

Question - 1:

More people are using smartphones as their first device, unlike developed markets where the PC is the first device. And we have seen a huge growth of internet users in video/contents apps like Youtube and tiktok.

Impact of JIO on Youtube :

Before the invention of JIO , YouTube content from India would hardly have views ranging about less than average of 50k for most popular videos and normal Unpopular YouTuber with content had views ranging around 2k to 5k. But after jio The same Video would easily have views ranging around 50 M within months of it's upload.

Reliance Jio provides high speed broadband connectivity across India through its 4 G network & FTTH Jio Fiber service. With such an ease of internet connectivity, youtube and tiktok has seen a tremendous growth.

Advantages of Youtube :

- YouTube has 2 billion users worldwide and 79% of Internet users have their own YouTube account.
- Almost eight out of ten marketers consider YouTube to be the most effective video marketing platform.
- 94 percent of American users between the age range of 18-44 year old accessed YouTube at least once a month.
- Everyday people watch one billion hours of video on YouTube.
- 62 percent of businesses use YouTube as a channel to post video content.
- More than 70 percent of YouTube watch time comes from mobile devices.
- 90 percent of people say they discover new brands or products on YouTube.
- 400 hours of video are uploaded to YouTube every minute worldwide.
- 90 percent of US digital video viewers use YouTube, the most popular channel for digital video consumption.

Impact of JIO on Tik-tok :

Before the invention of JIO , the TIK TOK even didn't exist but after jio a guy with no talent became stars. TikTok's explosion in India in the 18-month period since January 2018 has expanded its reach to 30% of all Indian smartphones as of August 2019, according to data provided by Delhi-based market intelligence firm KalaGato.

A majority of TikTok's users (in India) are 18-35 years old and come from tier-2 and tier-3 cities.

→ In brevity, Youtube and TikTok have given content creators an opportunity to earn . With jio coming in, people can easily use the internet.

While Coming to Amazon / Flipkart :

The online retail base is poor relative to offline, taking time to reach the segment. To focus even more on the previously untapped markets of Tier – II and Tier – III, Amazon / Flipkart must penetrate the hyperlocal market currently dominated by the likes of Swiggy, Grofers and Bigbasket .They need to put more efforts to grab more consumers from offline-friendly Tier – II and Tier – III cities.

These E-commerce sites haven't seen this type of huge growth like youtube or tik-tok. Lower data prices and improved data speeds will enable higher consumption and better online experience for consumers. Wider reach of the Internet and more people upgrading from feature phones to smartphones is good news for online marketplaces.

→ The large Internet base in India looks attractive but making money from users is another matter altogether. Still, Jio will help in improving Internet speed and consistency, the lack of which is believed to have held back the expansion of Internet businesses. This is the reason why Youtube and Tiktok have increased their users and we can say that Amazon/Flipkart sites also have increased users but making money and purchasing things from them is another matter. So that's why they are not much profitable with the coming of JIO.

Question - 2:

Yes, the onboarding flow revamp is a success. This is because the ratio of FTBs and new installs is decreasing with each passing month. So we are able to convert more users to buy from Nymtra. We can analyse the fact that as soon as the 3 new features were introduced (31st july), the revenue from the FTBs increased drastically (August onwards). This is due to the fact that there were free shipping and easy returns, as a result of which customers didn't have to pay anything more than the MRP of the item they were buying and not only that, they were even given privilege to return the item, incase they find any defect in the items they purchase. Adding to that "10,000+ items under ₹999" banner, gave 10,000 variety of options to choose from, that too in such a minimal amount of Rs. 999. Making the customers' experience hassle free 'Skip Login' option, has indeed resulted in decrease in the number of FTBs who made the second purchase, reason being that since customers' database wasn't recorded and free shipping for the first-order, motivated repeated customers , to act like the first time buyers.

If we review the May month and the June month there is certainly an increase in the New Installs, First time buyers , Revenue from FTB's and FTB's who made a second purchase . Now if we take account of the July month there is a slight rise in all the aspects of the users (New Installs, First time buyers , Revenue from FTB's and FTB's who made a second purchase).

There is a sharp rise in the August month in New Installs, First time buyers, Revenue from FTB's and FTB's who made a second purchase as this has been the highest growth in a month in all the factors as compared to other months . Then in the month of September and October there is a steady increase in New Installs, First time buyers and Revenue from FTB's but there is a decrease in the FTB's who made a second purchase.

For the initial 2 months, when this scheme was introduced, customers' used to fill their details in LOGIN place, but then that decreased tremendously in October. The only negative impact of this action is that Nymtra can no longer send engaging emails to customers. Emails usually give an opportunity to continue building relationships with the customers before and after their initial purchase .It adds value to the customer's experience. Not doing this adds the risk of losing them. However, neglecting this fact, revenue for Nymtra still increases.

→ Overall, there is a increase in the New Installs, First time buyers and Revenue from FTB's from the May month to October but there is a decrease in the FTB's who made a second purchase in October still all these new ideas has helped the company in gaining more and more new users in every month so this is a successful onboarding revamp as New Installs, First time buyers , Revenue from FTB's and FTB's who made a second purchase is increasing with every month.

Question : 3

Personalised Recommendations at FilmiStar:

a) What will be the change in user behaviour once this feature is introduced?

Ans.) The feature will allow users to share the list of movies to another user/users. This helps in satisfying the core needs of the user such as

- a. Social Validation - What are others watching?
- b. Make my viewing experience better by seeing what others are watching.

- c) Users also became more excited that what is new going on of my type
- d) Users also get more attracted towards these platforms.

b) What should be the goals and metrics for this feature?

Ans.) Goal of this feature - Sharing Recommendations is a feature which will help improve engagement in the platform. The North star metric for this feature would be to measure the Netflix Streaming time/user.

Metrics to track:

Feature Metrics:

- Streaming time increase/decrease due to the shared lists/recommendations
- Click through rate increase due to shared lists/recommendations shared via social media channels
- Number of lists
- Number of times a lists has been accessed and via which channels(Facebook, whatsapp, messenger etc.)
- Number of lists subscribed and added by user to their account .

c) How should this feature be launched and evaluated?

Ans.)

-) A working interactive web-based film recommendation system needs to be developed, which will be accessible to the public. Preliminary input from registered users of this live system will be obtained and used as a basis for testing the effectiveness and accuracy of our system. It will go like this:

To verify the performance of our proposal, we first have to use datasets,consisting of ratings from users on movies.After that RMSE has to be calculated

where $P_{u,i}$ and $r_{u,i}$ are the predicted and observed ratings, respectively, for user and item in the test dataset, and N is the number of elements in the dataset. The lower the RMSE is, the more accurate the recommendation engine is at predicting user ratings.

To test this feature, we need to build a live film recommendation system in which users are asked to pick a collection of their favourite films, and then recommendations should be given for

another set of films. With each recommendation, a request should be made to the user with input about how good she or he feels about it. It will start as follows:

All users who wish to browse through the movie list posted by the FilmiStar administrator, and set film ratings, are asked to register with the site first. Notice that we do not require users to supply any sensitive information (age, gender, identity card number, etc.) to protect user privacy; only a pseudo username and password is required.

After successful registration, users are able to login into the system, search for a movie, and rate any movie according to their degree of satisfaction.

After successful login, a user can directly click on a movie which he/she is interested in. From there the user can obtain detailed information about the movie, such as its name, director, main actors, category, release date, rating, synopsis, and a movie player link. The user can also search for a specific movie and rate it, based on a 5-star rating system. If the user gives 5 stars to a movie, this indicates a 100% satisfaction level, and if 1 star is given, the movie does not meet the user's expectations.

After this the user can then click an option that would be given where movies of the user's taste would be displayed. The list of movies would be recommended by the FilmiStar system.

Then we can test the precision of our Weighted- SlopeUV algorithm in the live production environment. We may determine the efficacy of our proposed algorithm based on the real difference between the algorithm's prediction and the actual feedback rating results.