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The Covid-19 Media Behavioral Sink: How User Experience and Design can promote the longevity of Streaming and Streaming Platforms

Abstract:

Covid-19 has influenced a surge in streaming products. Taking the streaming service winter into a new season. While this flux has provided a great opportunity for network television and media companies to evolve it also has resulted in the crippling of the theater and cinema industry. Ironically, this boom has also started the development of a product/design “ceiling”, making it difficult for new services to obtain content for their platforms. The cluttering of the market makes a sense of individuality between these products very hard to come by. Meaning that there is an opportunity to further study these product interactions and designs to introduce a new era in the streaming service timeline. This paper’s research will focus on how cinema and social media could impact the experience of streaming services, then provide a set of design/interface that the service could iterate on or incorporate.

Keywords: Streaming Platform & User Research/Interface

Introduction

Streaming, especially in the era of Covid-19, has become a titan of industry. This concept of streaming being a superpower was not always the case and is relatively young in comparison to several entertainment sectors. While relatively young streaming is not a new notion. However, how does one define streaming? The BBC refers to streaming as a means of consuming content instantaneously rather than downloading a separate file to one's device and viewing it later. Live-streaming, which is a subsection of streaming, is when the online media is recorded and viewable in the time of the event on multiple devices. A Streaming Platform or Streaming Service Provider is categorized as a subscription-based service offering content.

Cinema Chains and TV seemed to have an almost endless reign and touted a supreme dominance or Monopoly over the entertainment marketplace for several decades. This unbalanced power dynamic began to shift in the late 90s and early 2000s due to the advent of the Data Compression Process. Data Compression is a process where the file is resized by re-encoding the bits of storage found in the original file. There are a variety of compression techniques, although there was only one (DCT) that led to the MPEG and later to the MP3 audio format. The type of streaming that we know today had not come about until around 1993. This began the fall of the DVD industry, Netflix, which was a DVD rental service that was founded in 1997. We could consider the rise of Netflix to be the beginning of the end of the modern-day cinema chain.

Media Streaming Platforms have exponentially risen to power, especially in the time of Covid-19. A large margin of users stays at home and rely on these products to get through the

monotony of their daily lives. While this is an opportunity for rapid growth for the product category, I believe like the cinema industry Streaming services will die out faster than expected or would reach a ceiling very early in its product life cycle through a variety of factors like media content. Like the tulip bubble or the rat utopia project shows an overabundance creates problems for the product and displays a need for diversity. Since a ceiling is pertinent to the fabric of a market, a shifting in the market and lack of overall content would spell the end of some services. While economics is a primary motivator, providing and creating content is a staple for a streaming service. From a design standpoint, audio-visual streaming services are truly providing a relatively personal viewing experience that is separate from the cinematic experience. The research in this paper will contribute to providing a model to how a more personalized viewing experience can be created during and after Covid-19 by infusing aspects of cinema and social networking in a streaming platform.

Literature Review

The Importance of Social Interactions in Cinema Culture

Humans are social beings. We rely on social interactions between each other to perceive, comprehend, and navigate our physical/conceptual world. Social Interactions like participating in group activities have become a part of human culture. The way we speak, our posture, and how we emote allows us to transfer pertinent information. When integrating audio and visuals into a social scenario it has a larger effect on a participant's viewpoints, choice, and memory formation.

Western Movie-goer's Social interactions seem to have a more individualistic mindset when partaking in group activities especially regarding Cinema. In America, it is acceptable for users to enjoy activities like shopping and watching movies in individual or isolated settings. American audiences are expected to stay silent and focus more on "The Big Screen" rather than starting conversations with one another. Contradictory, eastern countries like India have a collective mentality, where the user goes to see a movie based around the social grouping rather than the actual content of the movie. When asked about their viewing experience audience members recalled personal experiences and stories told by friends (Srinivas, 2002). What this does is provide an all-around viewing experience based on the human experience rather than the media content provided.

Since COVID, the sociable movie-goer could not participate in the typical cinema-going experience. Consumers looked towards other sources which were seen by many audiovisual streaming services in March of 2020 where there was an increase in viewership of major streaming services in the United States of America, with Disney Plus obtaining a 68% increase and Netflix observing a 66% spike in their viewing community (nScreenMedia, 2020). While using a streaming platform was beneficial at first, users in both cultures still needed a way to interact with one another. Consumers had to interact with multiple applications to balance the availability of streaming services with external social applications, like Zoom, to connect to their social groups. The management of individual applications to achieve a traditional social setting allows streaming services to incorporate a conversational scenario and heighten user experience among new viewers. For instance, Twitch users have been found to navigate across platforms: While Twitch was used for live streaming, users would learn about special happenings or

controversies on reddit, watch highlights and replays on YouTube and communicate with friends and fellow players through VoIP-communities such as Discord or TeamSpeak (Sjöblom, Törhönen, Hamari, & Macey, 2019). Steps like this have already been made to incorporate multiple viewers but they are still outsourced and lack a high level of functionality.

Social Interactions in the time of Covid-19 and The Reliance on Technology

From the beginning and midway through the pandemic, COVID-19 was rampant and uncontrolled. To keep safe, we had to alter our daily lives through activities like self-quarantining and social distancing. While Cinema would have a hard time adapting to the new way we communicate and experience media, we would not since society has built a variety of systems like email, text message, and phone calls to communicate with each other. To the general population, those previous forms of media are more related to the corporate sector where constant information transfer is imperative. Dr. K.R. Subramanian's research paper, Influence of Social Media in Interpersonal Communication, emphasizes the negative effects of social media on our interpersonal relationships and how we share information. Stating that through the personalization of our communities we only come across information that reflects those of the group (Subramanian, 2017). While this might not be optimal for polarizing information, it provides an opportunity for content to be passed through word of mouth and a shared interest/experience. Social media like Twitter, Facebook, and Reddit is used to view media and extracurricular forms of content. And recently modified their platform of user-based content to their advantage, many social media platforms rely on user generated content, streaming functionality, and on demand services (Spilker & Colbjørnsen, 2020), to attract a large following. Covid-19 Social Media appears to have impacted how we view others and media. Studies on affordances for Social Media platforms allow for a vast amount of functions such as constant content discovery, connectivity, and interactivity (Spilker & Colbjørnsen, 2020) taking their functionality past their highly addictive likes based system into something more and diverse compared to their competition. Spilker highlights that's in Gillespie's article that additional features are in response to the growth of demands and competition, while we have seen this in a variety of different social media platforms that provide on demand and user generated content, we only see a select few live streaming services like twitch and YouTube use current functionalities as well as social platforms in the same area. This leads to our research question; Can the additional functionalities provide users an opportunity to connect and be more social in such a distanced and individualistic setting? Along with can the functions be integrated in a proper way without inhibiting the viewing experience.

Method

The article, research on self-management experience of audio-visual streaming platforms takes, NETFLIX as an example, focuses on Netflix's mobile application, stream/view time, and overall UI. While I believe their results will be of no use to me, the framework provided could lead to the formation of my method. The idea to iterate on a product such as Netflix, was chosen due to its familiarity with a variety user no matter the background. Though this may be the main case for the previous study, Netflix was chosen as the subject study because the product is well known across a variety of different countries (Hu, Feng, Liu, & Hsu, 2020) this fact along with Netflix was one of the first companies to start on demand streaming content and being a natural disruptor of the movie rental industry. Ironically, Netflix has almost become an antithesis of

itself, while they are still leading in comparison to their competitors not a major change has come out of the product they are not completely “benefiting” from. While major change is not completely necessary there is a perfect opportunity for the corporation to disrupt another major industry.

However, this study will focus on the viewing habits of pre and present Covid-19 viewing habits. And conduct interface improvements to exemplify how the integration of social media platforms, as well as cinema, could lead to diverse product forms and interactions. The procedure will be conducted as follows:

1. *Interview participants on their viewing habits*
2. *Develop an interface focusing on commentary the discovered commentary*
3. *Test interfaces and obtain feedback*

Experiment Design

Through a set of in-person interviews focusing on viewing habits and interactions that took place before and during COVID-19. What users missed most about Pre-Covid viewing was the cinematic experience; this includes sound, screen size, and personal interactions one could have with friends or the audience. The questions are as follows:

Pre-Covid

- How often did you go to the cinema?
- What aspects did you enjoy the most? Why?
- Did you go alone?
- How did you hear about new movies?
- What was your process when selecting a movie at the cinema?
- Do you think Social media or others ever played a role in your decision making?
- Did you use streaming services before Covid?

During/Post-Covid

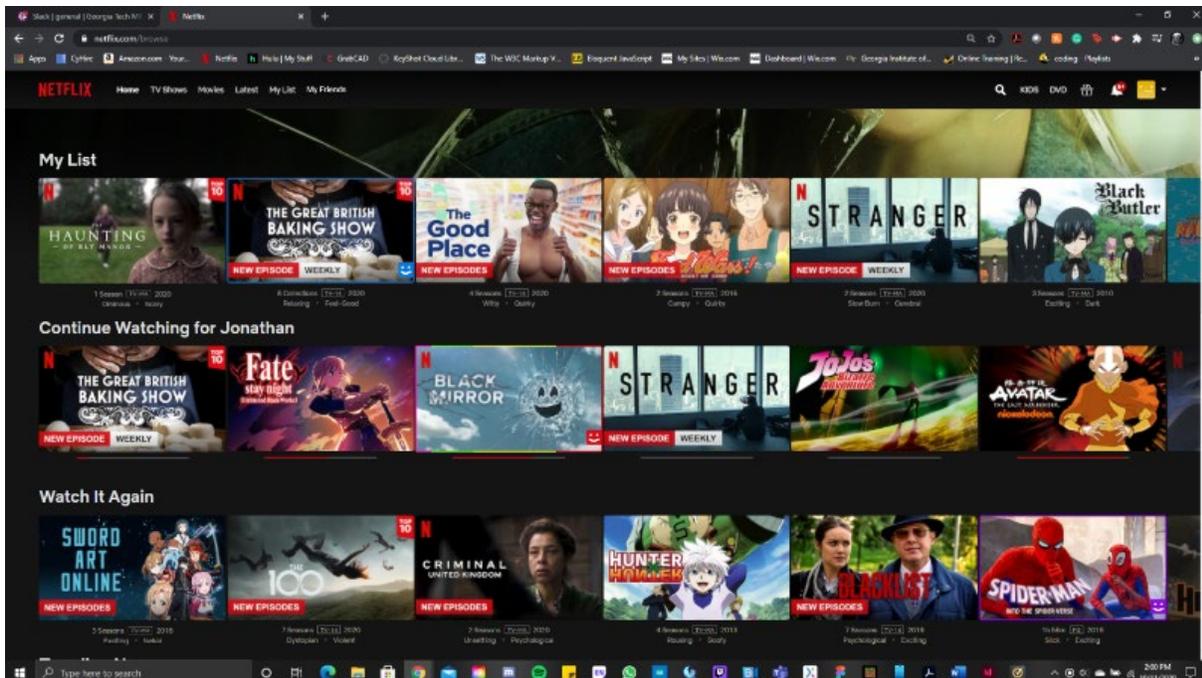
- What streaming services do you use? Which is your preferred service?
- Do you mostly watch these apps on the laptop or Phone?
- How often do you watch in a group?
- Do you feel like your movie going experience is different from your streaming service experience?
- Do you interact with Audio/Live Streaming services (Spotify, Twitch)?
- What is your experience like when using these services?
- Do ratings affect your movie choices?
- What, if anything, would you change about current streaming services?

Due to time restrictions and COVID-19 guidelines, the number of participants were limited to a set of 5 students that attend The Georgia Institute of Technology. Interviews lasted around 40 minutes to 1 hour and asked if they would like to participate in user testing a future design with varied functionality. When discussing Pre-COVID-19 media viewing habits and use cases,

students would use each other as a reference when deciding a movie as well watch it together, mentioning other than the booming sound, large screen, and content the aspect of watching/interacting with others was mentioned the most. In the case of streaming before COVID-19 users would still refer each other movies personally and learn about them through close or trusted networks. Participants viewing habits seemed to have diversified over time. For instance, before COVID-19 student had initially stuck to 1 or 2 audio visual streaming services with one additional live streaming and audio streaming platform. These instances were dependent on payment and content provided. Participants habits, interactions, and wishes/hopes during COVID-19 were, users rely on external applications to view content with their social group resulting in a constant flipping of applications or a tedious amount of chat management. Users also view content based on recommendations from their social circle and social media relying less on the TOP 10 in their country. This statement was also the same when referring to reviewing sites like rotten tomatoes.

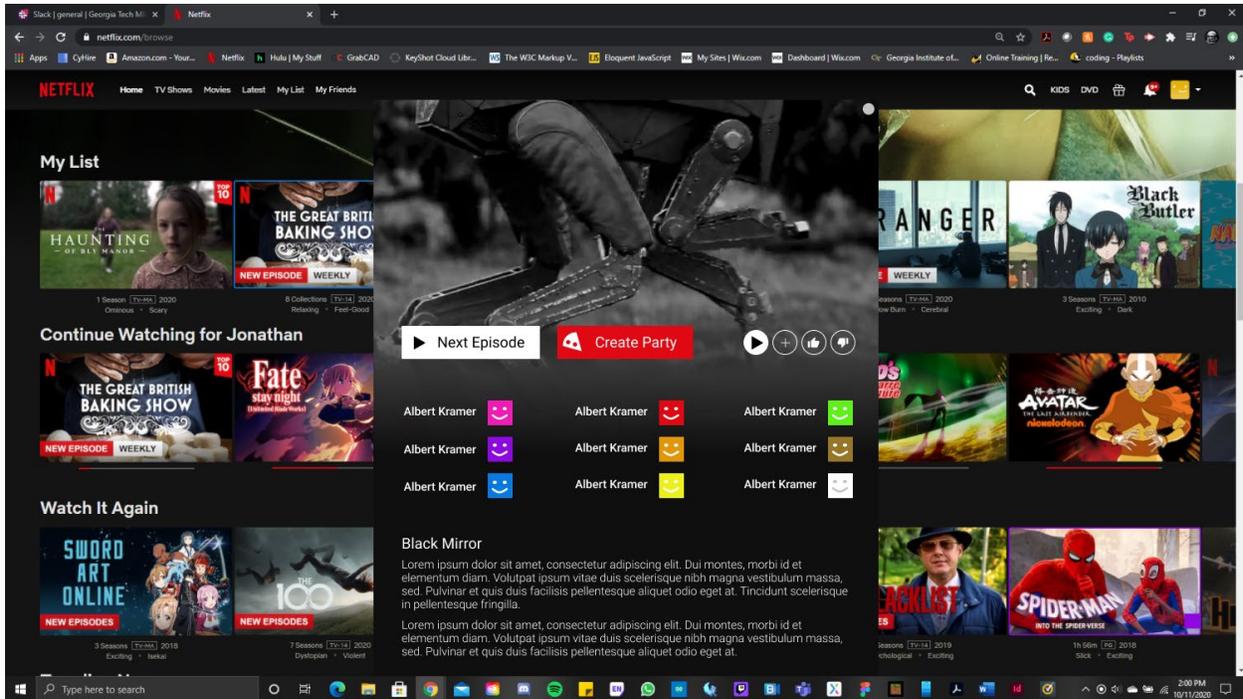
Result

The process that most users described when interacting with the web view as a single watcher is as follows, Users start by logging in to their specific accounts, from there they will peruse the platform in search of content; during this time users will preview contents of interest. Then users will select the chosen media content. If users are watching in a group in person or through digital means it changes the process, once again this process is altered by what the groups interests are, this was a factor that was incorporated in all iterated designs. The current layout and Ui is built in favor of keeping users entranced in an endless scroll and displays the multitude of options that the platform has to offer. If the layout were altered in ways like providing a higher amount of sectioning or collapsible menus, then it would become a confusing assortment of pathways. Using this to their advantage, Netflix could use their open layout like a cloud archive system. The design shown below takes the original design and uses the “anonymous user” icon as an additional effect to show which friends are viewing which shows.



While this configuration easily flows with the Netflix original app design there are still areas of improvement to make the viewing experience a bit more intuitive for users. When reviewing this scenario, users liked the opportunity for one to or know what their network was watching. However, they had agreed that it would be better if the icons were placed under the images of the media content. This would also give the user an ability to read the names of their friends as well as where they are in the show. The rimmed glow what quite difficult to see and could be used elsewhere.

As stated before, a major aspect that users have missed throughout COVID-19 and said that has lacked in streaming services is the connected experience when physically watching a film. Students mentioned that when watching during COvid-19 they use external applications like Discord, Teams, and Teleparty. For Discord and Microsoft Teams, video sharing would be done through streaming or sharing one’s screen and communication would be done through chat or an audio means. Audio was primary way of communicating when sharing a viewing experience rather than through chat. Teleparty, is an external application that requires users to use a link and send to participants, users disliked this because they would have to verify that other users had a Netflix subscription, this program also uses a chat function reminiscent of other live streaming services. Students disliked this feature since it they would have to direct their attention to what they were typing and who they were responding to rather than the movie or show at hand.



To solve the issue regarding knowing who can join a party, the redesign allows for an additional interaction where a party can be started before going into the watch screen (shown above). Once “Create Watchparty” has been selected, online participants will appear and can be selected for an invite. Participants thought that this was advantageous since it streamlines the system and help coordinate who can participate, keeping users on the site rather than going to a bootlegger. The Spotify side panel would have been an awkward addition to this layout since it does not fit the design scheme for Netflix and can be present in a variety of other ways. Furthermore, Netflix’s

original design for watching content seemed heavy and constricted, with many of the related buttons and interaction points separated from each other. This issue becomes evident when students engage in watching content with the help of Teleparty.



The redesign which is depicted above uses the corners and edges to as much as possible. While Teleparty does not allow for real time audio and the redesign made in this paper allows for this, showing who is speaking next to the chat function and allowing users the opportunity to

communicate through a collapsible chat feature. When accessed the user can invite other participants, mute them, or change the volume of whoever might be speaking. Additionally, there are two other options of communication, typing or quick emotes. Users appeared indifferent about being able to type in the chat saying the audio feature might be unnecessary since one is able to talk. However, the responses for the quick emotes proved to be more of a point of interest to participants. This offers further exploration on chat functions and features regarding chats and emoticons when viewing media.

Conclusion

This paper's research question and goal is to propose a design that would be able to push Netflix ahead of its competitors as well as create a sort of breathing room in its marketplace. Deliverables in this study were to obtain information from users and understand possible outlets that could be used to ascertain what opportunities are prevalent at this time during Covid-19, implement a system or redesign to be tested with users, and procure information that could be tested at a later date. From what I had gathered through interviews and user testing that the implementation of socializing the audio-media streaming platform would be advantageous from a user perspective. However, this would require a larger amount of server space for Netflix especially with the addition of a more Google Docs formatting and tracking. Through this study there is another design opportunity that was not able to be covered completely through this study. The first would be interactive storytelling in more of a social environment allows users to interact with each other as well as the content would be interesting as well as the idea of premium events during this time. With these studies done in the future this could positively affect the platform.

Citation

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