**Expanded Use Case**

**Use Case:** Predictive Analytics for Vendor Sales

Actors: Vendor, System

Description: A vendor uses the Predictive Analytics feature of VendorInsight to forecast sales, optimize inventory, and make informed business decisions.

Typical Course of Events:

|  |  |
| --- | --- |
| Actor Action | System Response |
| 1. Actor logs into the dashboard and requests sales forecasting. |  |
|  | 2. System analyzes historical sales data and market trends using machine learning algorithms and provides a sales forecast. |
| 3. Actor queries for inventory optimization. |  |
|  | 4. System calculates optimal inventory levels using predictive analytics and suggests restocking levels. |

Alternative Courses:

Line 2: If there's insufficient historical sales data, the system notifies the vendor.

**Use case: Personalized Recommendation system**

Actors: Customer, System

Description: The system generates personalized product recommendations for customers based on their browsing history and preferences.

Typical Course of Events:

|  |  |
| --- | --- |
| Actor Action | System Response |
| Actor browses products |  |
|  | System tracks the browsing history and preferences |
| Actor views a product. |  |
|  | System suggests similar products based on the customer’s browsing history and preferences. |

Alternative Courses:

Line 4: For a new customer with no browsing history, the system uses general trends and popular items for recommendations.

Use Case: Sentiment Analysis of Customer Reviews

Actors: Customer, System

Description: The system analyzes customer reviews and feedback for sentiment to inform product recommendations and vendor insights.

Typical Course of Events:

|  |  |
| --- | --- |
| Actor Action | System Response |
| Actor submits a product review |  |
|  | System analyzes the review for sentiment |
|  | System updates the recommendations for the customer accordingly |
|  | System updates the products rating and sends analysed data to vendor dashboard. |

Alternative Courses:

Line 3: In case of ambiguous feedback the system uses it with lower weighting in the recommendations.

Use case: Multi-Vendor Platform Management

Actors: Vendors, System

Description: Vendors manage their stores, view analytics, and adjust pricing and inventory through a centralized dashboard.

Typical Course of Events:

|  |  |
| --- | --- |
| Actor action | System Response |
| Actor logs into their dashboard to manage store |  |
|  | System provides an overview of sales, customer feedback, and inventory status. |
| Actor updates product listings. |  |
|  | System reflects changes in real-time on the platform |