Design Report

Showing all current and past merchant information that includes:

* Business Name
* Email Address
* Billing Status
* Country
* Total Number of Customers over Time

Answer

Using PowerBI

1. Direct live connection - PowerBi reports support various data sources to be combine together in a single report, data from Microsoft sql server can be loaded using ‘Import’ selection to get data from sql server database then include PostgreSQL DB connection to load tables.
2. Star schema is chosen as data model to stored centralized fact with dimensions.
3. Schedules is being configured to ensure data updates to latest
4. Transformation is being made to all column for ‘Platform1’ and ‘Platform2’ to achieved integrated ‘source of truth’ in fact as well as in creation of a lookup dimension.
5. Dataflows is used to capture data from various source (i.e: Microsoft SQL Server, PostgreSQL, etc.), while dataset is being construct as base for PowerBI reporting elements.

Alternative using Pentaho and SpagoBI

1. Load data from both Microsoft SQL Server and PostgreSQL to Pentaho tools and combine together to a target DW database.
2. Snowflake schema can be used to design DW.
3. Schedules is being configured to control frequency of data update.
4. Transformation is used to cleanse, filter, transform and standardize column format in DW.
5. Dataset is being produce in a form of datamart to be used in reporting tools(i.e: SpagoBI).