Straight-through processing

300-level live demo script

Introduction

Welcome to the straight-through processing demonstration.

Today, I will demonstrate how the IBM Cloud Pak for Business Automation supports straight-through processing to automate customer refund requests quickly and easily. We'll take advantage of the Pak's workflow and decision management features — along with its operational intelligence capabilities — to show how business users can lead the effort to transform customer service. Let's get started.

1 - Model workflow

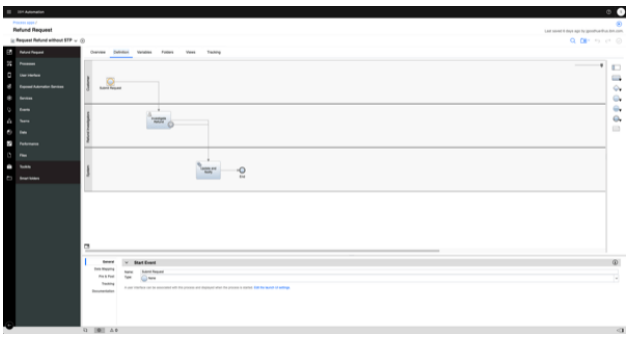
1.1 - Introduce refund request process without straight-through processing

Narration
We are looking at the process diagram for Focus Corp's refund request process. Process diagrams are created in Process Designer. Process Designer is used to implement the refund request process logic. Within this low-code environment, the process diagram will control the execution of each process request. The process diagram adheres to the Business Process Modeling Notation (BPMN). We use drag-and-drop to build the process diagram from the palette on the right. This allows us to model the process steps and flow. From there, you can drill down to complete the implementation and testing of the process application.

Looking at Focus Corp's refund request process, customers can initiate returns directly from the company's portal. Currently, each request is routed to a customer service agent for resolution.

Action 1.1.1

- Show the process diagram for Focus Corp's refund process without straight-through processing in Process Designer, which you opened during your demo preparation.



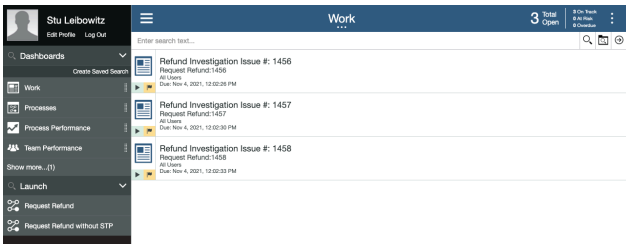
2 - Execute workflow without straight-through processing (SaaS)

2.1 - Task management and execution (SaaS)

Note:
This is for **SaaS**. For ROKS, please refer below to **2 - Execute workflow without straight-through processing (ROKS)**.

Narration
The customer service agent uses the Process Portal to work on their tasks. It is also used to launch processes and view the process dashboards.

Action 2.1.1
- Show the **Process Portal** that you have already opened in your preparation.



Narration
We are looking at the task list for the customer service agent.

Process Portal is highly customizable to fit your organization's look and feel. The new responsive user interface provides flexibility to get work done anywhere, at any time, on any device type, from a desktop device in the office to a mobile device at home or at a customer site. It can be configured through a set of configuration options without having to customize the Process Portal application itself.

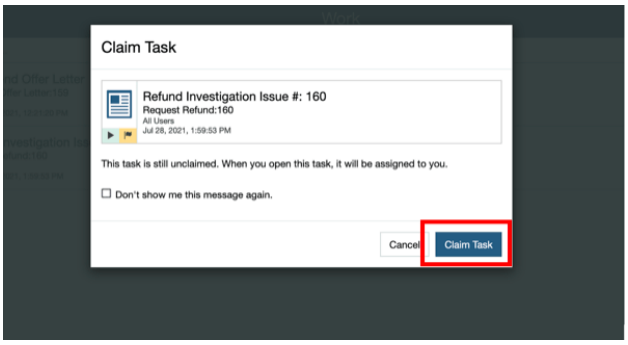
Process Portal has a robust search capability. You can create a customized task list, for example, with specific business data, by saving task-based searches for later use.

Customer service agents use the task list to organize and work on the tasks assigned to them. Our agent received a new investigation task.

Action 2.1.2
- Click any **Refund Investigation** task.

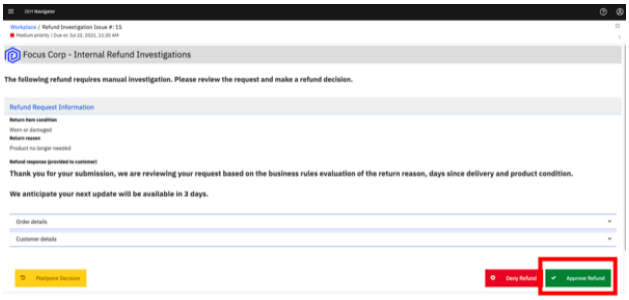
Narration
As I open the task, I have all the information needed to investigate the refund. Now, I'll claim the task.

Action 2.1.3
- Click **Claim Task.**



Narration
Let's review the request data and make an approval decision.

Action 2.1.4
- Click **Approve Refund.**



Narration
Behind the scenes, the refund process is managed by workflow. Once the investigation task is completed, the system automatically updates Focus Corp's ordering application and notifies the customer.

Although the process is managed by workflow, there is currently no straight-through processing since every request must be examined by a customer service agent. Let's go back to the process diagram and see how we can improve things with straight-through processing.

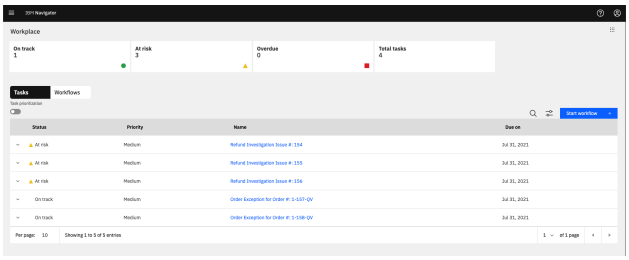
2 - Execute workflow without straight-through processing (ROKS)

2.1 - Task management and execution (ROKS)

Note:
This is for **ROKS**. For SaaS, please refer above to **2 - Execute workflow without straight-through processing (SaaS)**.

Narration
The customer service agent uses the task list to work on their tasks. Our agent has received a new investigation task.

Action 2.1.1
- Go to the **Workplace** window that you have already opened in your preparation.



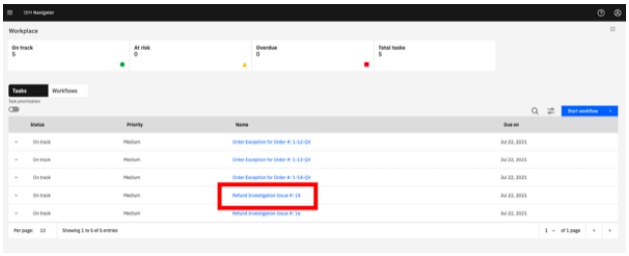
Narration
We are looking at the task list for the customer service agent.

Workplace is customizable to fit your organization's look and feel. The new responsive user interface provides flexibility to get work done anywhere, at any time, on any device type, from a desktop device in the office to a mobile device at home or at a customer site. It can be configured though a set of configuration options behavior without having to customize Workplace application itself.

Workplace has a robust search capability. You can create a customized task list, for example, with specific business data, by saving task-based searches for later use.

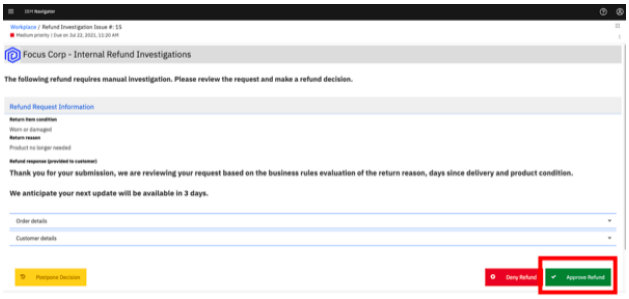
Customer service agents use the task list to organize and work on the tasks assigned to them. Our agent has received a new investigation task.

Action 2.1.2
- Click the **Refund Investigation** task.



Narration
As I open the task, I have all the information needed to investigate the refund.

Action 2.1.3
- Click **Approve Refund**



Narration

Let’s review the request data and make an approval decision. Behind the scenes, the refund process is managed by workflow. Once the investigation task is completed, the system automatically updates Focus Corp’s ordering application and notifies the customer.

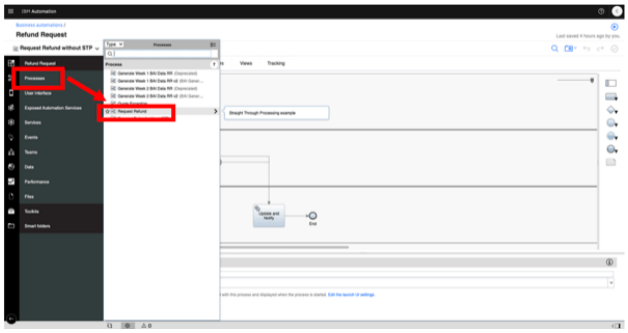
Although the process is managed by workflow, there is currently no straight-through processing since every request must be examined by a customer service agent. Let’s go back to the process diagram and see how we can improve things with straight-through processing.

3 - Changing the workflow for straight-through processing

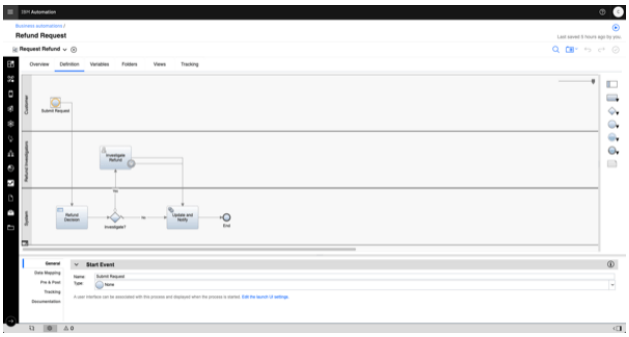
3.1 - Introducing straight-through process automation

Narration
Let's look at how we can streamline the refund process by combining workflow and decision management.

Action 3.1.1
- Go back to the **Process Designer** tab, and click on **Processes** in the menu on the left side. Click on **Refund Request**.



Action 3.1.2
- You will see the following process diagram.



Narration
We've added a decision task to the workflow that will automatically look at each request and make a refund decision without human intervention. This means that most requests can now be approved or declined in real time. Those that can't are still routed for manual investigation.

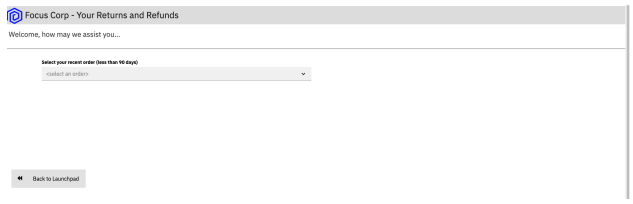
Therefore, we can achieve a significant amount of straight-through processing where we completely process refund requests without human intervention.

4 - Execute workflow with straight-through processing

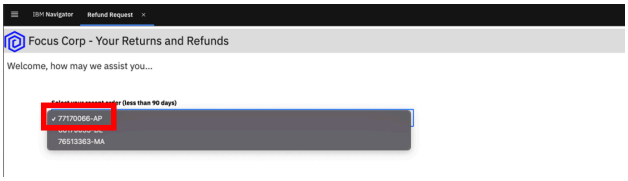
4.1 - Refund request approved

Narration
Let’s look at how straight-through processing transforms the refund process.

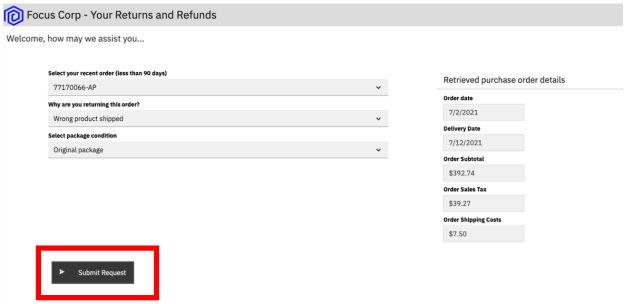
Action 4.1.1
- Go to Focus Corp’s **Your Returns and Refunds** page.



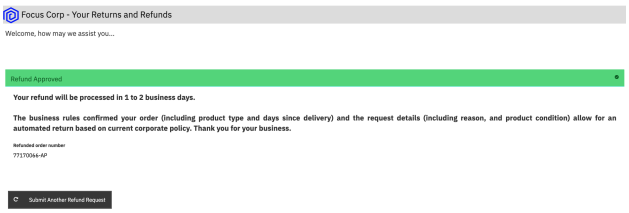
Action 4.1.2
- Click to select an order. Of the three orders that display, click on the refund request ending in ’**AP**.’



Action 4.1.3
- Click **Submit Request** to process the refund.



Action 4.1.4
- The process executes and generates a refund-approved result.

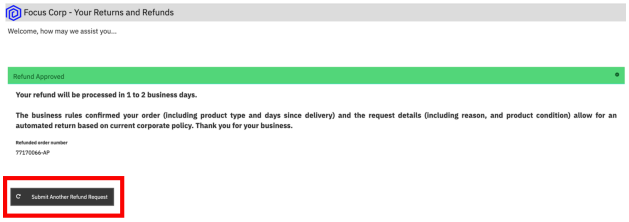


Narration
In this first example, when the customer submits the refund request, the criteria is evaluated by the refund decision, and the approval is granted in real time, avoiding a time-consuming manual investigation.

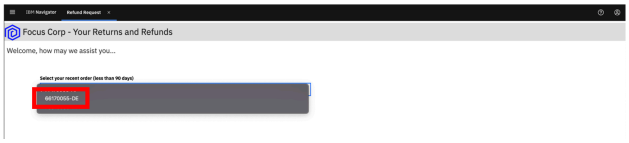
4.2 - Refund request denied

Narration
Let’s look at a second example.

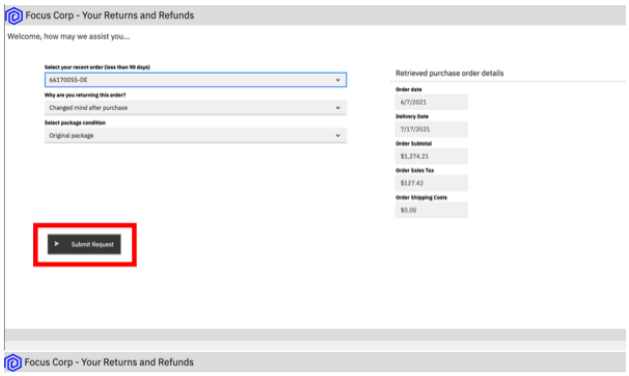
Action 4.2.1
- Click on **Submit Another Refund Request**.



Action 4.2.2
- Click to select an order. Of the three orders that display, click on the refund request ending in ’**DE**.’

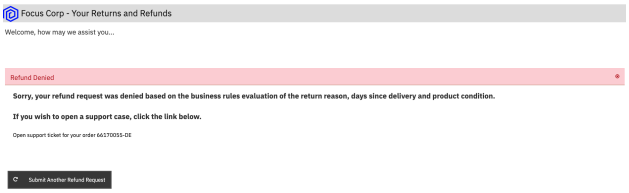


Action 4.2.3
- Click **Submit Request** to process the refund.



Action 4.2.4

- The process executes and generates a refund-denied result.



Narration

This one clearly did not meet our criteria and resulted in a denial because it was well outside the time window. This refund request resulted in a denial, but it is still straight-through processing because there is no manual work.

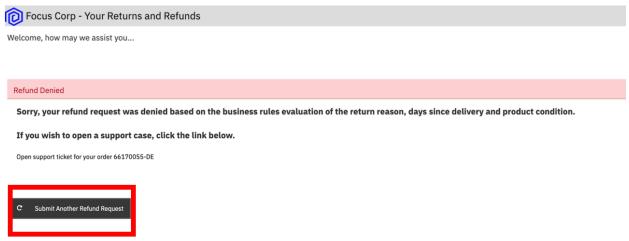
4.3 - Refund request requires manual investigation

Narration

But what if the business rules determine this request requires investigation?

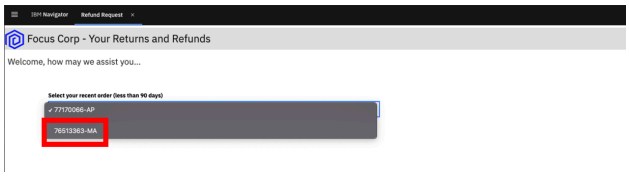
Action 4.3.1

- Click **Submit Another Refund Request**.



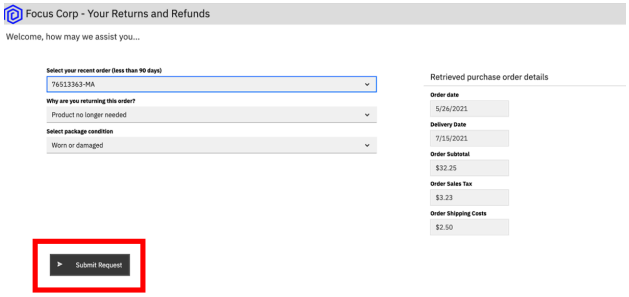
Action 4.3.2

- Click to select an order. Of the three orders that display, click on the refund request ending in '**MA**.'



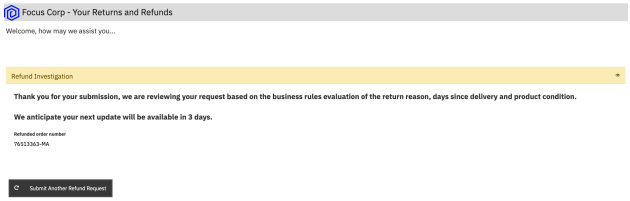
Action 4.3.3

- Click **Submit Request** to process the refund.



Action 4.3.4

- The process executes and generates a refund investigation result.



Narration

In that case, workflow would route the request to our customer service agent to do the investigation.

5 - Monitor operational intelligence

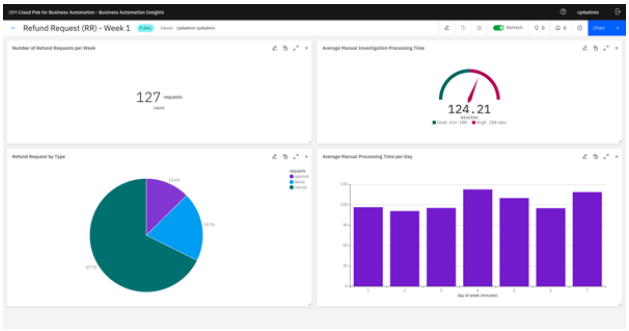
5.1 - Review the refund dashboard

Narration

Let’s look at the refund dashboard to see how much straight-through processing we’ve achieved.

Action 5.1.1

- Click the **Refund Dashboard** tab, which you opened in the demo preparation. In this step, you are just speaking to the displayed dashboard.



Narration

So far, the percentage of manually processed requests is still above 70%, with the average manual investigation taking over two hours.

Let’s look at what’s behind this dashboard.

First, as the refund process runs, the system can collect and process historical data and make it available for visualization.

Next, we provide the Business Performance Center, a no-code monitoring application for the IBM Cloud Pak for Business Automation. Dashboards can be designed and shared in minutes that provide insight into important business activities and processes. You can prepare, track, and design visualizations of metrics, key performance indicators (KPIs), and other measurements of business performance in customizable dashboards.

Additionally, the historical data can be used to feed a data lake to apply machine learning to our automations. For example, to make even more sophisticated refund decisions, we could use a data lake to incorporate machine learning into our refund process. The Cloud Pak for Business Automation includes some machine learning samples to help you get started.

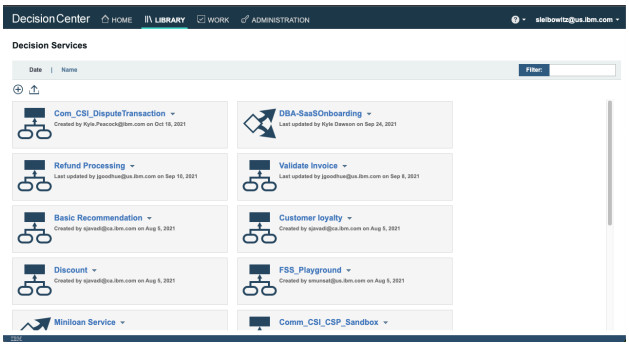
6 - Model decisions

6.1 - Review the refund approval decision model

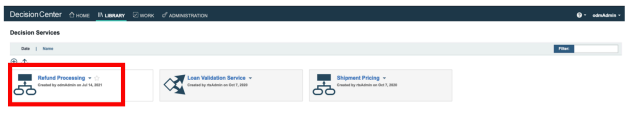
Narration
Let's look at how the business analyst can create and manage business rules to further increase straight-through processing. The business rules replicate how experts make refund decisions.

Using no-code decision modeling, business analysts can easily author and test refund decision criteria.

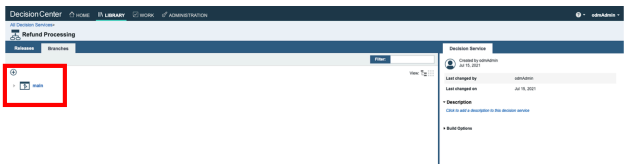
Action 6.1.1
- Go to your **Decision Center**, having already logged in with your credentials if necessary.



Action 6.1.2
- Click on the decision service named **Refund Processing**.

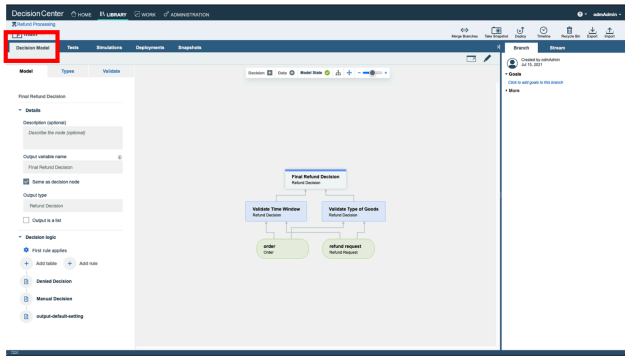


Action 6.1.3
- When the **Refund Processing** decision screen appears, click on **main**.



Action 6.1.4

- The next screen has several blue tabs at the top. Click on **Decision Model**.



Narration

This is the decision model for the refund request decision service. A decision model uses a diagram to break the decision down into sub-decisions, which all contribute to the final refund decision.

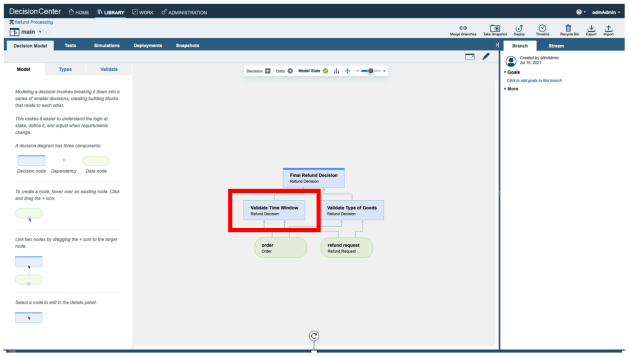
6.2 - Review the decision tables

Narration

To automate the refund request process, we've used two decision tables. A decision table groups rules that have similar conditions and actions but use different thresholds.

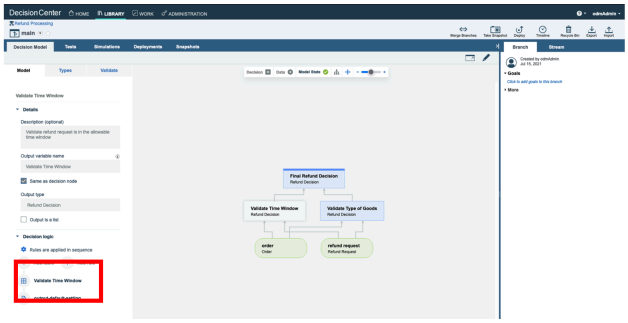
Action 6.2.1

- Click on **Validate Time Window** in the decision diagram.



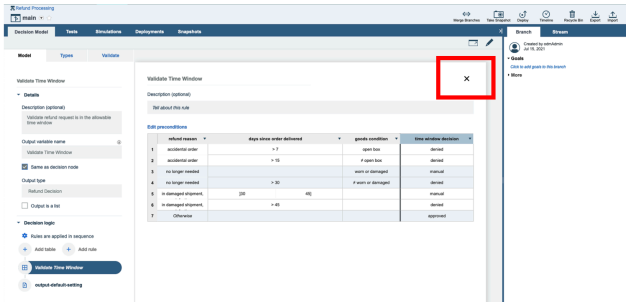
Action 6.2.2

- Click on **Validate Time Window** in the Decision Logic section on the left side of the screen.



Action 6.2.3

- This opens a rule table based on the refund reason, days since order, and goods condition. Close the **Validate Time Window** table.

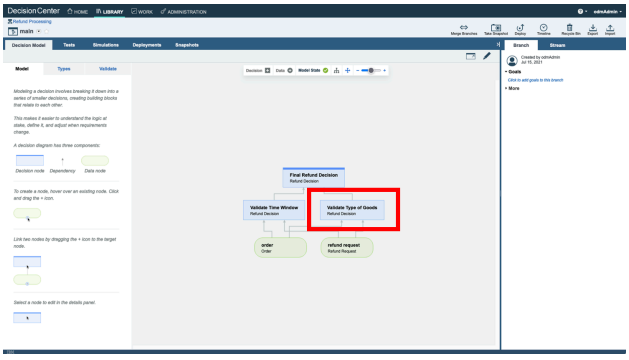


Narration

The first decision table considers the customer's reason for return, the days since delivery, and the condition of the item. These are the same criteria that a customer service agent would have used to make a refund request decision, but now, the decision is automated and executes in real time.

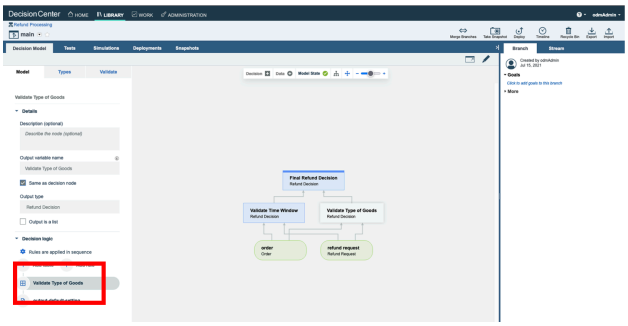
Action 6.2.4

- Click on **Validate Type of Goods** in the decision diagram.



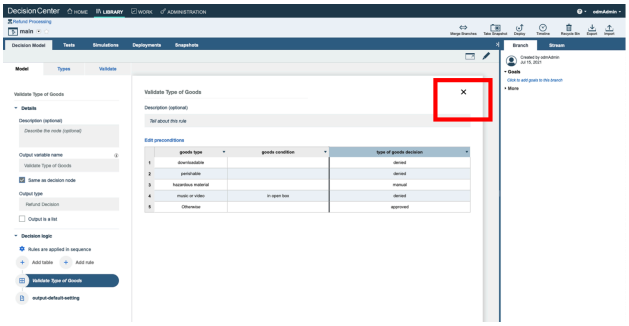
Action 6.2.5

- Click on **Validate Type of Goods** in the Decision Logic section on the left side of the screen.



Action 6.2.6

- This opens a rule table based on goods type and goods condition. Close the **Validate Type of Goods** window.



Narration

The second sub-decision has a table that considers the type of item being returned.

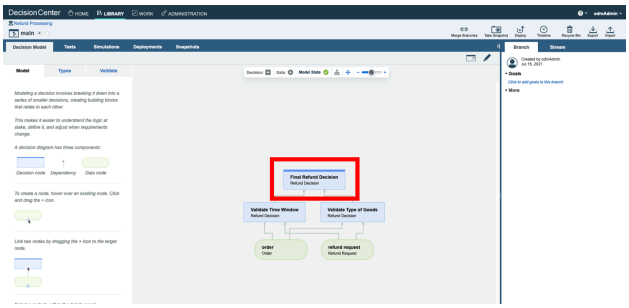
6.3 - Make the final refund decision

Narration

The final refund decision is made by combining the results of the ‘Validate Time Window’ and ‘Validate Type of Goods’ decisions.

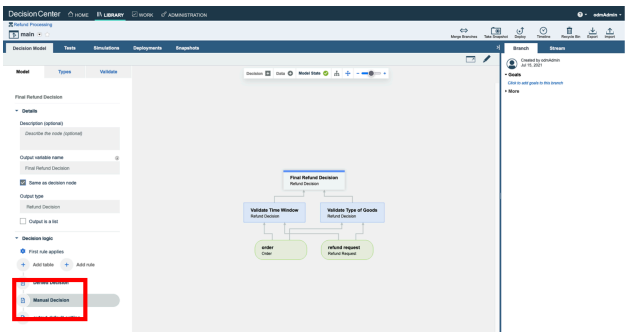
Action 6.3.1

- Click **Final Refund Decision** in the decision diagram.



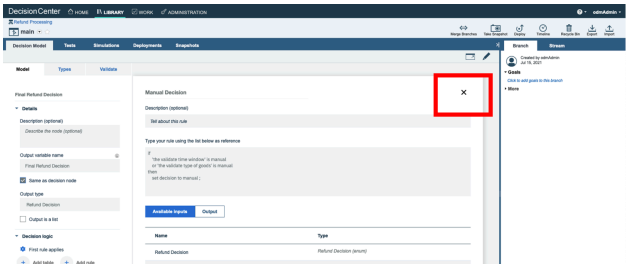
Action 6.3.2

- Click on **Manual Decision** in the Decision Logic section on the left side of the screen.



Action 6.3.3

- This opens a rule script based on goods type and goods condition. Close the **Manual Decision** rule logic window.



Narration

We've combined the two sub-decisions to make the final response using a simple text rule.

Business analysts can change the rules to achieve higher levels of straight-through processing or to adapt to changing business conditions.

7 - Reduce manual work

7.1 - Compare and test a new version of the refund decision model

Narration

After running these rules for a few weeks, we realize we can further reduce manual investigations without increasing our risk.

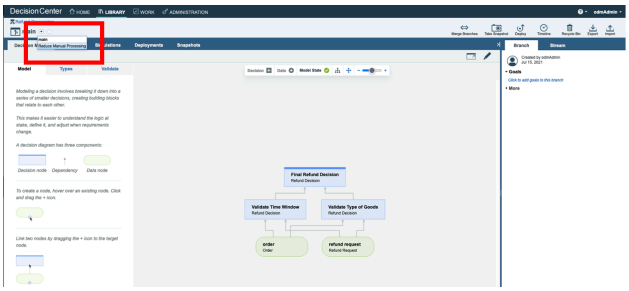
The decision models can be changed without having to change the underlying process application.

The business analyst previously created a new version of the decision model to enhance the level of straight-through processing by reducing the number of manual investigations.

Now, let's compare the before and after versions to see what changed.

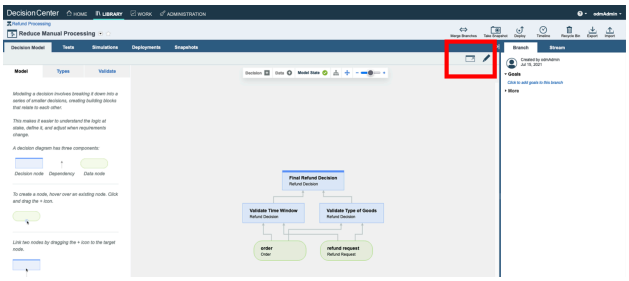
Action 7.1.1

- On the top right of the Decision Center, click the arrow next to main and select **Reduce Manual Processing**.



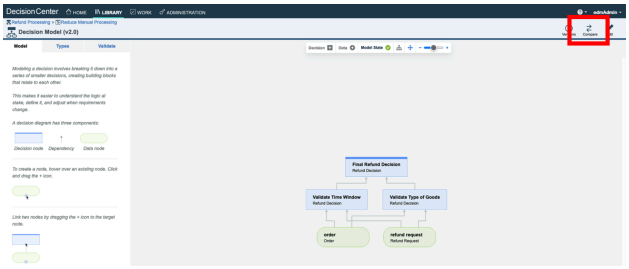
Action 7.1.2

- Click on the **maximize** icon towards the top right of the Decision Center (right below the blue bar). This opens the Decision Model view.



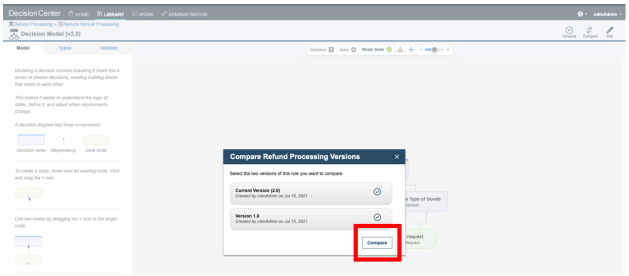
Action 7.1.3

- Click on the **Compare** icon on the top right of the Decision Model view.



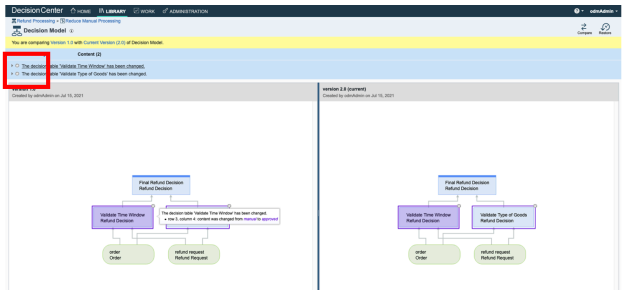
Action 7.1.4

- When a window opens to prompt a comparison of V.1 and the current model, hit the **Compare** button.



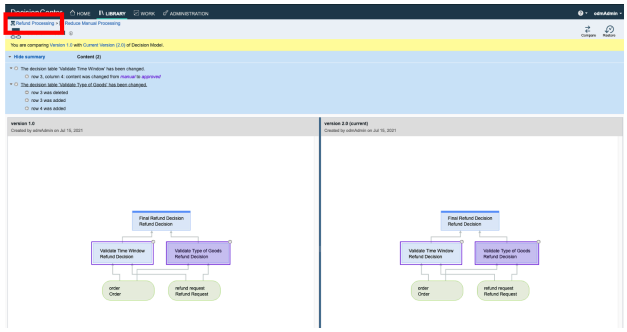
Action 7.1.5

- Click on the arrows next to the two changes on the top left to display rule changes above the two decision diagrams.



Narration
We select the two versions we wish to compare and see a side-by-side comparison of the two versions with details of the changes highlighted in the diagram and summarized above.

Action 7.1.6
- Click on **Refund Processing** at the top left side of the page. Then, click on **Main**.

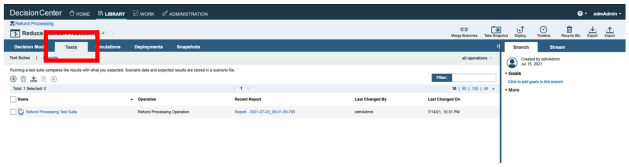


7.2 - Test a new version of the refund decision model

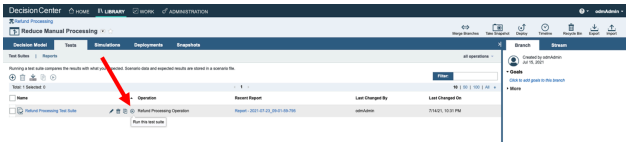
Narration
The business analyst can also validate that the updated rules pass the regression test suite. One or more test suites can be created and executed. Let's run one now and review the results. All the scenarios succeeded, and the results were all as expected.

Once ready, the new version of the rules can be pushed into production by the business team (if they have the permission) or the IT team, depending on your governance processes.

Action 7.2.1
- Click on the **Tests** tab.

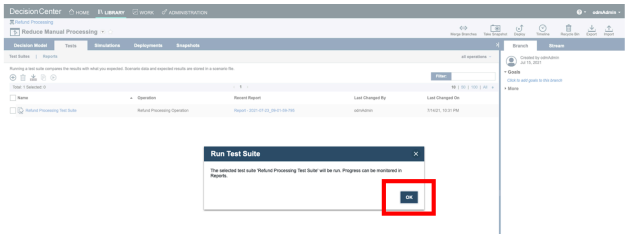


Action 7.2.2
- Click on the **run** icon next to **Refund Process Operation**.



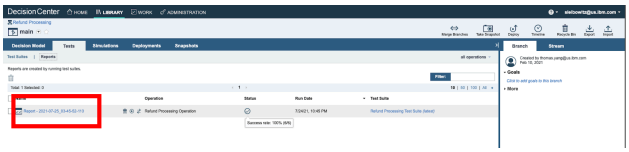
Action 7.2.3

- Click **OK** on the **Run Test Suite** dialogue box. Note: Make sure you are on the **Test Suites** sub-tab and not on the Reports sub-tab.



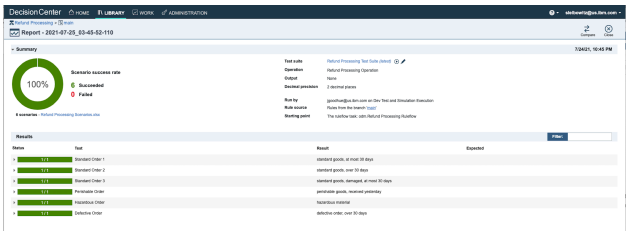
Action 7.2.4

- Click on the report name to access the comparison report.



Action 7.2.5

- You will see the following comparison report.



Summary

Using the Cloud Pak for Business Automation, we had all the capabilities needed to significantly reduce the amount of manual refund processing. We combined workflow and decision automation to increase straight-through processing, which resulted in a lower average completion time, lower costs, and more consistent customer communication throughout the process.