**Data Warehousing Application in Finance Industry**

As part of this week’s memo thought of writing about the application of data warehousing in different industries. Data warehousing can be applied in multiple industries like Banking, Telecommunications, Hospitality, Education, Manufacturing, Government Institutions to name a few. I am going to primarily be focusing on Banking domain for this memo as it could be quite extensive in the way data ware housing can be used. Though data warehousing can be applied in various areas I will be discussing a couple of areas.

The appropriate data management in banks ensures information quality and consistency. Data warehousing helps banks in building more effective processes for data collection, processing, storage, exchange, analysis, etc. Gathering information from various sources and converting it to valuable insights are the main objectives of DWH.

One of areas that data warehousing is used in banking sector is for customer analysis. In this the spending patterns of customer, the type of transactions and merchant classification can be done. Based on these decisions of partnering with different merchants can be done. Also, if new types of credit cards need to be introduced to specific customer type can be done. Customer segmentation can also be done based on spending patterns, location they are based out of etc.

NPA detection based on the historical data early warning signals can be established to keep merchants, customer which could potentially convert to NPA. Detecting these kinds of people in advance safety precaution can be put in place and thereby try and reduce the bank exposure. Even the call of taking a write off can be made to establish what could be the possible loss to the bank.

Data warehousing can also be used for analysing the performance of the products that have been launched in the market. Based of this if course correction is required or its working in some cities as compared to other can be taken. Market research can also be done to based on the data that has been collected from customers and merchants.

Having a data warehouse helps in getting data almost on a real time basis for analysis. Multiple reports to slice and dice for analysis can be pre-defined thereby reducing the time to create a report on adhoc basis.

Banking ultimately has financial information which needs to be analysed and maintained. Same information also needs to be maintained for regulatory purposes. These reports can easily be generated based on the data that is stored and maintained. Based on the data provided by the banks the decision on repo rate, exchange rate, interchange etc are determined.

Credit risk is another important area in which data warehousing is used. It helps in monitoring non-payments, forecasting the effects of credit policy changes, prediction of credit usage etc. A major factor is the credit score which is calculated for all individuals. This credit score can only be measured if data is collected and stored.

Overall having a data warehouse helps in data quality and management. To conclude the main advantages of having a data warehousing is having a single source of truth, reduced costs, enabling scalability, data consistency and quick access. All of these help in quick decision making and increasing the ROI for the banks.