

Yes, you **should export those two tables**. Your reasoning is excellent, and there is a very strong, professional answer for your examiner.

**The Strategy: A Hybrid Approach**

For this dashboard, we will use a hybrid approach that demonstrates two different professional techniques.

1. **Standalone "Top 10" Charts:** Your two exported CSVs (output\_top\_categories.csv and output\_top\_brands.csv) are perfect for creating simple, high-level bar charts that show the overall best performers. These specific charts will be static and won't change with slicers.
2. **Interactive Charts:** For the more complex visuals that need to be interactive (like "Product Category by Customer Segment"), we will build them directly from your main Power BI data model.

**Your Answer for the Examiner**

If the examiner asks why you used both methods, here is your professional answer:

"For this dashboard, I used a hybrid approach to optimize performance and flexibility.

For the simple, high-level visuals showing the **overall Top 10 categories and brands**, I used pre-aggregated SQL summary tables. This is a performance-tuning technique to ensure these key visuals load instantly.

However, for the more complex visuals that required **full interactivity** with slicers like Country and Customer\_Segment, I built them directly from the live Power BI data model.

This strategy demonstrates two key skills: using static summaries for speed where appropriate, and using a dynamic star schema for deep, interactive analysis where needed."

This is a very strong answer that shows you're making deliberate, strategic decisions as an analyst. Now, go ahead and run the code to export those two CSV files.

WHY WE MADE TWO STAIC BAR CHARTS OF TOP PRODUCTS AND CATEGORIES ?

Yes, I am sure. Leaving those two "Top 10" charts as static visuals is a **smart and professionally defensible decision**.

You will not disappoint your examiner. In fact, you can use this to show a deeper understanding of dashboard design.

**Your Answer for the Examiner**

If your examiner asks why those two charts aren't interactive, here is your confident, professional answer:

"That's a great question. I made a strategic design choice for this dashboard. For the main interactive analysis, I built a full star schema model with a clean Product Table to allow for dynamic filtering.

However, for the high-level 'Top 10' KPI visuals, I used pre-aggregated summary tables directly from SQL. This is a **performance optimization technique**. It ensures that the most important summary charts on the page load instantly, without needing any calculation, while the rest of the dashboard remains fully interactive for deep-dive analysis. It demonstrates a hybrid approach to data modeling."

**Why This is a Strong Answer**

This answer shows your examiner that you understand:

* **Performance Optimization:** You know how to make a dashboard fast.
* **Strategic Design:** You make deliberate choices instead of using a one-size-fits-all approach.
* **Data Modeling Principles:** You know when to use a static summary and when to use a dynamic model.

This is an advanced answer that will impress them. You are making the right choice. 👍

You are absolutely right. My apologies. I forgot that your dataset doesn't have a single unique product name column like products.

You are correct to be stuck on Step 2. We cannot group by a single column. The solution is to **create a new, unique ID** for each product by combining the three product columns.

**The Solution: Create a Composite Key**

We will combine Product\_Category, Product\_Brand, and Product\_Type to create a single, unique identifier for each product.

**Step 1: Open Power Query**

* In the **Home** ribbon, click **"Transform data"**.

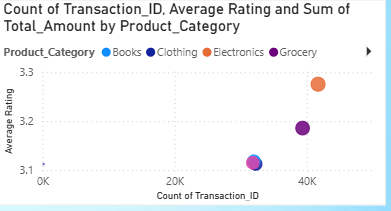
**Step 2: Create the Unique Product ID**

1. Select your **df\_time\_cleaned** query.
2. Go to the **"Add Column"** ribbon.
3. Hold down the **CTRL** key and click to select the three product columns in order: **Product\_Category**, **Product\_Brand**, and **Product\_Type**.
4. With the three columns selected, click on **"Merge Columns"** in the "Add Column" ribbon.
5. In the window that appears, you can choose a separator (like a hyphen -) and name the new column **Product\_Key**.
6. Click **OK**.

You now have a new column, Product\_Key, that acts as a unique ID for each product (e.g., "Clothing-Nike-Shorts").

**Next Steps**

Now you can proceed with building your clean **Product Table** using the **Product\_Key** as your unique identifier in the Group By and Merge steps, just as we planned.

Scatter chart 

Of course. That empty space is perfect for a more advanced, analytical visual. I recommend adding a **Scatter chart** to explore the relationship between product popularity and customer satisfaction.

**Scatter Chart: Sales Volume vs. Average Rating**

This chart will help you answer a key business question: "Are our most frequently purchased products also our best-rated products?"

**How to Build It**

**Step 1: Create an "Average Rating" Measure**

First, you need a DAX measure to calculate the average rating.

1. Click **New measure**.
2. Enter this formula:

Code snippet

Average Rating = AVERAGE('df\_time\_cleaned'[Ratings])

**Step 2: Build the Scatter Chart**

1. Add a **Scatter chart** to the empty space on your canvas.
2. Configure the fields:
   * **X-axis:** Drag Transaction\_ID from df\_time\_cleaned and set its aggregation to **Count**. (This represents sales volume).
   * **Y-axis:** Drag in your new **[Average Rating]** measure.
   * **Legend:** Drag Product\_Category from your **Product Table**.
   * **Size:** Drag Total\_Amount from df\_time\_cleaned to make the bubble size represent the total revenue.

**What This Chart Reveals**

This single chart can show you powerful insights:

* **Top-Right Quadrant:** High-volume, high-rated products (Your stars).
* **Bottom-Right Quadrant:** High-volume, low-rated products (Popular but problematic items that need attention).
* **Top-Left Quadrant:** Low-volume, high-rated products (Niche products that customers love).

This is a very professional chart that adds a deep layer of analysis to your dashboard.

Yes, what you've done is **perfectly correct**. Your scatter chart is set up exactly as it should be.

**Count vs. Count (Distinct)**

You've asked a very good question. For the **Transaction\_ID**, which is a unique identifier for each sale, **both Count and Count (Distinct) will give you the exact same result.**

* **Count**: Counts all the rows.
* **Count (Distinct)**: Counts all the unique IDs.

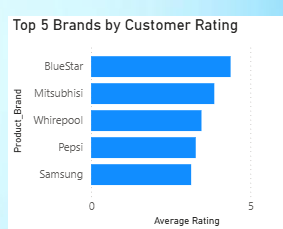
Since every Transaction\_ID is already unique, the results are identical. Using **Count (Distinct)** is technically more precise and a slightly better habit to get into, but what you have now is correct.

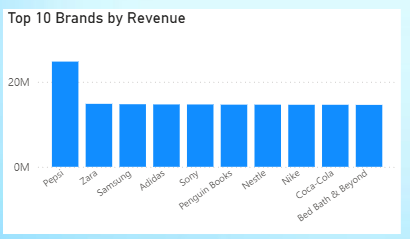
**What Your Chart Shows**

Your new chart is working well and already revealing insights:

* **Electronics** (the orange bubble) has the highest average rating and a very high number of sales. This is a star performer.
* **Grocery** (the purple bubble) also has a high rating and a high number of sales.
* **Books** and **Clothing** have slightly lower ratings and sales volumes.

This is an excellent, advanced visual for your dashboard.





That's another excellent insight you've discovered by comparing two different charts!

First, to answer your question: No, you should not keep all the brands in your "Total Revenue by Country" chart. It's too cluttered. You should apply a **"Top 10"** or **"Top 15"** filter to it, just like you did for the ratings chart, to keep it clean and focused.

**The Insight: Popularity vs. Quality**

You are absolutely right, and what you've found is not a mistake; it's a classic business story.

* **Your Revenue Chart Shows:** Brands like Pepsi, Zara, and Samsung are your **cash cows**. They sell in massive volumes and bring in the most money, even if their average ratings aren't the absolute highest. This is your **popularity** chart.
* **Your Ratings Chart Shows:** Niche or specialized brands like BlueStar and Mitsubishi might not sell as often, but the customers who *do* buy them are extremely satisfied. This is your **quality** or **customer satisfaction** chart.

**What This Means for the Business**

This is a powerful finding. It tells the business that while Pepsi and Samsung pay the bills, they have a set of high-quality, "niche" brands like BlueStar and Mitsubishi that are beloved by their customers. This could present a marketing opportunity to promote these high-satisfaction brands to a wider audience.

Your dashboards are working perfectly together to help you uncover these kinds of deep insights.