How to transition and structure your organisation's Power BI reporting

Your organisation has invested in a new Data Platform utilising Power BI on the front end. Now it is time for the next step:

Deciding where to start

An organisation in this position can be quite overwhelmed with all the data needs from top to bottom of the organisational structure but just developing to the loudest demand (or "squeaky wheel") can cause quite a bit of disorganisation midway through your backlog.   It can also cause your underlying data model to become more of a hodgepodge of tables rather than well thought-out design.   It can cause one or two functional areas within the organisation to monopolise report development while other functional areas struggle just to survive.

Develop from the top down to gain an organic growth of reporting

Report development in this order addresses the overall business performance measures and Key Performance Indictors (KPIs), then the departmental group of KPIs, and finally the day-to-day operations of an organisation. In other methods of report development there is a strong risk of developing a report that both, reports Business-Wide KPIs and is used to understand why. It will end up having compromises in the data presentation that reduces the impact the report makes and can miss the mark of accuracy and validation. Keeping your audience tightly defined allows for a value-added approach to report development as well; there will be less waste of unused reports in the report server and the information presented is more focused on the things that the organisation does well or obtain the best "win" early. This pushes the organisation more towards finding issues that affect larger areas of the business and less toward the 10% issues that affect only some of the business some of the time. One final benefit to keeping the defined audience tight is keeping the balance of reporting across all departments so they all have a chance to succeed early in the transition.

The main principle to follow is the 'Who is your audience?'. The concept is to frame the report around a specific audience to avoid having to develop for too many points of view.

Organisational structure

Organisations have groups of people who are deciding the overall direction of the business. This upper group will not need a great deal of detail to make basic decisions. They mainly need accuracy and proper validation of the figures. At least one layer down within the organisation, you have a group of people who must understand the organisational goals and how the organisation operates but also ensure those goals are met between reporting periods. They are the ones that make sure the right people and resources are brought in and equip and motivate the front-line workers. This mid-level of the organisation desires to know when problems are occurring so they can be resolved early, long before a reporting period ends. Finally, you have an audience of front-line workers who can directly influence on a day-to-day basis how the organisational goals can be met -- this level needs a great deal of detail as they are usually dealing with individual customers, suppliers, services, equipment, or products.

Top-down approach

A good place to start is with the "Big Picture". Think along the lines of what the organisation must report to the highest level of ownership, board of directors, and/or investors. You typically want to report how the organisation is performing using KPIs or accomplishing overall goals for the business. There are standards of information reported to the highest level of the organisation within each industry. For example, for business there are typical reports for Comparison to Budget/Forecast and Comparison to Time (YoY, WoW, Day to Day). An ideal layout is a dashboard with highlights on specific points of interest and the ability to select different slices of time to look at things by reporting period and then across the fiscal year. This is not the level for project-based reporting, save that for the middle level. Focus to keep these reports void of any operational detail.

Once your highest level of reporting is developed, the next level of reporting can happen organically. The highest-level reporting will generate questions on why the reports show the data they show or identify areas of interest for investment of time and resources. This opens a gold mine of possible "wins" for the middle level of reporting and gives middle managers/leaders the ability to identify ways to get "wins" of a greater value rather than chase small issues that do not really achieve overall organisational goals.

Use the upper-level reports to ask a few questions, something like:

- Is this performance across the entire business? or do we have any Opportunities to improve?
  - An example middle level report here, would be one that allows the viewer to drill down for more detail in specific Regions, Channels, and metrics that are components to the higher-level measures/KPIs; no doubt, each department of an organisation has their own set of KPIs to achieve and this is a good place to put them.
- Behaviour-wise what correlations are there in the performance?
  - One method is to compare basic metrics to each other in charts and graphs, look for obvious patterns and relationships like similar highs and lows over time or the inverse relationship between two measures over time. Identify the influencers for what makes the organisation succeed or fail.
- Where is most of our success? Where is most of our failures?

A way to answer these questions is to develop reports that rank regions, channels, and specific metric components both in a favourable order and an unfavourable order

The middle level is also good for special projects for the business that report to the Board but are generally under the oversight of a business executive. These reports are focused on growth in certain areas of the business or in researching potential investments.

The main thing in the middle level is to keep your audience framed at organisational executives and front-line managers, the content of the reports does not yet need to be detailed down to specific cases. The reports need to accomplish the task of identifying where the opportunities lie and any problems that are occurring.

Finally, when viewing more detail and finding correlations, the next layer of reporting is "Investigative". This is where the detail should come in. The audience of this layer can see the operationally detailed steps within a process to identify why reports at the middle layer are identifying a success or failure within a measure/KPI. Some questions at this level look like this:

- What information would be useful in allowing a front-line worker to learn why the numbers appear the way they do?
  - In the case of a sales rep, knowing what their gross unit sales, discounts given, most profitable product lines, or most idle product lines would most-definitely give them an opportunity to improve their performance within the numbers, or at least identify where more training could be applied.
- What process failures are the worst?
  - In the case of manufacturing, knowing what machines are offline and a list of the error messages would allow for identification of the frequency of failure for specific machines and identify opportunities to increase maintenance or request funding for replacement

Overall, this "investigative' layer contains day to day operational reports that allow for finite changes in Process, Training, etc to achieve high level outcomes.

Structuring your report development from the top-down gives a chance to capture the most value-added information and opportunities in the organisation for the best short-term return on your investment in PowerBI. It helps you organise your data model in a balanced manner for delivery of data throughout the organisational structure as well as benefits and brings quick wins to all areas of the organisation.

If your organisation needs help with structuring their Power BI reporting, please contact a Fujitsu Data & AI specialist now.