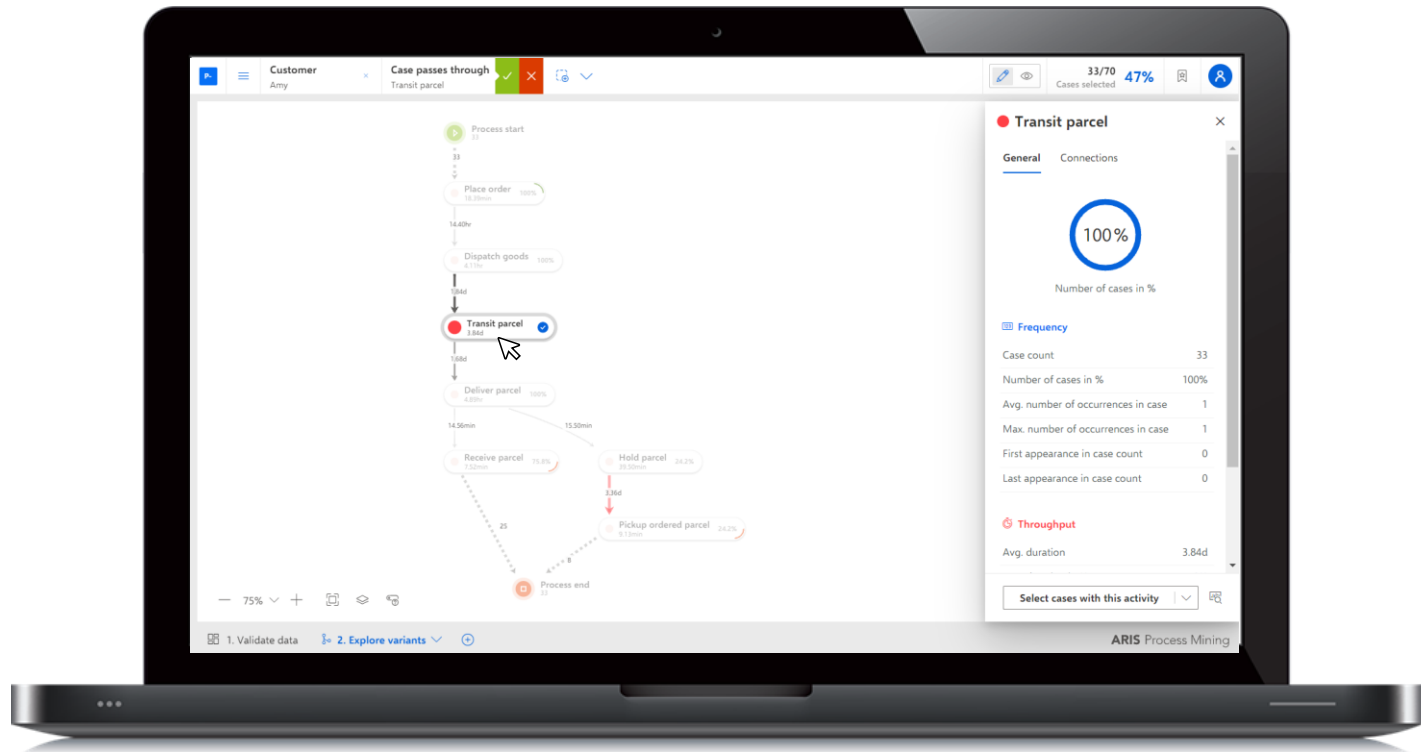












Explore process variants [4/4]



That indicator of a bad process performance for the customer **Amy** can be solidified when the filter is inverted

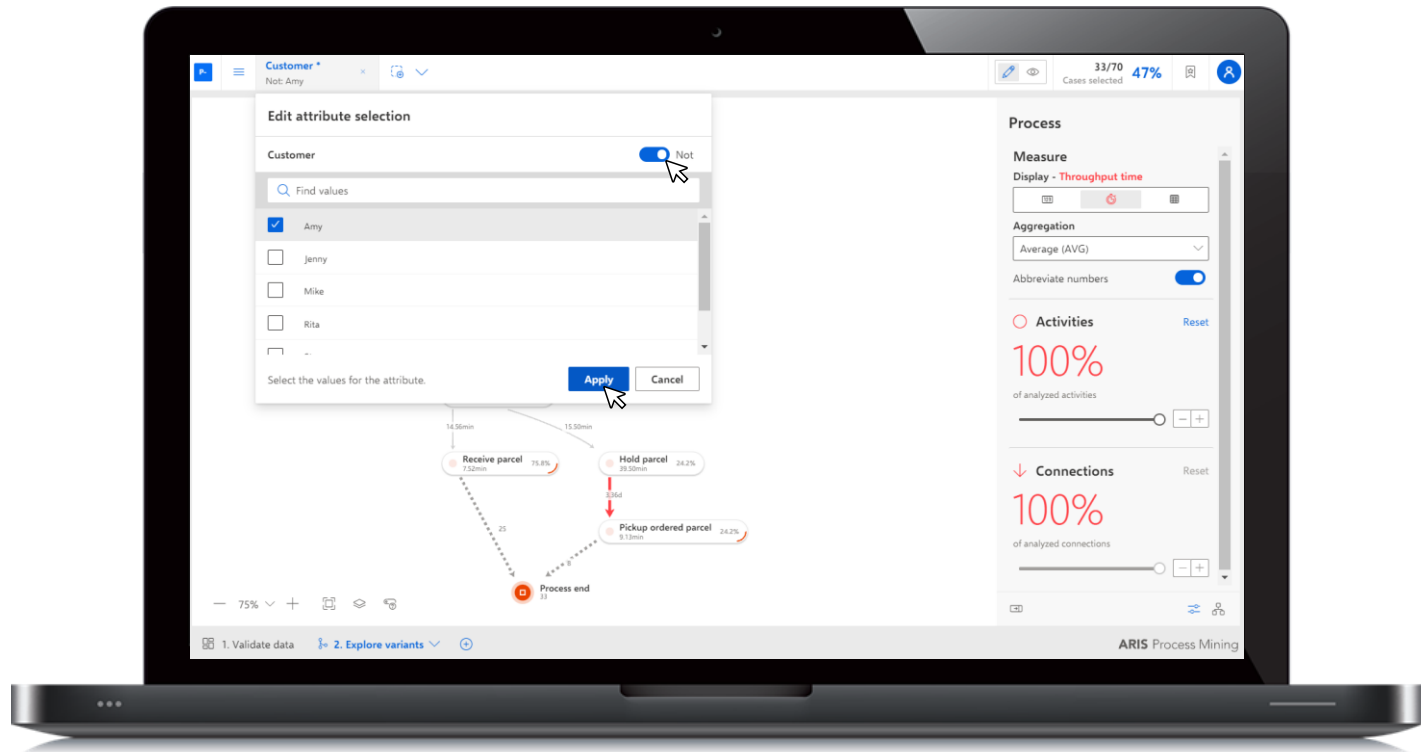
9. Click **Customer/Amy** and turn on the **Not** option

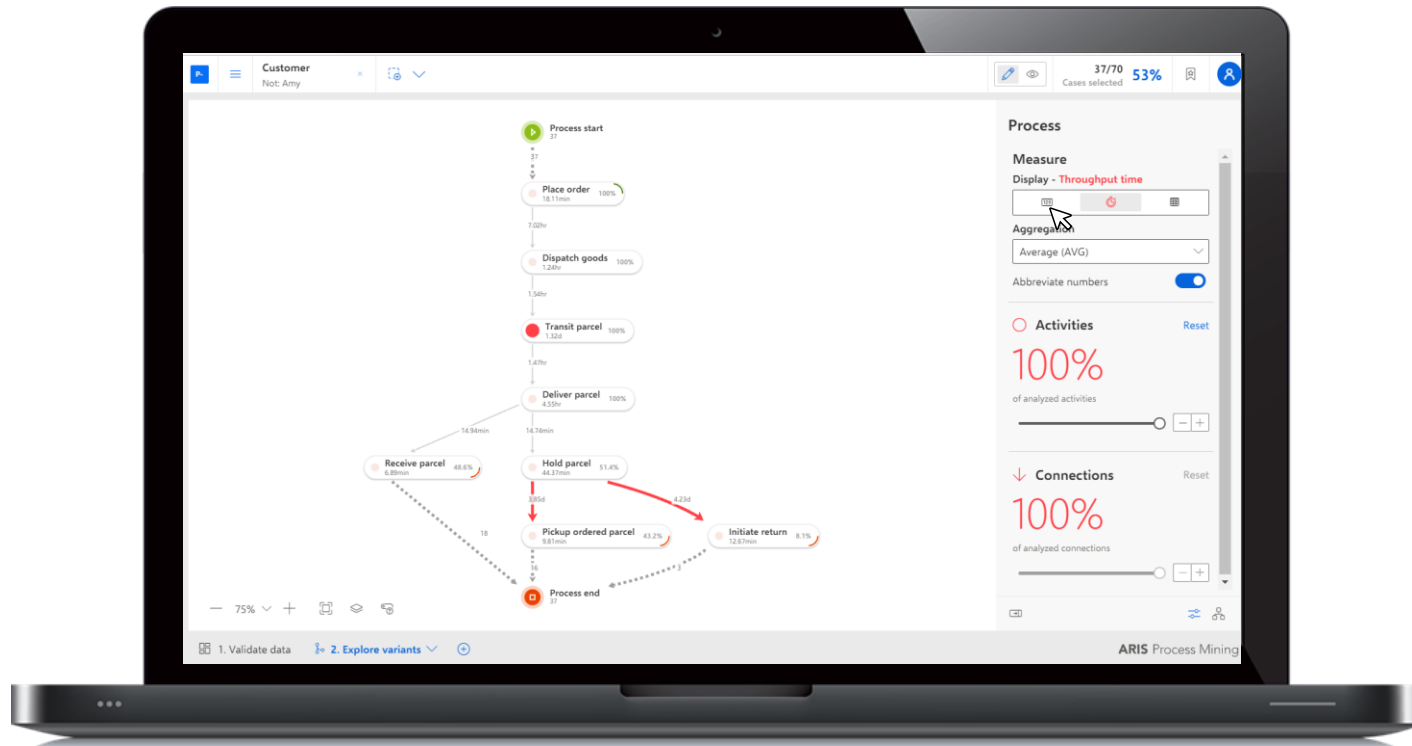
Notice that the activity **Transit parcel** shows now only 1.32 days which is much lower than the average of all deliveries

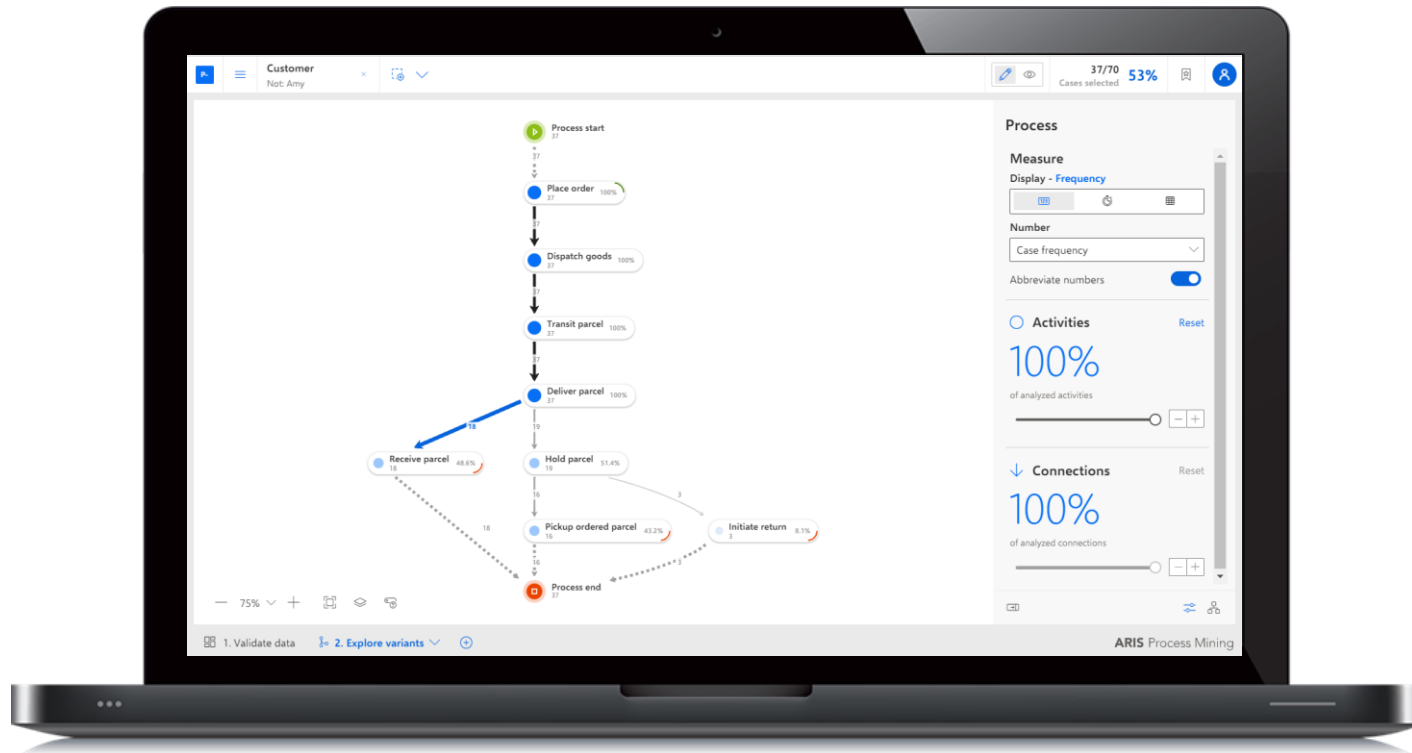
10. And notably the process flow has changed the layout at the end which can be explained when switching back to **Frequency**

The standard process from **Deliver parcel** to **Receive parcel** has only 18 deliveries while the exceptional path through **Hold parcel** happened once more

ARIS Process Mining helps to intuitively understand how processes were executed based on a recoverable sequence of activities and using time stamps and a case IDs





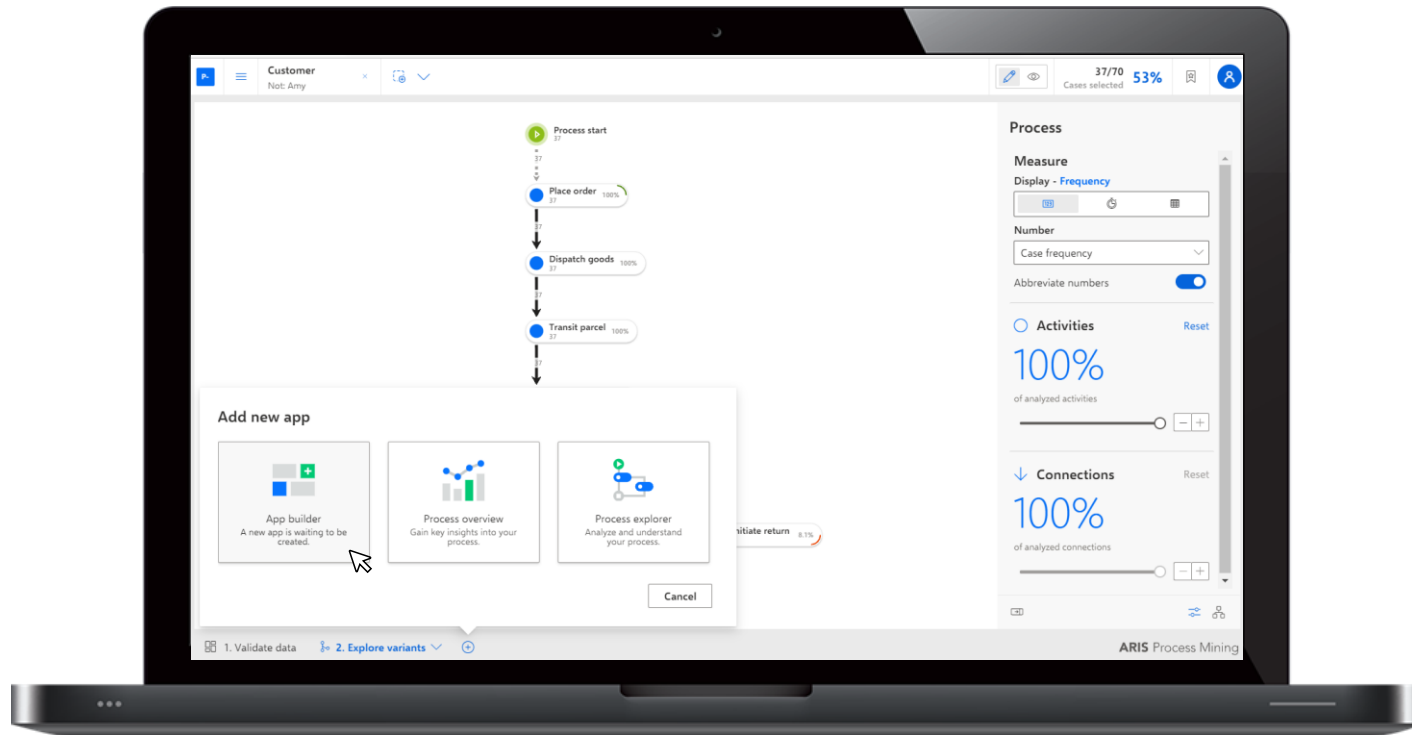


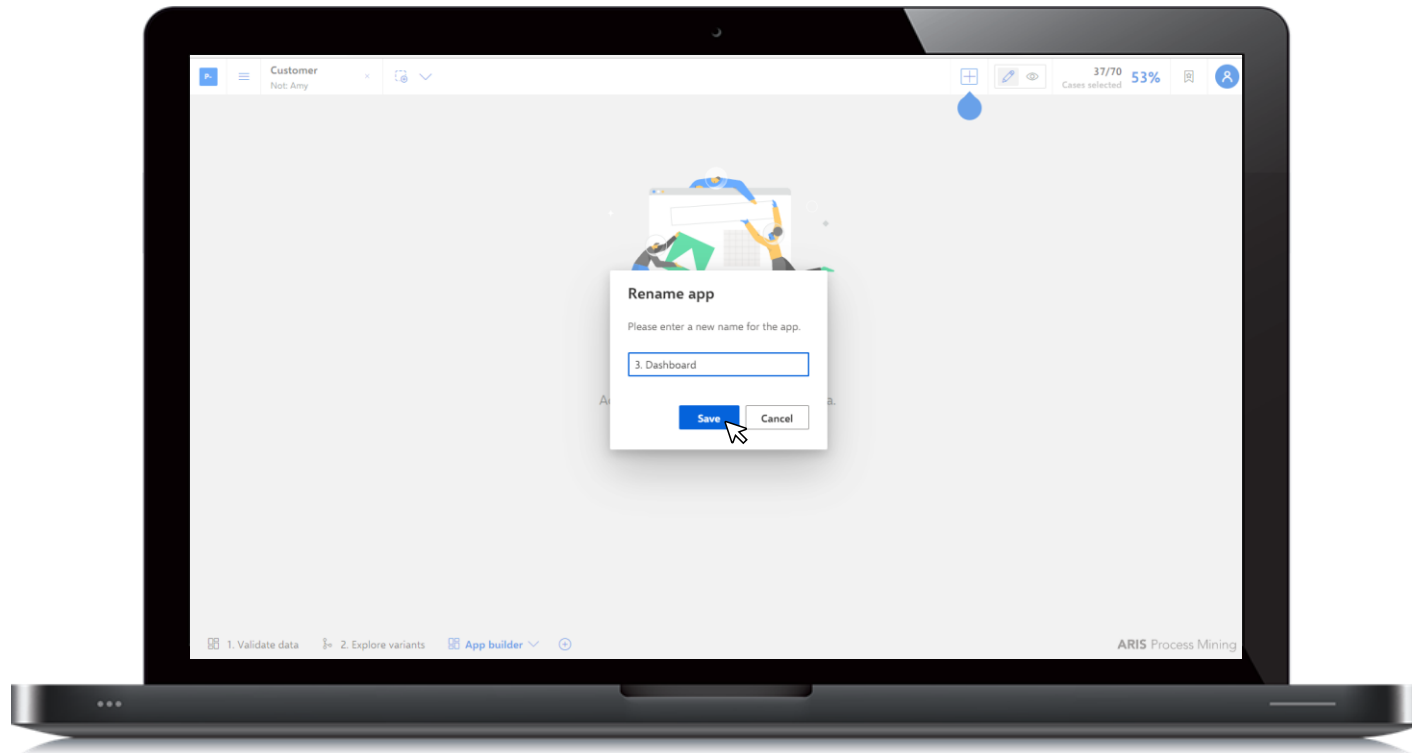
Design dashboard [1/3]

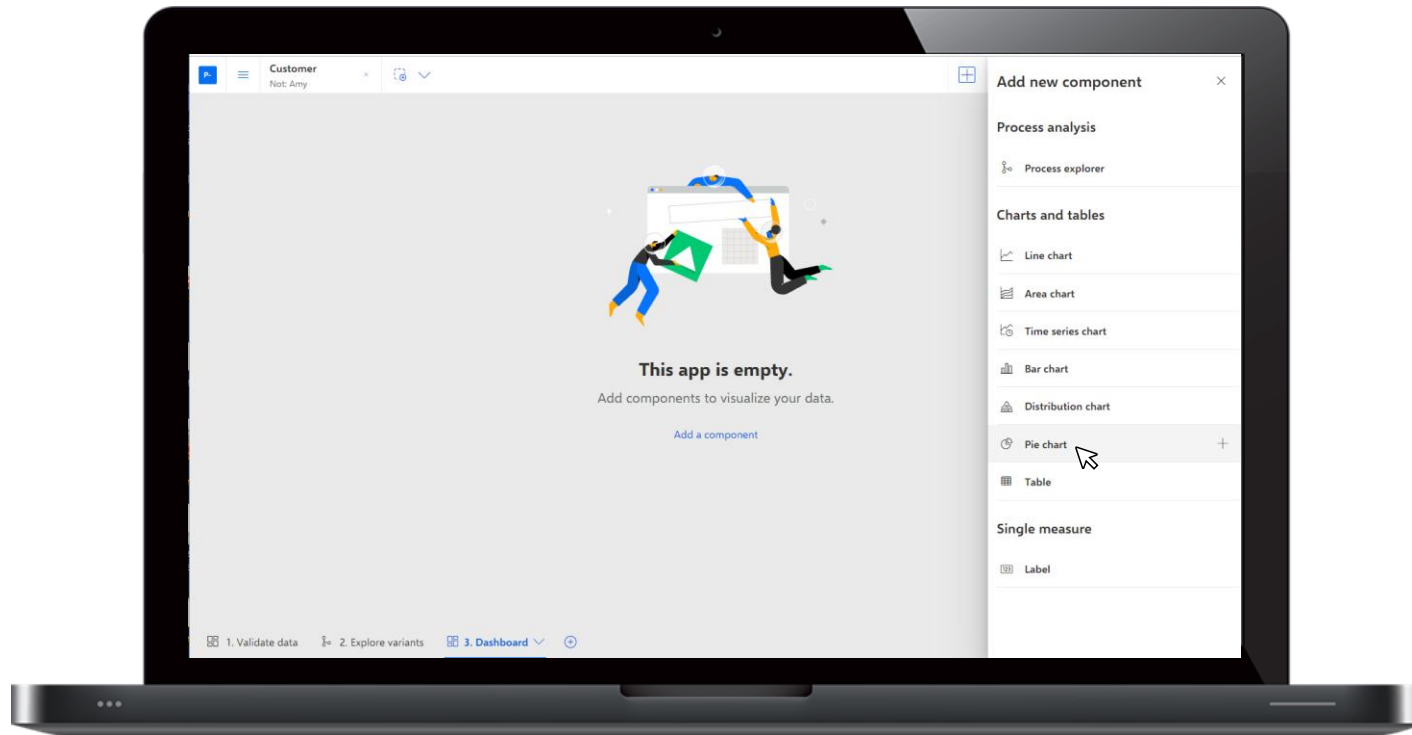


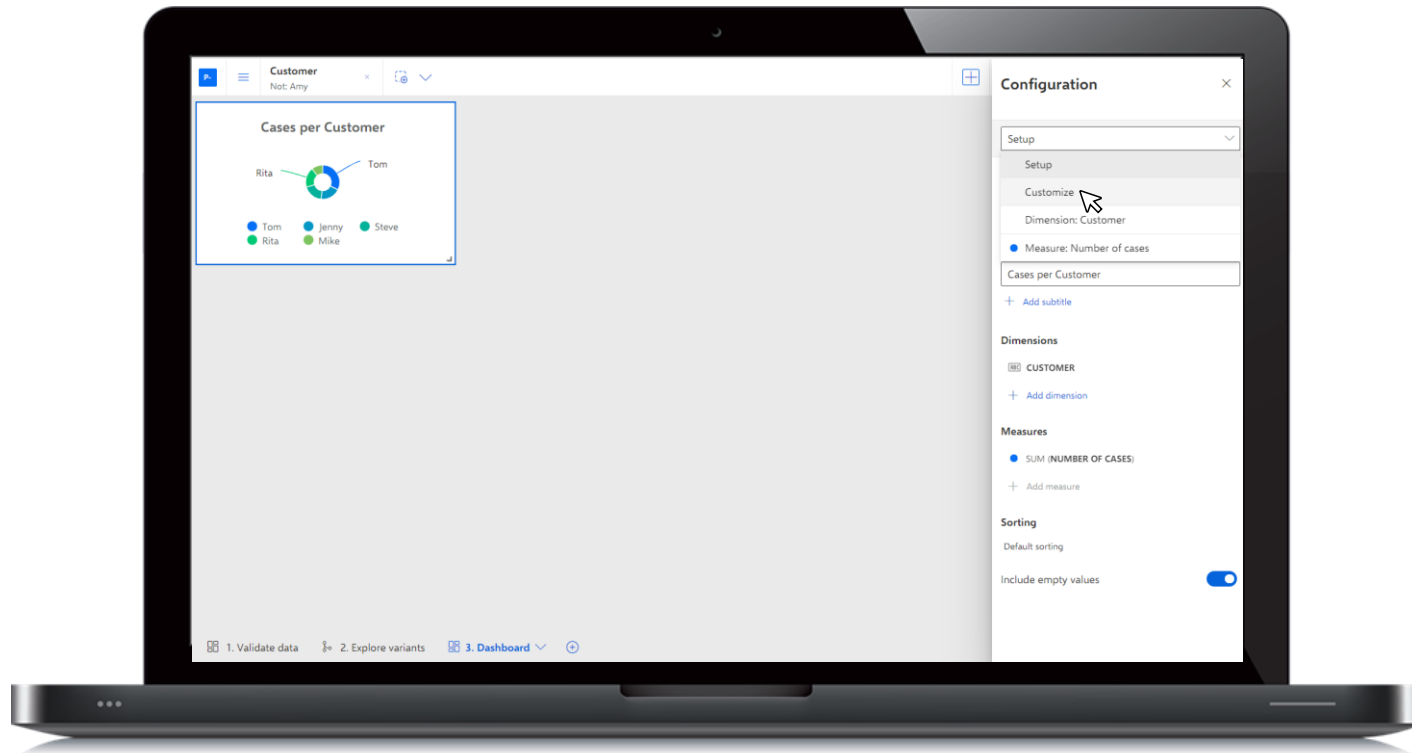
The third part is a stepwise guide to build up a comprehensive analysis dashboard

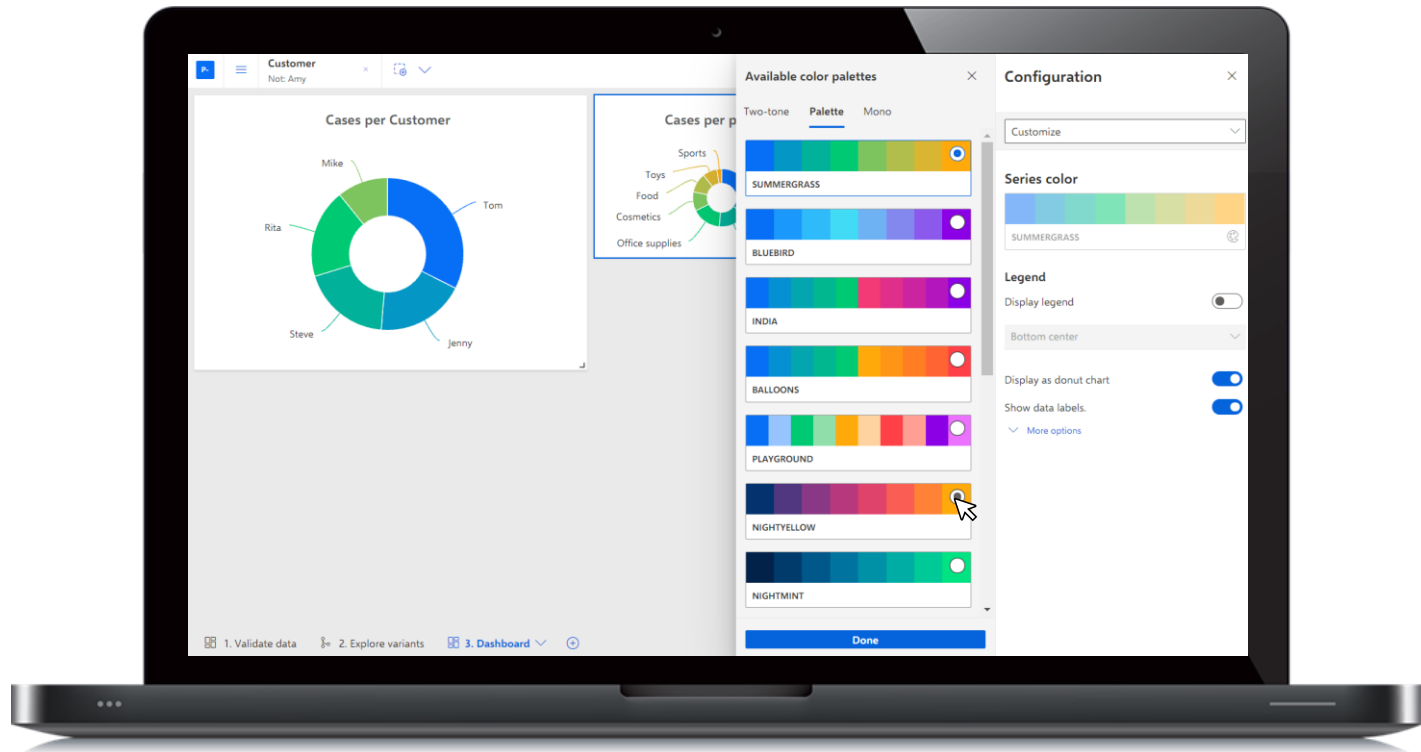
1. Click the circled **(+)** symbol select **App builder** and name it *3. Dashboard*
2. Click at the top right the **[+]** symbol to add a new component and select **Pie chart**
 - a. In the **Title** field enter *Cases per Customer*
 - b. Click **Add measure** and select **Number of cases, Sum (SUM)**
 - c. Click **Add dimension** and select **Customer** and click **Done**
 - d. In the **Configure** tab click on **Setup**, then **Customize** and turn off **Display legend**
 - e. Enlarge the **pie chart** to a square shape and fill 25% of the page width
3. Click the **[+]** symbol to add another **Pie chart**
 - a. In the **Title** field enter *Cases per Product*
 - b. Click **Add measure** and select **Number of cases, Sum (SUM)**
 - c. Click **Add dimension** and select **Product** and click **Done**
 - d. In the **Configuration** tab click on **Setup**, then **Customize** and turn off **Display legend**, then click on **Series color** and select color palette **NIGHTYELLOW** and click **Done**
 - e. Enlarge the **pie chart** to a square shape and fill 25% of the page width

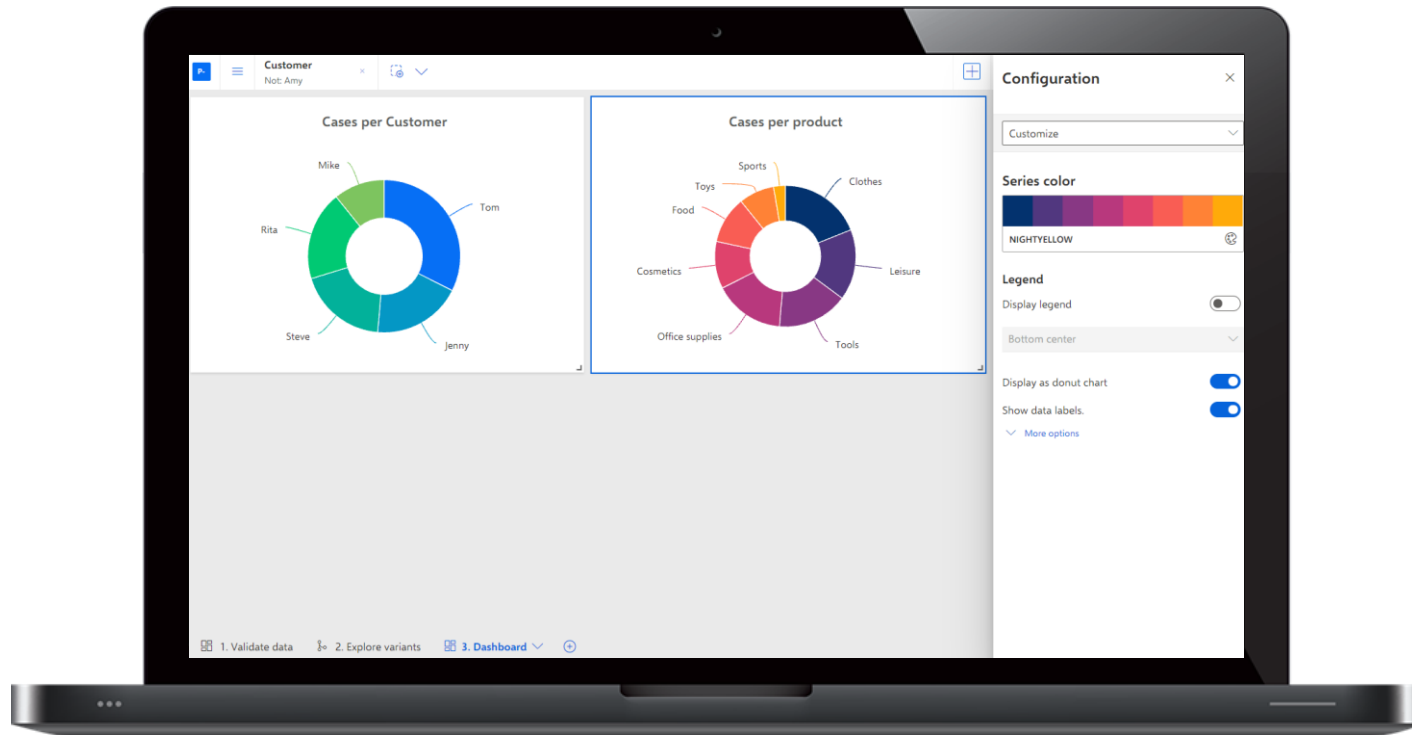








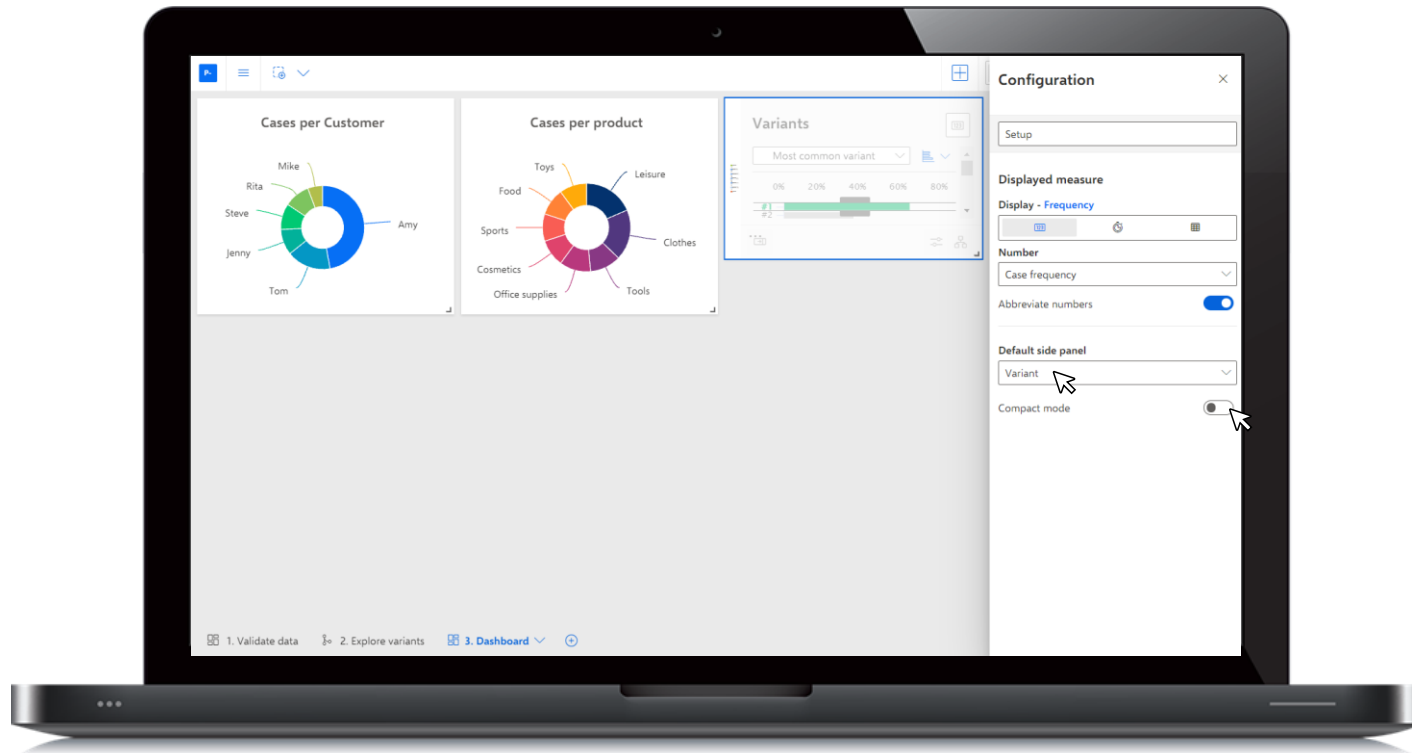


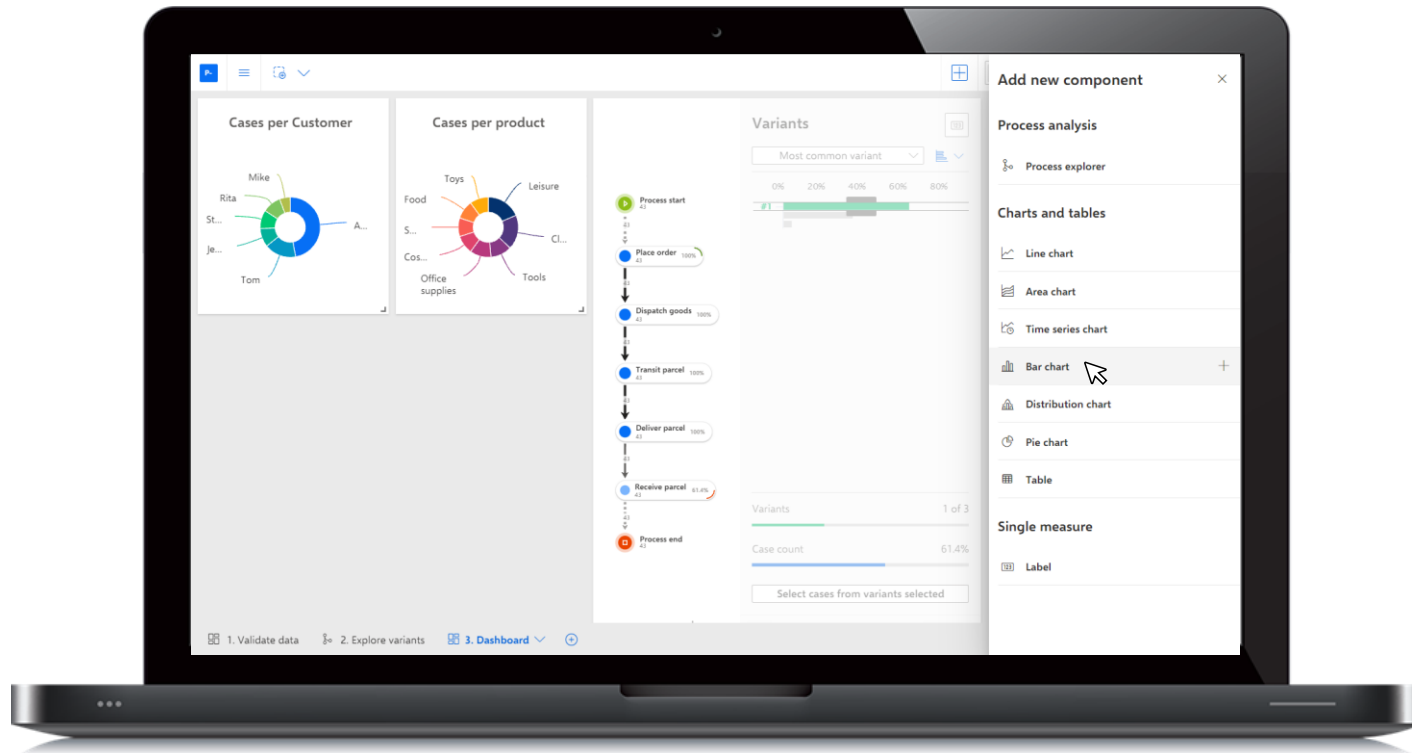


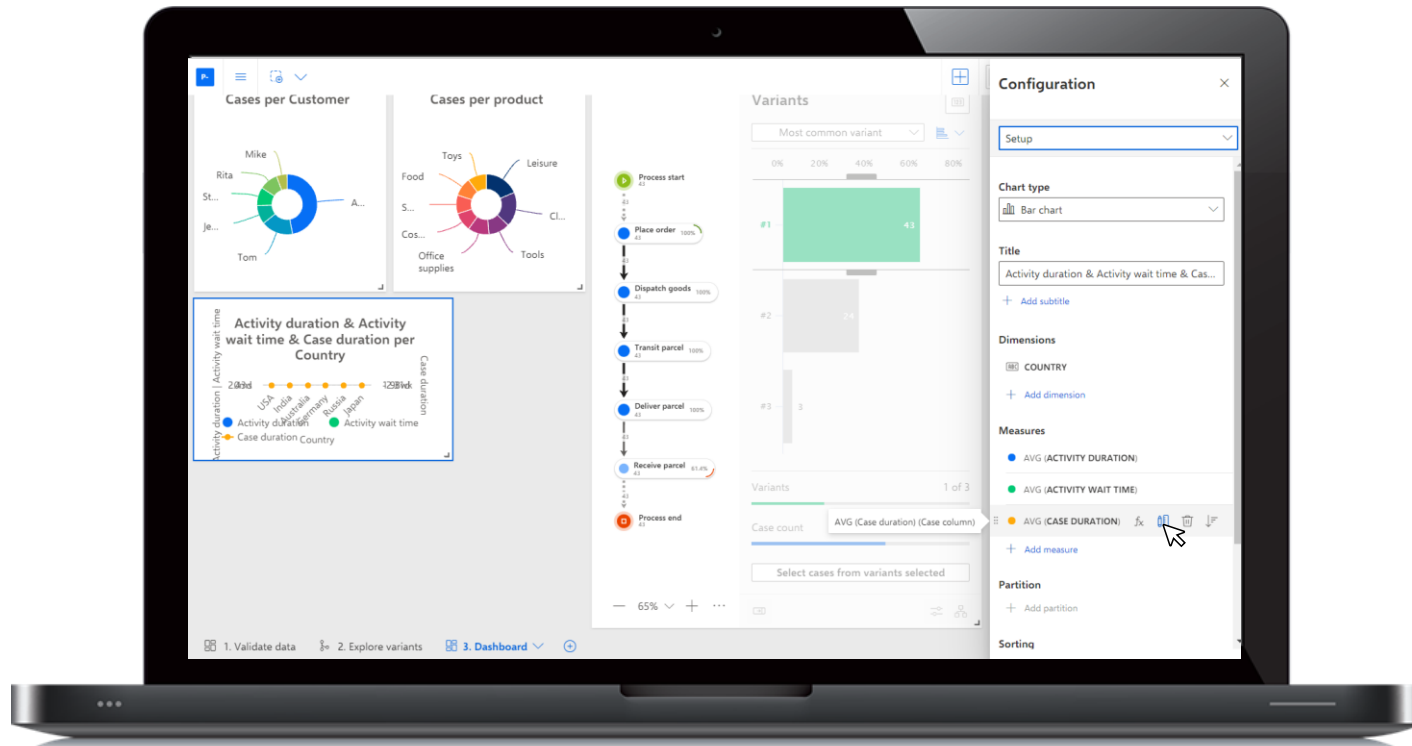
Design dashboard [2/3]

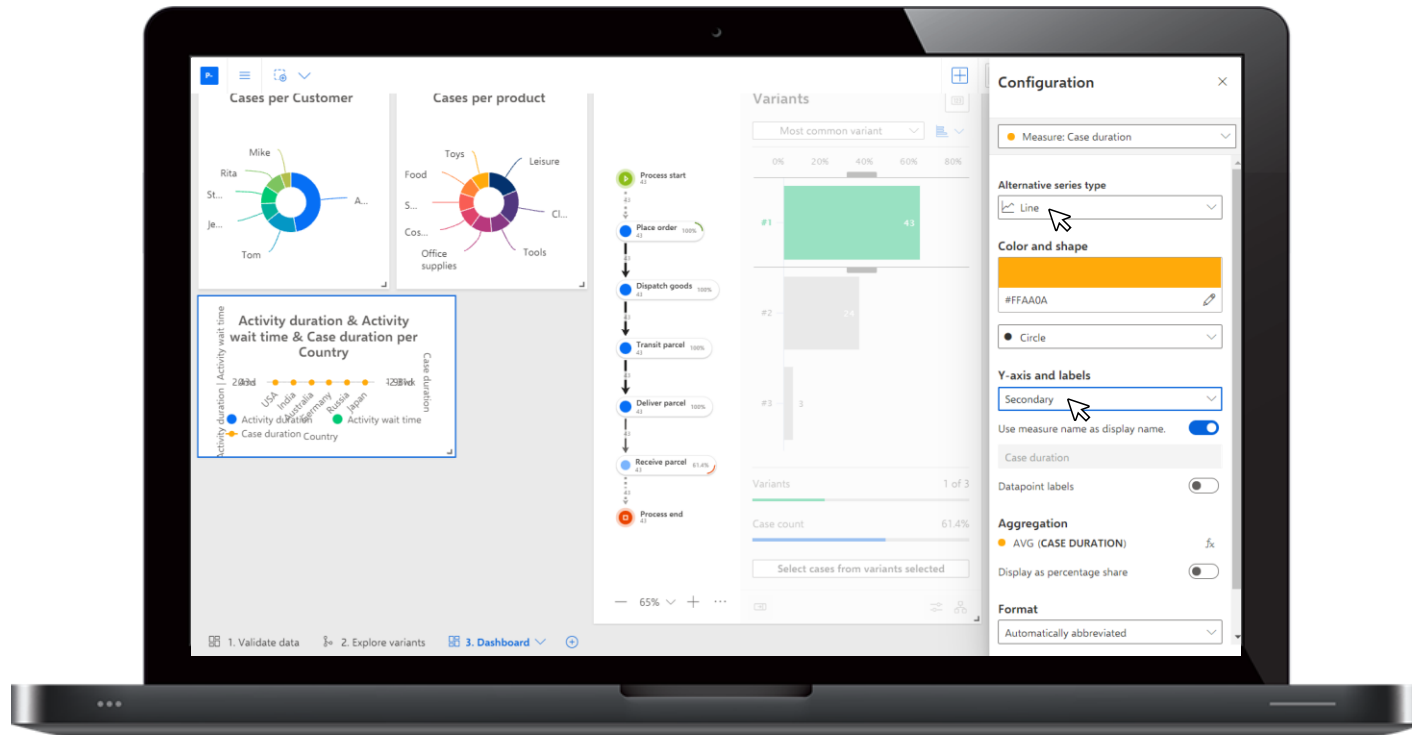


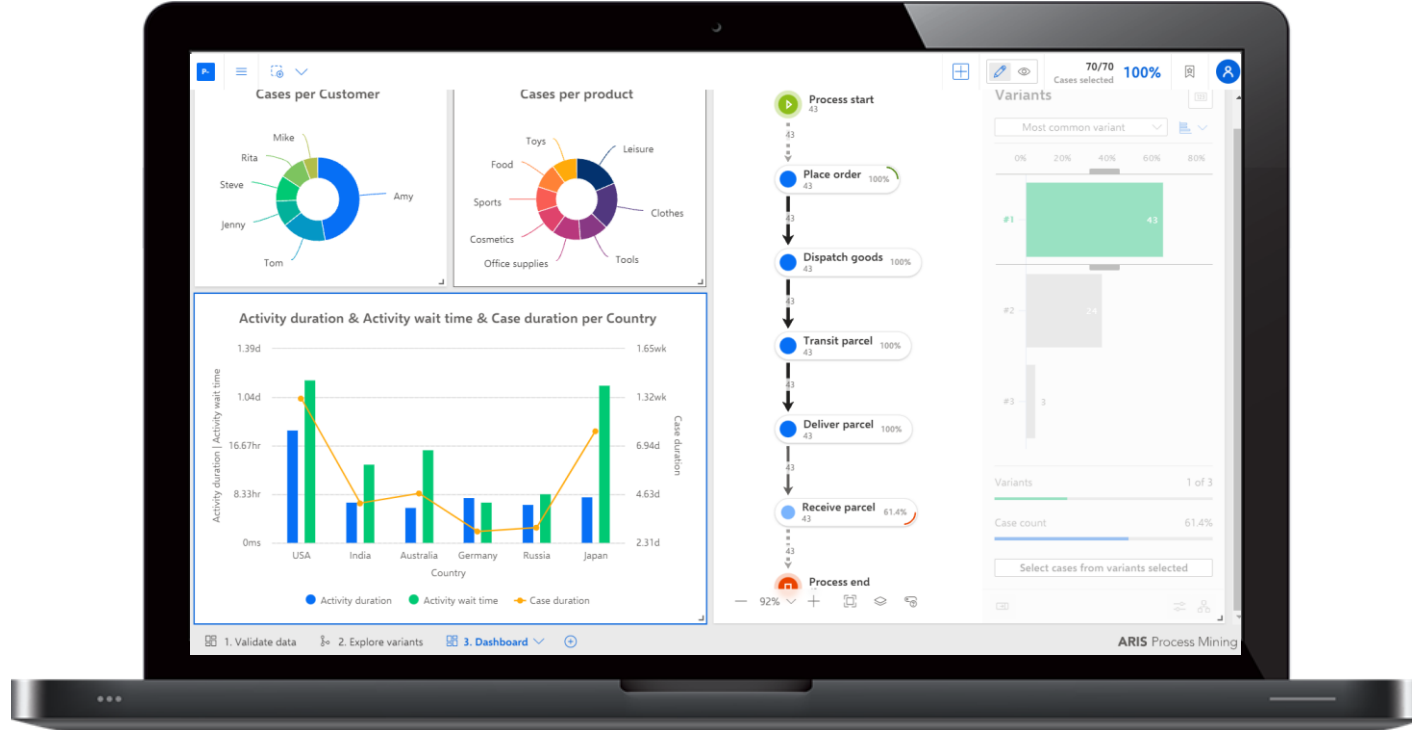
4. Next to the filter **Customer/Amy** click on the **V** icon and select **Clear all selections**, confirm the prompt to reset all filters for starting this dashboard from scratch
5. Click the **[+]** symbol and select **Process explorer**
 - a. In the drop-down box **Default side panel** select **Variant** and turn off **Compact mode**, then click **X** on the **Configure** tab to close it
 - b. Enlarge the component to the bottom of the browser window
6. Click the **[+]** symbol and select **Bar chart** and enter as **Title** *Activity duration & Activity wait time & Case duration per Country*
 - a. Click **Add dimension** and select **Country**
 - b. Click **Add measure** and select **Activity duration, Average (AVG)**, then **Activity wait time** and **Case duration** both also with **Average (AVG)**, then click **Done**
 - c. Hover over **Case duration** and click on the **pen icon** to change the settings of this measure
 - d. In the drop-down box **Alternative series types** from **Column** to **Line** to better separate that process measure from the other two activity measures
 - e. In the drop-down box **Y-axis** select **Secondary**, click **X** on the **Configuration** tab to close it
 - f. Enlarge the chart to fill up the remaining space









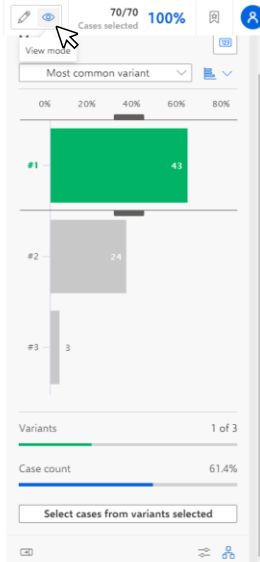
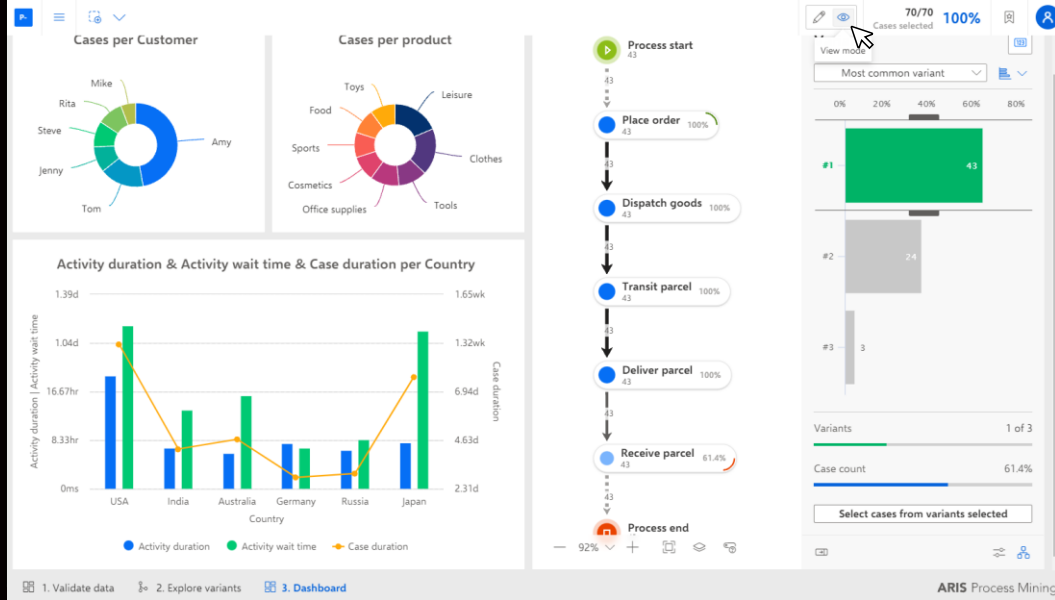


Design dashboard [3/3]



7. On the top click the **eye symbol** to switch to from the **Edit mode** to the **View mode**
8. In **Variants** drag the lower selection down to include the all variants, then click the icon **Switch to compact view** to increase the size of the process flow
9. In the chart **Cases per Customer** click on **Steve** and notice that the process flow indicates that for this customer there was one more delivery to **Hold parcel** than the standard process step **Receive parcel**
10. In the chart **Cases per Product** click on **Tools** and notice that for that combination there was no standard process executed as the parcel was picked up later
11. This demo ends with a click on the **≡ sandwich icon** to select **Share** to invite your manager and coworkers with a direct link to your analyses

ARIS Process Mining allows even deeper analyses on the level of activities which makes up each process (here: delivery) which isn't part of this demo.

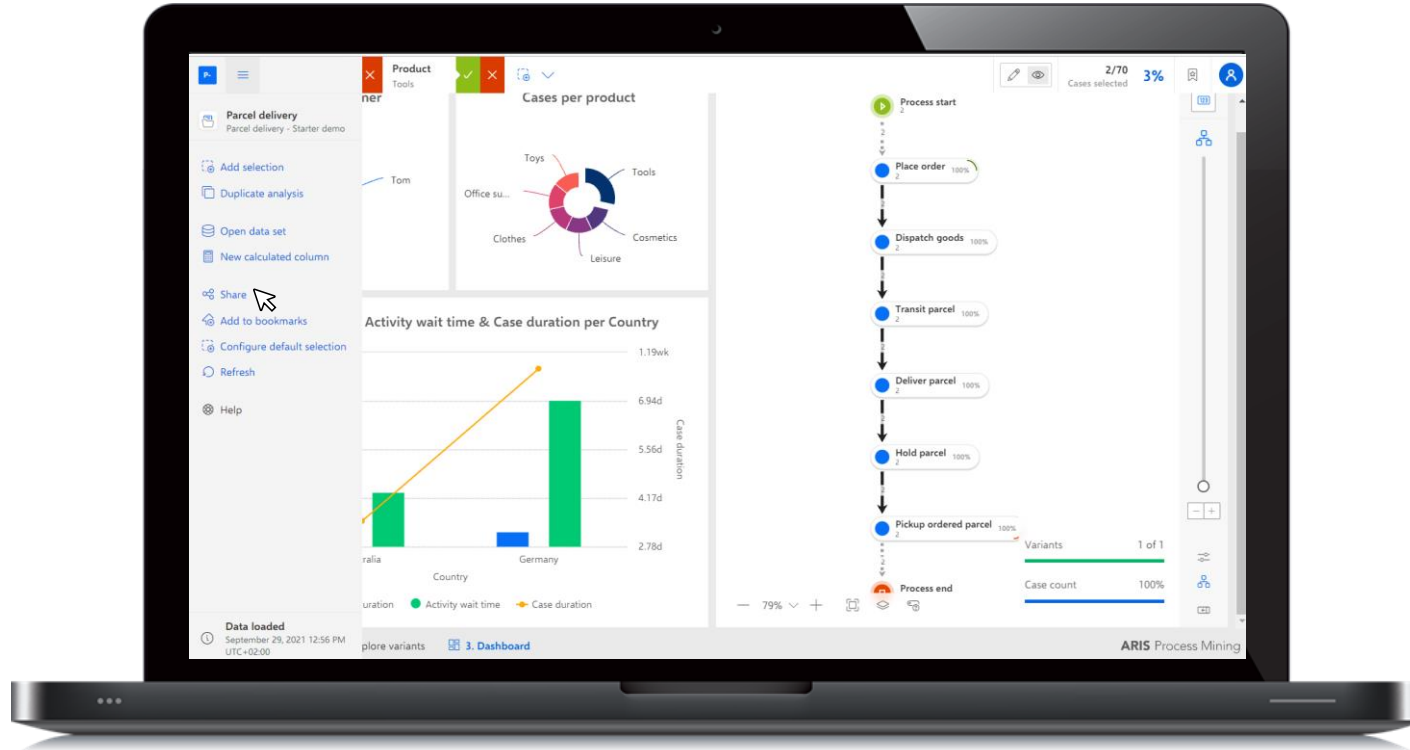








You are ready to share your insights with your manager



ARIS Process Mining

Starter demo for ARIS Process Mining Basic



Thanks for trying our demo
More examples and use cases:
<http://ARIS-Process-Mining.com>