

Invoice Error Message Categorization Using Generative AI - (NP-38941)

Target GA: November, 2024



Feature Overview

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Introducing: Invoice Error Message Categorization Using Generative AI (NP-38941)

Feature Description

- Invoice rejections from external invoice processing system comprises of multiple rejection reasons in a semi structured format. These rejections comprise of user entered as well as system generated rejection reasons.
- Invoice error classification is about segregation and classification of these external rejections into different rejection categories and extract precise information specific to each rejection by the Large Language Model. Wherever applicable these rejection categories represent the exception type coming from the external invoice processing system.
- The classified rejection gives Suppliers precise information on Rejection level(Generic, Header, Line), Rejection details(line number, Part number, Description), Rejection category and Invoice field associated with the rejection.
- The rejection categories generated in Business Network are the foundation units for all the future use cases related to rejection analytics, rejection resolution recommendations and eventual error detection at the time of invoice creation.

Key Benefits

- Instead of reading and making sense of voluminous rejection reasons, suppliers now have access to precise rejection categories that are easily comprehensible and actionable, thus reducing time taken for remedial actions

Audience:

Supplier

Enablement Model:

Customer Configured

Applicable Solutions:

SAP Business Network

User Story

- As a supplier, you can now use GenAI capability inside the invoice document to transform detailed rejection reasons into concise, intuitive rejection categories for further analysis
- Basic process steps are:
 - Activate Gen AI preference for invoice (one time)
 - Navigate to 'Rejected Invoice' tile and select an invoice
 - Activate 'Simplify errors with AI'
 - View rejection categories generated from the detailed rejection text
- This feature automatically converts verbose rejection text into concise, easy-to-understand and actionable rejection categories
- As a result, you can now see all the reasons the invoice got rejected for and take rapid action

Enablement Steps & Notes

- Supplier has to activate the Gen AI preference for invoice

The image consists of three panels illustrating the steps to enable Gen AI for invoices:

- Panel 1 (Left):** Shows the 'Account Settings' menu. The 'Generative AI' option is highlighted with a red box. An arrow points from this menu to the 'Enable AI' page.
- Panel 2 (Middle):** Shows the 'Enable AI' configuration page. A table lists various AI applications with their status and associated fields. The 'Invoice' application is selected with a radio button. An arrow points from the 'Apply' button to the confirmation dialog.
- Panel 3 (Right):** Shows a confirmation dialog box titled 'CONFIRMATION' with the message 'PS - IIC Supplier 10 - TEST is enabled to Generative AI' and a 'Done' button.

Name	Status	Field
Discovery	Disabled	Keywords generations
Discovery	Disabled	Respond to Lead
Network Catalog	Disabled	Generate product summary and description in network catalog
Invoice	Disabled	Generate classified Invoice Rejection details.

Prerequisites, Restrictions, Cautions

Prerequisites

- None

Restrictions

- None

Cautions

- None

Feature Details

- **How the solution works:**
 - Gen AI preference for invoice is activated (one time)
 - Navigate to 'Rejected Invoice' tile and select an invoice
 - Activate 'Simplify errors with AI'
 - View rejection categories generated from the detailed rejection text
- **Solution limitations:**
 - None
- **The following slides explain system navigation for the scenario**

Feature Navigation – Step 1

Navigate to Rejected invoice tile

Navigation bar: Invoices (Last 31 days), Rejected invoices (Last 31 days), Overdue invoices - Not approved (Last 31 days), Overdue invoices - Approved (Last 31 days), Invoices pending approval (Last 31 days), Approved invoices pending payment (Last 31 days), Paid invoices (Last 31 days), Draft (Last 50)

Invoices (10)

▼ Edit filter | Last 365 days

Customers: Select or type selections

Invoice number: Type selection (Partial match selected, Exact match unselected)

Reference: Type input

Invoice date: Last 365 days

Invoice type: All

Show more | Apply | Reset

Invoice Number	Customer	Reference	Invoiced Date ↓	Amount	Routing Status	Invoice Status	From address	To address	Actions
In-invoice-0wnwerksdhf3423123	Automation Test Inc jxeilj b	po-order-0201-023200301	Feb 1, 2024	₹55,200.00 INR	Acknowledged	Rejected	Commscope India Private Limited, Goa, Goa, IND	Infosys Limited, Chennai, IN-TN, IND	...
In2k223hj4hj23h4hj234123	Automation Test Inc jxeilj b	po-order-j23h4gh23g4234f4301	Feb 1, 2024	₹55,200.00 INR	Acknowledged	Rejected	Commscope India Private Limited, Goa, Goa, IND	Infosys Limited, Chennai, IN-TN, IND	...
In2k2342rer344343123	Automation Test Inc jxeilj b	po-order-jk2235sdfsf4301	Feb 1, 2024	₹55,200.00 INR	Acknowledged	Rejected	Commscope India Private Limited, Goa, Goa, IND	Infosys Limited, Chennai, IN-TN, IND	...
In2k1332m34n2344343123	Automation Test Inc jxeilj b	po-order-jk22353244301	Feb 1, 2024	₹55,200.00 INR	Acknowledged	Rejected	Commscope India Private Limited, Goa, Goa, IND	Infosys Limited, Chennai, IN-TN, IND	...
In2k13323j4hk2j34343123	Automation Test Inc jxeilj b	po-o234jhkj234hk2j34123301	Feb 1, 2024	₹55,200.00 INR	Acknowledged	Rejected	Commscope India Private Limited, Goa, Goa, IND	Infosys Limited, Chennai, IN-TN, IND	...
In2k13423j4kk2j343123	Automation Test Inc jxeilj b	po-order-0201-023200301	Feb 1, 2024	₹55,200.00 INR	Failed	Rejected	Commscope India Private Limited, Goa, Goa, IND	Infosys Limited, Chennai, IN-TN, IND	...
In2k134jkk234j2343123	Automation Test Inc jxeilj b	po-order-0201-023200301	Feb 1, 2024	₹55,200.00 INR	Failed	Rejected	Commscope India Private Limited, Goa, Goa, IND	Infosys Limited, Chennai, IN-TN, IND	...

Feature Navigation – Step 2

View original rejection reason in selected invoice and activate GenAI feature in invoice

The screenshot displays the SAP Business Network interface for an invoice with ID In2k223hj4hj23h4hj234123. The interface includes a header with the SAP logo, 'Business Network', and 'Enterprise Account'. Below the header, there are tabs for 'Detail', 'Scheduled Payments', and 'History'. The main content area shows 'Rejected Invoice' details, including reasons and comments. A red box highlights a specific comment: 'Comment: Invoice is Rejected. There are invoices already processed against the PO line item. There are not enough funds left for the current invoice. Total Remaining: \$94,906.00000 USD. Please provide a valid PO and resubmit the invoice. (Eliza A. Chmielewska, 2023-01-23T01:53:15-08:00)Line item: Line Number:1 Part Number:Not Available Description:Malware 1.4 IDAM1.5 August 31, 2022 to January 31, 2023 Exceptions: PO Quantity Variance The quantity on the invoice line item, 1, is different from the quantity on the purchase order line item, 0. Please revise your invoice and resubmit.' Below this comment, there is a toggle switch labeled 'Simplify errors with AI'. A red box highlights this toggle, and an arrow points to it with the text 'Activate GenAI feature in invoice'. At the bottom of the interface, there is a 'Standard Invoice' section with a table of amounts and a 'Feedback' button. An 'Acknowledgement' dialog box is open, displaying a message about AI-generated content and a 'Don't show this message again' checkbox. The dialog box has 'Ok' and 'Cancel' buttons.

Detailed rejection text in invoice as raw input

Activate GenAI feature in invoice

Feature Navigation – Step 3

GenAI generates concise header and line level rejection categories

The screenshot shows the SAP Business Network interface for an invoice with ID In2k223hj4hj23h4hj234123. The 'Detail' tab is selected. The 'Simplified rejection reasons' section is highlighted in blue. It contains the following information:

- Customer internal reference number:** [Redacted]
- Generic level:**
 - Rejection category:** Insufficient Funds
 - Rejection reason detail:** Invoice is Rejected. There are no enough funds left for the current invoice. Total Remaining: \$94,906.00000 USD.
 - Rejection category:** Processed Invoices
 - Rejection reason detail:** Invoice is Rejected. There are invoices already processed against the PO line item.
- Line level:**
 - Line Number:** 1
 - Part Number:** Not Available
 - Line Description:** Malware 1.4 IDAM1.5 August 31, 2022 to January 31, 2023
 - Invoice field:** Item Quantity
 - Rejection category:** PO Quantity Variance
 - Rejection reason detail:** PO Quantity Variance. The quantity on the invoice line item, 1, is different from the quantity on the purchase order line item, 0. Please revise your invoice and resubmit.

At the bottom of the section, there is an 'Edit & Resubmit' button and a toggle for 'Simplify errors with AI' which is currently turned on.

Gen AI creates header level rejection categories

This screenshot is identical to the one on the left, showing the same invoice and rejection reasons. However, the 'Line level' section is highlighted in blue, and a mouse cursor is pointing at the 'Line level' heading. This highlights the line-level rejection categories.

Line level rejection categories are also generated automatically

Thank you.

Pushpendu Sarkar (p.sarkar@sap.com)

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