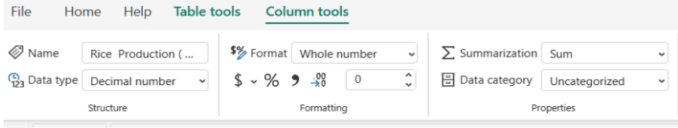
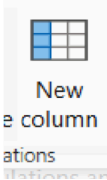


## Project Development Phase Model Performance Test

Date	24 March 2025
Team ID	PNT2025TMID07288
Project Name	Global Food Production Trends and Analysis: A Comprehensive Study from 1961 to 2023 Using Power BI
Maximum Marks	

### Model Performance Testing:

Project team shall fill the following information in the model performance testing template.

S.No.	Parameter	Screenshot / Values
1.	Data Rendered	24 Column and 1912 Rows
2.	Data Preprocessing	 
3.	Utilization of Data Filters	Data filters in the project allow users to analyze food production trends by time, region, crop type, production metrics, climate factors, sustainability indicators, data sources, and custom multi-filter combinations for precise insights.
4.	DAX Queries Used	<pre>1.EVALUATE     TOPN(100, 'world food production')     ( 2.Participation_Product =     5     )     SWITCH(</pre>

		<div>TRUE(),</div> <div>SELECTEDVALUE('Operations_FT'[Operation]) =</div> <div>"Exports",</div> <div>DIVIDE(</div> <div>[Total Export Value_Per_Product],</div> <div>CALCULATE(</div> <div>[Total Export Value_Per_Product],</div> <div>ALLSELECTED('Operations_FT'[Product]</div> <div>)</div> <div>)</div> <div>),</div> <div>SELECTEDVALUE('Operations_FT'[Operation]) =</div> <div>"Imports",</div> <div>DIVIDE(</div> <div>[Total Import Value_Per_Product],</div> <div>CALCULATE(</div> <div>[Total Import Value_Per_Product],</div> <div>ALLSELECTED('Operations_FT'[Product])</div> <div>)</div> <div>),</div>
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		<div>DIVIDE(  [Total Export Value_Per_Product] + [Total Import Value_Per_Product],  CALCULATE(  SUM('Operations_FT'[Value]),  ALLSELECTED('Operations_FT'[Product])  )  )  ) where Total Export Value_Per_Product =  CALCULATE(  SUM('Operations_FT'[Value]),  (6)  'Operations_FT'[Operation] = "Exports"  ) And: Total Import Value_Per_Product =  CALCULATE(  (7)  SUM('Operations_FT'[Value]),</div>
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		<p>'Operations_FT'[Operation] =</p> <p>"Imports"</p> <p>)</p>
5.	Dashboard design	<p>No of Visualizations / Graphs - 1</p>
6	Report Design	<p>No of Visualizations / Graphs -2</p> <p><b>REPORT</b></p> <p>The total rice production globally from 1961 to 2023 is 269 billion tonnes.</p> <p>The total wheat production globally from 1961 to 2023 is 282 billion tonnes.</p> <p>The total tea production globally from 1961 to 2023 is 2 billion tonnes.</p> <p>Africa, America, and Asia lead in the production of green coffee, with Africa being the top producer followed by America.</p> <p>Wheat, maize, and rice production have all shown a steady increase from 1961 to 2023, with wheat production showing the most significant rise over the years.</p> <p>Apples, avocados, bananas, and oranges are produced in varying quantities by different entities, with countries like Europe and Asia showing significant production volumes.</p> <p>Maize production has consistently increased over the years, with notable jumps around the late 1980s and continuing into the 2000s.</p> <p>Grapes have the highest total production at 43 billion tonnes, followed by apples (39 billion tonnes), bananas (32 billion tonnes), and oranges (26 billion tonnes).</p> <p><b>Global Food Production Trends and Analysis: A Comprehensive Study from 1961 to 2023 Using Power BI</b></p> <p>This project successfully visualized key insights into global food production trends using Power BI. The comprehensive analysis empowers ABC Company to understand global agriculture patterns, aiding strategic decisions in food security, trade, and production planning.</p>

