

Assignment 2025

Objective:

Build a **Power BI Report/Dashboard** using the provided datasets (**Orders, People.xlsx** and **Returns.xlsx**) that provides **insights into employee performance, returns analysis, and key trends with YoY comparison**.

The candidate must:

1. Import, clean, and transform the datasets.
 2. Create a **data model** with appropriate relationships.
 3. Build **interactive visuals** focusing on **UI/UX best practices**.
 4. Write **complex DAX measures**, including **time intelligence for YoY**.
 5. Record a **5-minute video walkthrough** of the dashboard.
 6. Submit both the **PBIX file** and **YouTube video link** via Google Form.
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Tasks to Perform

1. Data Preparation

- Load both datasets into Power BI.
- Ensure proper **data types** and **relationships** between tables.
- Create a **Date Table** and mark it as the official date table.

2. Data Modeling

- Relate **People** and **Returns** logically (based on available fields).
- Ensure a **star schema** design (dimension–fact relationship). And create a date Dimension table using the Date and Time DAX function align with required relationship.

3. DAX Calculations

Create the following **measures with YoY comparisons**:

- **Return Rate %** = (Number of returns / Total transactions).
→ Add **YoY Return Rate % change**.
- **Avg. Return Value** = Average monetary value of returns.
→ Add **YoY Avg. Return Value change**.
- **Top 5 Employees by Return Count** (dynamic).
→ Show **YoY return count difference** for each.
- **Monthly Return Trend** (using the Date table).
→ Add **YoY trend line overlay**.
- **% Contribution of Each Employee to Total Returns**.
→ Compare with **last year's contribution**.

(Hint: Use DAX functions like `SAMEPERIODLASTYEAR()`, `DATEADD()`, or `PARALLELPERIOD()` for YoY calculations.)

4. Visualization & UI/UX

- Design a **dashboard page** with:
 - **KPI Cards** (Return Rate %, Avg Return Value, Return Count)
→ Each KPI must display **YoY comparison (up/down %)**.
 - **Line Chart** (Monthly return trends with YoY overlay).
 - **Bar/Column Chart** (Top 5 employees by returns with YoY comparison).
 - **Donut/Pie Chart** (% contribution by employee with YoY difference tooltip).
 - **Filters/Slicers** (by Employee, Region, and Date).
- Apply **consistent theme, color palette, and layout**.
- Ensure **interactivity** (cross-filtering works properly).

5. Video Presentation (5 minutes max)

- Walk through the dashboard.
- Explain insights and **highlight YoY changes**.
- Highlight **UI/UX choices**.

Deliverables

1. **PBIX File** – the completed Power BI dashboard.
2. **YouTube Link** – 5-minute video presentation uploaded to YouTube.
3. **Google Form Submission** – submit both via Google Form (link will be provided).

Evaluation Criteria

- **Data Modeling (20%)** – Correct schema and relationships.
- **DAX & Time Intelligence (30%)** – Correctness of YoY calculations and measures.
- **Visualization & UI/UX (20%)** – Clean, professional, and user-friendly design.
- **Insights & Storytelling (20%)** – Ability to extract and explain meaningful YoY insights.
- **Presentation (10%)** – Clarity and professionalism in the video.

Find the data here: `Assignment_data`

Google Submission Form: <https://forms.gle/wmRgYKVeYrSLxWP9>

Submission Due Date: **15th Sep 2025**