

Phase II: Business Process Modeling — CustoVision MIS

Objective

Model the business process for the CustoVision MIS, from customer transaction to inventory update.

1. Scope Definition

Process participants: Sales Staff, CustoVision MIS, Manager, and Inventory Department. The workflow includes sales data entry, automated forecasting and alerts, managerial review, and stock replenishment. Outcomes: accurate demand forecasts, automated alerts, and evidence-based stock management.

2. Key Entities & Responsibilities

- Sales Staff: Record and submit customer transactions.
- CustoVision MIS: Automatically generates forecasts, classifies customers, compares demand to stock, and triggers low-stock alerts.
- Manager: Reviews alerts and decides on orders.
- Inventory Department: Evaluates requests, approves purchase orders, and updates inventory.

Data Sources: Sales_History, Products, Customers, Forecasts, Alerts, Decision_Log.

3. Process Flow (Swimlanes)

- Start/End: Circles mark initiation/completion.
- Activities: Rounded rectangles for manual (sales entry, review) and automated (forecasting, classification) tasks.
- Decisions: Diamonds for key choices (e.g., "Predicted Demand > Stock?").

Flow: Sales data input → MIS processes/forecasts → Manager reviews alerts → Inventory replenishes stock.

4. Data-Driven Decisions

- Forecasting: PL/SQL functions compute demand using historical sales.
- Stock Comparison: System checks demand vs. inventory and triggers alerts.
- Managerial Action: Decisions based on forecast data, confidence scores, and reorder recommendations.
- Feedback Loop: Inventory updates refine models continuously.

5. Impact & Analytics

- Impact: Increases inventory accuracy, prevents stockouts, optimizes purchasing, lowers risk.
- Analytics: Historical data in Decision_Log allows performance tracking, model refinement, and predictive insights for strategy.

Conclusion

The swimlane diagram clearly models CustoVision's data flow, combining automated analytics with human oversight. This supports data-driven decisions, follows MIS best practices, and adds measurable value in inventory and customer management.