Middle Eastern Video on Demand

Digital Marketing Analytics (Undergraduate), Fall 2020, Final project

Context

Your client, Mevod, is a Dubai based video on demand company. It is a wholly owned subsidiary of a regional Telco that distributes internet and traditional, linear cable; this is the parent company's beach head product to move into the OTT space. There are limited players currently in the market; an American company, Starz, began offering their OTT service, "Starz Play" in the last few months, and another American company, HBO is rumored to be considering an entry as well. Other international streaming services can be accessed through VPNs. None of the current OTT offerings are tailored to the Middle Eastern / Arabic-speaking market. Mevod's strategy objective is to become the dominant regional market player. Leadership believes focusing on local customers — as opposed to treating the region as a secondary market — is key. The strategy team has outlined two components to their tactical plan: acquiring and/or producing native content (currently primarily generated in Egypt and Turkey) and offering superior customer service to establish their committed presence to the region.

Business model

Mevod operates a subscription business; customers pay a monthly fee for access to the service. Customers can watch content through a variety of platforms: on mobile or tablet devices by downloading a device-specific app from either the iTunes or Google Play stores, on their television by mirroring these apps on smart TVs (wifi-connected), or on smart TVs through downloading an app in the native TV application store operated by the parent Telco. They can also pay their subscription fee through these same channels: iTunes, Goolge Play, or their cable and internet bills from the Telco.

Since this is a new business, the strategy and marketing teams have been piloting several pricing schemes (amounts and structure):

- No trial fee
- Discounted trial fee
- 14 day trial period
- 7 day trial period
- High priced monthly plan
- Low priced monthly plan

Up until this point, all customers have been committed to 4-month contracts: at the beginning of each 4-month billing cycle, they pay 4x the quoted monthly fee up front and are not billed again until 4-months later. Management is open to alternative structures.

Data

One of the client's database-admins-now-data-engineers has been pulling data in response to your team's data request. She has generated three data sets:

- A subscriber data set, "subscribers". Each record is a past or current subscriber to your service.
- A customer service representative data set "customer_service_reps". Each record is a customer service representative who serves multiple subscribers.
- A product usage data set, "engagement". Each record is a measure of product engagement for a given subscriber on a given date (if the subscriber had any engagement on that date).
- Advertising spend, "advertising spend". Total spent per select channels per month.

She merged them for you, and after some joint review working sessions and SQL query revisions, you both feel that you've arrived at a data set you're comfortable with from a quality assurance standpoint.

See the Appendix for data dictionary. See Google Drive for the data sets:

Data files

Statement of Work

[Your consulting firm's name] (Consultant) has been engaged to support Mevod (Client) in their market expansion strategy over the next 3 months ending 16-May-2020.

The client has asked you to put together a marketing strategy plan. They want to synthesize who their customers are, what their customers want, and recommendations for expanding marketing share and improving profitability.

Your firm will conduct 2 of the following analyses:

- A/B testing pricing schemes that the strategy and marketing teams have been piloting to evaluate their effectiveness
- Customer segmentation
- Attribution and allocation to understand how sensitive our marketing budget is to whether we use customers' survey responses or technical data to determine optimal allocation
- Churn forecasting and revenue retention opportunities

Since management is testing pricing strategies in A/B testing, they also want a churn forecast analysis, so they can understand downstream forecasted revenue impacts to changing unit economics (plan prices). (If you choose A/B testing as one of your two analyses, you must do the churn forecasting as your second analysis.)

(This is a substantial amount of work on a short time frame, so the client internal team is going to help by doing the analyses your firm does not undertake.)

Deliverables

- 1. SteerCo presentation on 01-DEC-2020 to review general data structure, findings, and patterns and proposed analyses
- 2. Written presentation on findings for the Q2 board meeting submitted for review to the Executive team no later than 08-DEC-2020

Class notes

- You may collaborate with others, including sharing pieces of code with one another or repurposing from previous assignments (I expect you to repurpose code from work you've done earlier this semester, otherwise this will be horrendously time consuming). However, everyone must submit individually developed code for the churn model. Discussion is encouraged, but no two students should have identical pieces of code for this component. Additionally, everyone must individually produce their own final presentations. There will be conceptual overlap, but each presentation should reflect individual student's insight and thought process.
- Each student must submit two components for grading:
 - Code base checked into public GitHub repo
 - Board presentation in pdf format submitted through Classes with link to GitHub repo (doesn't have to be live link, can be plain text)
- Each student must do a preliminary presentation (the SteerCo meeting) to the class on either 01-DEC-2020 or 04-DEC-2020. Everyone must be present and ready to present on both days, I will be selecting students randomly in real time, but all of you will present at some point. Each student will have approximately 5 minutes. The purpose of this meeting is to make sure you understand the data sets and know what you plan to analyze and how. You do not have to have client-ready presentations, but you should have some visual materials to aid in discussion, e.g. my level of formatting on case solutions.
- Grading criteria: as with all of our homework assignments, I'm looking for effort in applying the methods we've learned and business insights from their application. There is no "right" answer and It is ok to take a risk and be wrong; what matters most is that your assumptions and thought process are clear so that your effort can be used to discuss and enhance everyone's understanding, as we ideally do in industry contexts. For the final board deck, the formatting needs to be at a level more formal than my case examples, similar to what you have all been doing for assignments so far.



Data Dictionaries

Table 1 – Subscribers

field	description
subid	unique subscriber id
package_type	customer internet package, independent from OTT signup
num_weekly_services_utilized	number of OTT services currently subscribed to, self-reported upon signup
preferred_genre	preferred content genre, self-reported upon signup
intended_use	intended OTT product usage, self-reported upon signup
weekly_consumption_hour	number of television or movies consumed per week, self-reported upon signup
num_ideal_streaming_services	subscriber's target number of services (Mevod, Starz, etc.) subscribed to, self-reported upon signup
age	subscriber age
male_TF	subscriber gender, True if male, False if female
country	subscriber country
attribution_technical	entrance to sign-up form captured by product
attribution_survey	customer reported "how did you hear about us", self-reported upon signup
op_sys	operating system used for sign-up
months_per_bill_period	duration of billing cycle in months
plan_type	pricing plan type, trial fee and duration
monthly_price	monthly quoted price of subscription
discount_price	monthly quoted discounted price of subscription
account_creation_date	date of user sign-up for an account
trial_end_date	end date of subscriber trial period
initial_credit_card_declined	T/F first attempt at charging user was declined by credit card company
join_fee	amount user paid to sign up
language	user preferred language, indicated in product settings
payment_type	type of credit card
num_trial_days	number of days in user's trial period
current_sub_TF	user currently has access to content (tech flag)
payment_period	which renewal period a subscriber was in as of date data was pulled, trial period considered payment_period = 0
last_payment	last date user successfully made a payment
next_payment	next date user needs to complete payment by for access in next period
cancel_date	date a user requested cancellation
trial_completed	user completed the trial period without canceling