



Power BI

POWER BI – DIRECT QUERY MODE (SQL Server)

Transformations – Possibility Matrix

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Overview:

When using **Power BI in DirectQuery mode**, not all Power Query transformations are supported because queries are pushed directly to the data source (SQL Server). This document provides a **clear possibility matrix** to understand which transformations are supported and which are not, helping in efficient dashboard design.

Transformation	Possible (Yes / No)
Rename column	✓ Yes
Uppercase / Lowercase rows	✓ Yes
Trim / Clean rows	✓ Yes
Remove column	✓ Yes
Replace values	✓ Yes
Filter rows	✓ Yes
Merge 2 columns (Text)	✓ Yes
Merge 2 columns (Int)	☒ No
Merge 2 columns (Different data types)	☒ No
Sorting rows (Ascending / Descending)	✓ Yes
Add new column	✓ Yes
Extract (Year / Month / Week)	✓ Yes
Group By	✓ Yes
Choose Column / Go to Choose Column	✓ Yes
Duplicate column	✓ Yes
Conditional column using parameters	✓ Yes
Reorder columns	✓ Yes
Convert single column into Int to Float	✓ Yes
Convert single column into Float to Int	☒ No
Keep first rows	✓ Yes
Keep last rows	☒ No
Append queries	✓ Yes
Count rows	☒ No
Convert column to list	☒ No
Trigonometry functions	✓ Yes



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Statistical functions	✓ Yes
Scientific functions	✓ Yes
Information function – SIGN	✓ Yes
Information functions – IS EVEN / IS ODD	<input checked="" type="checkbox"/> No
Remove duplicates	<input checked="" type="checkbox"/> No
Remove blank rows	<input checked="" type="checkbox"/> No
Remove top rows	<input checked="" type="checkbox"/> No
Remove bottom rows	<input checked="" type="checkbox"/> No
Remove alternate rows	<input checked="" type="checkbox"/> No
Remove errors	<input checked="" type="checkbox"/> No
Split column	<input checked="" type="checkbox"/> No
Index column	<input checked="" type="checkbox"/> No
Reverse rows	<input checked="" type="checkbox"/> No
Fill Down / Fill Up	<input checked="" type="checkbox"/> No
Use first row as header	<input checked="" type="checkbox"/> No
Date filter	<input checked="" type="checkbox"/> No
Detect data type	<input checked="" type="checkbox"/> No
Capitalizing the Rows	<input checked="" type="checkbox"/> No
Adding Prefix/Suffix	<input checked="" type="checkbox"/> No

Key Notes:

- DirectQuery prioritizes **query folding**, so unsupported transformations are restricted.
- Some operations are **partially supported** depending on SQL translation.
- Understanding these limitations helps in **better data modeling and performance optimization**.