**Web Events and Sales Orders Dashboard with Analysis 2013 - 2017**

**Analysis Finding**

The data shows that the year 2016 had the highest total orders with around 1.05M and $5.89M revenues, With Northeast region contributing $1.89M in total revenue (18.14%).  
 **About Dataset**

1. **Orders Dataset**:
   * Contains details of customer orders, including order dates, total order amounts (in USD), and associated customer IDs.
   * Help analyze revenue trends, customer purchasing behavior, and seasonal patterns.
2. **Accounts Dataset**:
   * Represents customer account information such as account IDs, names, and sales representative assignments.
   * Useful for understanding customer demographics and their engagement with the company.
3. **Regions Dataset**:
   * Defines geographical regions managed by sales representatives, including region names and IDs.
   * Enables regional sales performance analysis and comparative insights across regions.
4. **Sales Representatives Dataset**:
   * Includes data on sales representatives, their IDs, names, and the regions they serve.
   * Helps link customer accounts to specific regions and analyze rep performance.
5. **Web Events Dataset**:
   * Logs customer interactions on the company's website, including timestamps, event types, and user IDs.
   * Helps track user activity, identify trends in website engagement, and optimize the online user experience.

**DATA ANALYSIS REQUEST**

**Subject:** Request for Web Events and Sales Orders Dashboard with Analysis  
 **Objective:** Our goal is to analyze the correlation between web traffic channels and sales performance across different regions. We would like to track key metrics such as web event volume, channel effectiveness, order quantity breakdown, and sales revenue. The analysis should be presented via a Power BI dashboard for easy reporting and decision-making.  
  
**Key Metrics and Insights Requested:**

1. **Web Traffic Analysis:**
   * Volume of web events segmented by channel
   * Identify which web channels are generating the most engagement based on the number of web events.
   * Trends in web events over time
2. **Sales Performance Analysis:**
   * Total orders by accounts and associated sales representative
   * Breakdown of order quantities (standard, gloss, poster) and sales revenue (standard, gloss, poster)
3. **Regional Sales Performance:**
   * Sales revenue and order quantities by region and sales representative.
   * Identify top-performing regions based on total total amount and number of orders.
4. **Customer Account Insights:**
   * Overview of account performance: total quantity and revenue per account.

**Deliverables:**

Power BI Dashboard:

* + Overview Dashboard of **Web Traffic Metrics, Regional Sales Performance**
  + A Detailed **Sales Performance Analysis** on another page

**THE ACTUAL PROCESS  
Data Preparation**

* + Clean and Transform Data Using Power Query
    - Rename all id column to their respective table name + id to avoid confusion for later in data modeling
    - Split the Date-Time columns into Date and Time.
  + Create Calendar Table using the DAX formula below
    - The dataset have a date-time column which means we need to create a stand alone calendar table

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**Data Modeling**

* + Create Relationship with other tables

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**Wire Framing**

* + Create a **visual blueprint** or **sketch** of how data and insights will be organized and presented

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**Data Visualization**

* + Create a Dynamic Dashboard that will show key metrics and provide Insights.

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