**Company Analytics Dashboard**

**Abstract**

* Context: Understanding employee working preferences and weekend work patterns is crucial for optimizing workforce management.
* Goal: To provide actionable insights into how employees work, particularly focusing on weekend remote work, using data analysis and visualization.

**Software Requirements:**

* Power BI Desktop: For data analysis and visualization.
* Database Management System (DBMS): For storing and managing raw data (e.g., SQL Server, Oracle).
* Excel: For importing data

**Architecture:**

* Data Source: Employee data (timesheets, login records, surveys).
* ETL Process: Extract, Transform, Load using Power BI’s Power Query.
* Visualization Layer: Power BI for creating and sharing reports.

**Process Flow**

1. **Data Collection:** Gather data on employee working preferences and weekend work patterns.The dataset that we have uses is a company data collection.
2. **Data Cleaning & Transformation:** Leveraged advanced SQL to transform company analytics data by modifying data types and removing unnecessary columns, ensuring data sets were optimized for analytics and reporting.

**Steps:**

* **Data Cleaning:** Removed duplicates, handle missing values, and correct inconsistencies (e.g., standardizing location names).
* **Data Transformation:** Converted data types, created new calculated columns (e.g., work from home percentage), and aggregated data as needed (e.g., by week, month, or department).
* **Tools:** Used Power Query in Power BI for data cleaning and transformation tasks.

1. **Data Analysis:** Utilized PowerBI to identify, analyze, and visualize trends or patterns in complex data sets, providing valuable insights into business processes, financial calculations, capacity/demand forecasting, data flows, and host systems.
2. **Visualization:** Analyzed remote work trends and preferences using Advanced Excel Calculations to determine the percentage of employees working from home, informing strategic workforce planning and aligning with relevant KPI metrics.

**Visualizations:**

* **Bar Chart:** To show the percentage of employees preferring different working arrangements (e.g., home, office, hybrid).
* **Pie Chart:** To illustrate the proportion of employees working from home during weekends.
* **Line Chart:** To display trends over time (e.g., increase in home working during weekends).
* **Table:** To show detailed data by department, role, or location.

1. **Reporting:** Applied advanced PowerPoint and Think-Cell skills to interpret and present data requirements and specifications, using advanced statistical techniques to generate actionable insights and ongoing reports, ensuring data-driven decision-making

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**Testing**

* **Data Validation:** Ensure data accuracy and consistency.
* **Report Testing:** Validate the correctness of the visualizations and the accuracy of calculations.
* **User Testing:** Ensure the report meets the needs of stakeholders and is user-friendly.

This approach provides a structured way to understand working preferences, determine weekend work-from-home patterns, and generate insightful reports using Power BI.