**Plan for a Powerful Power BI Dashboard**

**1️⃣ Data Preparation**

* **Clean & transform** in Power Query:
  + Remove blanks, fix date formats, normalize column names.
  + Ensure consistent naming for products, regions, currencies, etc.
  + Create **relationships** between datasets (e.g., Sales ↔ Products, Expenses ↔ Departments).
* **Merge** datasets where appropriate (e.g., Amazon + International + Sale Report into a unified sales fact table).

**2️⃣ Data Modeling (Star Schema)**

* **Fact tables**: Sales, Expenses, Profit & Loss.
* **Dimension tables**: Date, Product, Region, Customer, Category.
* **Calculated columns/measures** in DAX:
  + Total Sales = SUM(Sales[Amount])
  + YOY Growth = ( [This Year Sales] - [Last Year Sales] ) / [Last Year Sales]
  + Profit Margin, Average Order Value, Expense-to-Sales Ratio.
  + Currency conversion if needed.

**3️⃣ Advanced Power BI Features**

* **Dynamic Date Filters**: Relative date slicers (Last 7 days, Last Month, YTD, QTD).
* **Drill-through pages**: Click on a region or product to see a deep dive.
* **Bookmarks & Buttons**: Switch between views (Sales View, Profit & Loss View, Expense Breakdown).
* **Conditional Formatting**: Highlight underperforming categories with red; top performers with green.
* **Tooltip Pages**: Hover to see additional KPIs without cluttering the main view.
* **Scenario Analysis**: Use **What-if parameters** (e.g., price increase %, cost reduction %) to see impact on profit.
* **Custom Visuals**:
  + KPI Cards with targets.
  + Waterfall chart for P&L breakdown.
  + Decomposition Tree for expense analysis.
  + Map visuals for sales by geography.
  + Smart Narrative for automated insights.

**4️⃣ Dashboard Pages**

1. **Executive Summary** (KPIs, trends, top & bottom performers)
2. **Sales Performance** (Domestic + International split, category analysis, channel comparison)
3. **Expense Analysis** (department-wise, month-wise, vs budget)
4. **Profit & Loss View** (waterfall, variance vs previous period)
5. **Cloud Warehouse Comparison** (cost vs performance benchmarking)
6. **Forecast & Scenario Simulation** (based on historical trends + what-if)

**5️⃣ Interactivity & Automation**

* Set up **refresh schedule** for real-time data.
* Implement **role-based security** (RLS) to restrict sensitive data.
* Use **dynamic titles** that change based on filters.
* Add **Power Automate buttons** for exporting reports or sending alerts.

| **Column Name** | **Meaning** | **Notes & Usage in Power BI** |
| --- | --- | --- |
| **index** | Row number in the CSV export. | Not needed in Power BI, can be removed. |
| **Order ID** | Unique identifier for each Amazon order. Format: XXX-XXXXXXXX-XXXXXXX. | Primary key for order-level analysis. |
| **Date** | Order date (MM-DD-YY). | Convert to *Date* type, create Year/Month columns for trend analysis. |
| **Status** | Current order status (e.g., Shipped, Cancelled, Shipped - Delivered to Buyer). | Useful for filtering out cancellations or tracking delivery performance. |
| **Fulfilment** | Who fulfills the order: Merchant (you ship) or Amazon (FBA). | Useful for cost/profitability segmentation. |
| **Sales Channel** | Marketplace where the sale occurred (e.g., Amazon.in). | Good for filtering when multi-channel selling. |
| **ship-service-level** | Shipping speed level (e.g., Standard, Expedited). | Can analyze cost/time trade-offs. |
| **Style** | Product style code (e.g., SET389, JNE3781). | Helps group similar products. |
| **SKU** | Stock Keeping Unit: your internal product code. | Key for joining with product details/pricing tables. |
| **Category** | Product category (e.g., kurta, Set). | Important for category-wise sales reports. |
| **Size** | Size variant (e.g., L, M, XL). | Enables size-based inventory & sales analysis. |
| **ASIN** | Amazon Standard Identification Number. Unique to product listing. | Can be used for cross-marketplace mapping. |
| **Courier Status** | Real-time shipment tracking status. | Not always filled; can be used for logistic performance metrics. |
| **Qty** | Quantity of units in the order. | Needed for total units sold calculation. |
| **currency** | Currency code (INR). | Needed for multi-currency reports. |
| **Amount** | Sales amount for the order line item. | Core metric for revenue. |
| **ship-city** | Destination city for the shipment. | Enables city-level sales mapping. |
| **ship-state** | Destination state. | Useful for state-level geographic analysis. |
| **ship-postal-code** | Delivery postal PIN code. | Can be used for detailed geo analysis. |
| **ship-country** | Destination country (IN for India). | For domestic vs international segmentation. |
| **promotion-ids** | IDs of applied promotions or offers. | Can measure impact of promotions on sales. |
| **B2B** | Boolean (True/False) indicating if sale is business-to-business. | Segment analysis for wholesale vs retail. |
| **fulfilled-by** | Easy Ship, FBA, or blank. | Used for logistics efficiency tracking. |
| **Unnamed: 22** | Empty column from export. | Safe to remove. |