**TASK 1 - DATA IMPORT & MODEL SETUP (START)**

**1.1 - Open Tableau**

Open **Tableau Desktop** or **Tableau Public**.

Once you're on the start screen:

**1.2 - Import the main dataset (netflix\_clean.csv)**

**Steps:**

1. On the left sidebar → click **Text File**
2. Navigate to your project folder:
3. C:\Projects\Netflix\_Content\_Analysis\data\processed\
4. Select:
5. netflix\_clean.csv
6. Click **Open**.

**1.3 - Add the second dataset (netflix\_genres\_exploded.csv)**

**Steps:**

1. On the **left pane → Connections**, click **Add**.
2. Again choose **Text File**.
3. Select the second file:
4. netflix\_genres\_exploded.csv
5. Click **Open**.

Now both datasets appear under **Connections**.

**1.4 - Create the Relationship (NOT a Join)**

This is *very important* to avoid double-counting.

**Steps:**

1. You will see **netflix\_clean** as your primary table.
2. Drag **netflix\_genres\_exploded** **next to it**, but **do NOT drop it on top**.
3. When Tableau shows **"Drag table here"**, drop it.
4. A pop-up appears → **"Edit Relationship"**.

**Set the relationship:**

Left table → **netflix\_clean.csv**  
Right table → **netflix\_genres\_exploded.csv**

**Key field on both sides:**

| **Left Table Column** | **Right Table Column** |
| --- | --- |
| show\_id | show\_id |

1. Click **Close**.

**TASK 2 - BUILD ALL VISUALIZATIONS**

**2.1 - Worksheet 1: KPI\_Total\_Titles**

**Goal: Show the total number of unique titles on Netflix**

(count of distinct show\_id)

**Step-by-Step Instructions**

**Step 1 - Create new worksheet**

* At the bottom of Tableau → click the **New Worksheet icon**  
  (looks like a small chart)

**Step 2 - Rename worksheet**

Right-click the sheet tab → **Rename** → type:

KPI\_Total\_Titles

**Step 3 - Add the main measure**

1. In **Data pane**, search for **show\_id**
2. Drag **show\_id → Text** (on the Marks card)

**Step 4 - Change aggregation**

* Click the dropdown on the field pill
* Select **COUNTD(show\_id)**  
  (very important: COUNT DISTINCT)

You should now see a **single big number**.

**Step 5 - Format the KPI**

**Make it visually strong:**

1. Go to the **Marks card → Text**
2. Click the text icon ("ABC")
3. Choose:
   * **Font size**: 36–48
   * **Bold**
   * **Center alignment**

**Add a title:**

* Double-click the chart title area at the top
* Change it to:

Total Titles on Netflix

A screenshot of a computer

AI-generated content may be incorrect.

**Worksheet 2 - Movies\_vs\_TV (Donut Chart)**

**Goal: Show the proportion of Movies vs TV Shows**

(using type field: Movie / TV Show)

**Step-by-Step Instructions**

**Step 1 - Create a new worksheet**

Click the **New Worksheet** button at the bottom.

Right-click the tab → **Rename →**

Movies\_vs\_TV

**Step 2 - Build a basic pie chart**

**1. Drag type → Color**

This assigns different colors to Movies & TV Shows.

**2. Drag type → Label**

This shows the text on the slices.

**3. Drag show\_id → Angle**

* Tableau will auto-aggregate
* Click the pill dropdown → select **COUNTD(show\_id)**  
  (very important!)

Now you should see a pie chart with two slices.

A screenshot of a computer

AI-generated content may be incorrect.

**Step 3 - Convert Pie → Donut Chart**

**Steps:**

1. Go to **Marks card → change type to Pie**
2. Now create a **second Marks layer**:
   * Drag **Show Me** panel left
   * On the left, drag **"Measure Values"** to the rows (just temporarily)
3. Right-click the **SUM(Number of Records)** pill → Remove
4. Add a **Dual Axis** chart:
   * Drag **measure values** onto the row shelf again
   * On the second mark, remove everything
5. Adjust sizes:
   * On the **inner pie**, reduce Size slider to 0%
   * On the **outer pie**, adjust to look like a donut

If this feels confusing, here is a cleaner method:

**Simpler Donut Method (Recommended):**

1. Hold **Ctrl** and drag **COUNTD(show\_id)** from Rows to create a duplicate.
2. Change the second one’s **mark type to Circle**.
3. Reduce its size to **0%** (making the hole).
4. Right-click the axis → **Dual Axis**
5. Synchronize axes → **Synchronize Axis**
6. Hide both headers.

This gives a clean donut chart.

**SUPER SIMPLE DONUT METHOD (Beginner-Friendly)**

(Works in ALL Tableau versions, and avoids the confusing steps)

You already have a **pie chart** built using:

* type → Color
* type → Label
* show\_id → Angle (CNTD)

Perfect.

Now convert this pie into a donut using **just 2 steps**.

**STEP 3 - Create the Donut Hole (Easiest Method)**

**Step 3.1 - Duplicate the measure**

Right now you have:

CNTD(show\_id) on Angle

We need to create a **dual-axis chart**.

Do this:

1. In the **Marks card**, find your measure:  
   CNTD(show\_id)
2. **Drag it to Rows**  
   (This will create a bar chart temporarily - ignore it)
3. Hold **CTRL** (or CMD on Mac)
4. Drag the CNTD(show\_id) pill **to the right of itself** on the Rows shelf  
   → You now have:

CNTD(show\_id) | CNTD(show\_id)

Two pills side-by-side.

A screenshot of a computer

AI-generated content may be incorrect.

**STEP 3.2 - Turn it into a Dual Axis**

1. Right-click the **second CNTD(show\_id)** axis
2. Select **Dual Axis**

Now both pies overlap.

A screenshot of a computer

AI-generated content may be incorrect.

**STEP 3.3 - Make the inner chart the hole**

At the top-left, you now have **two Marks cards**:

* **Marks (CNTD(show\_id))** ← first pie (outer)
* **Marks (CNTD(show\_id) (2))** ← second pie (inner)

Do this:

**Outer Pie (first marks card):**

* Keep mark type = **Pie**
* Keep size = default

**Inner Pie (second marks card):**

1. Change mark type to **Pie**
2. Reduce **Size slider → all the way to the left** (very small)

Now you get a beautiful donut hole.

**STEP 3.4 - Clean up**

* Right-click BOTH axes → **Hide Header**
* Right-click → **Synchronize Axis**

**Step 4 - Add labels**

Go to **Marks → Label**

Enable:

* **Show Mark Labels**
* Format:
  + Bold
  + Increase size
  + Show both **Type** and **Percentage** (if not automatically shown)

To show percentages:

1. Right-click the donut → **Quick Table Calculation → Percent of Total**
2. Format → Percentage → 1 decimal

**Step 5 - Final formatting**

* Match color scheme (same colors you’ll use later)
* Remove borders
* Center labels
* Add title:

Movies vs TV Shows Distribution

**Create two layered charts using the Dual Axis feature: a larger pie chart for the data segments and a smaller circle for the inner hole**.

Here is a step-by-step guide:

**Step 1: Create the initial pie chart**

1. **Connect** to your data source in Tableau
2. Go to a new worksheet.
3. Change the **Marks** type from to in the Marks card dropdown menu.
4. Drag your dimension (containing "TV Show" and "Movie") to the card.
5. Drag the measure you want to visualize (e.g., a of records or a measure if available) to the card.
6. For better labels, drag the measure to the card as well. You can also add to the card.
7. In the top menu, select &gt; . Name it "Dummy Axis" (or "Zero") and in the formula field, type or .
8. Drag the new field to the shelf twice. You will now see two separate pie charts. [[2](https://help.salesforce.com/s/articleView?id=001473877&language=en_US&type=1), [3](https://help.salesforce.com/s/articleView?id=001473877&language=en_US&type=1), [4](https://www.acte.in/create-a-donut-chart-in-tableau), [5](https://www.youtube.com/watch?v=McC1P-EU7qE), [6](https://help.tableau.com/current/pro/desktop/en-us/viewparts_marks_marktypes.htm#:~:text=Tableau%20will%20never%20use%20the%20Pie%20mark,Pie%20from%20the%20Marks%20card%20drop%2Ddown%20menu.)]

**Step 2: Combine the charts with Dual Axis**

1. On the shelf, right-click the second instance of and select . The two charts will overlay.
2. Right-click on either of the axes headers and uncheck to hide them. [[3](https://help.salesforce.com/s/articleView?id=001473877&language=en_US&type=1), [8](https://www.thedataschool.co.uk/daniel-bostrom/how-to-make-a-donut-chart-in-tableau/)]

**Step 3: Format the inner circle**

1. In the **Marks** card area, you will see three tabs: , , and . Click on the second mark card, .
2. Remove all fields from this specific Marks card (i.e., remove the fields you put on , , and in Step 1).
3. Change the type for this second card from to .
4. Click the card for this inner circle and choose a color that matches your dashboard's background (usually **white**).
5. Click the card and use the slider to make the circle smaller, creating the donut hole effect. Adjust the size on the *first* marks card to adjust the outer ring's thickness. [[3](https://help.salesforce.com/s/articleView?id=001473877&language=en_US&type=1), [9](https://www.csc2.ncsu.edu/faculty/healey/msa/tableau/#:~:text=Notice%20that%20this%20produces%20two%20independent%20bar,choose%20%22Line%22%20to%20show%20two%20line%20graphs.), [10](https://www.thebricks.com/resources/guide-how-to-create-multiple-tabs-in-tableau-dashboard#:~:text=This%20is%20where%20we%20turn%20those%20placeholders,labeled%20something%20like%20%22AGG(MIN(0))%22%2C%20%22AGG(MIN(0))%20(2)%22%2C%20etc.)]

**Step 4: Add labels and finalize**

1. To add a total value in the center, click on the second marks card again.
2. Drag your relevant measure (e.g., of records) to the card.
3. Format the view by removing any grid lines or borders for a cleaner look.
4. Use the first Marks card () to customize the colors of the "TV Show" and "Movie" segments and ensure labels are formatted nicely.

A screenshot of a computer

AI-generated content may be incorrect.

**Worksheet 3 - Titles\_Over\_Time (Line Chart)**

**Goal: Show how many titles Netflix added each year**

using your cleaned added\_year column.

**STEP-BY-STEP INSTRUCTIONS**

**Step 1 - Create a new worksheet**

Click the **New Worksheet** button  
Rename it:

Titles\_Over\_Time

**Step 2 - Add the Time Dimension**

1. In the Data pane, search for **Added Year**
2. Drag **Added Year → Columns**

Make sure it shows as **Discrete Year**  
(if not, click the pill → choose *Discrete* → *Year*).

**Step 3 - Add the measure**

1. Drag **Show Id → Rows**
2. Click the pill → choose:

Measure → Count Distinct

You should now see a bar chart with annual counts.

A screenshot of a computer

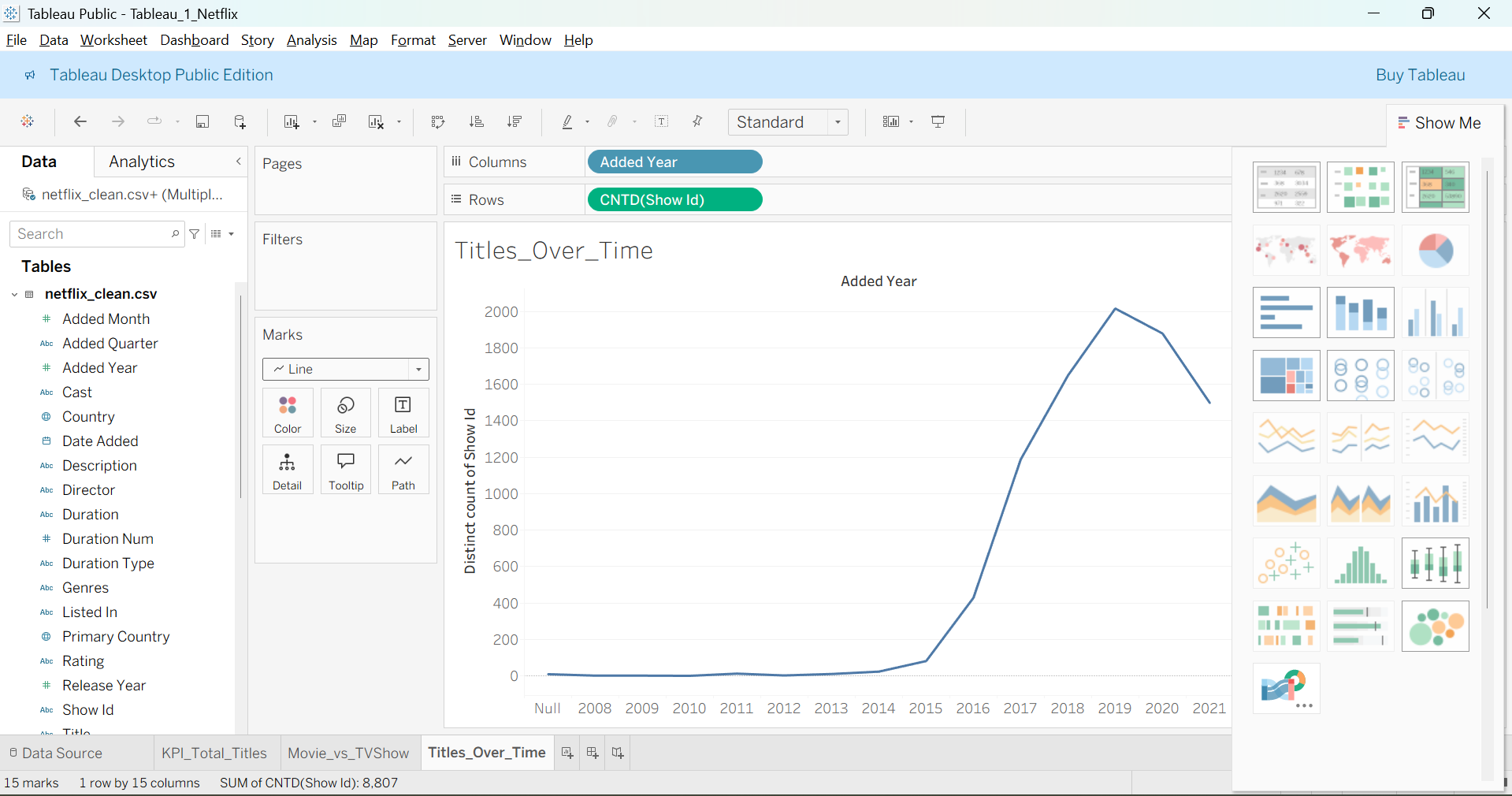
AI-generated content may be incorrect.

**Step 4 - Convert to Line Chart**

1. Click **Show Me**
2. Select **Line Chart**

Or set it manually:

* On Marks card → change **Automatic → Line**



**Optional Enhancements (highly recommended)**

**Add color by Type**

Drag **Type → Color**  
This splits the line into:

* Movie trend
* TV Show trend

Looks great on dashboards.

**🎛 Add filters (optional)**

Drag **Type → Filters**  
Drag **Added Year → Filters**

A screenshot of a computer

AI-generated content may be incorrect.

**Worksheet 4 - Top Genres (Horizontal Bar Chart)**

This uses your **exploded genres dataset**, thanks to the relationship you created earlier.

**GOAL**

Show the **Top 10 genres** on Netflix by number of titles.

**STEP-BY-STEP INSTRUCTIONS**

**Step 1 - Create a new worksheet**

Click **New Worksheet**  
Rename it:

Top\_Genres

**Step 2 - Add the Genre Dimension**

In the Data Pane (left):

1. Search for **Genre**
2. Drag **Genre → Rows**

You will see a long list of genres.

**Step 3 - Add the Title Count**

1. Drag **Show Id → Columns**
2. Click the pill → select:

Measure → Count Distinct

You now have a vertical bar chart.

**Step 4 - Convert to Horizontal Bars**

On the toolbar:

* Click the **Swap Rows and Columns** button  
  (looks like two arrows going in opposite directions)

OR use **Ctrl + W**

Now bars are horizontal (cleaner for long labels).

**Step 5 - Sort**

Click the **Sort icon** on the toolbar (descending).  
Bars will reorder from highest to lowest.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

**Step 6 - Keep only Top 10**

1. Right-click **Genre** in Rows
2. Choose **Filter**
3. In the dialog → Go to **Top** tab
4. Select:

By Field:

Top 10

CNTD(Show Id)

Click OK.

Now only the top 10 most common genres appear.

**Optional formatting (recommended)**

* Make bars thicker (Size on Marks card)
* Add labels:
  + Drag **CNTD(Show Id) → Label**
* Set a consistent color:
  + Click Color → choose a clean single-color palette  
    (e.g., blue or red - same you’ll use for other charts)

A screenshot of a computer

AI-generated content may be incorrect.

**Worksheet 5 - Top Countries (Bar Chart or Map)**

**We’ll create the Top 15 content-producing countries.**

You can do either a bar chart or a map - but the bar chart is required for the dashboard layout we planned, and the map is optional.

We’ll build the **bar chart version first**.

**Worksheet 5 - Top\_Countries (Bar Chart)**

**Goal: Identify which countries produce the most content on Netflix.**

**STEP-BY-STEP INSTRUCTIONS**

**Step 1 - Create a new worksheet**

Click **New Worksheet**  
Rename it:

Top\_Countries

**Step 2 - Add Country Dimension**

In the Data Pane, search for:

**Primary Country**

Drag **Primary Country → Rows**

**Step 3 - Add Title Count**

Drag **Show Id → Columns**  
Click the pill → select:

Measure → Count Distinct

You’ll see a vertical bar chart.

**Step 4 - Convert to Horizontal Bars**

Click the **Swap Rows and Columns** button (double arrows).  
Now the chart is horizontal.

**Step 5 - Filter Out Null Values**

Right-click **Primary Country** → **Filter**  
Check:

* **Exclude Null**

Click OK.

**Step 6 - Sort**

Click the **Sort** icon (descending).  
Bars reorder from highest to lowest.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

**Step 7 - Keep Top 15 Countries**

1. Right-click **Primary Country** → **Filter**
2. Go to **Top** tab
3. Select:

By Field

Top 15

CNTD(Show Id)

Click OK.

A screenshot of a computer

AI-generated content may be incorrect.

**OPTIONAL (Recommended)**

**Add labels**

Drag CNTD(Show Id) → Label.

**Set color palette**

Click Color → choose a solid color (consistent with other charts).

**Increase bar thickness**

Marks → Size slider.

A screenshot of a computer

AI-generated content may be incorrect.

**Worksheet 6 - Movie Duration Distribution (Histogram / Bar Chart)**

**Goal**

Understand how long Netflix movies typically are  
(using the cleaned numeric column **duration\_num**).

We’ll build a **distribution chart** using bins.

**STEP-BY-STEP INSTRUCTIONS**

**Step 1 - Create a new worksheet**

Click **New Worksheet**  
Rename it:

Movie\_Duration

**Step 2 - Filter only Movies**

1. Drag **Type → Filters**
2. Check only **Movie**
3. Click OK

Now the sheet only contains movies.

**Step 3 - Create Duration Bins**

1. In the Data pane, right-click **duration\_num**
2. Select:

Create → Bins

1. In the dialog box:
   * **Bin size = 10** (recommended)  
     *(You can use 15 if you want wider ranges)*
2. Click OK.

This creates a new field:

duration\_num (bin)

**Step 4 - Build the histogram**

1. Drag **duration\_num (bin) → Columns**
2. Drag **Show Id → Rows**
3. Click the pill → **Measure → Count Distinct**

This gives you a histogram of movie durations.

A screenshot of a computer

AI-generated content may be incorrect.

**OPTIONAL (recommended)**

**Change chart type to bars**

Marks → choose **Bar**

**Add colors (optional)**

Click Color → choose a neutral one.

**Add labels**

Drag CNTD(Show Id) → Label (optional)

**Sort (optional)**

You can leave it in natural order - bins already represent linear increasing durations.

A screenshot of a computer

AI-generated content may be incorrect.

**What Are “Bins” in Tableau?**

A **bin** is just a **range bucket** that groups numeric values into intervals.

Think of bins like:

* 0–10 minutes
* 10–20 minutes
* 20–30 minutes
* 30–40 minutes
* … and so on

Each bin contains all values that fall inside that range.

So instead of showing every individual movie duration (80 minutes, 92 minutes, 67 minutes…), Tableau groups them into buckets.

This is how you create a **histogram**.

**Why do we need bins? (**If you don’t create bins, Tableau can’t build this histogram.)

Because you want to create a **movie duration distribution** plot.  
That means:

* How many movies are 0–10 minutes long?
* How many are 10–20 minutes long?
* How many are 20–30 minutes long?
* How many are 100–110 minutes long?

**TASK 3 - FINAL DASHBOARD ASSEMBLY**

**STEP 1 - Create a New Dashboard**

**1. Click the New Dashboard button**

(looks like a rectangle icon next to the “new worksheet” icon)

**2. Rename the dashboard**

Right-click the tab → **Rename →**

Netflix\_Analytics\_Dashboard

**STEP 2 - Set Dashboard Size**

On the left side-panel → choose:

Size → Fixed Size

Recommended:

1200 × 800

OR choose:

Automatic

Automatic adjusts to screen size - either is fine.

**STEP 3 - Add Title Section**

At the top:

Double-click the title area → Type:

Netflix Content Analytics Dashboard

Under it, add a subtitle (optional):

Data Source: Kaggle | Cleaned using Python | Visualized in Tableau

Center it and make it bold.

**STEP 4 - Add Worksheets in Layout (in order)**

Now drag the worksheets from the left “Sheets” panel into the dashboard.

**TOP SECTION - KPI row**

1. **KPI\_Total\_Titles** (left)
2. **Movies\_vs\_TV** (right)

Make sure:

* Both are small & aligned
* Remove extra legends if required
* Keep whitespace balanced

**MIDDLE SECTION - Trends**

1. **Titles\_Over\_Time**  
   Place this chart **full-width** across the dashboard.

This gives your dashboard a strong visual anchor.

**BOTTOM SECTION - Distributions**

1. **Top\_Genres** (left)
2. **Top\_Countries** (middle)
3. **Movie\_Duration** (right)

Adjust layout so they look even.  
You can drag to resize each container.

**STEP 5 - Styling and UX Polish**

**Remove unnecessary legends**

If Movie/TV colors are consistent, keep only one legend.

**Add borders sparingly**

Use subtle borders or shading if sections blend too much.

**Adjust fonts**

* Titles → Bold
* Labels → Clean and readable
* Remove clutter: gridlines, axis titles, tiny labels

**Interactivity**

Enable:

* Highlight on hover
* Click-to-filter (optional)
* Show tooltips

**Consistent color scheme**

Make sure:

* Movies always use the same color everywhere
* TV Shows use the other color
* Bar charts use neutral palettes

This makes dashboard visually unified.

**STEP 6 - Final Export**

When the dashboard is done:

**Export options:**

* **Dashboard → Export as Image** (PNG for LinkedIn & GitHub)
* **File → Save to Tableau Public** (if using Public)
* **Dashboard → Export as PDF** (for your project submission)

A screenshot of a computer screen

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.