ABBYY Vantage

Customer Feedback Analysis Use-case Solution

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About Customer Feedback Analysis Use-case Solution

The Customer Feedback Analysis Use-case Solution leverages advanced AI technologies to automate the extraction, analysis, and visualization of customer feedback.

By integrating ABBYY Vantage for data extraction and using a large language model (LLM) for sentiment analysis, the solution identifies key insights, trends, and sentiments from customer surveys, reviews, or other feedback documents. The extracted data is then visualized in ABBYY Timeline, providing deeper insights and allowing for continuous monitoring and analysis of feedback trends.

This solution reduces manual effort, enhances data accuracy, and supports data-driven decision-making to improve customer satisfaction and business performance.

Setting the solution

To set up the solution, perform the following steps:

Importing the package

The solution package (.zip file), Customer Feedback Analysis Use Case - Process Skill.zip, can be downloaded from the ABBYY Marketplace. It automates customer feedback extraction, performs sentiment analysis with an LLM, and sends insights to ABBYY Timeline for visualization and deeper analysis.

To import the demo flows, follow these steps:

1. Download the Customer Feedback Analysis Use case - Process Skill.zip package.
2. Click Import, then Import Package.
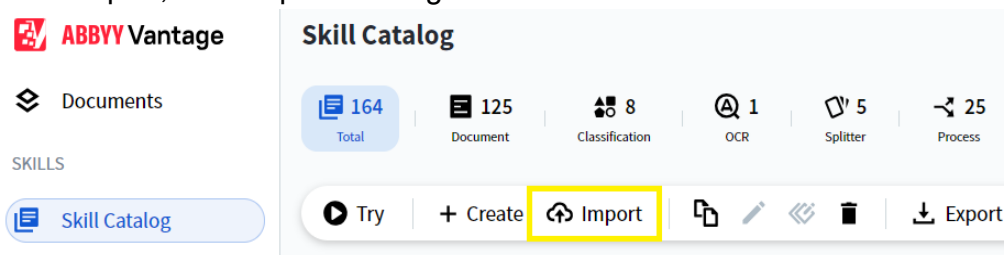
3. Select the downloaded ZIP package and click **Open.**
4. Once the Skill is imported, the Customer Feedback Analysis Use case - Process Skill is available under the Process Skill tab.
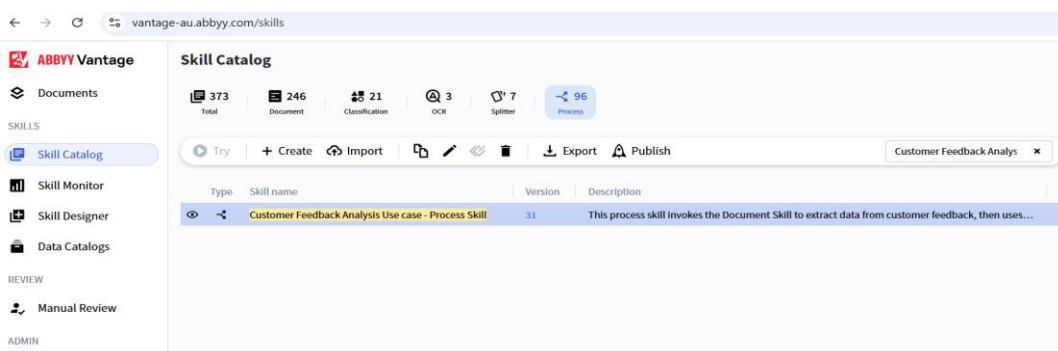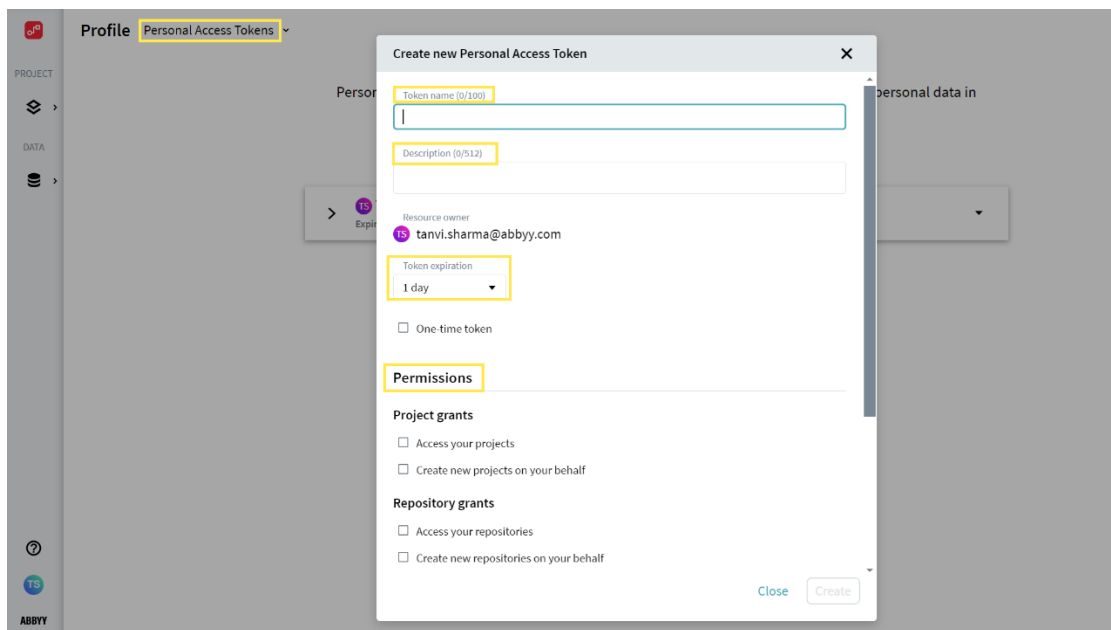
Generating Abbyy Timeline personal access token

To connect to Timeline, you need to generate a personal access token and provide write permissions for project and repositories.

To generate a personal access token, follow the below steps:

1. In your Timeline Account navigate to "User Profile".
2. Under "User Profile" navigate to "Personal Access Tokens".
3. Create a new personal access tokens and set the configurations such as name, token expiration and permissions.
4. Under permissions you can grant different levels of permissions for project, repository and profile.


5. Once the personal access token is created copy and save the token as it would be visible only once.
6. Copy the generated personal access token and directly save this value to ABBYY Vantage environment variable (Timeline_Personal_Access_Token).

# Using the Customer Feedback Analysis Use case - Process Skill

To use the Customer Feedback Analysis Use case - Process Skill, follow these steps:

- Open the **"Customer Feedback Analysis Use-case - Process Skill"** in your environment.

- The process skill invokes the **"CustomerFeedback_Analysis_DocumentSkill-Connector"** document skill.

- This skill can be edited or opened in Advanced Designer and utilizes two primary activities:
    - Fast Learning: Extracts fields such as Name, Date, Phone Number, Email, etc.
   - Extraction Rules: Extracts fixed fields and checkmarks.
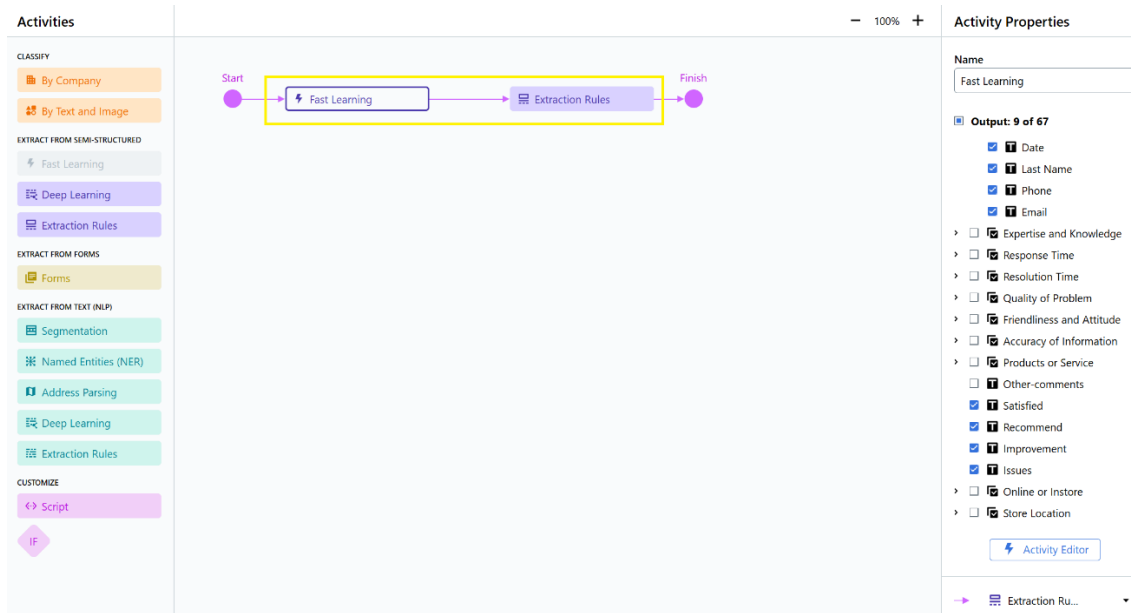
- Custom scripts are applied to specific fields to set values based on conditions or data extracted from other fields.

- The process is fully customizable, enabling modifications to activities like Sentiment Analysis to align with your business needs.

- In the **"Sentiment Analysis"** activity, you can update and add your ChatGPT bearer token, stored in the Vantage environment variable **"Chatgpt_Token"**.
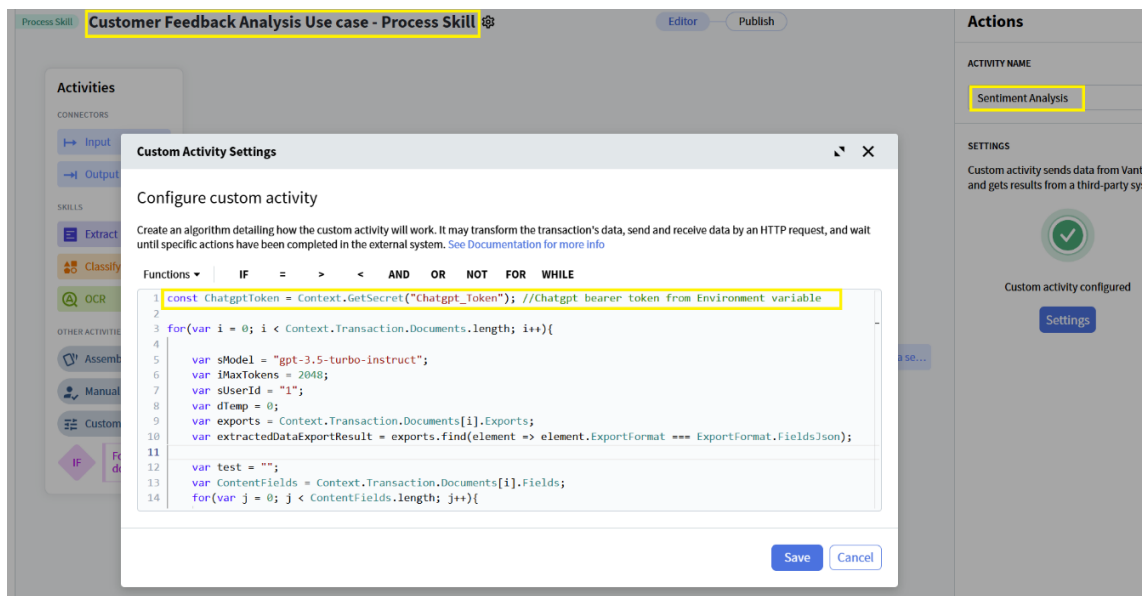
- The output activity **"Output data sent to Timeline"** contains a script to authorize and send data to ABBYY Timeline. Ensure that in the final API call of this script, the field-to-Timeline column mapping is correct to ensure accurate data transmission.
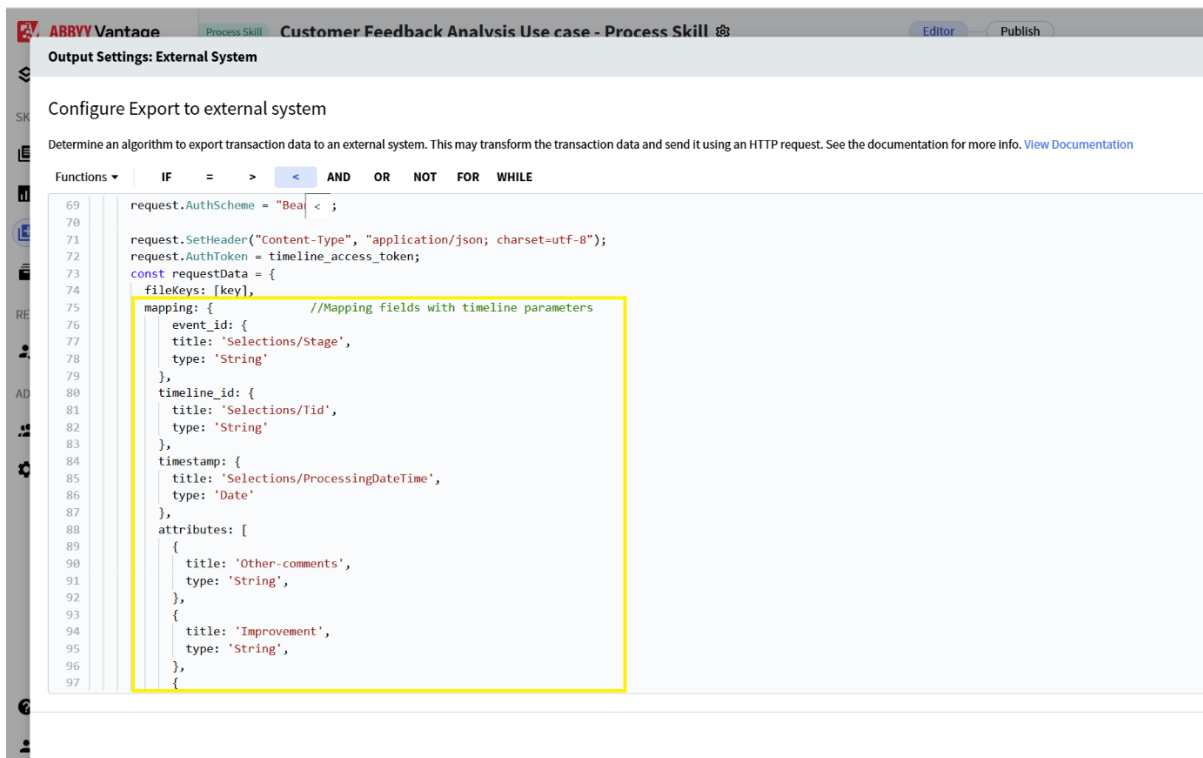
- Update the Vantage environment variables with fields like Timeline project ID, base URL, and personal access token to ensure seamless integration. The Timeline project ID can be found in the URL of your Timeline project, as highlighted in the screenshot below.
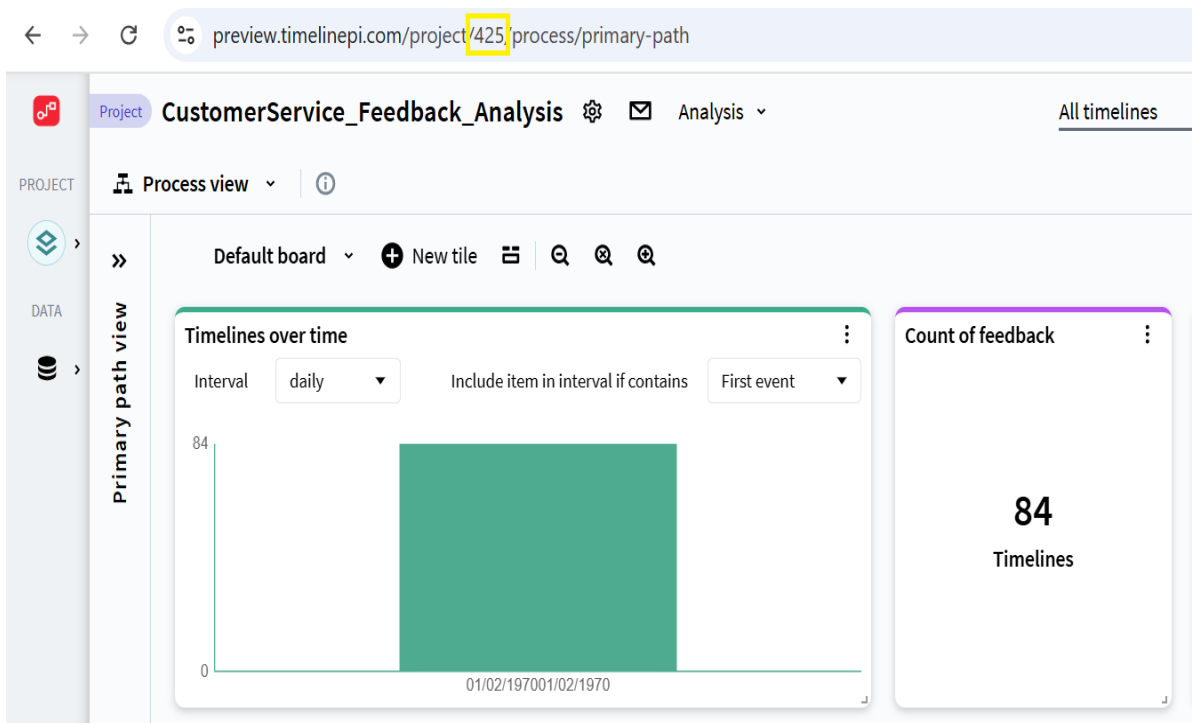
Customizing the solution

The Customer Feedback Analysis solution is flexible and customizable to meet various business needs.

- Add activities like "Classify" or "OCR" before the **Document Skill** for enhanced data preparation.

- Update the **Sentiment Analysis** activity by modifying scripts or replacing the ChatGPT bearer token.

- Create your own **Document Skill** or add sample documents to the existing one and retrain it to accommodate different templates and business processes.

- Enable the **Online Learning** option to allow Vantage to learn during the Manual Review activity, ensuring continuous skill enhancement and improvement.

- Include logging and validation steps to ensure accuracy and data integrity.

These customizations enable seamless integration and efficient feedback analysis tailored to your requirements.

Benefits of This Solution

- **Seamless Integration of Vantage and Timeline**: Combines ABBYY Vantage for data extraction with ABBYY Timeline for visualization, creating an efficient end-to-end solution.

- **Sentiment Analysis with LLM**: Uses large language models (LLM) to analyse feedback and uncover valuable insights.

- **Unified Feedback Processing**: Leverages Vantage, LLM, and Timeline for comprehensive data extraction, analysis, and reporting.

- **Increased Accuracy and Efficiency**: Automates the process, reducing manual errors and improving consistency.

- **Actionable Insights**: Provides clear insights to drive better business decisions and enhance customer satisfaction.

- **Customizable**: Easily tailored to meet specific business needs while utilizing the power of Vantage, Timeline, and LLM.