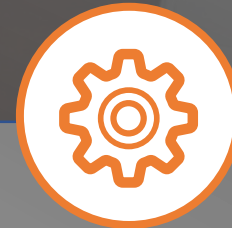


Power BI best practices, tips and tricks



Benefits

- Information readily available for Users and Developers.
- User will use and trust the reports.
- User will know how to use the reports.
- Less time spent in creating and maintaining the reports.
- Support time will decrease.
- Better for the organization.

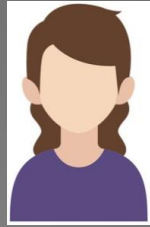
Version Control



John













Bob



Cindy

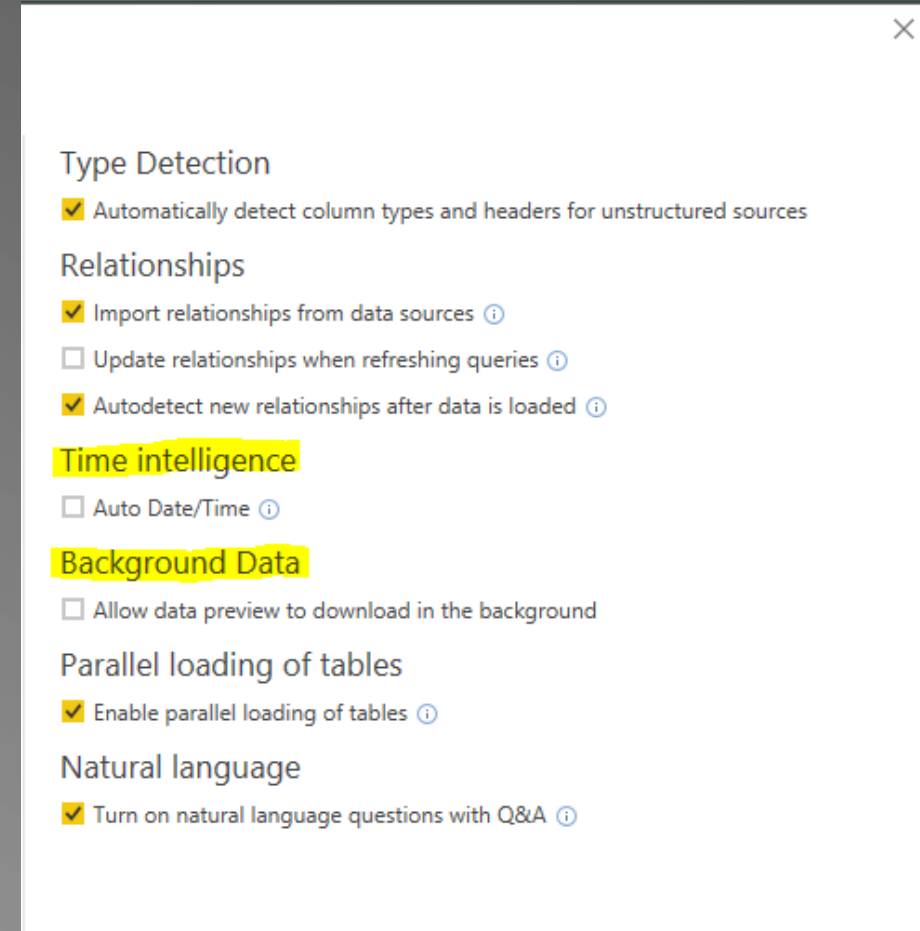
- One person working at a time
- Cannot maintain change history
- Cannot go back to earlier state
- Will have to maintain multiple copies

- Collaboration
- Storing versions properly
- Restore previous version (Troubleshooting)
- Understanding what happened (how project evolved)
- Backup
- https://en.wikipedia.org/wiki/List_of_version_control_software
- <https://www.slant.co/topics/370/~best-version-control-systems>

BEST VERSION CONTROL SYSTEMS			PRICE
96	 Git		FREE
90	 Mercurial		FREE
--	 Fossil		-
--	 Darcs		-
--	 Pijul		-
--	 Vault		-
50	 Subversion		-
--	 Bazaar		-
--	 Perforce		-
--	 Team Foundation		-

Power BI Options

- Regional setting
- Preview features
- Disable Time intelligence
- Disable Background Data
- Do manually refresh



Power Query Editor

- PQ compress data up to 10 to 1.
- Prefer import over DirectQuery unless data is too large to import.
- Turn on Formula Bar from “View” menu.
- Do not trust the automatic conversion from engine.
- Always use Power Query to change data types.
- Give every step an explanatory name.
- More options available in PQ than in Data Modeling.

Power Query Editor cont...

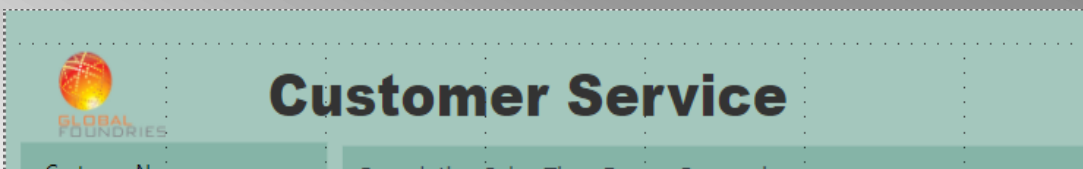
- Document it in “Applied Steps”.
- Give Columns user-friendly name as they are being used in QA.
- Remove unused columns.
- Structure your queries in folders.
- Create reference instead of duplication of your query.
- Uncheck “Enable Load” for queries that are not being used.
- Always use external date table.

Split report into 3 parts

- Heading
 - KPI / Slicers
 - Graph / Charts
-
- Matrix and KPIs are very important for any report
 - Simplicity....convey information/Trend/Patterns

Use Templates

- Many templates are provided
- Use different templates for different departments
- Keep Themes consistent (<https://powerbi.tips/tools/advanced-color-theme-generator/>)
- Keep slicers/filters on consistent places
- Enable Show Gridlines and Snap Objects to Grid



Modeling

- Hide columns you do not want presented to users.
- Use separate Date Table.
- Use separate table for measures.
- Create DAX Measures instead of Default Summarization (better for reusable).
- Always use table name with columns.
- Always manually change data type on user created measures with user-friendly names.
- Only use DAX calculated Columns when you cannot use PQE.
- Use prefix in measures (% or \$ or # etc.)
- Use abbreviations like Total, YTD, LY, PY etc.

Calculated Column vs Measure

Calculated columns (and tables) are:

- Evaluated for each row in your table, immediately after you hit 'Enter' to complete the formula.
- Saved back into the model so take up space.

Calculated Measures are:

- Evaluated when you use it in a visual, when the visual is rendered.
 - Not saved anywhere (well, actually there's a cache in the report layer but it's not part of the file when you hit Save).
-
- Takes Less space on the disk.
 - Use less memory when loaded in memory.
 - Use less CPU power.

How to create Measure

1. Create a new matrix on a new sheet.
2. Put Category on Rows.
3. Right-click on Table "All Measure" and select New Measure.
4. Give the measure a descriptive name (Natural Language).
5. Start typing the function and pause so you can read the IntelliSense description of the function and the syntax.
6. Immediately after writing the function, click back into the formula bar and apply any formatting you want to use.
7. Add the measure to your matrix so you can see the results.

Info on reports/dashboards

- Refresh Date
- developer's email
- Business users email
- Link to web page
- Other links like

let

LastRefreshDate = #table(type table[LastRefresh=datetime], {{DateTime.LocalNow()}})

in

LastRefreshDate

Rename Query1 to LastRefresh

Place LastRefreshDate in Card

PBI Resources

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-best-practices>

<https://www.youtube.com/user/mspowerbi>

<https://powerbi.tips>

<https://guyinacube.com>

<https://www.daxpatterns.com>

<https://www.daxformatter.com/>

<https://radacad.com>

<http://daxstudio.org>

<https://www.sqlbi.com>

<https://dax.guide>

<https://www.sqlbi.com/tools/>