## Challenges and Concerns

Some minor challenges/concerns with this web based data product are:

1. Custom front end and back end development:

The custom frond and back end development although provides much more control but is costly. Traditionally for Analytical or BI related teams, there are off the shelf solutions which can be used to avoid this cost but the product needs to be flexible enough to accommodate those and also custom design and managing user experience of the business users can be difficult. For front end development, SuperSet is one good alternative and for a complete end to end self service analytics solution; thoughtspot is an emerging tool in the market.

2. Too many heterogeneous sources and lack of control on source:

Too many different sources and the accomodating to the changes in the upstream can be a challenge. Although, our schema enforcement mechanism in the transformation layer and the lean raw layer allow us to ingest data as it arrives, but some times manual interventions might be required to handle the changes in the sources.

To negotiate this problem, the concept of data contracts should be adapted in the organization where a contract will determine what will be consumed by the consumers of various data products in the organization, at what cadence, according to what quality rules and on whose responsibility.

## 3. No Scrum/Agile coach in the team:

This is not actually a problem but a delibrate choice as the role of scrum masters or agile coaches have been diluting with the maturity of processes. Although this means some additional responsibility on the technical product owner and the tech lead; however, it save a lot of cost and also the team can share the responsibilities of holding different ceremonies and it can be an inclusive exercise.