Tell us about a problem associated with any product that you observed during the COVID-19 pandemic.

Why did you choose this problem and what potential impact can solving it create?

How will you solve this problem using technology?

How will you measure the success of your solution?

What are the possible pitfalls of your solution?

NETFLIX

"Netflix added **13.2M** new paid subscribers as people stayed home during the pandemic. This is a great opportunity for us to put money into content making"

- Reed Hastings, Netflix CEO, Sept 2020

What Reed Hastings didn't say is that how many 'freeloaders' Netflix added during the pandemic and how much was the apparent monetary loss!

[Sai Thete] [20191076] [sai.ashok@mnnit.ac.in [MNNIT]



What's the problem?

As most people are at home – with some free time at hand, the temptation to spend time on OTT platforms is very high But do they actually pay?

Effects

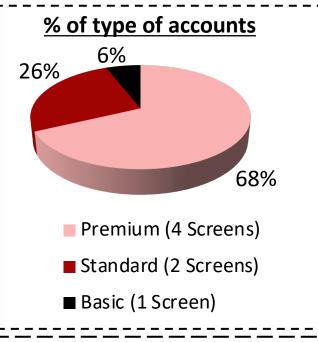
Sharp decrease in revenue due to multiple logins (over the desired limit)

People often hesitate to share passwords but have to do it because of social obligations

Major avenue for content piracy

Market Potential

How much monetary loss are we looking at?



Netflix claims that, on average, 1 premium account (meant for 4 users) has been logged on to 11 different screens

Considering that 3 people watch it on both mobile & laptop, still one account is being used by **8 unique users** and likewise for other accounts

Netflix's average loss: \$2.65/month/user

Actual viewership worldwide: 417.78M

Number of Paid Subscribers: 192.95M

Hence, Netflix loses: \$2.65*(417.78-192.95)*12 = **\$7.15B/year**

Which means, it's revenues could increase by 35.4%

Knowing The Customer-Base Better

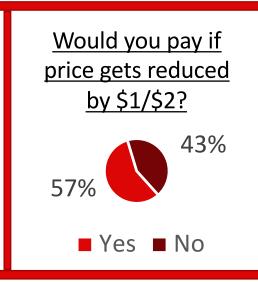
(Survey conducted on : A mix of adults & teenagers across Mumbai)

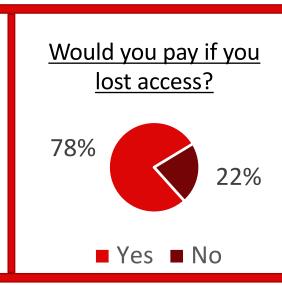
A survey to understand the effects of the upcoming solutions combined with a revised pricing strategy



If not, why?

- It's quite expensive (42%)
- Don't use it to the fullest (23%)
- Can pay but why pay when someone's already doing that (31%)
- Pay 1/10th of the amount as it's being shared by 10 people (4%)





<u>Incorrect Pricing</u>: How the prices need to be corrected to build a sustainable model

Region	Standard Plan	Willingness to Pay	Difference
Canada	\$8.67	\$13.41	35% lower
India	\$8.88	\$6.15	44% higher
UK	\$11.16	\$13.85	19% lower
Sweden	\$13.37	\$15.28	12% lower

<u>Desired Results/Conclusion</u>:

- Pricing strategy needs to be revamped. To gain new users & retain previous ones – prices need to be reduced in some places. To compensate for that, prices in some countries can be hiked
- This revamped strategy when combined with the upcoming solutions will create a sustainable model wherein people will actually have to pay to access the content



Solution 1: Netflix Smart Lock



Current Shortcomings: Only email address & password is needed to log in



Objective: Using biometrics for signing up every time. This acts as 2 Factor Authentication



Mobile



Laptop



Television

- Biometrics include –
 iris scanner,
 fingerprint scanner &
 face scanner
- Along with the password, people will be asked to sign in with any one of the biometrics every time

- Face recognition using the laptop's webcam
- If laptop doesn't have a webcam, sign up using Netflix mobile's QR code scanner (similar to WhatsApp)
- Sign up using Netflix mobile's QR code scanner



Things to ponder upon:



Premium plan would be able to store 4 sets of biometrics and likewise for other plans – 2 sets for Standard & 1 set for Basic



Biometrics will be stored on a secure Netflix server so the user can access it from any device



Solution 2: Unique Product Keys



Objective: Providing unique one-time product keys to users to register for the product



Major Change: Instead of Netflix on a browser, roll it out as a software for computers



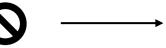
How does it work: Concept of product keys will only work if Netflix is installed as a software on laptops as it is installed as an app on a phone

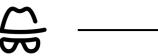
Each user will be provided with 4 unique product keys - one for laptop, one for mobile, one for television & one as a backup key for people with 2 laptops or mobiles

How will **BOTH** the solutions solve the problem











Revamped pricing strategy will attract new users

Avoids excessive logins

Eliminates piracy risk

Parents can control children's screen time

Things to ponder upon:



Users paying for Standard (2-screen) & Premium (4-screen) plans would be given 2*4=8 and 4*4=16 keys respectively



Users can request for a backup key if they are switching to a new device & in-turn they have to choose one device to permanently sign out off

Netflix as an installed software



















































DECISION MATRIX & COMPARISONS

<u>Scale</u>

1 : Least favorable case2 : Fair but needs improvement

3 : Neutral case

4 : Good scenario

5 : Most favorable case

Factor	Solution 1	Solution 2	Reason
User Friendliness	3	4	Solution 2 doesn't require biometrics every time
Tech Accessibility	3	4	Same reason. Some devices may not have all the biometric sensors
Security Level	4	3	Out of the 4 product keys given to the user, 1 or even 2 spare keys can be shared
Investment Level	3	3	Solution 1 needs a server to store all biometric details. Solution 2 needs an installable software to be created
Implementation Ease	4	3	Biometric plugins need to be updated on existing product. Solution 2 needs a whole software
Sustainability	5	3	Biometrics are tough to bypass. Product keys can be forged after a point of time
Final Score	22	20	Solution 1 is chosen over Solution 2

SOLUTION 1 - SUCCESS METRICS

User Funnel % of new users who get to know about the revamped pricing strategy & biometric plugins % of people who register for the pre-existing Netflix trial for 1 month **Conversion Metric** % of users who pay according to the revamped pricing strategy **Retention Metric** % of people who continue after the first paid month **Security Metric** Technology Metric

What type of biometrics (iris, fingerprint, face) are being majorly used? Is Netflix on laptop being accessed by face scanner or phone's QR scanner?

One account is being logged on into how many devices? If this number is low but the number of users is same or greater than before, the product is successful

SOLUTION 1 - PROBABLE PITFALLS



Good amount of investment is needed to store the biometrics



Families of more than 2 would be forced to switch to 4-screen memberships



Face scanners are relatively easy to bypass using photographs of the user



A mobile would always be needed for QR scanning when logging into TVs