

COMPREHENSIVE INVOICE ANALYSIS REPORT

Invoice Number:	795 / 2025-26
Supplier:	Om Flex Printing
Total Amount:	₹20,979.40
Processing Date:	2025-11-08 13:55:23
Document Type:	B2B_INVOICE
AI Confidence:	52.5%

Validation Status:	<input checked="" type="checkbox"/> VALID
Duplication Status:	<input checked="" type="checkbox"/> DUPLICATE
Tests Performed:	15 validation tests
Processing Status:	<input checked="" type="checkbox"/> COMPLETED

EXECUTIVE SUMMARY

Invoice Assessment: REQUIRES REVIEW

Processing Confidence: 52.5%

Recommendation: MARK_AS_DUPLICATE

Key Findings:

- All arithmetic validations passed successfully
- Potential duplicate detected (95.0% confidence)
- 5 AI recommendations provided

Business Impact:

This assessment focuses on the business impact of the identified duplicate invoice (Invoice ID 7, Invoice Num: 795 / 2025-26, Amount: ■20,979.40) from "Om Flex Printing." The high confidence score (0.95) and exact match on invoice number and supplier make this a critical finding.

Business Impact Assessment: Invoice ID 7 (Duplicate)

Overall Conclusion: The detection of Invoice ID 7 as a highly confident duplicate represents a successful application of validation and duplication analysis. [See AI Reasoning section for full analysis]

INVOICE DETAILS

Field	Value
Invoice Number	795 / 2025-26
Invoice Date	2025-05-02
Supplier Name	Om Flex Printing
Supplier GSTIN	06ANSPK3486H1ZI
Buyer Name	Adani Intra & Der pvt. Ltd.
Taxable Value	₹17,830.00
Total Tax	₹3,150.60
Total Amount	₹20,979.40
Payment Terms	10 days

Line Items Details:

Item	HSN Code	Qty	Unit Price	Taxable Value	GST Rate	GST Amount
Item 1: Sandwich Board Au Di...	7318	4.00	₹750.00	₹3,000.00	18.0%	₹540.00
Item 2: Sandwich Board A3 Di...	7318	4.00	₹1,100.00	₹4,400.00	18.0%	₹792.00
Item 3: vinyl Print with ACP...	3920	0.00	₹0.00	₹6,120.00	18.0%	₹1,101.60
Item 4: star Fiex Print 3x5...	3921	0.00	₹0.00	₹510.00	18.0%	₹91.80
Item 5: Badge Print with saf...	4821	300.00	₹6.00	₹1,800.00	18.0%	₹325.20
Item 6: Flage print 3x2'...	5907	1.00	₹1,000.00	₹1,000.00	12.0%	₹120.00
Item 7: Transport charge...		1.00	₹1,000.00	₹1,000.00	18.0%	₹180.00

ARITHMETIC VALIDATION ANALYSIS

Validation Metric	Result
Total Tests Performed	15
Tests Passed	13
Tests Failed	2
Tax-related Failures (Ignored)	2
Critical Non-tax Failures	0
Suggestions Provided	7
Overall Status	■ VALID
Note	Tax-related validation failures are ignored

■ Valid Checks Log:

Test Name	Expected	Actual	Tolerance	Description
Line Item 1 Total	3000.00	3000.00	±0.05	quantity × unit_price should equal taxable_value
Line Item 2 Total	4400.00	4400.00	±0.05	quantity × unit_price should equal taxable_value
Line Item 5 Total	1800.00	1800.00	±0.05	quantity × unit_price should equal taxable_value
Line Item 6 Total	1000.00	1000.00	±0.05	quantity × unit_price should equal taxable_value
Line Item 7 Total	1000.00	1000.00	±0.05	quantity × unit_price should equal taxable_value
Line Item 1 GST Calculation	540.00	540.00	±0.05	taxable_value × gst_rate/100 should equal amount
Line Item 2 GST Calculation	792.00	792.00	±0.05	taxable_value × gst_rate/100 should equal amount
Line Item 3 GST Calculation	1101.60	1101.60	±0.05	taxable_value × gst_rate/100 should equal amount
... and 5 more valid checks				

Detailed Validation Results:

Test Name	Status	Expected	Actual	Error Message
Line Item 1 Total	■ PASS	3000.00	3000.00	
Line Item 2 Total	■ PASS	4400.00	4400.00	
Line Item 5 Total	■ PASS	1800.00	1800.00	
Line Item 6 Total	■ PASS	1000.00	1000.00	
Line Item 7 Total	■ PASS	1000.00	1000.00	
Line Item 1 GST Calculation	■ PASS	540.00	540.00	
Line Item 2 GST Calculation	■ PASS	792.00	792.00	
Line Item 3 GST Calculation	■ PASS	1101.60	1101.60	
Line Item 4 GST Calculation	■ PASS	91.80	91.80	
Line Item 5 GST Calculation	■ FAIL	324.00	325.20	Taxable(1800) × Rate(18%) ≠ Amount(325.2)

... and 12 more test results

AI Validation Analysis:

DUPLICATION DETECTION ANALYSIS

Analysis Metric	Result
Duplication Status	■ DUPLICATE DETECTED
Confidence Score	95.0%
Recommended Action	MARK_AS_DUPLICATE
Potential Matches Found	1
Analysis Method	Enhanced AI-Powered Detection

Potential Duplicate Matches:

Original Invoice	Match Type	Confidence	Matching Fields	Recommendation
795 / 2025-26	EXACT_INVOICE_NUMBER_SAME_COMPANY	95.0%	Invoice Number: 795 / 2025-26, Supplier: Om Flex Printing	HIGH CONFIDENCE DUPLICATE

Analysis Summary:

Invoice Analysis: 795 / 2025-26 Supplier: Om Flex Printing Amount: ■20,979.40 Found 1 potential duplicate(s): 1. 795 / 2025-26 (Confidence: 95.0%, Type: EXACT_INVOICE_NUMBER_SAME_COMPANY) ■ CONCLUSION: This invoice appears to be a DUPLICATE.

AI Duplication Analysis:

This analysis focuses on Invoice ID 7, identified as a highly confident duplicate based on the provided duplication detection results.

Invoice Duplication Analysis: Invoice ID 7 (Invoice Num: 795 / 2025-26)

Overall Conclusion:

Invoice ID 7 (795 / 2025-26) from "Om Flex Printing" is highly likely a duplicate of an previously processed invoice (Original Invoice ID 5, also 795 / 2025-26).

The system's recommendation to "MARKASDUPLICATE" is strongly supported by the evidence.
1.

Patterns That Indicate Potential Duplicates (Logic of Detection)

The duplication detection system has identified a very strong pattern indicating a duplicate based on the following logic:

- Exact Invoice Number Match: The most critical piece of evidence is the exact match of the invoice number: "795 / 2025-26".

Invoice numbers are generally intended to be unique identifiers issued by a supplier for each distinct transaction.

An exact match is a primary red flag.

*Same... [Analysis truncated for space]

AI REASONING & RECOMMENDATIONS

AI Analysis Metric	Result
Overall Confidence	52.5%
Analysis Type	Comprehensive Validation & Duplication
Processing Status	Completed Successfully
Recommendations Generated	5

AI-Generated Recommendations:

1. Investigate potential duplicate submission
2. Cross-reference with payment records
3. Implement additional duplicate prevention controls
4. Here are 4 specific, actionable recommendations based on the analysis results:
5. 1.
Immediate Action & System Automation:

Business Impact Assessment:

This assessment focuses on the business impact of the identified duplicate invoice (Invoice ID 7, Invoice Num: 795 / 2025-26, Amount: **■20,979.40**) from "Om Flex Printing." The high confidence score (0.95) and exact match on invoice number and supplier make this a critical finding.

Business Impact Assessment: Invoice ID 7 (Duplicate)

Overall Conclusion: The detection of Invoice ID 7 as a highly confident duplicate represents a successful application of validation and duplication analysis.

However, the very existence of such a duplicate highlights potential vulnerabilities in upstream processes that, if unaddressed, could lead to significant negative business impacts.

1.

Financial Risk Level

The financial risk associated with this specific duplicate is High if not detected and prevented, and Moderate in terms of the cost of detection and resolution even when caught.

- Direct Financial Loss (High if undetected): The most immediate risk is a double payment of **■20,979.40**. If the original Invoice ID 5 was already paid, paying Invoice ID 7 would result in an erroneous outflow of funds, directly impacting the company's cash position and profitability.
- Cash Flow Impact: Even if the amount is eventually recovered, the initial double payment ties up working capital unnecessarily.
- Cost of Recovery (Moderate): Should a double payment occur, the process of identifying the overpayment, contacting the supplier, and recovering the funds involves significant administrative effort (AP staff time, bank charges, potential legal fees), which can easily exceed the initial invoice amount for smaller transactions.
- Fraud Risk (Potential): While this could be an innocent supplier error, repeated duplicate submissions, especially if they go undetected, could indicate an attempt at fraudulent billing, either by the supplier or an internal party.
- Audit Adjustments: Undetected duplicates lead to overstated expenses and understated profits, requiring costly audit adjustments and potentially impacting financial reporting accuracy.

2.

Process Efficiency Impact

The detection of this duplicate, while beneficial, indicates inefficiencies in the overall procure-to-pay (P2P) process.

- Manual Intervention & Rework: Even with automated detection, the duplicate requires manual

review, validation, and a decision (e.g., mark as duplicate, reject).

This diverts AP staff from processing legitimate invoices.

- Increased Processing Cycle Time: The need to investigate and resolve duplicates adds steps and time to the invoice processing workflow, potentially delaying payments to other suppliers or legitimate invoices.
- Resource Utilization: Time spent by AP staff, supervisors, and potentially procurement or business units in resolving duplicate issues is unproductive and represents a wasted resource.
- Erosion of Trust: Frequent duplicate submissions, even if caught, can erode trust in the supplier relationship and the efficiency of internal processes.
- System Overload: If the volume of duplicates is high, the detection system itself might generate too many alerts, leading to "alert fatigue" and potentially legitimate issues being overlooked.

3.

Compliance Considerations

The presence of duplicates, particularly if they lead to double payments, has significant compliance implications.

- Internal Controls Failure: Allowing a duplicate payment to occur signifies a breakdown in internal controls related to accounts payable and expenditure management.
This is a critical finding for internal and external auditors.
- Audit Findings: Auditors (internal and external) will flag duplicate payments as a material weakness or significant deficiency in financial controls, potentially leading to qualified audit opinions or increased audit fees.
- Financial Reporting Accuracy: Duplicate payments lead to misstatements in financial records (overstated expenses, incorrect balance sheet figures), impacting the reliability of financial statements.
- Tax Implications: Double expensing an invoice could lead to incorrect tax calculations and potential penalties from tax authorities if not rectified.
- Company Policy Adherence: Most companies have strict policies against duplicate payments. Allowing them to occur indicates non-adherence to established financial policies.
- Regulatory Scrutiny: In regulated industries, control failures can attract scrutiny from regulatory bodies, potentially leading to fines or reputational damage.

4.

Operational Recommendations

Based on the high-confidence duplicate detection, the following operational recommendations are crucial:

1.

Immediate Action on Invoice ID 7:

- * Prevent Payment: Ensure Invoice ID 7 is immediately flagged as a duplicate and blocked from any payment processing.
- * Mark as Duplicate: Formally mark the invoice in the system as a duplicate of Invoice ID 5, linking them for audit trail purposes.

2.

Root Cause Analysis & Supplier Management:

Investigate Submission Reason: Determine why* "Om Flex Printing" submitted the invoice a second time.

Was it an internal error on their part, a system glitch, or an attempt to get paid twice?

- * Supplier Communication: Contact "Om Flex Printing" to inform them of the duplicate submission and clarify that payment has been or will be made only for the original invoice (Invoice ID 5).

Reinforce proper invoicing procedures.

- * Supplier Performance Review: If this is a recurring issue with this supplier, consider it in supplier performance reviews and potentially implement stricter controls for their invoices.

3.

Process and System Enhancements:

- * Automated Blocking: For high-confidence duplicates (e.g., confidence score > 0.90 with exact invoice number/supplier match), the system should automatically block the invoice from further processing and require an explicit, authorized override to proceed.
- * Workflow Integration: Ensure the duplicate detection results are seamlessly integrated into the AP workflow, triggering alerts and actions for AP staff.

Pre-Payment Validation: Strengthen pre-payment validation steps to include robust duplicate checks before* payment runs are initiated.

- * 3-Way Matching Reinforcement: Ensure that 3-way matching (invoice, purchase order, goods receipt) is consistently applied.

While this duplicate is caught by invoice number, robust 3-way matching can prevent other types of duplicate issues (e.g., duplicate POs, duplicate receipts).

* Master Data Management: Regularly review and cleanse supplier master data to prevent issues arising from multiple entries for the same supplier.

4.

Internal Controls & Training:

* AP Staff Training: Provide ongoing training to AP staff on identifying and handling duplicate invoices, emphasizing the financial and compliance risks.

* Policy Review: Review and update internal policies regarding invoice processing and duplicate handling, ensuring clear guidelines and escalation paths.

* Audit Trail: Ensure all actions taken on duplicate invoices (e.g., marking as duplicate, rejection, communication with supplier) are logged and auditable.

5.

Monitoring and Reporting:

* Duplicate Reporting: Implement regular reporting on duplicate invoices detected, including supplier, amount, and root cause.

This helps identify trends and problematic suppliers.

*Key

AI Final Analysis:

Executive Summary: Duplicate Invoice Detection - Invoice ID 7

Overall Assessment:

Invoice ID 7 (Invoice Num: 795 / 2025-26) from "Om Flex Printing" has been identified as a highly confident duplicate of a previously processed invoice (Original Invoice ID 5, same invoice number).

This detection successfully prevented a potential erroneous double payment of □20,979.40.

Confidence Assessment:

The system's confidence score for this duplicate is 0.95 (95%), indicating near-certainty.

This high confidence is based on an exact match of the invoice number and supplier, which are the strongest indicators of a duplicate.

Key Business Impact:

While successfully detected, the existence of this duplicate highlights significant business risks if such issues go unaddressed.

These include direct financial loss from double payments, negative impacts on cash flow, increased administrative costs for recovery, and potential fraud risk.

Furthermore, it points to inefficiencies in our procure-to-pay process, leading to manual rework, delayed processing, and critical compliance concerns regarding internal controls, audit findings, and financial reporting accuracy.

Key Action Items:

1.

Immediate Action: Ensure Invoice ID 7 is immediately blocked from payment and formally marked as a duplicate of Invoice ID 5 in the system.

2.

Root Cause & Supplier Engagement: Investigate why "Om Flex Printing" submitted the invoice a second time and communicate with them to reinforce proper invoicing procedures.

3.

Automated Control Enhancement: Implement automated blocking for high-confidence duplicates (e.g., >90% confidence with exact invoice/supplier matches) and strengthen pre-payment validation steps.

4.

Process & Training Review: Review and update internal AP policies, reinforce 3-way matching, and provide ongoing training to staff on identifying and resolving duplicate invoices to prevent future occurrences.

TECHNICAL DETAILS & DATABASE INFORMATION

Document Classification:

Classification Attribute	Value
Document Type	B2B_INVOICE
Classification Confidence	85.0%
Keywords Detected	invoice, bill, gstin, gst, invoice no, igst, cgst, sgst, total, amount
Processing Method	AI-Powered Classification

Database Records Created:

Record Type	Database ID
Document Record	7
Invoice Record	7
Supplier Company	2
Buyer Company	3

Processing Metadata:

- Processing Timestamp: 2025-11-08 13:55:23
- Source Filename: 3P140001#5001866978_1762590212745.pdf
- Processing Time: Not recorded
- Errors Encountered: 0

This report was generated by the Intelligent Invoice Processing System. All analysis results are based on AI-powered validation and duplication detection algorithms.