

# Use Case Document: Rebate Recovery for Medical Supplies Vendor Contracts

## 1. Overview

This use case focuses on automating and improving the rebate recovery process for locally negotiated medical supplies vendor contracts. The goal is to streamline tracking, validation, and forecasting of rebates, replacing a manual, error-prone process with an efficient, scalable solution that leverages AI and data integration.

## 2. Objectives

- **Primary Objective:** Automate the rebate recovery process to reduce manual effort, improve accuracy, and enhance scalability.
- **Secondary Objectives:**
  - Streamline contract term extraction and codification.
  - Improve handling of contract amendments.
  - Enhance item matching across inconsistent data sources.
  - Support compliance reporting and forecasting.
  - Recommend or generate SQL logic for contract codification.
  - Identify patterns for a standardized data architecture.

## 3. Stakeholders

- **Contract Management Team:** Responsible for receiving, interpreting, and managing vendor contracts.
- **Finance Team:** Handles validation and reconciliation of rebates with general ledger data.
- **Data Analysts:** Develop and maintain Tableau dashboards for tracking and forecasting.
- **Vendors:** Provide contracts and amendments, and make rebate payments.
- **Compliance Team:** Ensures adherence to contractual obligations and regulatory requirements.

## 4. Current Process

The current rebate recovery process involves multiple manual steps:

1. **Receiving Agreements:** Contracts and amendments are received from vendors.

2. **Tracking:** Contracts are manually tracked, often requiring clarification from vendors.
3. **Linking Contract Numbers:** Contract numbers are matched to items in the item master.
4. **Extracting and Codifying Terms:** Contract terms (e.g., timelines, rebate rates, non-standard fiscal quarters) are manually extracted and codified.
5. **Data Integration:** Data is loaded into Tableau dashboards for visualization.
6. **Validation and Reconciliation:** Rebate data is validated against general ledger records to ensure accuracy.
7. **Compliance Reporting:** Manual generation of compliance forms and reports.

## 5. Pain Points

1. **Manual Extraction of Contract Terms:** Extracting timelines, dates, and nuanced terms (e.g., non-standard fiscal quarters) is time-consuming and requires vendor clarification.
2. **Handling Amendments:** Reviewing original agreements and multiple amendments increases complexity and manual workload.
3. **Item Matching Challenges:** Inconsistent contract numbers or item descriptions make matching to the item master difficult.
4. **Market Share and Competitor Identification:** Vague contract language requires fuzzy matching to determine items included in market share calculations.
5. **Data Quality Issues:** Errors or inconsistencies in Premier and item master data necessitate additional logic (e.g., OR statements) for accurate matching.
6. **Custom SQL Logic for Each Contract:** High variability in contract terms requires custom SQL logic, limiting scalability.
7. **Validation and Reconciliation:** Lumped payments or payments spanning multiple contracts complicate reconciliation with general ledger data.
8. **Compliance Reporting:** Manual effort is required to generate compliance forms and reports.
9. **Limited Efficiencies of Scale:** Lack of standardization makes each contract a significant work effort, hindering scalability.

## 6. Proposed Solution

### 6.1 Automation with AI

- **Contract Term Extraction:** Use AI to automatically extract timelines, dates, and nuanced terms from contracts, reducing manual effort and errors.

- **Amendment Handling:** Implement AI to process amendments by cross-referencing original agreements and updates, maintaining a consolidated view of contract terms.
- **Prompt-Based Queries:** Enable AI-driven, prompt-based queries to allow users to quickly retrieve contract details or resolve ambiguities.
- **SQL Logic Generation:** Leverage AI to recommend or generate SQL logic for codifying contract terms, reducing the need for custom coding per contract.
- **Pattern Identification:** Use AI to identify patterns in contract data to support the development of a standardized data architecture.

## 6.2 Data Integration and Matching

- **Fuzzy Matching for Item Identification:** Implement fuzzy matching algorithms to improve item matching across inconsistent data sources, addressing vague or broad contract language.
- **Data Quality Improvement:** Introduce logic to handle errors or inconsistencies in Premier and item master data, such as OR statements for robust matching.
- **Standardized Data Architecture:** Develop a unified data model to reduce variability and enable scalability.

## 6.3 Visualization and Reporting

- **Tableau Dashboards:** Enhance dashboards to support real-time tracking, forecasting, and compliance reporting.
- **Compliance Automation:** Automate the generation of compliance forms and reports to reduce manual effort.

## 6.4 Validation and Reconciliation

- **Automated Reconciliation:** Develop tools to match expected rebates with actual payments, handling lumped payments and multi-contract scenarios.
- **Integration with General Ledger:** Streamline data flows to ensure accurate validation against financial records.

## 7. Expected Benefits

- **Reduced Manual Effort:** Automation of contract term extraction, amendment handling, and compliance reporting.
- **Improved Accuracy:** Enhanced item matching and data quality reduce errors in rebate calculations.
- **Scalability:** Standardized data architecture and AI-generated SQL logic enable efficient processing of multiple contracts.

- **Enhanced Compliance:** Automated compliance reporting ensures vendors meet contractual obligations.
- **Better Forecasting:** Improved dashboards provide accurate, real-time insights for rebate forecasting.

## 8. Assumptions

- Access to vendor contracts and amendments in digital formats.
- Availability of Premier and item master data for integration.
- Tableau infrastructure is in place for dashboard enhancements.
- AI tools are compatible with existing systems for contract analysis and SQL generation.

## 9. Constraints

- Variability in contract terms may require ongoing AI training.
- Data quality issues in external sources (e.g., Premier data) may persist.
- Initial setup of AI and data integration tools may require significant resources.

## 10. Next Steps

1. Conduct a pilot to test AI-driven contract term extraction and amendment handling.
2. Develop and test fuzzy matching algorithms for item identification.
3. Design a standardized data architecture for contract data.
4. Enhance Tableau dashboards with real-time tracking and compliance reporting features.
5. Train staff on new tools and processes.
6. Monitor and refine AI models to improve accuracy and scalability.