



PUBLIC

SAP Intelligent Product Recommendation

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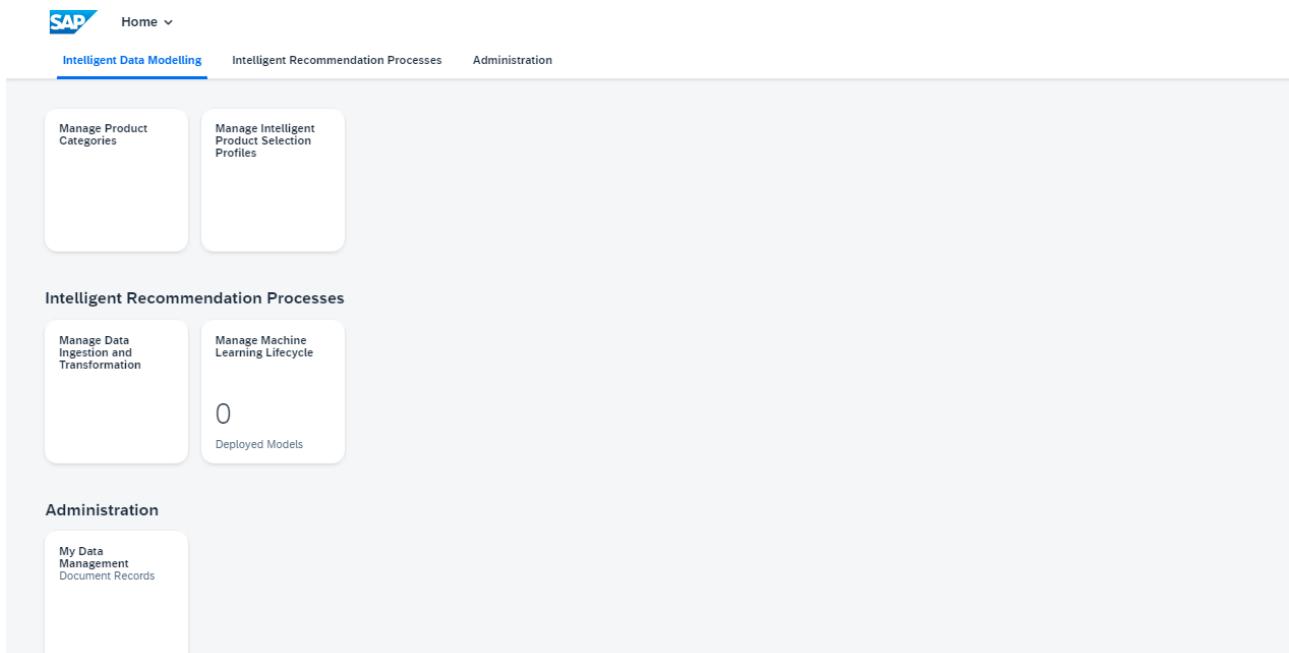
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Step 1

Login to SAP Intelligent Product Recommendation

1. Open [SAP Intelligent Product Recommendation](#) FLP. (User credentials will be provided in the hands-on session)



Step 2

Assign a Configurable Product to the Product Category

Product categories and solutions are the building blocks in SAP Intelligent Product Recommendation. The assignment of configurable products to solutions helps in determining the best technical configuration for a product recommendation.

Open “**Manage Product Categories**” application.

The screenshot shows the SAP Home page. At the top, there is a navigation bar with the SAP logo, a "Home" dropdown, and links for "Intelligent Data Modelling", "Intelligent Recommendation Processes", and "Administration". A blue circular icon with the letters "PP" is in the top right corner. Below the navigation, there are three main sections: "Manage Product Categories" (highlighted with a red box), "Manage Intelligent Product Selection Profiles", "Intelligent Recommendation Processes" (with sub-options "Manage Data Ingestion and Transformation" and "Manage Machine Learning Lifecycle" showing 0 deployed models), and "Administration" (with "My Data Management Document Records").

1. Search for the **Product Category “PC_INDTRK_<UserID>”** with your User ID and click “**Go**”. Ex:
If your User ID is P0, search “PC_INDTRK_P0”.

The screenshot shows the "Manage Product Categories" screen. At the top, there is a search bar with the placeholder "Search" and a dropdown menu set to "All". Below the search bar, there is a filter for "Product Category" with a value of "Industrial Tr...". The main table displays one row of data:

Product Category	Created By	Created On/At	Changed By	Changed On/At
Industrial Trucks (PC_INDTRK_P0)	user_p0@ipr.com	Oct 11, 2023, 1:00:12 PM	user_p0@ipr.com	Oct 11, 2023, 1:00:12 PM

Buttons for "Create", "Delete", and other actions are visible at the bottom of the table.

2. Navigate to the details page by clicking the arrow.

Product Category	Created By	Created On/At	Changed By	Changed On/At
Industrial Trucks (PC_INDTRK_P0)	user_p0@ipr.com	Oct 11, 2023, 1:00:12 PM	user_p0@ipr.com	Oct 11, 2023, 1:00:12 PM

3. Click “Edit”.

4. Click “**Solutions**” tab and navigate to the details page by clicking the arrow.

The screenshot shows the SAP Fiori interface for managing product categories. On the left, there is a search bar and filter options for 'Product Category', 'Created By', 'Created On/At', and 'Changed On/At'. Below these is a 'Product Categories (1)' section with a 'Create' button. On the right, the 'PC_INDTRK_P0' details page is open. At the top, there are tabs for 'General Information', 'Descriptions', and 'Solutions'. The 'Solutions' tab is highlighted with a red box. Below it, the 'Solutions' section shows a table with one item: 'Forktruck_P0' with a description 'Forktruck P0' and created by 'user_p0@ipr.com'. A red box highlights the three-dot menu icon at the bottom right of the table row. At the bottom right of the main screen, there are 'Save' and 'Discard Draft' buttons.

5. Scroll down to “**Configurable Product Assignment**” and click “**Create**”.

Depending on the screen resolution, you will see three dots at the corner of the table instead of “Create”. Click the dots and select “Create”.

The screenshot shows the SAP Fiori interface for managing product categories. The left side has the same search and filter options as the previous screenshot. The right side shows the 'PC_INDTRK_P0' details page. The 'Descriptions' tab is selected. In the 'Solutions' section, the table shows the same item as before. To the right, a sidebar titled 'Configurable Product Assignment' is expanded. It contains a table with one item: 'Forktruck_P0' with a description 'Forktruck P0' and created by 'user_p0@ipr.com'. A red box highlights the 'Create' button in the table's context menu. Another red box highlights the three-dot menu icon at the top right of the sidebar. At the bottom right of the main screen, there are 'Save' and 'Discard Draft' buttons.

6. Open the value help and search for the **Product "PJ001_<UserID>"**. Ex: If your User ID is P0, search "PJ001_P0".

The screenshot shows the SAP Fiori interface for managing product categories. On the left, a sidebar displays filtering options for 'Standard' products, including 'Editing Status' (All), 'Product Category' (PC_INDTRK_P0 selected), and various date/time fields. Below this is a 'Product Categories' section with a single entry: PC_INDTRK_P0.

The main area shows a draft for 'PC_INDTRK_P0'. Under the 'Descriptions' tab, there is one item: 'Forktruck_P0' with a description 'Forktruck P0'. The 'Solutions' tab is also visible.

To the right, a separate card for 'Forktruck_P0' is shown under 'Configurable Product Assignment'. It lists two items: 'Forktruck_P0' (selected) and 'FL001_P0'. Both entries have their 'Configurable Product Description' set to 'Fork Truck FTK'.

The screenshot shows the SAP Fiori interface for managing product categories. The sidebar and product category selection are identical to the previous screenshot.

The main area shows a search dialog for 'Product'. The input field contains 'PJ001_P0', which is highlighted with a red box. The search results table shows one entry: 'PJ001_P0' with a description 'Side Loader SLD'.

To the right, a card for 'Forktruck_P0' is shown under 'Configurable Product Assignment'. It lists two items: 'Forktruck_P0' (selected) and 'FL001_P0'. The 'Forktruck_P0' entry has its 'Configurable Product Description' set to 'Fork Truck FTK'.

7. Click “Apply” and “Save”.

The screenshot shows the SAP Fiori interface for managing product categories. On the left, the 'Standard' view of 'Manage Product Categories' is shown, with a selected product category 'PC_INDTRK_P0'. In the center, the detailed view for 'PC_INDTRK_P0' is displayed under the 'Draft' tab. The 'Descriptions' tab is selected, showing one item: 'Forktruck_P0' with a description 'Forktruck P0'. Below this, the 'Solutions' tab is also visible. At the bottom right of the central screen, there are 'Save' and 'Discard Draft' buttons, with 'Save' highlighted with a red box. On the right, a separate panel titled 'Forktruck_P0' shows 'Configurable Product Assignment' with two items: 'PJ001_P0' and 'FL001_P0'. Each item has a description and creation details. At the bottom right of this panel, there is an 'Apply' button highlighted with a red box.

Manage Product Categories

PC_INDTRK_P0 Draft

Solutions

Forktruck_P0

Configurable Product Assignment

Product Categories (1)

PC_INDTRK_P0

PC_INDTRK_P0

Descriptions

Solutions

Forktruck_P0

Configurable Product Assignment

Product Categories (1)

Industrial Trucks (PC_INDTRK_P0)

Descriptions

Solutions

Forktruck_P0

Configurable Product Assignment

Step 3

Add Characteristics to the Intelligent Product Selection Profile

You can define the relationship between needs or requirements that customers want from a product and the technical configurations of solutions using a product selection profile (IPSP).

1. Open “Manage Intelligent Product Selection Profile” app.

The screenshot shows the SAP Home interface. At the top, there's a navigation bar with the SAP logo, "Home", and "Intelligent Data Modelling" (which is underlined). Below the navigation bar, there are three main sections: "Manage Product Categories", "Manage Intelligent Product Selection Profiles" (which is highlighted with a red box), and "Intelligent Recommendation Processes" which includes "Manage Data Ingestion and Transformation" and "Manage Machine Learning Lifecycle". Under "Intelligent Recommendation Processes", there is a box indicating "0 Deployed Models". The bottom section is "Administration" with a "My Data Management Document Records" option.

2. Search for the profile “IPSP_INDTRK_<UserID>” with your UserID and click “Go”. Ex: If your User ID is P0, search IPSP_INDTRK_P0.

The screenshot shows the "Manage Intelligent Product Selection Profiles" application. At the top, there's a search bar with "IPSP:" and "IPSP for I...". Below the search bar, there are filters for "Product Category", "IPSP Status", and "Created On/At". The main area is titled "Profiles (1)" and shows a table with one row. The table columns are: IPSP, Product Category, IPSP Status, Description Sync Status, Created By, and Created On/At. The single row contains: "IPSP for Industrial trucks (IPSP_INDTRK_P0)", "Industrial Trucks (PC_INDTRK_P0)", "New", "Not Started", "user_p0@ipr.com", and "Oct 11, 2023, 2:47:38 PM". There are buttons for "Activate", "Deactivate", "Sync Descriptions", "Create", and "Delete".

3. Navigate to the details page by clicking the arrow.

IPSP	Product Category	IPSP Status	Description Sync Status	Created By	Created On/At
IPSP for Industrial trucks (PC_INDTRK_P0)	Industrial Trucks (PC_INDTRK_P0)	New	Not Started	user_p0@ipr.com	Oct 11, 2023, 2:47:38 PM

4. Click “Edit”.

IPSP	Product Category
IPSP for Industrial trucks (PC_INDTRK_P0)	Industrial Trucks (PC_INDTRK_P0)

General Information

IPSP:	IPSP for Industrial trucks (PC_INDTRK_P0)	IPSP Description:	IPSP for Industrial trucks
IPSP Status:	New	Created By:	user_p0@ipr.com
Created On/At:	Oct 11, 2023, 2:47:38 PM	Changed By:	user_p0@ipr.com
Description Sync Status:	Not Started	Created On/At:	Oct 11, 2023, 2:47:38 PM

Needs Attributes

Attribute	Attribute Description	Attribute Type	Unit of Measure
IQ_MAX_RACK_HEIGHT	Max Rack Height	CodeList	
IQ_WH_NOISE	Warehouse Noise	CodeList	
IQ_MAX_PAL_WEIGHT	Max Pal Weight	CodeList	LBR
IQ_PALLET_MOVE	Pallet Movement	CodeList	

5. Click “Needs Attributes” tab and click “Create”.

The screenshot shows the SAP S/4HANA interface for managing Intelligent Product Selection Profiles. On the left, there is a search bar and filter options for 'IPSP' and 'Product Category'. Below this is a table titled 'Profiles (1)' showing one profile for 'Industrial Trucks (PC_INDTRK...)'. On the right, the main area is titled 'IPSP_INDTRK_P0 Draft'. It has tabs for 'General Information', 'Needs Attributes' (which is highlighted with a red box), 'Product Attributes', and 'Commercial Attributes Settings for Runtime Application'. Under the 'Needs Attributes' tab, there is a table titled 'Items (9)' listing various attributes like 'IQ_MAX_RACK_HEIGHT', 'IQ_WH_NOISE', etc., with columns for 'Attribute', 'Attribute Description', 'Attribute Type', and 'Unit of Measure'. A red box highlights the 'Create' button at the top right of the table area. At the bottom right of the screen, there are 'Save' and 'Discard Draft' buttons.

6. Open the value help and search “**IQ_MIN_ISLE_WIDTH**”. Select the record from the results.

This screenshot is similar to the previous one, showing the SAP S/4HANA interface for managing Intelligent Product Selection Profiles. The 'Needs Attributes' tab is selected. In the 'Items (9)' table, the first row's 'Attribute' field ('IQ_MIN_ISLE_WIDTH') is highlighted with a red box. The other rows show attributes like 'IQ_MAX_RACK_HEIGHT', 'IQ_WH_NOISE', etc. The bottom right of the screen has 'Save' and 'Discard Draft' buttons.

Characteristic ID	Characteristic Name	Characteristics Description	Unit of Measure
1993008722	IQ_MIN_ISLE_WIDTH	Isle Width	

7. Select the “Attribute Type” as “CodeList”.

Attribute	Attribute Description	Attribute Type	Unit of Measure
IQ_MIN_ISLE_WIDTH	Isle Width	CodeList	
IQ_MAX_RACK_HEIGHT	Max Rack Height	Code...	
IQ_WH_NOISE	Warehouse Noise	Code...	
IQ_MAX_PAL_WEIGHT	Max Pal Weight	Code...	LBR
IQ_PALLET_MOVE	Pallet Movement	Code...	
IQ_SURFACE	Type of Surface	Code...	
IQ_WU_G_HEIGHT	Ceilin Height	Code...	

8. Click “**Product Attributes**” tab and click “**Create**”.

The screenshot shows the SAP S/4HANA interface for managing intelligent product selection profiles. On the left, there's a sidebar with search filters and a 'Profiles (1)' section. The main area is titled 'IPSP_INDTRK_P0' (Draft) and shows the 'Product Attributes' tab selected. Under 'Items (3)', there are three entries for 'Forktruck P0 (Forktruck_P0)'. Each entry includes an 'Attribute' field with values like 'AVC_CR_COUNTERWEIGHT_VXX', 'AVC_CR_POWERSOURCE_VXX', and 'AVC_CR_FORKSIZE_VXX'. A red box highlights the 'Create' button at the top right of the table. At the bottom right, there are 'Save' and 'Discard Draft' buttons.

9. Open the value help for “**Solution**” and search for “**Forktruck_<UserID>**” with your UserID and click “**Go**”. **Ex:** If your User ID is P0, search Forktruck_P0. Select the solution from the results.

This screenshot is similar to the previous one but shows the 'Solution' value help dialog open. The 'Search' field contains 'Forktruck_P0'. The 'Create' button in the dialog is highlighted with a red box. The rest of the interface is identical to the first screenshot, showing the 'Product Attributes' tab with three items listed.

The screenshot shows the SAP Manage Intelligent Product Selection Profiles interface. On the left, there's a sidebar with search filters for IPSP, Product Category, and Status. The main area is titled "Select: Solution" with a search bar containing "Forktruck_P0". A table titled "Items (1)" shows one item: "Forktruck P0" under "Solution". At the bottom right, there are buttons for "Cancel", "Draft updated", "Save" (highlighted in blue), and "Discard Draft".

10. Open the value help for “Attribute”, search “AVC_CR_WHEELTYPE_VXX” and select the record from the results.

The screenshot shows the SAP Manage Intelligent Product Selection Profiles interface. The left sidebar shows a profile named "IPSP for Industrial trucks (IPSP_INDTRK_P0)". The right panel is titled "IPSP_INDTRK_P0" and has tabs for General Information, Needs Attributes, Product Attributes (selected), and Commercial Attributes Settings for Runtime Application. Under "Product Attributes", there's a table titled "Items (4)" with four rows. The first row has a red box around the "Attribute" column, which contains "AVC_CR_COUNTERWEIGHT_VXX". The second row contains "KGM". The third and fourth rows contain "AVC_CR_POWERSOURCE_VXX". At the bottom right, there are buttons for "Draft updated", "Save" (highlighted in blue), and "Discard Draft".

11. Click “Save”.

The screenshot shows the SAP S/4HANA interface for managing intelligent product selection profiles. On the left, the 'standard*' view is displayed with search filters for 'IPSP' (set to 'IPSP for Industrial trucks'), 'Product Category' (set to 'Industrial Trucks'), and other parameters like 'Status' and 'Sync Status'. Below the filters, there's a table titled 'Profiles (1)' showing one entry: 'IPSP' (selected) and 'Product Category' (Industrial Trucks). On the right, the detailed view for 'IPSP_INDTRK_PO' is shown under the 'Product Attributes' tab. It lists four items: Forktruck P0 (Forktruck_P0) with attributes KGM (Unit of Measure) and AVC_CR_COUNTERWEIGHT_VXX (Attribute); Forktruck P0 (Forktruck_P0) with attributes VXX (Unit of Measure) and AVC_CR_WHEELTYPE_VXX (Attribute); Forktruck P0 (Forktruck_P0) with attributes VXX (Unit of Measure) and AVC_CR_POWERSOURCE_VXX (Attribute); and Forktruck P0 (Forktruck_P0) with attributes VXX (Unit of Measure) and AVC_CR_FORKSIZE_VXX (Attribute).

Note: Step 2 and Step 3 will setup the data to be used for Schema creation in SAP Data Attribute Recommendation service.

Step 4

Create an Engineered Dataset and upload data.

The following steps are to prepare your data for machine learning trainings to get the best product recommendations.

Uploading a document lets you transfer your modified or fresh data to SAP Intelligent Product Recommendation.

Importing document makes your data available for machine learning trainings.

1. Open “Manage Data Ingestion and Transformation” application.

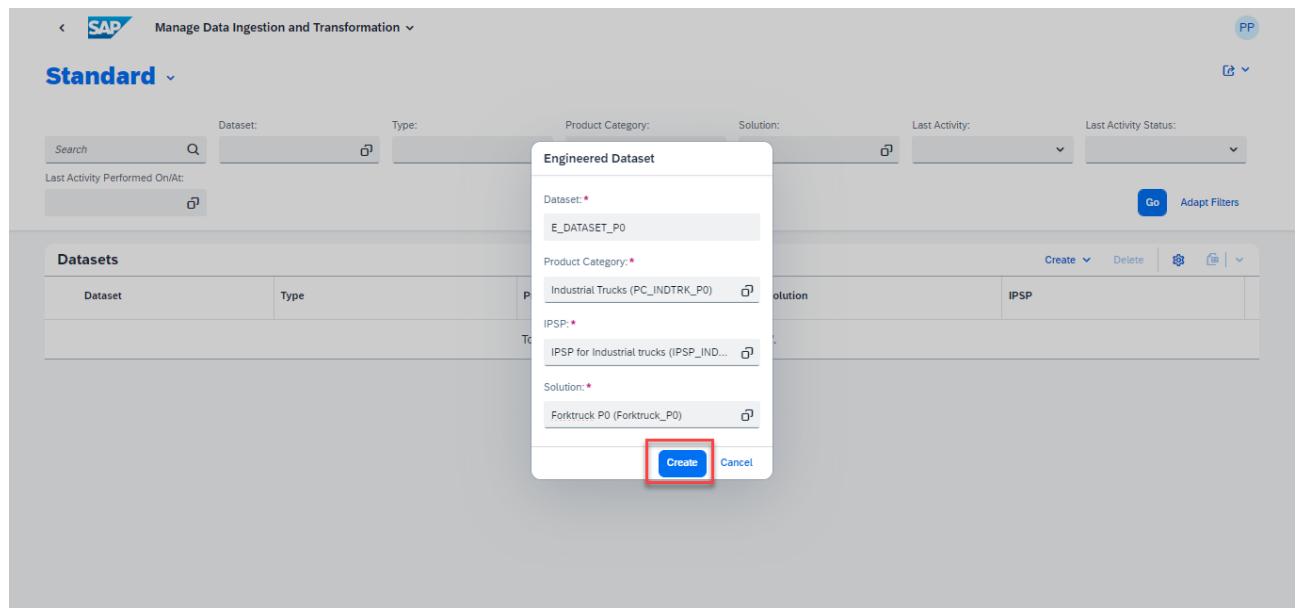
The screenshot shows the SAP Home interface. At the top, there is a SAP logo and a "Home" dropdown menu. Below the header, there are three main navigation tabs: "Intelligent Data Modelling" (which is highlighted in blue), "Intelligent Recommendation Processes", and "Administration". Under the "Intelligent Data Modelling" tab, there are several cards: "Manage Product Categories", "Manage Intelligent Product Selection Profiles", "Intelligent Recommendation Processes" (which has a red box around it), "Manage Data Ingestion and Transformation" (also with a red box around it), "Manage Machine Learning Lifecycle", and "0 Deployed Models". Under the "Administration" tab, there is a card for "My Data Management Document Records".

2. Click “Create” and choose “Engineered Dataset”.

The screenshot shows the "Manage Data Ingestion and Transformation" application. At the top, there is a back arrow, a SAP logo, and the title "Manage Data Ingestion and Transformation". Below the title, there is a filter section with dropdown menus for "Dataset", "Type", "Product Category", "Solution", "Last Activity", and "Last Activity Status". There is also a "Last Activity Performed On/At" input field with a calendar icon and a "Go" button. To the right of the filters is a "Create" button with a dropdown menu, which is currently open and shows two options: "Raw Dataset" and "Engineered Dataset" (with a red box around it). Below the filters, there is a table titled "Datasets" with columns for "Dataset", "Type", "Product Category", "Solution", and "IPSP". A message at the bottom of the table says "To start, set the relevant filters and choose "Go".

3. Enter the following details and click “**Create**”.

- **Dataset:** “**E_DATASET_<UserID>**” with your User ID. **Ex:** If your User ID is P0, search E_DATASET_P0.
- **Product Category:** “**PC_INDTRK_<UserID>**” with your User ID. **Ex:** If your User ID is P0, search PC_INDTRK_P0.
- **IPSP:** “**IPSP_INDTRK_<UserID>**” with your User ID. **Ex:** If your User ID is P0, search IPSP_INDTRK_P0.
- **Solution:** “**Forktruck_<UserID>**” with your user ID. If your User ID is P0, search Forktruck_P0.



4. Click “**Upload Document**” in the details page and select the file “**E_DATASET_<UserID>**” with your User ID. **Ex:** If your User ID is P0, select “**E_DATASET_P0**”.

(Download the CSV file from [here](#).)

Replace the **CONFIG_PRODUCT FL001_P0** with **FL001_<your user id suffix>**.

Replace the **CONFIG_PRODUCT PJ001_P0** with **PJ001_<your user id suffix>**.

Example, if your user id suffix is P25 then rename the products as **FL001_P25** and **PJ001_P25**)

The screenshot shows the SAP MDT interface. On the left, the dataset details for "E_DATASET_P0" are displayed, including its type (Engineered), product category (Industrial Trucks), solution (Forktruck P0), and last activity status. On the right, the "Document Staging Area" tab is selected, showing a table with columns for Document Name, Document Size, Document Status, and Action. A red box highlights the "Upload Document" button at the top of this table. Below it is the "Activity Log" section, which is currently empty.

This screenshot shows the "Upload Document" dialog box overlaid on the SAP MDT interface. The file "E_DATASET_P0.csv" is selected in the "Document Upload" field. The "Upload" button is visible at the bottom of the dialog. The background shows the same dataset details and document staging area as the previous screenshot.

5. Click “Upload”.

The screenshot shows the SAP MDT interface. On the left, the dataset list shows one entry: E_DATASET_P0. On the right, the details for E_DATASET_P0 are displayed, including its type (Engineered), product category (Industrial Trucks), and solution (Forktruck P0). Below this, the Document Staging Area is open, showing an 'Upload Document' dialog. The file 'E_DATASET_P0.csv' is selected, and the 'Upload' button is highlighted with a red box. The Activity Log shows no items available.

The screenshot shows the SAP MDT interface after the upload. The dataset E_DATASET_P0 now has a status of 'In Process' under 'Last Activity Status'. The Activity Log shows a single entry for 'Document Upload' at 3:07:50 PM on Oct 12, 2023, performed by user_p0@ipr.com. The Document Staging Area still shows no items available.

E_DATASET_P0

Dataset Type: Engineered
Product Category: Industrial Trucks (PC_INDTRK_P0)
IPSP: IPSP for Industrial trucks (IPSP_INDTRK_P0)
Solution: Forktruck P0 (Forktruck_P0)

Last Activity: Document Scan
Last Activity Status: In Process

Created By: user_p0@ipr.com
Created On: Oct 12, 2023, 3:03:44 PM

Document Staging Area Activity Log

Items (1)	Search	Generate Document	Upload Document	Delete
Document Name	Document Size	Document Status	Action	
E_DATASET_P0.csv	2.88 MB	Scanning for Viruses		

Activity Log

Items (2)	Search			
Activity	Status	Document Name	Performed By	Performed On/At
Document Scan	In Process	E_DATASET_P0.csv	user_p0@ipr.com	Oct 12, 2023, 3:08:00 PM

6. Refresh the browser until the “**Last Activity Status**” is set to “**Completed**”.

E_DATASET_P0

Dataset Type: Engineered
Product Category: Industrial Trucks (PC_INDTRK_P0)
IPSP: IPSP for Industrial trucks (IPSP_INDTRK_P0)
Solution: Forktruck P0 (Forktruck_P0)

Last Activity: Document Scan
Last Activity Status: Completed

Created By: user_p0@ipr.com
Created On: Oct 12, 2023, 3:03:44 PM

Document Staging Area Activity Log

Items (1)	Search	Generate Document	Upload Document	Delete
Document Name	Document Size	Document Status	Action	
E_DATASET_P0.csv	2.88 MB	Available for Import		

Activity Log

Items (2)	Search			
Activity	Status	Document Name	Performed By	Performed On/At
Document Scan	Completed	E_DATASET_P0.csv	user_p0@ipr.com	Oct 12, 2023, 3:08:00 PM
Document Upload	Completed	E_DATASET_P0.csv	user_p0@ipr.com	Oct 12, 2023, 3:07:50 PM

7. Click “**Document Staging Area**” and click the **Import icon** for the CSV file uploaded in the previous step.

E_DATASET_P0

Dataset Type: Engineered
Product Category: Industrial Trucks (PC_INDTRK_P0)
IPSP: IPSP for Industrial trucks (IPSP_INDTRK_P0)
Solution: Forktruck P0 (Forktruck_P0)

Last Activity Status: Completed

Activity Log

Activity	Status	Document Name	Performed By	Performed On/At
Document Scan	Completed	E_DATASET_P0.csv	user_p0@ipr.com	Oct 12, 2023, 3:08:00 PM
Document Upload	Completed	E_DATASET_P0.csv	user_p0@ipr.com	Oct 12, 2023, 3:07:50 PM

8. Click “**OK**” in the warning dialog. The “**Document Status**” changes to “**Importing Document**”.

E_DATASET_P0

Dataset Type: Engineered
Product Category: Industrial Trucks (PC_INDTRK_P0)
IPSP: IPSP for Industrial trucks (IPSP_INDTRK_P0)
Solution: Forktruck P0 (Forktruck_P0)

Last Activity Status: Completed

Document Staging Area

Warning

Importing document will overwrite existing data. Do you want to continue?

OK Cancel

Activity Log

Activity	Status	Document Name	Performed By	Performed On/At
Document Scan	Completed	E_DATASET_P0.csv	user_p0@ipr.com	Oct 12, 2023, 3:08:00 PM
Document Upload	Completed	E_DATASET_P0.csv	user_p0@ipr.com	Oct 12, 2023, 3:07:50 PM

The screenshot shows the SAP Data Ingestion and Transformation interface. On the left, a search bar and filter options are visible. Below them, a list of datasets is shown, with one dataset selected: E_DATASET_P0. The details for this dataset are displayed on the right, including its type (Engineered), product category (Industrial Trucks), and last activity (Document Import). The status is listed as "Last Activity Status: In Process". On the right side, there is a "Document Staging Area" and an "Activity Log". In the "Document Staging Area", there is one item: E_DATASET_P0.csv, which is 2.88 MB and has the status "Importing Document". The "Activity Log" shows three entries: Document Import (In Process), Document Scan (Completed), and Document Upload (Completed). The "Importing Document" entry is highlighted with a red box.

9. Refresh the browser until the “Document Status” is “Document Imported”.

This screenshot shows the same SAP Data Ingestion and Transformation interface after refreshing. The dataset E_DATASET_P0 is still selected. The status has changed from "In Process" to "Completed". The "Document Staging Area" now shows the document E_DATASET_P0.csv with the status "Document Imported". The "Activity Log" shows the same three entries as before, but the "Importing Document" entry is no longer present, indicating the task has been completed.

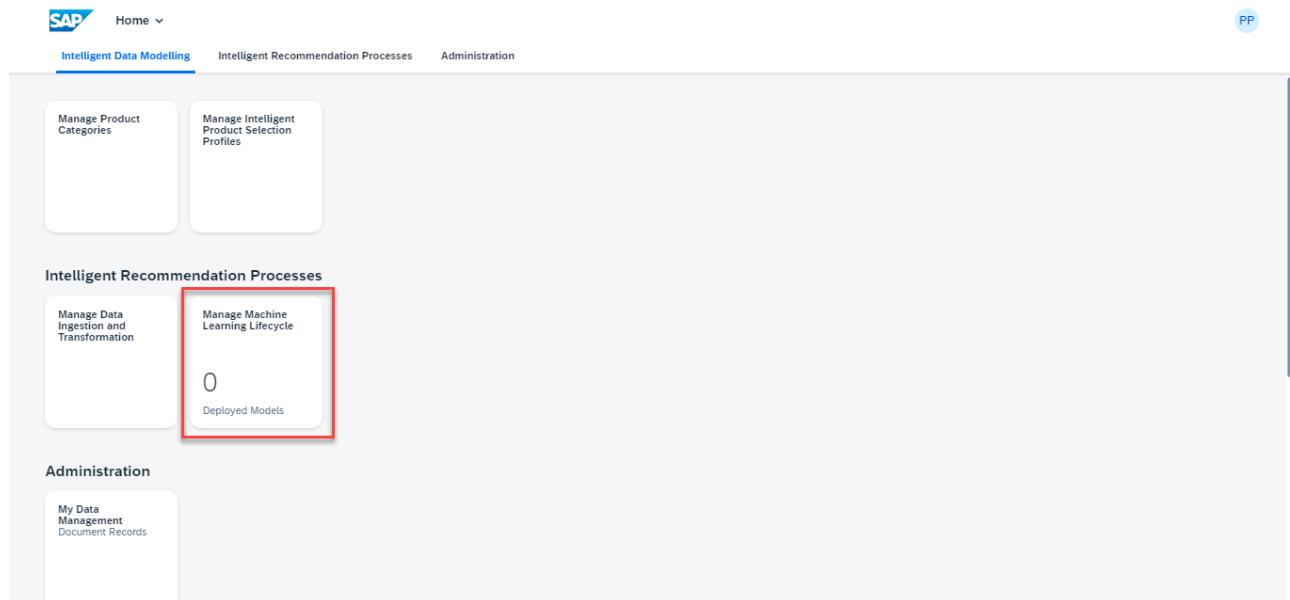
Note: Step 4 will setup the data that will be used for generating the training dataset that will be uploaded to SAP Data Attribute Recommendation service.

Step 5

Create a Machine Learning model.

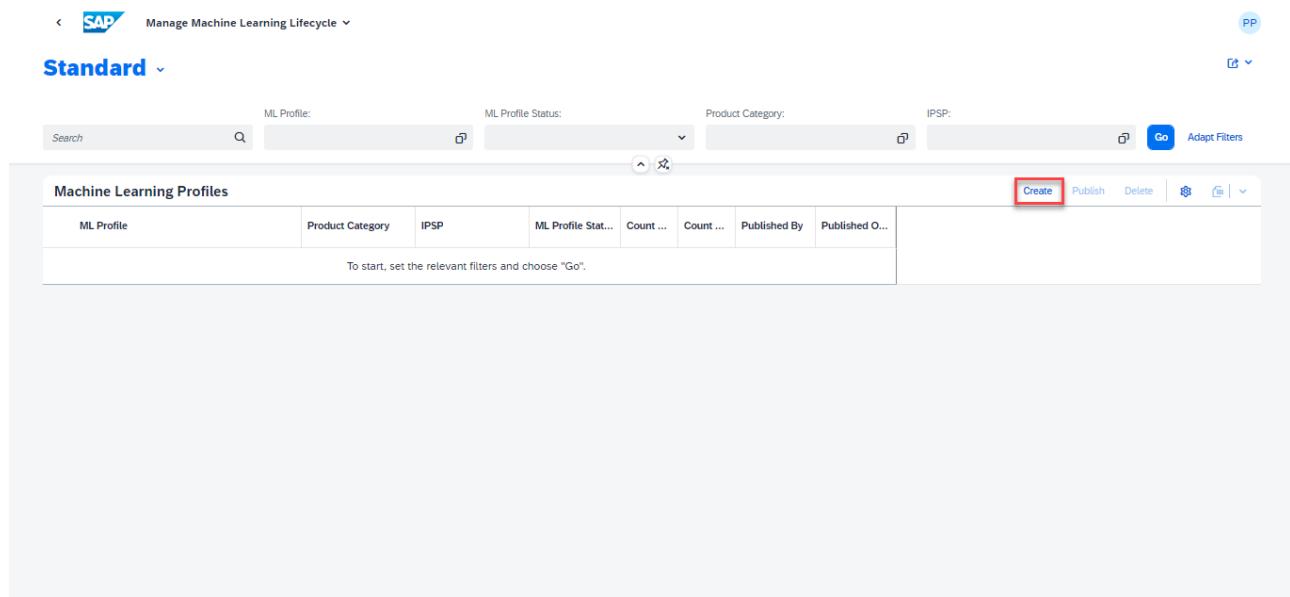
This application is to create, train, and deploy ML models to check their predictive performances. The ML Specialist can then select the best match for their requirements.

1. Open “Manage Machine Learning Lifecycle” application.



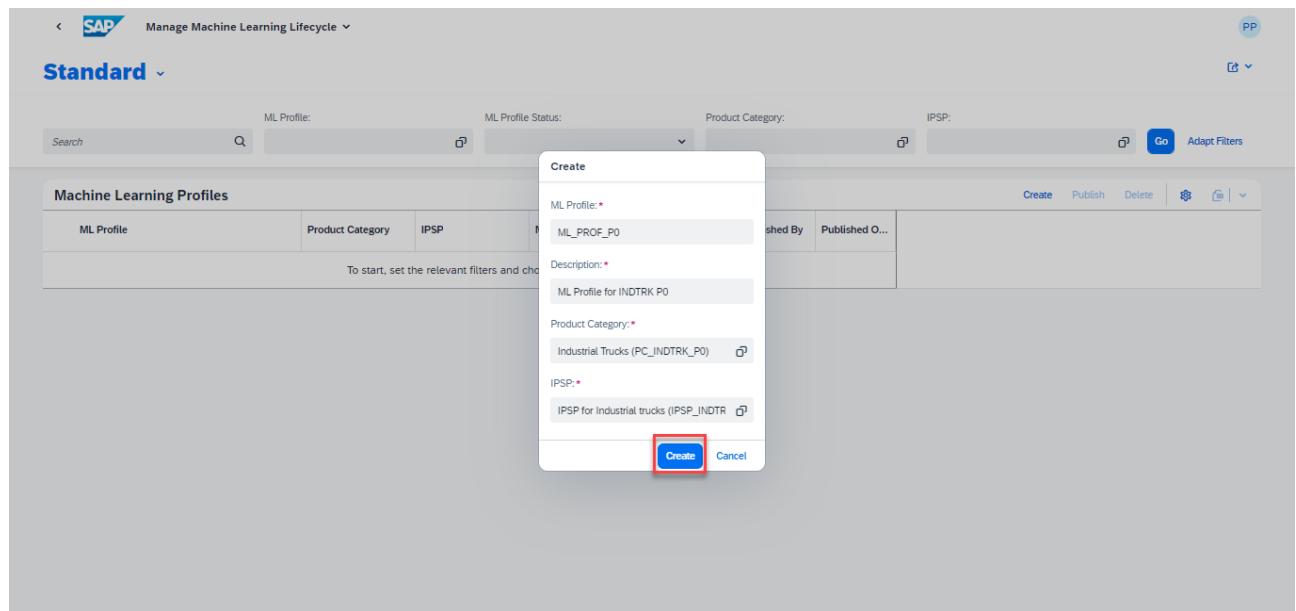
The screenshot shows the SAP Home interface with the 'Intelligent Data Modelling' application selected. In the 'Intelligent Recommendation Processes' section, the 'Manage Machine Learning Lifecycle' button is highlighted with a red box. The button displays '0 Deployed Models'.

2. Click “Create”.



The screenshot shows the 'Manage Machine Learning Lifecycle' application. At the top, there are search and filter fields for 'ML Profile', 'ML Profile Status', 'Product Category', and 'IPSP'. Below these is a table titled 'Machine Learning Profiles' with columns: 'ML Profile', 'Product Category', 'IPSP', 'ML Profile Stat...', 'Count ...', 'Count ...', 'Published By', and 'Published O...'. A red box highlights the 'Create' button in the top right corner of the table header. A message at the bottom of the table says, "To start, set the relevant filters and choose 'Go'."

- Enter the following details and click “Create” in the dialog.
- ML Profile:** “ML_PROF_<UserID>” with your User ID. **Ex:** If your User ID is P0, search “ML_PROF_P0”.
 - Description:** “ML Profile for INDTRK <UserID>” with your User ID. **Ex:** If your User ID is P0, search “ML Profile for INDTRK P0”.
 - Product Category:** “PC_INDTRK_<UserID>” with your User ID. **Ex:** If your User ID is P0, search PC_INDTRK_P0.
 - IPSP:** “IPSP_INDTRK_<UserID>” with your User ID. **Ex:** If your User ID is P0, search IPSP_INDTRK_P0.



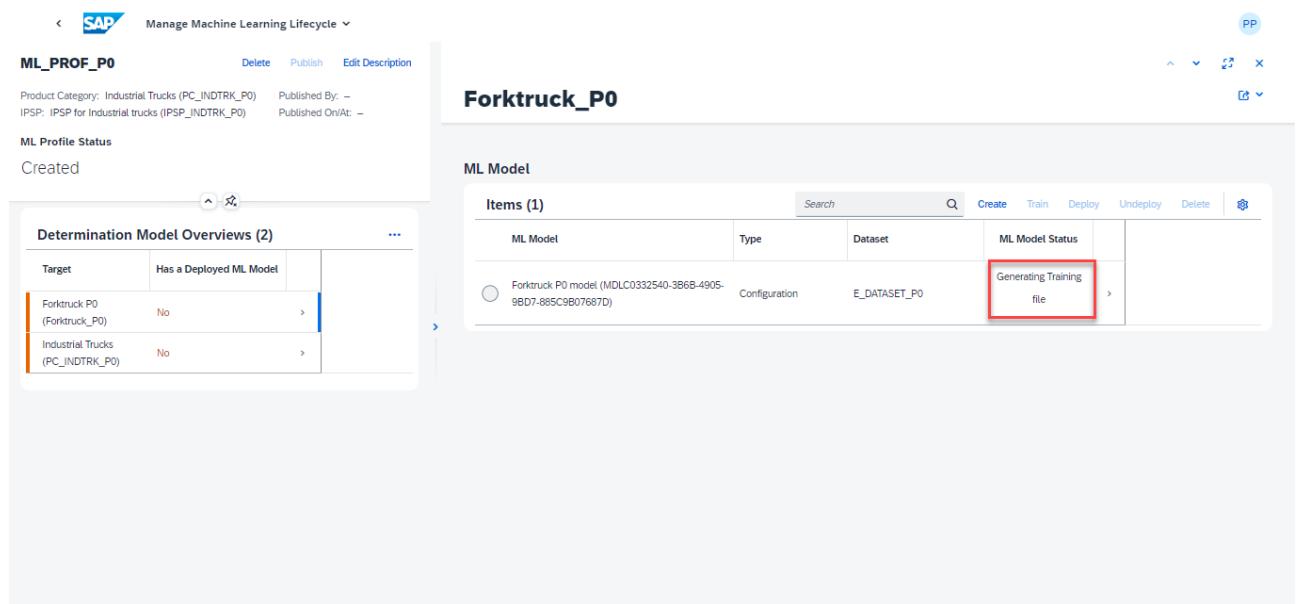
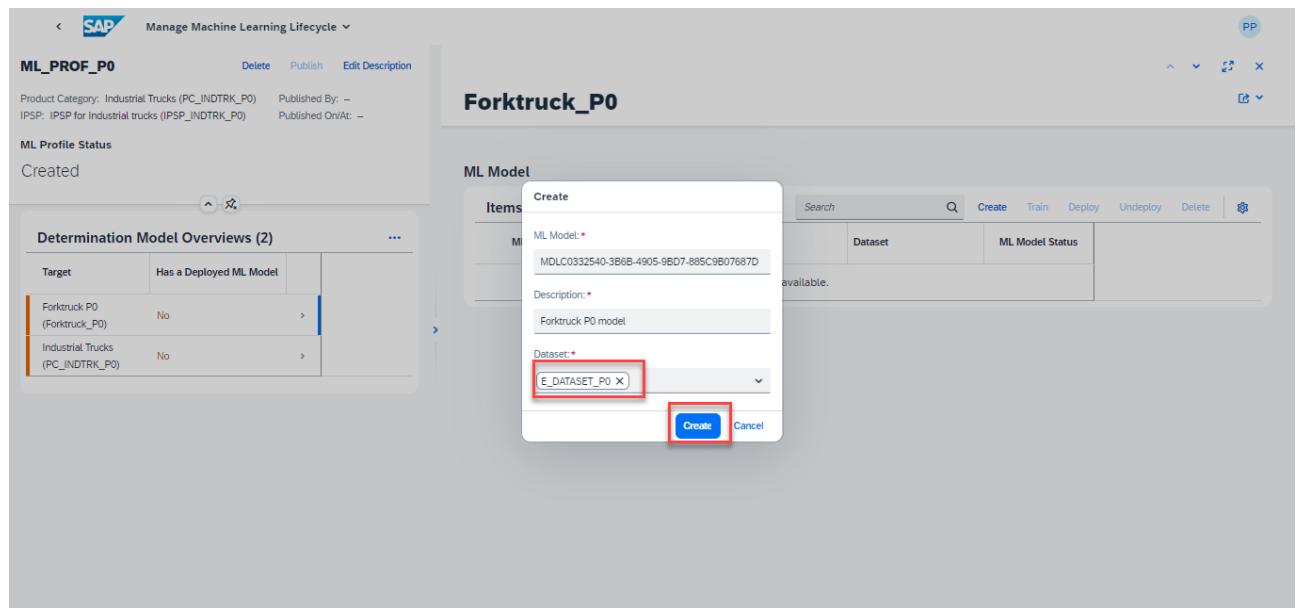
4. Navigate to the details page of the “**Target**” – “**Forktruck_<UserID>**”. **Ex:** If your User ID is P0, navigate to “Forktruck_P0”.

ML Model	Type	Dataset	ML Model Status
Forktruck P0 (Forktruck_P0)			No items available.

5. Click “**Create**”.

ML Model	Type	Dataset	ML Model Status
Forktruck P0 (Forktruck_P0)			No items available.
Industrial Trucks (PC_INDTRK_P0)			No items available.

6. Enter a Description, select the Dataset from the dropdown (created in the earlier step 4.3) and click “Create”.



7. Refresh the browser until the “**ML Model Status**” is “**Training File Generated, Ready for Training**”.

The screenshot shows the SAP ML Model Status page for the model **Forktruck_P0**. The main table has columns for **ML Model**, **Type**, **Dataset**, and **ML Model Status**. The status for the first row, which is the **Forktruck P0 model**, is highlighted with a red box and displays the message **Training File Generated, Ready for Training**.

ML Model	Type	Dataset	ML Model Status
Forktruck P0 model (MDLC0332540-3B6B-4905-9BD7-885C9B07687D)	Configuration	E_DATASET_P0	Training File Generated, Ready for Training

8. Similarly create a ML Model for **PC_INDTRK_<UserID>**

The screenshot shows the SAP ML Model Status page for the model **PC_INDTRK_P0**. The main table has columns for **ML Model**, **Type**, **Dataset**, and **ML Model Status**. The status for the first row, which is the **INDTRK P0 model**, is highlighted with a red box and displays the message **Training File Generated, Ready for Training**.

ML Model	Type	Dataset	ML Model Status
INDTRK P0 model (MDL96589461-E7D5-4211-90F4-1E4BEA92BDA5)	E_DATASET_P0		Training File Generated, Ready for Training

Next steps (For your information, not part of the exercise)

Train and deploy the ML model.

1. Navigate to “Machine Learning Lifecycle” application.

The screenshot shows the SAP Home interface. At the top, there is a navigation bar with the SAP logo, a "Home" dropdown, and links for "Intelligent Data Modelling", "Intelligent Recommendation Processes", and "Administration". Below the navigation bar, there are several cards: "Manage Product Categories", "Manage Intelligent Product Selection Profiles", "Intelligent Recommendation Processes" (which is expanded to show "Manage Data Ingestion and Transformation" and "Manage Machine Learning Lifecycle", with the latter being highlighted by a red box), and "Administration" (which includes "My Data Management" and "Document Records").

2. Search for profile “ML_PROF_P0” and click “Go”.

The screenshot shows the "Manage Machine Learning Lifecycle" application. At the top, there is a search bar with the placeholder "ML Profile:" containing "ML Profile for INDTRK...". To the right of the search bar are filters for "ML Profile Status:", "Product Category:", and "IPSP:", along with a "Go" button and a "Adapt Filters (1)" link, all of which are highlighted by a red box. Below the search bar, the results are displayed under the heading "Machine Learning Profiles (1)". A table shows one result: "ML Profile for INDTRK P0 (ML_PROF_P0)" under "Product Category: Industrial Trucks (PC_INDTRK_P0)". The table columns include "ML Profile", "Product Category", "IPSP", "ML Profile Stat...", "Count ...", "Count ...", "Published By", and "Published O...".

3. Navigate to the details page by clicking the arrow.

SAP Manage Machine Learning Lifecycle

Machine Learning Profiles (1)

ML Profile	Product Category	IPSP	ML Profile Stat...	Count ...	Count ...	Published By	Published O...
ML Profile for INDTRK_P0 (ML_PROF_P0)	Industrial Trucks (PC_INDTRK_P0)	IPSP for Industrial trucks (IPSP_INDTRK_P0)	Created	2	0		

4. Navigate to the details page of the Solution “**Forktruck_P0**”.

ML_PROF_P0 Delete Publish Edit Description

Product Category: Industrial Trucks (PC_INDTRK_P0) Published By: –
IPSP: IPSP for Industrial trucks (IPSP_INDTRK_P0) Published On/At: –

ML Profile Status
Created

Determination Model Overviews (2)

Target	Has a Deployed ML Model
Forktruck P0 (Forktruck_P0)	No
Industrial Trucks (PC_INDTRK_P0)	No

Forktruck_P0

ML Model

Items (1)

ML Model	Type	Dataset	ML Model Status
Forktruck P0 model (MDLC0332540-3B6B-4905-9BD7-885C9B07687D)	Configuration	E_DATASET_P0	Training File Generated. Ready for Training

5. Select the ML Model and click “**Train**”. The “**ML Model Status**” changes to “**Training**”.

The screenshot shows the SAP S/4HANA Cloud interface for managing machine learning lifecycle. On the left, there's a sidebar for 'ML_PROF_P0' with 'Created' status. The main area is titled 'Forktruck_P0'. Under 'ML Model', a table shows one item: 'Forktruck P0 model (MDLC0332540-3B6B-4905-9BD7-885C9B07687D)' which is a 'Configuration' type dataset. The 'ML Model Status' is currently 'Generated, Ready for Training'. A red box highlights the 'Train' button in the top navigation bar, which has been clicked. The status has now changed to 'Training'.

This screenshot shows the same SAP S/4HANA Cloud interface after the 'Train' button was clicked. The 'ML Model Status' for the 'Forktruck P0 model' has changed from 'Generated, Ready for Training' to 'Training'. A red box highlights the 'Training' status in the table.

6. Refresh the browser until the “**ML Model Status**” is “**Trained**”.
7. Click on “**Deploy**” to deploy the model. The “**ML Model Status**” changes to “**Deploying**”.
8. Refresh the browser until the “**ML Model Status**” is “**Deployed**”.
9. Repeat these steps for the ML model associated with the Target “**PC_INDTRK_P0**” to deploy the associated ML model.

10. Publish the ML Profile by clicking the “Publish” button.

ML Profile	Product Category	IPSP	ML Profile Stat...	Count ...	Count ...	Published By	Published On...
ML Profile for INDTRK P0 (ML_PROF_P0)	Industrial Trucks (PC_INDTRK_P0)	IPSP for Industrial trucks (IPSP_INDTRK_P0)	Published	2	2	user_p0@ipr.com	Oct 13, 2023, 7:39:21 PM

11. Go to the “Manage Intelligent Product Selection Profiles” app.

12. Activate the IPSP by clicking the “Activate” button.

IPSP	Product Category	IPSP Status	Description Sync Status	Created By	Created On/At	Changed By	Changed On/At
IPSP for Industrial trucks (IPSP_INDTRK_P0)	Industrial Trucks (PC_INDTRK_P0)	Active	Not Started	user_p0@ipr.com	Oct 11, 2023, 6:45:30 PM	user_p0@ipr.com	Oct 13, 2023, 7:39:43 PM

Note: Step 5 will use the APIs offered by SAP Data Attribute Recommendation service for training ML models, getting the model metrics and to deploy them.

Step 6

Launch the Runtime UI and run inferences.

You can embed the runtime UI in configure, price, quote (CPQ), or e-commerce business processes.

1. Open [SAP Intelligent Product Recommendation Runtime UI](#) and select the “**Product Category**”, “**Attributes**” and click on “**Show Products**”.

Needs Attributes

Select a product category and attributes below to help us recommend the best fit products to you.

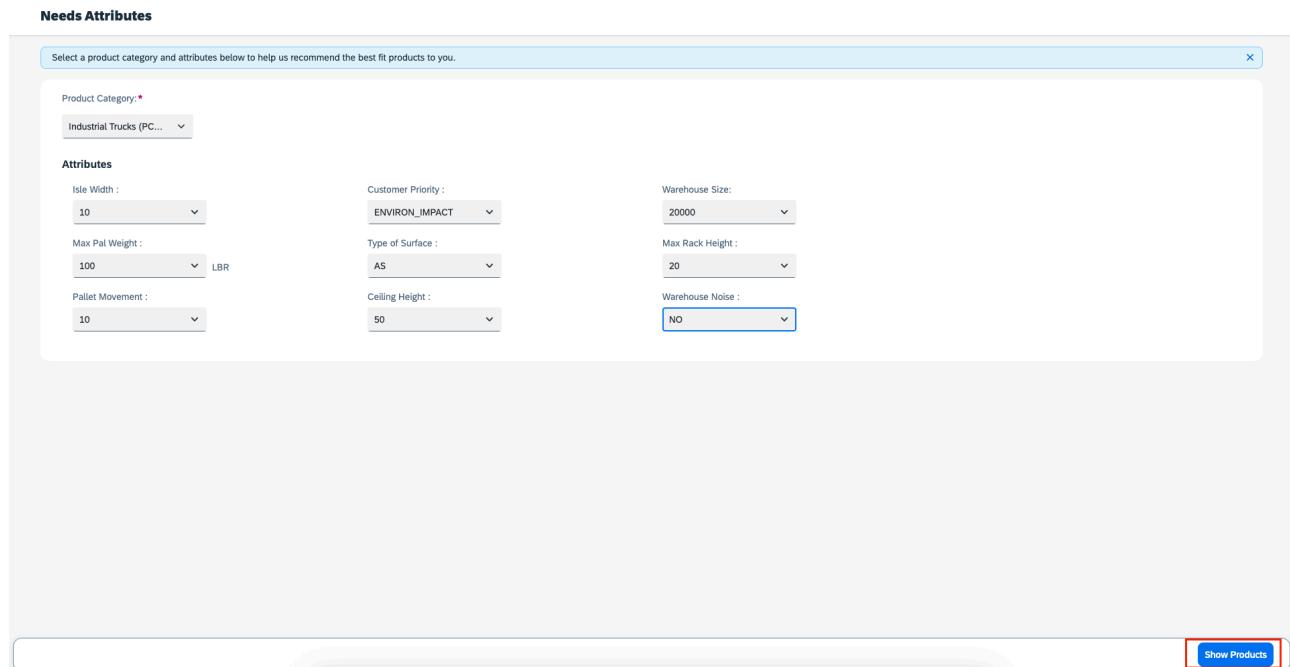
Product Category:*

Industrial Trucks (PC... ▾)

Attributes

Isle Width :	Customer Priority :	Warehouse Size:
10 ▾	ENVIRON_IMPACT ▾	20000 ▾
Max Pallet Weight :	Type of Surface :	Max Rack Height :
100 ▾ LBR	AS ▾	20 ▾
Pallet Movement :	Ceiling Height :	Warehouse Noise :
10 ▾	50 ▾	NO ▾

Show Products ▾



2. Choose the recommended product.

Needs Attributes

Matching Products

Products (2)		
Product ID	Product Description	Confidence Score
FL001_P0	Fork Truck FTK	0.81 >
PJ001_P0	Side Loader SLD	0.18 >

3. View the recommended product configuration.

Needs Attributes

Matching Products

Fork Truck FTK

Configuration Details

Counter Weight VXX:	(3000) KGM
Wheel Type VXX:	(P)
Powersource VXX:	(ELEC)
Fork Size VXX:	(L)

Accept

Note: Step 6 will use the APIs offered by SAP Data Attribute Recommendation service for sending inference requests.