# Power Query Processing Summary – Financials Table

This document summarizes the data ■cleaning and type ■handling logic applied in \*\*Power Query\*\* for the \*Financial Sample\* workbook. All steps are written to be reproducible and robust.

#### **Objectives**

- Import the true table from the Excel workbook and avoid accidental sheet imports.
- Promote headers only when necessary.
- Normalize column names to the canonical schema.
- Remove the large block of blank rows that caused an "empty" fact table.
- Fix the UnitsID column that turned into zeros.
- Cast types safely using Vietnamese culture (vi-VN) so commas are read as decimals.

### 1) Import the correct source

Open the workbook with Excel.Workbook(...) and fetch the real table named \*\*Financials\_Table\*\* (fallback to \*\*Financials\*\* if needed). This prevents the column drift seen when pulling directly from a sheet.

## 2) Promote headers only when needed

Detect whether the first row still contains generic headers (e.g., Column1/Column2). Only then call Table.PromoteHeaders to avoid double promotion.

# 3) Normalize column names

Trim and remove NBSP (char 160) from all headers so they match the canonical schema below:

```
SegmentID, CountryID, ProductID, DiscountID, UnitsID, Manufacturing Price, Sale Price, Gross Sales, Discounts, Sales, COGS, Profit, Date, DateID, Month Number, Month Name, Year
```

# 4) Remove blank/noise rows (root cause of "empty" table)

Keep only records where \*\*Date\*\* and \*\*SegmentID\*\* are not null. This removes ~1,048,575 blank rows (those with only DateID = 011900), which previously made the table look empty in the model.

# 5) Fix UnitsID becoming 0

Extract the numeric digits from UnitsID and cast to Int64. Remove/avoid any prior steps that force replacements to 0. Result: UnitsID values now reflect the original counts instead of all zeros.

# 6) Culture■safe type casting (vi-VN)

Apply types using the Vietnamese culture so comma decimals are parsed correctly. Numeric columns  $\rightarrow$  number; Date  $\rightarrow$  date; DateID, Month Number, Year  $\rightarrow$  Int64.

#### Results

- ~700 valid data rows remain after cleaning; numbers and dates parse correctly.
- UnitsID is fixed (no longer all zeros).
- No phantom rows with DateID 011900.

# **Applied Steps (as seen in Query Settings)**

```
\texttt{Source} \rightarrow \texttt{Navigation} \rightarrow \texttt{NeedPromote} \rightarrow \texttt{Promoted} \rightarrow \texttt{CleanNames} \rightarrow \texttt{Filtered} \ (\texttt{Keep Rows}) \rightarrow \texttt{TypePairs}
```

### **Target star schema**

Fact: Financials\_Table

**Dimensions:** Segment\_Table, Country\_Table, Product\_Table, Discount\_Table, Units\_Table, Date\_Table (each cleansed to distinct keys, proper types; one to many single direction relationships from dimensions to fact).

# **Suggested DAX measures (starting set)**

```
Total Sales = SUM(Financials_Table[Sales])
Total Profit = SUM(Financials_Table[Profit])
Discount % = DIVIDE(SUM(Financials_Table[Discounts]), SUM(Financials_Table[Gross Sales]))
```

Note: If you also need the M code skeleton, I can export a separate appendix with the parameterized query.