**Business Intelligence Requirement Document**

**Project Title**: Sales & Operations BI Dashboard  
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**Version**: 1.0

**🔸 Purpose**

The purpose of this document is to outline the data requirements and relationships for building an enterprise-level reporting solution. The solution will enable detailed sales, customer, employee, and product analysis using Power BI.

**🔸 Data Entities & Descriptions**

| **Entity** | **Description** |
| --- | --- |
| **Calendar** | Master date table used for time-based analysis including fiscal periods, months, weeks, and holidays. |
| **CancelledSales** | Records of all sales orders that were cancelled, including reasons and timestamps. |
| **Currency** | Exchange rate and currency code information to support multi-country sales reporting. |
| **Customer** | Master customer data including customer ID, name, demographics, and segmentation. |
| **Employee** | Employee information including sales reps, their departments, roles, and active status. |
| **ImageProducts** | Product catalog with image URLs and metadata for visual-based reporting. |
| **InternationalSales** | Sales made outside the local region, including region, tax, and duties information. |
| **InvoiceSales** | Finalized sales invoices used for revenue recognition, payment tracking, and reconciliation. |
| **Location** | Master location data for stores, warehouses, and distribution centers. |
| **OrderSales** | Order-level transaction data prior to invoicing, including cart and fulfillment status. |
| **PartnerSales** | Sales conducted via third-party partners or channels. |
| **Product** | Product master data including SKU, category, brand, pricing, and hierarchy. |
| **ReturnSales** | Records of returned items, including return reasons, dates, and restocking status. |

**🔸 Key Functional Requirements**

1. **Sales Analysis**
   * Total, cancelled, invoice, return, and partner sales
   * International vs domestic sales breakdown
   * Sales by product, location, employee, and customer segment
2. **Time-Based Reporting**
   * Year-over-year, quarter-to-date, and month-to-date trends
   * Compare sales across fiscal vs calendar months
3. **Product Performance**
   * Best-selling products
   * Sales vs returns analysis
   * Visual representation using product images
4. **Customer Insights**
   * New vs returning customers
   * Customer lifetime value (CLV)
   * Region-based segmentation
5. **Employee & Partner Performance**
   * Employee-wise sales contribution
   * Partner channel performance metrics
6. **Currency Conversion Support**
   * Ability to convert sales in real time using daily exchange rates

**🔸 Technical Requirements**

* **Source Systems**: ERP (Sales, Invoicing), CRM (Customer, Employee), DAM (Images), Currency API
* **Data Refresh**: Daily incremental refresh
* **Storage Mode**: Import for dimension tables; Hybrid (DQ + Import) for large fact tables
* **Security**: Row-Level Security (RLS) based on role (Sales Rep, Manager, Partner)
* **Deployment**: Power BI Service with deployment pipelines (Dev > UAT > Prod)

**🔸 Entity Relationship Overview (Simplified)**

Customer ----< OrderSales ----< InvoiceSales ----< ReturnSales

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Product ---------|

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Employee --------|

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Location --------|

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Currency --------|

|

PartnerSales ----|

|

CancelledSales --|

|

ImageProducts ---|

**🔸 Next Steps**

* Validate data availability and source connections
* Design semantic model and Power BI dataset
* Define KPIs and visual layout
* Begin development sprints