Middle Eastern Video on Demand

Digital Marketing Analytics, Spring 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

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.

See the Appendix for data dictionaries. See Google Drive for the data sets: https://drive.google.com/drive/folders/1OGtZTHgze19SAXyRFx_fZxONX0dVfj_g?usp=sharing

Data sets are in Python's native format, pickle.

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. Consultant will execute at least 2 marketing analyses of the following identified priorities:

- AB testing to understand what marketing strategies have been most effective to date
- Customer segmentation to help the marketing team design acquisition strategies supporting the Executive team's growth objective
- Advertising channel spend efficiency and effectiveness, supporting the advertising team's budget allocation for the upcoming quarter

In addition to the above, Consultant will build a churn model and develop recommendation(s) on an alternative product pricing structure as well as a distribution of expected CLV, representing the uncertainty of future payments given the current customer base.

Deliverables

1. SteerCo presentation on 03-May-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 16-May-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 03-May-2020 or 05-May-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. If you have a known conflict, like work or a capstone meeting, you **must** tell Devansh and myself via email by 30-April-2020 so that we can make sure to schedule appropriately. 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, but it does not need to be at the level you all have been putting in for class to receive full credit (though the class decks have been absolutely beautiful and I appreciate them!)

Appendix

Data Dictionaries

Table 1 – Subscribers

field	description
subid	unique subscriber id
package_type	customer internet package, independent from OTT product
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 consumers 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
retarget_TF	T/F this person was a previous subscriber who had churned
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
creation_until_cancel_days	number of days from account creation until user requested account termination
cancel_before_trial_end	T/F if user requested cancellation of account before trial period ended
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
revenue_net	actual revenue collected from user net of charge backs, refunds
join_fee	amount user paid to sign up
language	user preferred language, indicated in product settings
paid_TF	T/F user has made a successful payment
refund_after_trial_TF	T/F user requested refund for 1st period fee after the trial ended and account was charged
payment_type	type of credit card

Table 2 – Engagement

field	description
subid	unique subscriber id
date	date of engagement action
app_opens	number of times subscriber opened the application
cust_service_mssgs	number of messages sent to customer service representative
num_videos_completed	number of videos watched through 95%
num_videos_more_than_30_seconds	number of videos watched at least 30 seconds
num_videos_rated	number of videos user rated
num_series_started	number of TV series user played
payment_period	which renewal period a subscriber was in as of date in 'date' field, trial period is considered payment_period 0

Table 3 – Customer Service Reps

field	description
customer_service_rep_id	unique customer service rep id
subid	unique subscriber id
current_sub_TF	T/F subscriber is currently a subscriber
cancel_date	Date subscriber requested a cancellation of account
account_creation_date	date of user sign-up for an account
num_trial_days	number of days in subscriber trial period
trial_completed_TF	T/F subscriber completed trial period without cancelling account
billing_channel	Channel through which user receives / settles invoice
revenue_net_1month	actual revenue collected within first 30 days from user net of charge backs, refunds
payment_period	Renewal period for subscriber tied to observation attributes, trial period is considered payment_period 0
last_payment	Date of last payment made by subscriber
next_payment	Date of next payment to be made by subscriber
renew	T/F subscriber renewed in the payment_period