Power BI Data Cleaning & Transformation – Error Removal Workflow

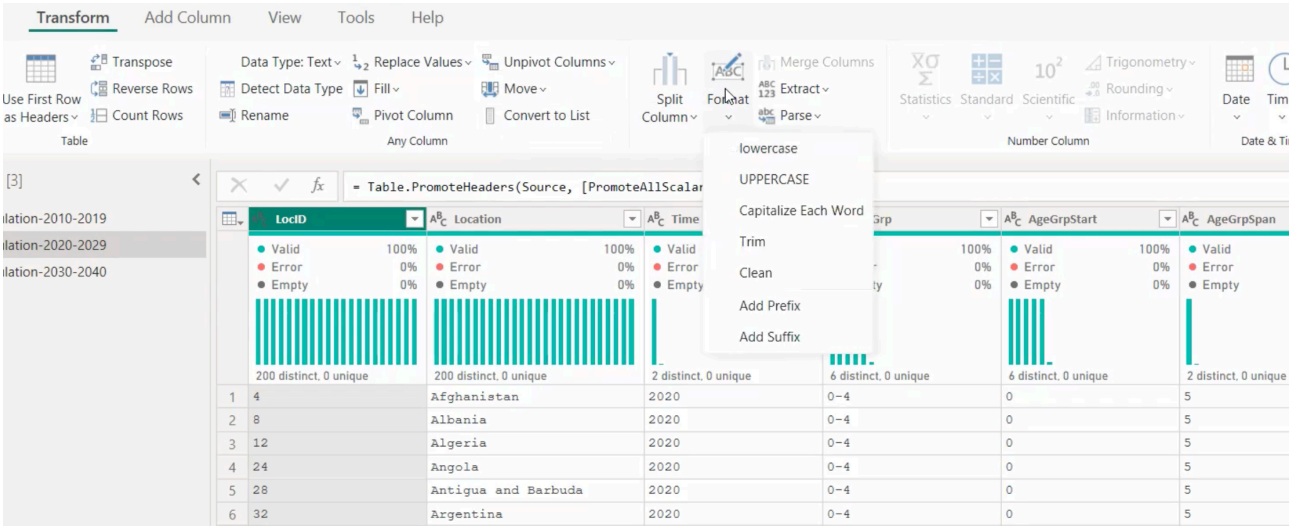
Cleaning and preparing your data in Power BI ensures that your reports are accurate, reliable, and meaningful. This guide walks you through the step-by-step process of detecting and fixing errors, transforming columns, and validating results.

1. Finding Errors in a Specific Column

- In Power Query Editor, select the column you want to inspect.
- Look for:
- Error values (often marked with a small red triangle).
- Blank or null entries.
- Unexpected data formats or outliers.
- Use the Column Quality and Column Profile features to identify inconsistencies.

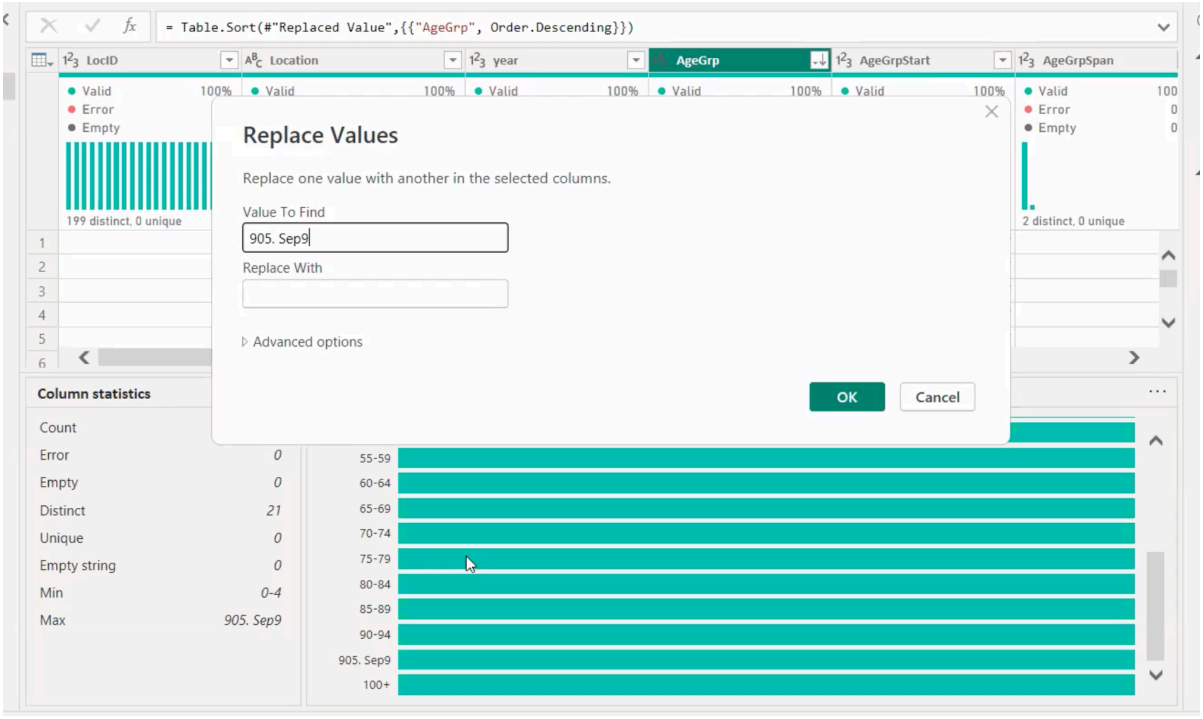
2. Using the TRIM Function

- Remove unwanted leading/trailing spaces that may cause matching or filtering issues.
- In Power Query, use the Transform → Format → Trim option.
- This is especially useful for text-based columns like names, categories, or codes.



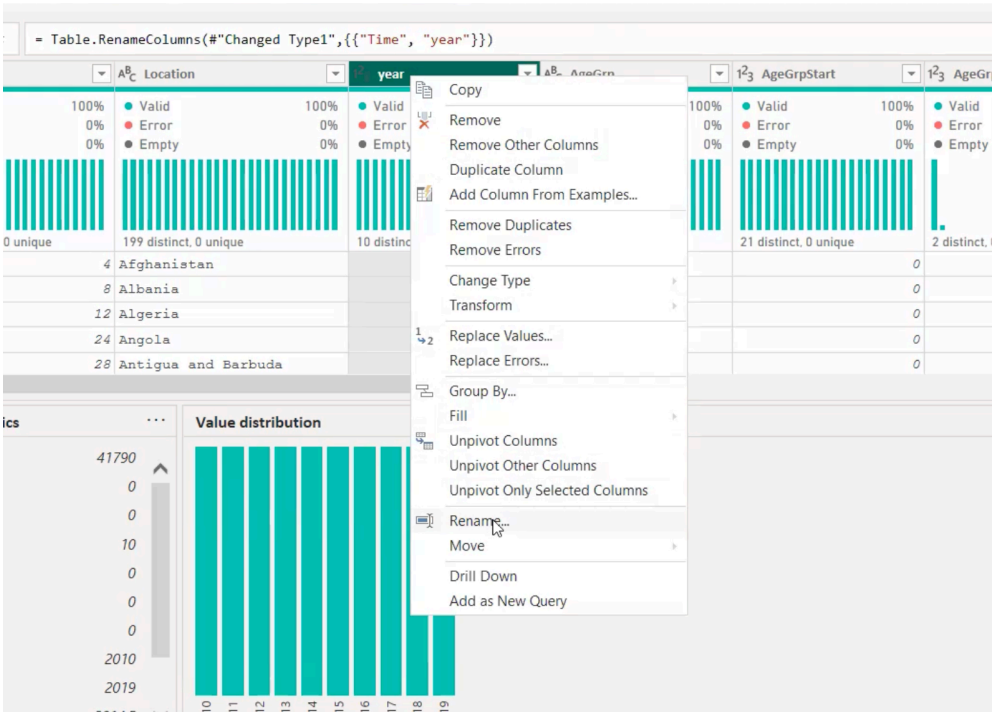
3. Replacing Values

- Highlight the column → Transform → Replace Values.
- Example: Replace "N/A" or "NULL" with a valid default value.
- Supports bulk corrections for typos or incorrect codes.



4. Changing the Column Name

- Select the column header → Right-click → Rename.
- Use clear, descriptive names that match the report's purpose.
- Avoid spaces if you plan to use DAX extensively.

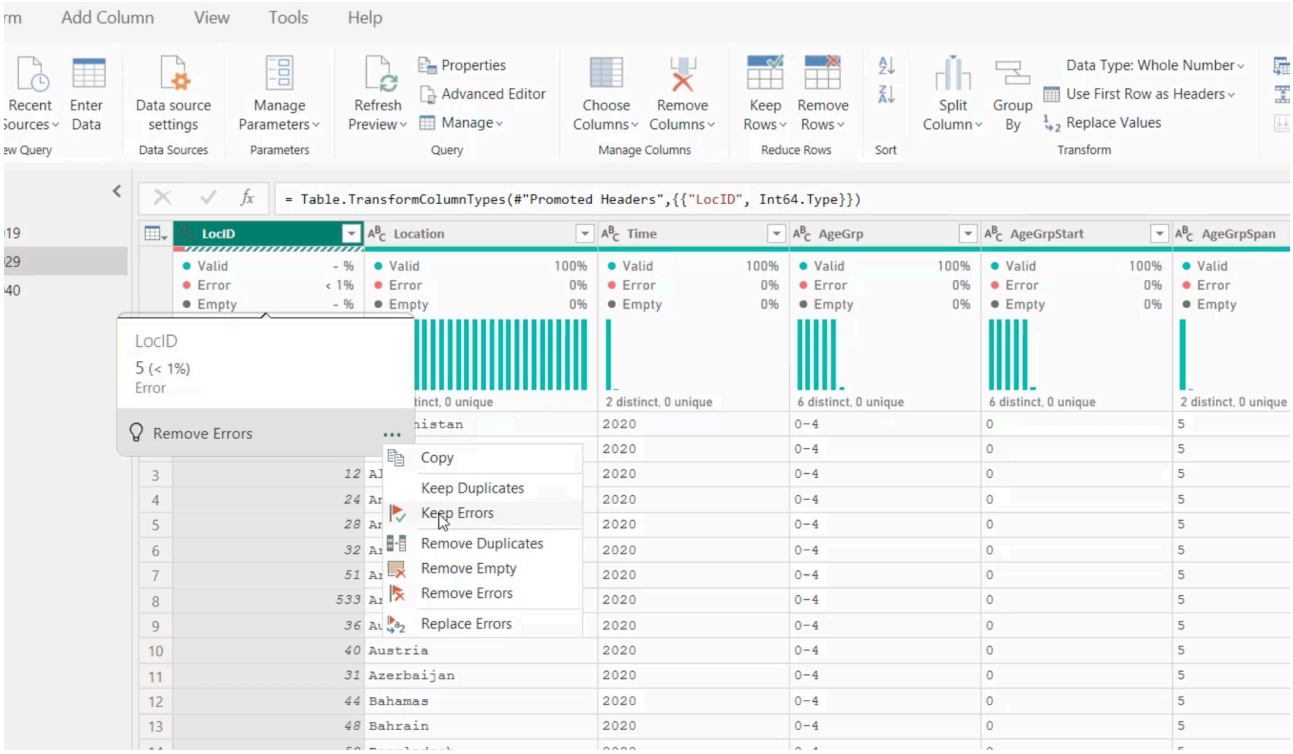


5. Filtering Rows

- Apply filters to remove unnecessary or invalid rows.
- Examples:
- Exclude negative sales values.
- Filter out test or dummy data.
- In Power Query: Home → Remove Rows (or use filter drop-downs).

6. Removing Errors

- After reviewing, right-click column → Remove Errors.
- This removes entire rows containing errors in the selected column.
- Use cautiously — you may lose important data if not checked first.



7. Changing Data Type

- Correct data types ensure accurate calculations and sorting.
- In the column header, select the Data Type icon and choose:
- Text
- Whole Number
- Decimal Number
- Date/Time
- Boolean
- Always perform this after cleaning to avoid type conversion errors.

8. Validation of Columns

- Cross-check cleaned data with the source system or expected rules.
- Sample checks:
- No blank IDs in a primary key column.
- Date ranges fall within logical limits.
- Numeric columns don’t contain unexpected symbols.

Documentation Best Practices

- Keep a Data Cleaning Log:
- Record each change (date, reason, and transformation applied).
- Maintain before/after screenshots for traceability.
- If working in a team, add notes inside the Power Query Steps Pane for clarity.

✅ Final Tip: Always apply transformations in a logical sequence — detect → clean → transform → validate — so your dataset stays accurate and audit-friendly.