

## DoubleClick Bid Manager - Google BigQuery

### Client

Our client is an advertising technology company focused on providing solutions to marketers to enable them to plan, execute and measure their digital media campaigns. Besides the ability to identify and reach targeted audience, the company focusses on providing transparency to CMOs, showing them clear results for their advertising spends and providing them the ability to measure ROI.

### Objective

The client's aim was to build a Data Analytics Platform that provides real time insights to marketers regarding the performance of their campaigns and deploy those insights to drive marketing effectiveness.

### challenges

The digital campaigns were delivered using DoubleClick Bid Manager, a Google Demand Side Platform that allows to create programmatic display campaigns and set bids and targets.

The reporting features of DBM provide information on the efficiency of campaigns. However, these reports had to be scheduled and were noninteractive. Congruent needed to develop a solution that provides the capability to perform real time analytics using data available within DBM.

### Solution

Congruent designed a solution using Google BigQuery and Python as the primary technology stack.

Congruent developed programmatic access to Scheduled Reports, Data Transfer files, Entity Read Files and all other DoubleClick Bid Manager data by enabling the DBM APIs. These data were ingested into Google Big Query using the chunking approach, in a distributed manner on a real-time basis. Analytics models were built on this data to easily compare return on ad spend across channels and learn how customers who saw or clicked on the ad behaved. These insights empowered marketers with the ability to

evaluate their advertising and make adjustments to their campaigns in real time to hit their brand and performance goals.

Some highlights of the solution design are:

- A highly configurable solution that can handle data ingestion of any/ all data from DBM to GBQ and vice versa
- Automated data transfer between the two data sources
- Built in email interfaces for alerting users on new data arrival
- Capability to edit DBM parameters from GBQ and re-upload into DBM

### **Benefits**

The client was able to showcase a full-funnel measurement and analytics solution that is seamlessly integrated, so that the marketers could

- Match key demographic information to campaign performance
- Identify the best path to purchase through insights on consumer activity across devices, channels and in-store
- Perform return on investment analytics and conversion reporting

### **Technology Used**

DoubleClick Bid Manager APIs, Google BigQuery APIs, Python, Sqlite3, Shell Scripts