

DWH model and ETL development, Design, Develop and Embed Custom Reports into LoanDepot - a leading personal and mortgage loan provider in the US



BUSINESS CHALLENGE

- Client is into personal loans and mortgage loans.
- Objective was to design , develop custom reports and dashboards based on the loan conversion rates for each stage (i.e. application submitted to fund).
- Normalization of data by designing the Sql scripts.
- Design dynamic reports with dates between PST and UTC including the daylight saving.
- Automate scheduling of reports via mail to different stakeholders on a daily basis.



SOLUTION

- Sigma conceptualized and development LOS (Loan Origination System) .
- The responsibility of BI team was to integrate Kafka and Storm with LOS.
- LOS sends data to Kafka queue through the event triggering. Storm pulls the data from Kafka and applies manipulations that are required. The data is process back to the database.
- Sigma also designed and implemented custom reports for operations & risk team.



ACHIEVEMENTS

- Design Sql scripts as per business requirement and use them in tableau reports.
- Design tableau workbooks with sheets and dashboards and publish them on to tableau server.
- Schedule data refresh based on daily and monthly reports.
- Automate reports generation and schedule email delivery of PDF reports to stakeholders on a daily basis.
- Install Kafka and Storm. Design the KafkaSpout API to pull data from LOS and emit them as stream.
- Design Bolt Java code to consume the data streams from Kafka.
- Configured Storm topologies and push final computed data to database.



TECHNOLOGY

- Hadoop
- Kafka
- Storm
- Tableau Desktop , Tableau Server
- MS Sql Server database