“Netflix” updated

You are a new analyst at Netflix and have been given the following SQL dataset on your first day on the job. The dataset consists of 2 tables, as follows: a customer table and a usage table. Definitions for the fields follow. Datasets can be found at the end of this document.

Customer

* Customer\_ID: unique identifier per customer
* Customer\_Name: name of the customer
* Plan: the Netflix usage plan the customer is on
* Signup\_Date: the date a customer started their free trial
* First\_Charge\_Date: the date the customer converted their free trial to a subscription
* Cancel\_Date: the date a customer cancels their subscription
* Channel: the marketing channel the customer came through to start their free trial

Usage

* Customer\_ID: unique identifier per customer
* Movie\_Name: name of the movie being viewed
* Movie\_Genre: genre of the movie being viewed
* Movie\_Length: length of the movie being viewed (hours)
* Start\_Time: the timestamp a customer starts watching a movie
* End\_Time: the timestamp a customer stops watching a movie

Question #1:

Based on the data at your disposal, what standard metrics would you propose tracking on an ongoing basis to answer the following questions?

* VP Marketing
  + How do we measure customer growth?
  + What attributes are important for increased growth?
* Director of Product
  + What type of usage creates sticky customers (customers who retain at high rates)?
  + How can we tell if our customers are happy?
* Product Engineering Manager
  + What additional fields would you like to instrument in the product and add to the data?

Question #2:

You are tasked with creating an idea to grow customers. How would you approach this and what would be your next steps?

* Provide data points that you analyzed which guided your thinking (free feel to make up data if you are short on time)
* Describe the idea and what belief you are testing.
* What kind of test would you run and what is the learning plan?

Question #3:

Your new charter is now to increase engagement. How would you apply a data modeling or predictive analytical capability to achieve this? How would you present this to a non-technical audience?

Instructions: 90 mins of preparation session to create a few slides or a document; feel free to make up numbers to illustrate if you are short of time; be prepared to present answers to the panel within 30 minutes.

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| **Customer Table Abridged Sample Dataset** | | | | | | |
|  |  |  |  |  |  |  |
| **Customer\_ID** | **Customer\_Name** | **Plan** | **Signup\_Date** | **First\_Charge\_Date** | **Cancel\_Date** | **Channel** |
| 1234 | John | Streaming | 12/25/2013 | 1/23/2014 | 3/29/2014 | PPC |
| 2345 | Jane | Mail | 12/23/2013 | *NULL* | *NULL* | SEO |
| 3456 | Sam | Both | 12/24/2013 | *NULL* | *NULL* | Direct |
| 4567 | Kristal | Both | 12/25/2013 | 1/24/2014 | *NULL* | Direct |
| 5678 | Erin | Streaming | 12/24/2013 | 1/23/2014 | *NULL* | PPC |
| 6789 | Alex | Streaming | 12/25/2013 | *NULL* | *NULL* | SEO |
| 7890 | Brian | Both | 12/26/2013 | *NULL* | *NULL* | Direct |
| 1122 | Jeremy | Streaming | 12/28/2013 | 1/27/2014 | *NULL* | Direct |
| 2233 | Brianna | Mail | 12/24/2013 | *NULL* | *NULL* | PPC |
| 3344 | Kelly | Both | 12/25/2013 | 1/27/2014 | 2/28/2014 | PPC |
| 4455 | Sean | Streaming | 12/21/2013 | 1/19/2014 | 1/22/2014 | Direct |
| 5566 | Kim | Mail | 12/27/2013 | *NULL* | *NULL* | SEO |
| 6677 | Chris | Both | 12/22/2013 | 1/26/2014 | *NULL* | Direct |
| 9900 | Jessica | Streaming | 12/25/2013 | *NULL* | *NULL* | SEO |
| 1112 | Hector | Mail | 12/21/2013 | 1/19/2014 | 3/25/2014 | SEO |
| 2223 | Mary | Both | 12/29/2013 | 1/29/2014 | 5/4/2014 | Direct |
| 3334 | Catherine | Mail | 12/19/2013 | *NULL* | *NULL* | PPC |
| 4445 | Billy | Streaming | 12/20/2013 | 1/19/2014 | *NULL* | PPC |

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| **Usage Table Abridged Sample Dataset** | | | | | |
|  |  |  |  |  |  |
| **Customer\_ID** | **Movie\_Name** | **Movie\_Genre** | **Movie\_Length** | **Start\_Time** | **End\_Time** |
| 1234 | Shrek | Kids | 2.52 | 12/31/2013 13:33 | 12/31/2013 16:04 |
| 2345 | The Ring | Horror | 3.00 | 1/6/2014 17:22 | 1/6/2014 17:29 |
| 1122 | Anchorman | Comedy | 3.63 | 1/2/2014 17:38 | 1/2/2014 20:52 |
| 4567 | Up | Kids | 3.33 | 1/6/2014 21:38 | 1/7/2014 0:56 |
| 2345 | Die Hard | Action | 2.94 | 12/30/2013 22:37 | 12/31/2013 1:30 |
| 1234 | Borat | Comedy | 2.52 | 1/3/2014 17:29 | 1/3/2014 18:34 |
| 7890 | Aliens | Action | 3.26 | 1/2/2014 2:52 | 1/2/2014 5:21 |
| 1122 | Toy Story | Kids | 3.13 | 1/1/2014 2:52 | 1/1/2014 5:58 |
| 2345 | Neverending Story | Kids | 3.25 | 1/9/2014 22:20 | 1/10/2014 1:35 |
| 3344 | Mothman Prophecies | Horror | 3.73 | 12/29/2013 17:32 | 12/29/2013 18:33 |
| 4455 | The Hangover | Comedy | 2.78 | 12/29/2013 21:04 | 12/29/2013 23:49 |
| 4455 | The Avengers | Action | 2.99 | 1/7/2014 19:30 | 1/7/2014 22:06 |
| 6677 | Airplane! | Comedy | 3.24 | 12/29/2013 1:45 | 12/29/2013 4:59 |
| 9900 | The Sixth Sense | Horror | 3.27 | 12/30/2013 6:04 | 12/30/2013 6:27 |
| 1112 | The Silence of the Lambs | Horror | 3.67 | 1/5/2014 6:07 | 1/5/2014 7:19 |
| 6677 | The Matrix | Action | 3.59 | 1/1/2014 9:33 | 1/1/2014 11:33 |
| 3334 | Up | Kids | 2.55 | 1/1/2014 20:38 | 1/1/2014 23:09 |