Microsoft Power BI : Write Back

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Contents

Requirement

Write to the Power BI Report or Dashboard Data Source from the Power BI Report or Dashboard.

Approach

- Using Power Apps to write data to the Data Source.
- Embedding a Power App to the Power BI Report or Dashboard connected to the same data source as of the Power BI Report or Dashboard.
- Integration of Power BI Report or Dashboard Data with the Power App.

Using Power Apps to write data to the Data Source

- Connect to the data source.
- Use Power Apps Controls such as textinput etc to input data.
- Using In-built Power Apps function "Patch" to edit existing records or add new records to the data Source.

Patch :

New Record : Patch(*DataSource*,*Defaults(DataSource)*, *ChangeRecord1* [, *ChangeRecord2*, …])

Existing Record : Patch(*DataSource*, *BaseRecord*, *ChangeRecord1* [, *ChangeRecord2*, …])

Embedding Power Apps with Power BI

- Drag and drop the Power App visual in the canvas area of a Power BI Report.
- Add the data fields used in the application to the fields pane.
- Create a new Power Apps application or choose an already created Power Apps application with the same data source as that of the Power BI Report.
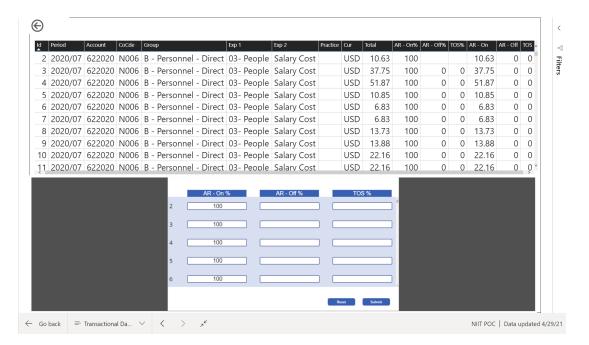
Integration of PowerBI with Power Apps

- Go to Power Apps Studio to edit the application. A new data source called "PowerBIIntegration" will be available due to the embedding process.
- Use PowerBIIntegration as our Data Source for Power Apps Controls like Forms, Gallery etc. This will make our application interact with the Power BI Report or Dashboards where it is embedded.
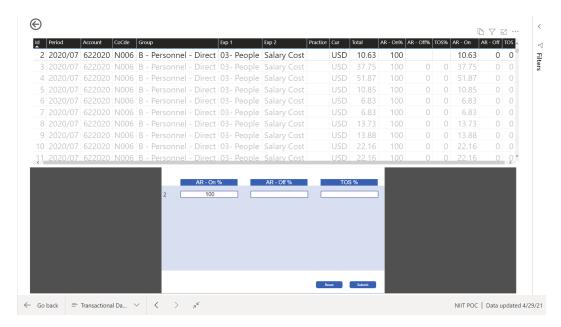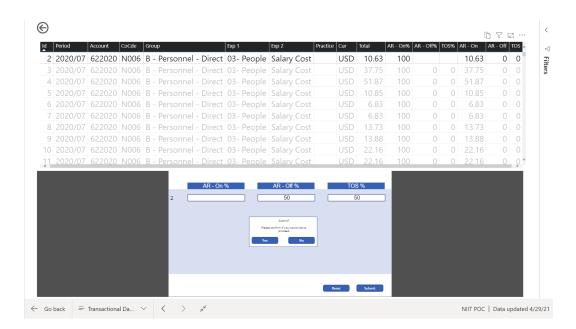
Case Study

1. A Power BI Report is generated using Excel(Online) as the data source.
2. The same data source is used to create a Power Apps Application.
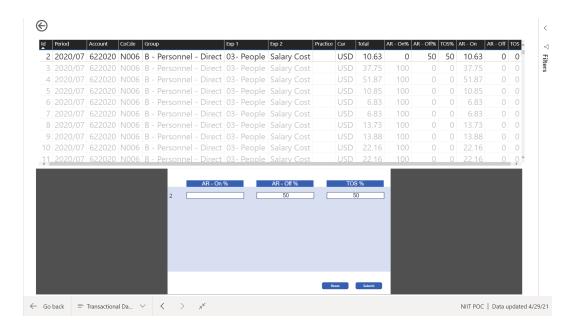3. The data is represented using a table visualisation in Power BI.

4. The Power App is integrated using the Power Apps visual in Power BI

5. On clicking on any row in the table visual the Power Apps gallery also gets filtered as the gallery runs from the data source PowerBIIntegration.Data.
6. Make the required edits in the Power App Visual and click on Submit.

7. The application does any data validation required before submitting and then displays a submission confirmation dialog box
8. On clicking on yes. The row is edited in the data source.

9.   On refreshing the Power BI report we can see the changes in the table visual.

Conclusion

Using the capability of Power Apps to write to the data source and that of Power BI to embed Power Apps in it's report or Dashboards we can add write back functionalities to our Power BI Reports and Dashboards. This will help the users of the Power BI Report or Dashboards to directly make changes in the data source in case of any changed business scenarios like targets etc, without involving data stewards or data analysts.

Thank You.