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YouTube: How much is it for "You"?

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1 ABSTRACT

Youtube is probably the most popular online video sharing and social media platform. It has one of the most intuitive and easy to use user interface. But over the years it has adopted some controversial decisions and which led to user frustrations. It has focused more on their business side and maximizing profits. It is obviously good for them. But We think the 'You' from the Youtube is missing the signature it used to focus more on user experience and satisfaction.

Fig. 1. YouTube home page

We are trying to focus on some of the problems we think are noticeable and frustrating for users. We are thinking from the perspective of the users. Youtube have some issue in visibility and discoverability in some of their features. Further more some features are deliberately pushed to gain some technical and economical advantages. They aggresively using their ads and sometimes shamefully blending them with normal videos which are one of major problems we are focusing

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on. The other we studied about is adding pseudo new feature, but actually making things worse in mobile platforms.

After Google, YouTube is the most visited website worldwide, with over one billion monthly users [1]. Its users watch more than one billion hours of videos each day, and, As of May 2019, it was estimated that videos were being uploaded at a rate of more than 500 hours of content per minute. YouTube also offers paid content such as movies and exclusive content. It shares revenues with creators.YouTube has expanded beyond the website into mobile apps, network television, and the ability to link with other services, such as Discord and Nintendo. Video categories on YouTube include music videos, video clips, short films, feature films, documentaries, audio recordings, movie trailers, live streams, vlogs, and more. In a work youtube has revolutionalized how a free to use video platform works and shaped modern internet standards. With the rise of internet bandwidth speed and capacity, the popularity has massively increased in all over the world

Fig. 2. Youtube Inc.

2 HEURISTIC EVALUATION

Youtube has revolutionized the video industries and changed how a user interface can work in a massive scale. When dealing a scale of about the population of the world, there are certainly some aspects of things that may feel different from person to person. We have tried to be unbiased and give our opinion accordingly.

2.1 Usability of youtube as a platform

You has provided one of the most secure and easy to use platform for different media consumption. It has become our day to use product of choice. According to latest statics Youtube is now the most popular website visited after Google which is also by the same company. The ecosystem and google authentication system has made a crucial role for ease of use with best of class security. The content is well moderated, safe and has proper right management. So the usability of youtube is extemely positive. Most of the video platform who tried to challenge youtube has failed hard because of bandwith limitation and payment model. Youtube's free to use model has helped grow the community and their local caching and compression have solved latency and bandwidth problem greatly.

2.2 User experiences on using youtube

Youtube has one the largest user base on the planet. So their user base is extremely varied by language, region, ethinity and religion. It has

3 USER ANALYSIS

. Youtube has solved the problem of global communication via video content. The shift in direction shows how successful the platform is.

News media has shifted their focus on Youtube. Now every popular channel is live telecasting news and short clips everyday. Information technology has changed drastically.

Personal Vlogging has become extremely popular. One can follow one role model and can learn from his lifestyle. Everyday their is chance of growth.

3.1 Youtube demographic

56% of Global YouTube users are male. 44% of Global YouTube users are female 81% of U.S. adults use YouTube. 82% of U.S. male adults use YouTube. 80% of U.S. female adults use YouTube. 95% of 18-29 year-olds in the U.S. use YouTube. 91% of 30-49 year-olds in the U.S. use YouTube. 49% of 65+ year-olds in the U.S. use YouTube. 89% of YouTube users come from outside the US. 51% of YouTube users say they visit the site daily. 37% of Millennials aged 18 – 34 are binge-watching YouTube daily. YouTube services are available in more than 100 countries.

3.2 User statistics

15.5 % of YouTube site traffic comes from the U.S. More than 70 % of YouTube watch time comes from mobile devices. You can navigate YouTube in a total of 80 different languages. YouTube is the world's second-most visited website. YouTube is the world's second-most used social platform. The average visitor to YouTube checks out 8.89 pages per day. The number of channels with more than one million subscribers grew by more than 65 % y/y. The top genres watched by YouTube customers are comedy (77 %), followed by thriller/crime/mystery (60 %). People watched 100 billion hours of gaming on YouTube in 2020. India leads as the country with the highest number of YouTube users at 225 million.

3.3 Financial statistics

YouTube generated $19.7 billion in revenue in 2020, a 30.4% increase year-on-year. YouTube generated $6 billion in revenue in Q1 2021, a 49% increase year-on-year. The number of channels earning five figures per year on YouTube grew more than 50% y/y. The highest-paid YouTube star of 2020 was Ryan Kaji, with $29.5 million in earnings. Google acquired YouTube in 2006

for $1.65 billion. YouTube video influencers with 500-5k followers charge, on average, $315 per video. YouTube video influencers with 500k+ followers charge, on average, $3857 per video. Most YouTube channels get paid $0.5 per 1000 video views. YouTube pays $18 per 1,000 ad views on average. Over the past five years, YouTube paid out over $2 billion to partners with Content ID.

3.4 Advertising

YouTube is used by 55% of marketers. 70% of viewers bought from a brand after seeing it on YouTube As of 2020, YouTube was the fifth most used social media platform for marketers after Facebook, Instagram, LinkedIn, and Twitter. Apple Inc was the biggest advertiser on YouTube in 2020 having spent $237.15 million. 29% of marketers find that pre-roll skippable YouTube video ads are considered the most effective advertising form on YouTube.

4 TASK ANALYSIS

4.1 Problems

4.1.1 Comment Section: **Problem:** The problem with the comment section was that the number of comments below the video was only one. After clicking that comment the app directs the users to the comment section, which is non-intuitive. Also that only comment is easy to avoid. Accidental quitting on the reply page is another problem of the comment section. The back button and close button can be mis-tapped by users.

Solution: Our solutions to these problems are, to begin with, keeping at least 3 comments instead of 1 comment. Secondly, there is no need to put the close button in the reply page.

4.1.2 Video Control: **Problem:** Setting the quality to our desired settings is a bit problematic in youtube in recent days. There are four video quality standards now. Which are not very consistent. If a user wants to set 1080p resolution in a video he has to perform two steps: 1st go to advanced settings → then set the quality to 1080p. After doing all this, these settings won't persist in the next videos the user plays. Secondly keyboard controls are unintuitive. Generally the keyboard arrow will forward the videos. But if a user clicks on the sound control. The keyboard arrows will no longer forward the video and increase the volume.

Solution: To address the video quality, giving the user an option of globally setting the video quality will solve the issue. About the keyboard controls, a fixed key binding will solve the problem, e.g. The left-right arrow key can be used to go forward or backward and the up-down arrow key can be fixed to control volume, the space bar to play-pause.

4.1.3 Blended Ads: **Problem:** In today's youtube, it can be difficult to tell the difference between an ad and a regular video. Many times when people are trying to find out if they want to buy
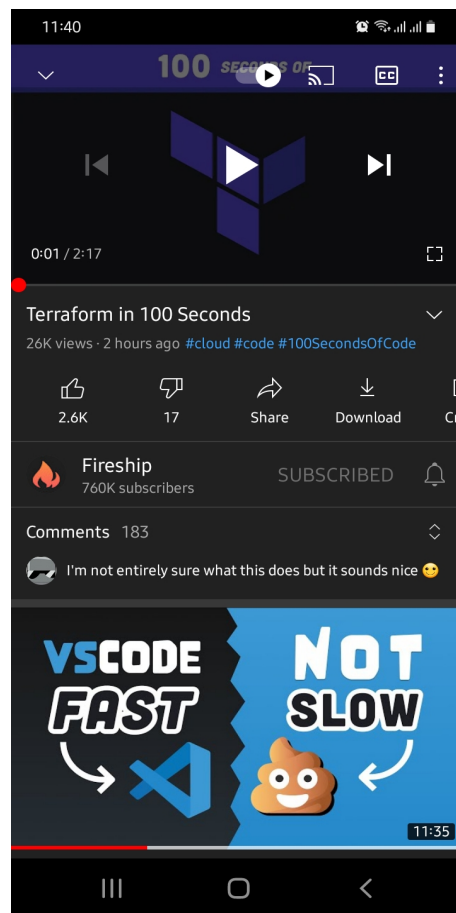
Fig. 3. Comment Section under videos

something or not, they will watch an ad before making their decision. This often creates confusion for viewers who may think that they're watching an actual show and not just another commercial. Which might be good for youtube but can be frustrating for the user.

Solution: A solution can be to put a border around an advertisement to make it more pronounced. The border can be of many colors, such as red, blue, green etc.

5 HEURISTIC EVALUATION AND PROTOTYPE REVISION

In this section, we have done some the heuristic evaluations (Nielsen's ten heuristics) and assessed the severity of each usability problems. We have given a severity rating in a scale of 0-4 as follows:
0 = I don't agree that this is a usability problem at all
1 = Cosmetic problem only: need not be fixed unless extra time is available on project
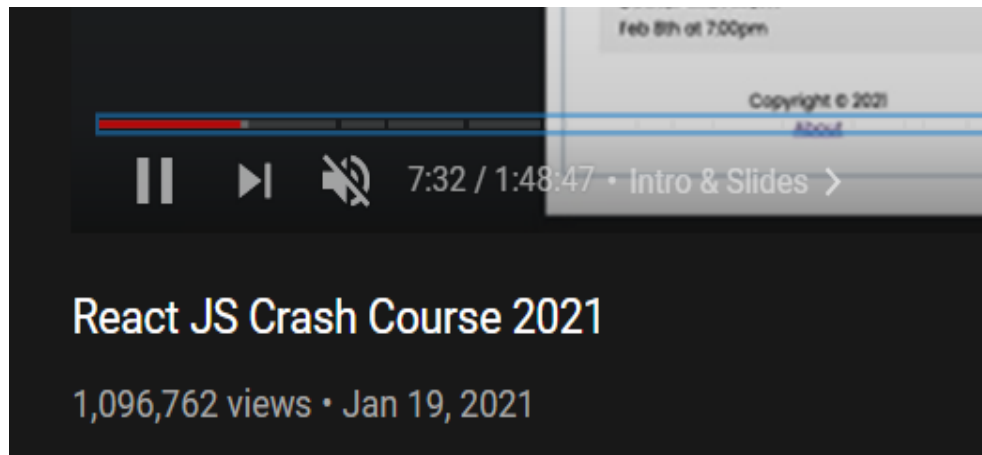
Fig. 4. Video controls

2 = Minor usability problem: fixing this should be given low priority

3 = Major usability problem: important to fix, so should be given high priority

4 = Usability catastrophe: imperative to fix this before product can be released (Nielsen)(cosmetic, minor, major, catastrophic).

We have also discussed the critical incidents/ problems we have observed and we have brainstormed some solutions for those observed problems in the Table **??**.

6   MULTI MODALITY SUPPORT

In this section, we discuss if the system supports multi modality.

- **Sight and Audio:** The system uses both visual and audio channels as primary modes of representations. Some feature visibility has some opportunity to be bit better.
- **Language:** Supports huge number of languages around the world. Although manual closed captions are pretty good, automated ones are not reliable most of the time.
- **Touch:** Supports touchability and different gesture.
- **Region:** Supports different regional features. Sometimes regions are selected based on preference and contents and sometimes geo-locations.

7   ACCESSIBILITY OF THE SYSTEM

In this section, we discuss how could systems be made more accessible to older/children/disable in the subsequent subsections.
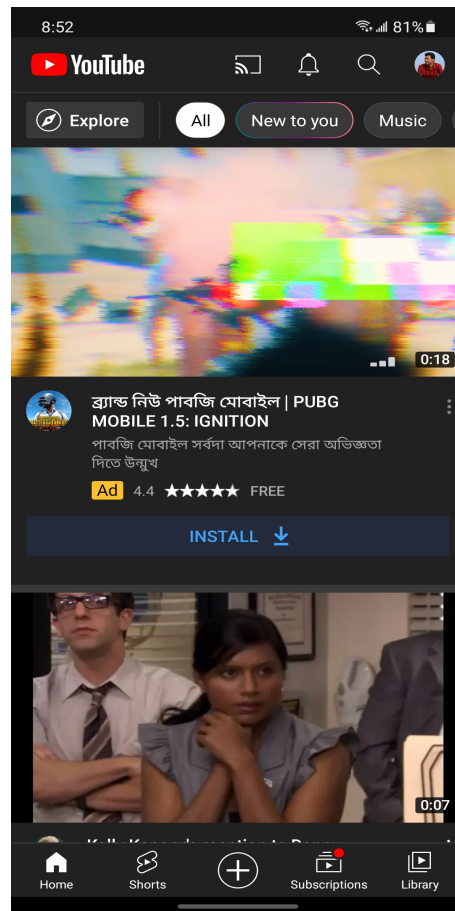
- **Age groups:**

Fig. 5. Advertisement

comment	visibility problem	2
	confusing control	3
video control	quality setting	3
	key mapping	2
Ads	Ad blending	2

Fig. 6. Heuristic evaluation

- Mostly convenient for teenages
- Older people will not find required features easily in compact home page
- Readability is less for older people
- Extra instructions/ tutorials can be added for olders

- **Visual impairment:**
  - Fonts are resized on different devices and sizes
  - Hard for the middle aged users due to lack of visual comfort
- **Physical impairment (autism, dyslexia):**
  - Most of the task done by listening and viewing
  - Most of the commands by clicking and tapping
  - Closed captions are there
  - Google assistance for voice command
- **Cultural differences:**
  - Easy to use for both educated and less educated people
  - Supports varieties of language
  - Easy to use for different classes of people

8 FEEDBACK

We took some feedback from our classmates and we quote the feedback directly here:

Md. Habibul Islma, a CSE student from Bangladesh University of Engineering and technology says, *"I get frustrated when I have change video quality setting everytime I have do multiple steps. It would have been better I just could have fixed universal setting"* He also added, *"I use Youtube all the time but new features feels bloated"*

Another CSE student from the same university, Tasnim Khondokar says that *"I dont like the ads. Ads are annoying. I dont mind supporting the content creators. But please don't force me. Forcing user is not good for experience"*

9 CONCLUSION

This study has helped us understand why user interface of a program is so important to make or break a product. We have seen although being a multi billion dollar company does not guarantee the best experience users can get. Sometimes features get manipulated and design gets altered. Most of the times business dictates some of the design decision. Although Youtube gives you one the most personalized social media and video platform and decent user interface, it is necessarily not all about you everytime.Sometimes it will do something unexpected because its more profitable. Business is the main key defining factor here.

REFERENCES

[1] H. Abubakar, N. L. Hashim, A. Hussain, Top 100: The most visited websites in the us [2021 top websites edition]". www.semrush.com. retrieved may 26, 2021.