

# Invoice & Ticket Reconciliation Agent

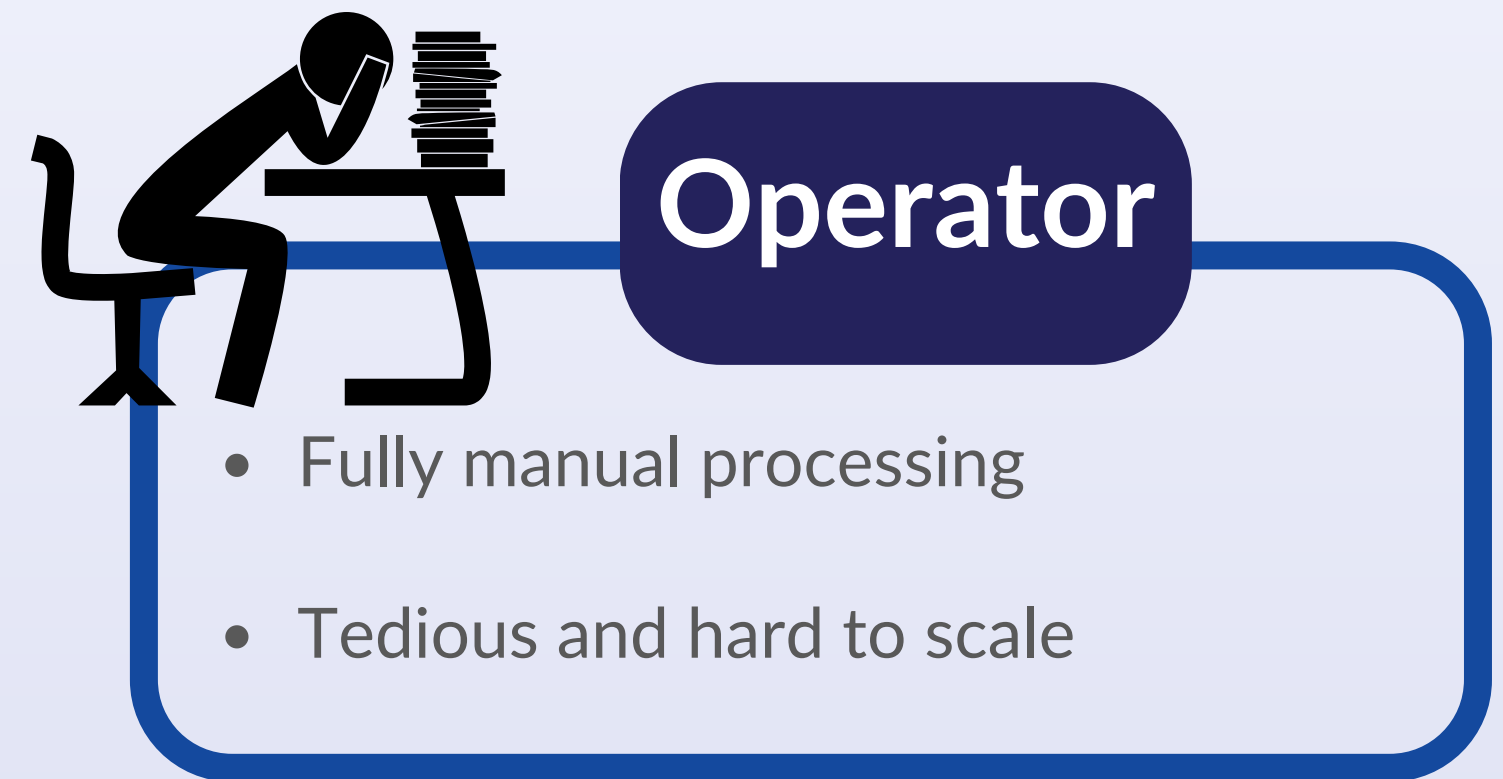
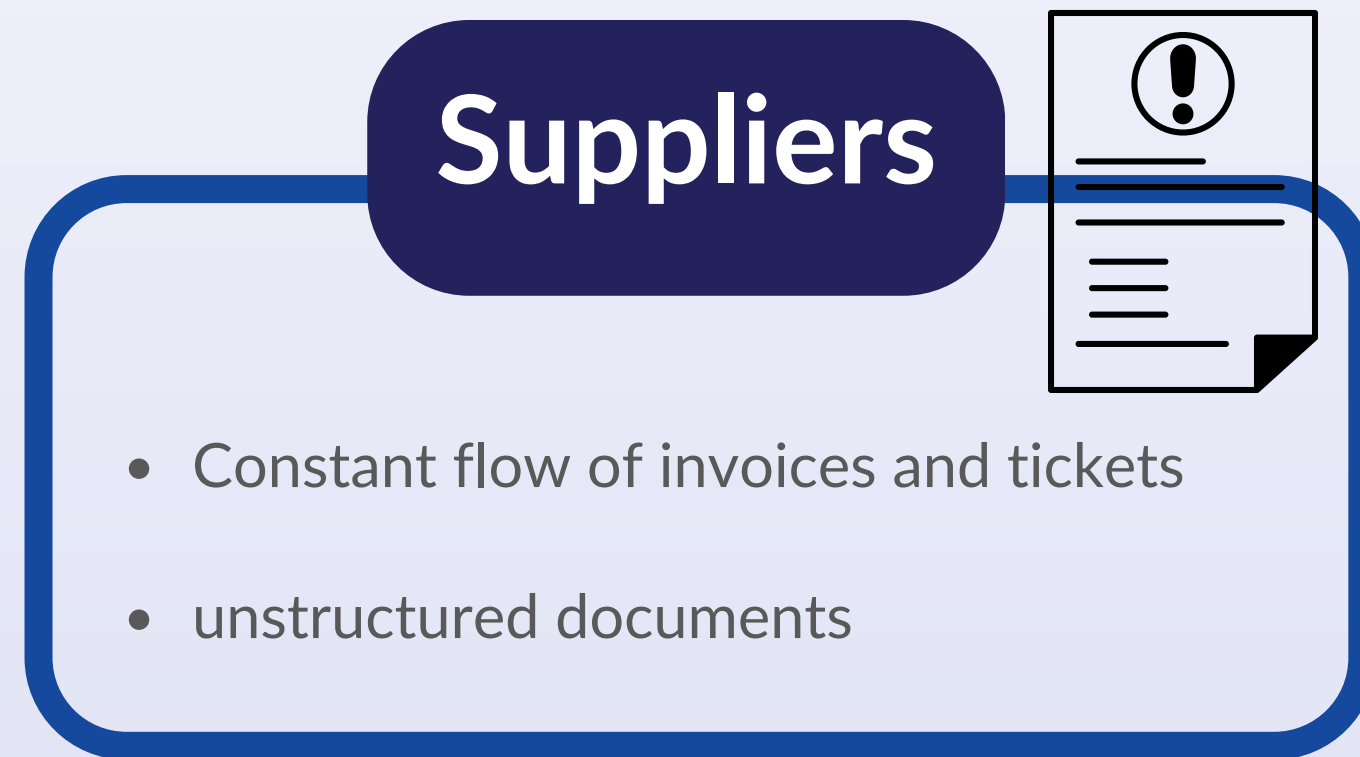
26/11/2025

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# Problem



# Data

- Invoices, tickets

Invoice Discrepancy Ticket	
Ticket ID	TCK-2025-001
Created Date	January 20, 2025
Created By	JANE SMITH (Accounts Payable Analyst)
Department	ACME ANALYTICS LLC – Finance
Status	Open
Priority	High
Issue Type	Amount mismatch

**GOTHAM OFFICE SUPPLIES INC.**  
350 5th Avenue, Suite 2100  
New York, NY 10118  
USA  
EIN: 12-3456789  
Email: billing@gotham-office.com

**INVOICE**  
Invoice #: INV-2025-003  
Invoice Date: January 10, 2025  
Due Date: February 04, 2025  
Currency: USD

**Bill To:**  
ACME ANALYTICS LLC  
123 Madison Avenue, 9th Floor  
New York, NY 10010  
USA  
ATTN: Accounts Payable

Item	Description	Qty	Unit Price	Line Total
1	Premium support (hours)	1	100.00	100.00
Subtotal				100.00
Sales Tax (NYC 8.875%)				8.875
Total Amount Due				108.875

**Payment Information**  
Bank: Bank of Metropolis  
Routing Number: 021000021  
Account Number: 987654321  
Payment terms: Net 30 days from invoice date.

- DB records

data > finance.db

Fi

Rows: 1

Filter 1 rows...

TABLES

invoices

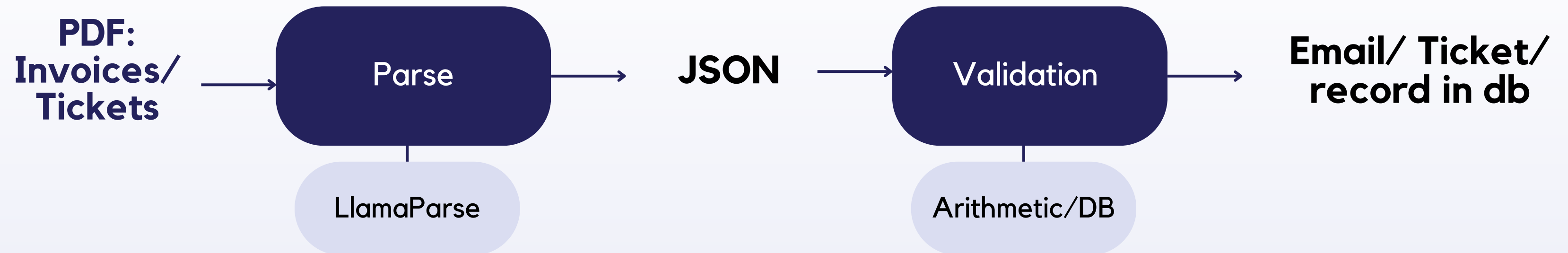
tickets

	invoic...	supplier_name	customer_name	invoice_d...	due_date	total_am...
	Filter	Filter...	Filter...	Filter	Filter	Filter
1	INV-2025-000	GOTHAM OFFICE SUPPLIES INC.	ACME ANALYTICS LLC	2025-01-10	2025-02-09	4376.78
2						



# Agent Solution

- An AI agent that reads invoices, reconciles them with your data, and only escalates exceptions to humans if needed.



# Workflow Invoice

- Agent reads & parses (Classify document type + Extract structured fields)
- Validation & Reconciliation (Check math + Compare with DB)
  - Math wrong : Draft and send email to supplier
  - math is correct : check for discrepancies against DB
    - if it is a new invoice : add to DB
    - If discrepancies found : create a ticket





# Workflow Ticket

- Agent reads & parses (Classify document type + Extract structured fields)
- Create ticket in DB



# Démonstration



# Value

- 01** Efficiency & cost
- 02** Systematic math checks and DB reconciliation
- 03** Scalability & transparency



# Difficulties / Possible Improvements

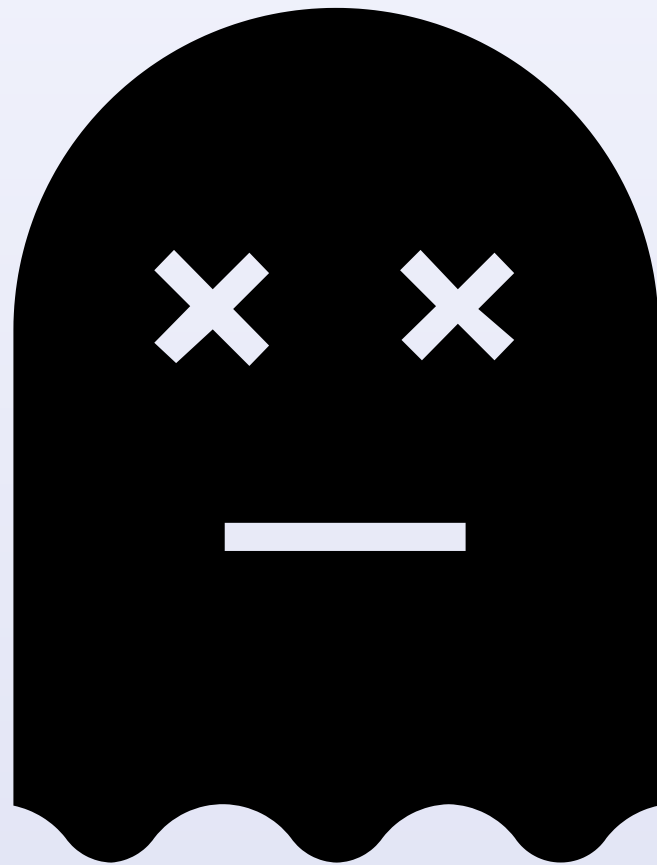
- 01** Dependent on PDF quality & LlamaParse
- 02** Reliable agent behavior
- 03** Limited robustness & monitoring
- 04** Security & access control basic



# Difficulties / Possible Improvements

- 01** More document types & flows
- 02** Stronger observability & control (Langfuse)
- 03** Validation
- 04** Data control & Cost (MinerU, full Ollama)
- 05** Human in the loop Control
- 06** cleaning the code





**Thank you for  
your attention!**

**Questions?**

