

The Future of Facebook Live Streaming: Defining a 5 Year Implementation Strategy
(Technical Paper)

Exploring the Policies in Place for Livestreaming Content Moderation
(STS Paper)

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Introduction:

The introduction of television across the world was extremely transformative and changed the way in which individuals consumed content and entertainment. As time progressed, innovators introduced the concept of streaming live content through cable television and eventually over-the-top (OTT). OTT is the productized practice of streaming content to customers directly over the web. This advancement led to the introduction of livestreaming. Livestreaming today is the synchronous distribution of content through the internet which “allows for real-time shared viewership and interaction among consumers through live chats and instant messages,” (Tyson, 2018, pg. 1). As shown in Figure 1, videos will be captured by cameras, processed, and then broadcasted live through various platforms. This product has been further developed by actors such as Twitch TV, YouTube Live, Periscope, Facebook Live, and many more. The many portals through which television content can be delivered have “caused Facebook to increasingly compete with other providers” (Hutchins, 2019, pg. 17). As competitors grow, there becomes a greater number of users creating content that governing bodies are not able to regulate. Since the inception of livestreaming, there has been a great deal of hate speech and misinformation content broadcasted on social media. With unclear regulation and oversight of the content that may be distributed to millions globally, there will be an increase in targeted hate speech and misinformation that is livestreamed.

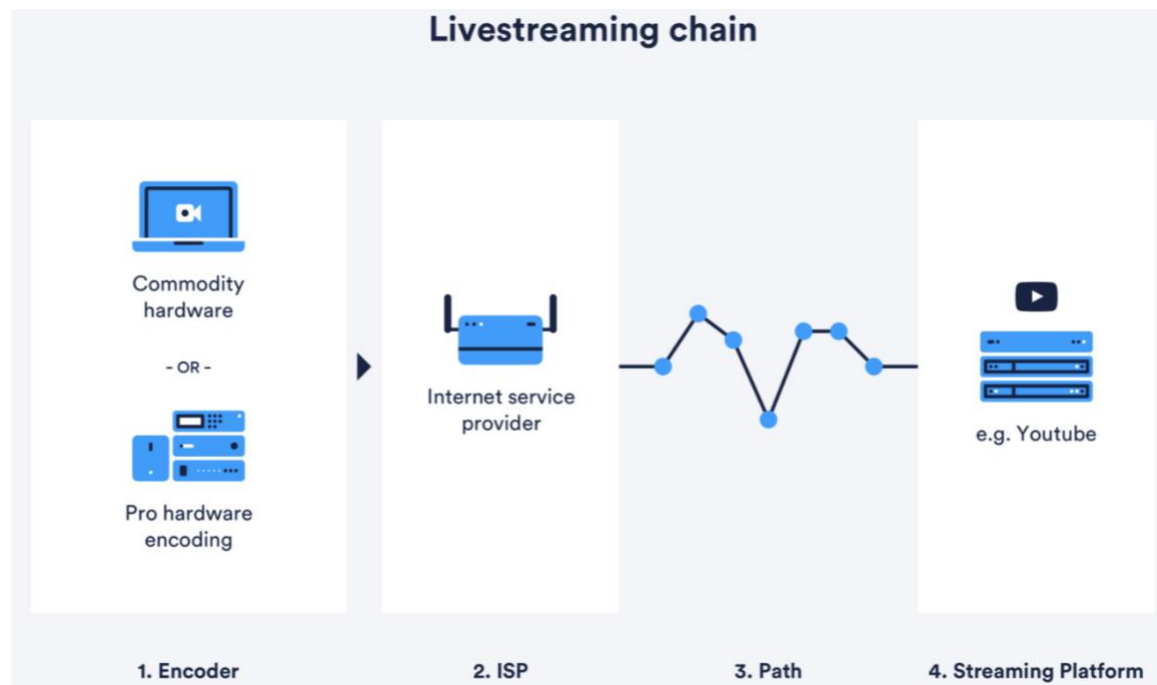


Figure 1: Illustrative Process Diagram visualizing process of content capturing to content distribution. (Restream.Io, 2018).

Leveraging the background of livestreaming challenges, my capstone team will be designing a 5-year technical and business implementation strategy to assist the Facebook Live product. The mission of the project will be to analyze historical data, understand the current infrastructure, and apply a systems-thinking approach to provide actionable recommendations for Facebook Live. The recommendations will allow Facebook Live to have a firm long-term strategy as opposed to their current short-term approach with livestreaming. Individually, I will be exploring the social implications of having a robust livestreaming product which allows for instant access to various forms of content. My research will explore how platforms define what is appropriate to be streamed and what gives those governing bodies the credibility and background to serve as regulators of that content. The research will explore precedent occurrences and how

these platforms have curbed or failed to curb the spread of hate speech and targeted misinformation.

Technical Topic: Designing and Recommending a 5-year Implementation Strategy for Facebook Live

As livestreaming services draw greater demand, there is an initial response by companies to participate in the market and capture market share from the most prominent competitors in the space. With the largest social network in the world, it was an obvious decision for Facebook to launch its live product in 2015. The platform initially offered the services to verified users, and eventually moved to allowing everyday users and groups to host their own livestreams. Today, most of the hours spent on livestreams are hosted by pages/groups and not users (Facebook, 2020). This means that most of the time spent on Facebook Live is on content posted by news channels, gaming channels, and much more. This makes Facebook responsible for attracting large organizations and content producers to its platform. This The recent trend of increased competition in the market means that Facebook Live faces an issue of having a competitive advantage and will need to fight for the viewership of global users. Facebook has been making a conscious effort to continue to attract these eyes to the platform by expanding into segments such as gaming, sports, news, e-commerce, and much more. In 2018, Facebook managed to secure the rights to the Champions League in Brazil. The success in the region motivated the brand to provide similar offerings in Brazil in 2020 which attracted over 4 million viewers at the same time (Holmes, 2018). In recent years, Facebook's hold on the market has deteriorated as competitors such as Periscope, Twitch TV, and YouTube Live have heavily invested in the technical infrastructure and content that viewers appreciate. Facebook has traditionally made short term strategic changes to adjust and account for new initiatives taken by competitors

instead of operating via a long-term strategy. This approach has led to abrupt investments and various technical systems that have not yielded appropriate returns. We believe it is critical that Facebook takes a longer-term approach and strategize for the future. In this research, we will make sure our strategic recommendations have a 5-year horizon with an emphasis on both the technical and qualitative sides of the business. The team will use the system's objective tree, a proven method which helps "analysts and decision makers to clarify and organize a rational set of goals," (Figure 2) we developed as a foundation to better understand the problem (Scherer 2007, pg. 66). This figure will allow the team to better understand the root problem and allow us to make targeted recommendations based on the objectives outlined in the figure. Additionally, the team will solicit historical data with the intention of extrapolating trends and patterns to better inform recommendations that we believe Facebook would benefit from. This approach will work because the team will be analyzing permutations of data and will provide a third-party perspective on the progress of the live platform. Although we've come up with an initial approach to the problem at hand, we have yet to decide how we will understand the dynamics of other competitors in the market. With limited access to the ways in which competitors are considering their own strategy, we hope to also do some work in better understanding the emerging markets that Facebook Live can capture in order to sustain a competitive edge and differentiate itself amongst its peers.

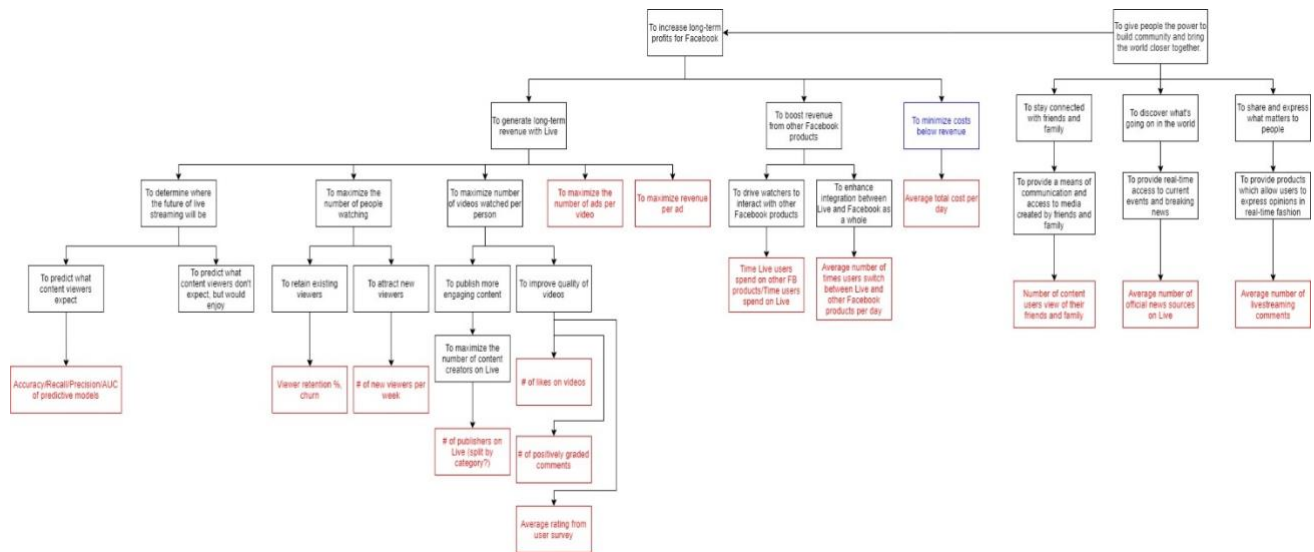


Figure 2: Facebook systems’ objective tree illustrating the descriptive scenario along with quantifiable and measurable metrics. There exist objectives that the Facebook Live product does not fully accomplish in their short-term strategy. (Created by Author).

STS Topic: Exploring the Policies in Place for Livestreaming Content Moderation

Livestreaming has brought a global audience together, allowing for friends and family to broadcast special events while interacting globally through features such as the like button or comments. Livestreaming appeals to individuals because it creates a social viewing experience that brings the “presence of others; and/or interactions with others” in real-time (Tyson, 3). This is possible with the traditional means of streaming where content is pre-recorded, and users can only interact with the individuals in their own circle. Livestreaming policies present many grey areas as to what may or may not be distributed in a synchronous fashion. Although social media platforms like Facebook and Twitch allow for communication and an opportunity to express opinions, they also “act as a mean of spreading hate speech online.” This is because social media platforms such as Facebook “distribute the content of hate speech, sensitive information, and disputed topics,” (Mossie, 2020, pg. 2). In July of 2016, two fatal shootings drew national attention. The first murder was one of Philando Castile by police in Falcon Heights, and the second was a bloody shoot-out in Dallas between a civilian and police officers. What made them

stand out was not solely the fact that people's lives were taken away, but because they were captured on onlookers' smartphones and live streamed (Cooper, 2019). In 2018, a far-right personality, Ethan Ralph, launched a live stream on YouTube to discuss the mass shooting that claimed the lives of 11 people in the Tree of Life Synagogue massacre. In this event, Ethan Ralph attracted hundreds of individuals who contributed to the conversation by commenting on a variety of topics. These viewers donated a range of \$5 - \$20 to the streamer to have some of their comments featured on the livestream (Koh, 2018). This event is not unique as there are hundreds of precedents to also pick from. These events lead me to question: At what point do we retract an individual's ability to contribute freely to speech? There is an intuition as to what is good content, but there continues to be blurred line as to what goes too "far" and what is "inappropriate" for streaming. Additionally, livestreamed content has been at the forefront of misinformation. This misinformation "has been possible because of three things: ease of distribution/cost; difficulty of regulation; and the decline of trust amongst the audience," (Cooper, 2019, pg. 168). Streamers can attract large crowds through large advertisements and manipulating algorithms to make sure that the right audience is attracted to their content. In a survey done by the Institute of Policy Research at Northwestern University, researchers found that "minorities, those with high levels of religiosity, and those with strong partisan identities across parties exhibit greater levels of misinformation than those with contrasting group affiliations," (Druckman, 2020, pg. 1). If this type of content is continually streamed to large audiences, there is high probability people will be enticed to carry out hate and bigotry while also being incorrectly informed about major issues around the globe. This research will dig into some of the policies that have been put in place by social media giants like Facebook and Twitch

which aim at suppressing hate speech and misinformation. It will explore the basis of those policies and whether they are sound and just.

Conclusion:

At the end of this project, the team will deliver a comprehensive set of actionable recommendations for a business strategy and design that will allow Facebook to be better prepared for its 5-year future. These recommendations will not only serve the purpose of allowing Facebook to have more clarity of their 5-year future but will also give Facebook the competitive edge needed to capture market share in a growing industry. Additionally, the completion of the STS research will allow individuals operating in the social media and livestreaming space to have a better understanding of the past, present, and future of content governance. This research will shed light on what constitutes “good” or “bad” content. If implemented correctly, the strategy will allow Facebook to increase its market share in livestreaming services as well as create a competitive advantage because of the way the platform streams content. Facebook will have differentiated content, an easily accessible interface, as well as a strong hold on niche industries. This strategy will allow Facebook to continue making short term adjustments while also factoring in the goals that have been set for the 5-year horizon. Facebook will additionally start thinking more critically have these governing bodies and how they can justify them to their constituents.

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