Exploring Sony in the Connected TV Domain

Connected TV (CTV) can be defined as a device connected or embedded into a TV that supports streaming video content (Oracle, n.d.). CTV has been growing significantly over the past two decades with various metrics showing that it will continue to do so in the upcoming years (Majidi, 2023). CTVs provide users with more flexibility and different benefits that linear television is not able to provide as easily or at all, such as providing users with more freedom of choice and convenience. There are various types of CTV devices, including smart TVs, standalone streaming gadgets, and Over-the-top (OTT) services (Sverdlik, 2023). While CTVs inherently have major benefits for consumers, they can be highly beneficial for advertisers within the industry as well.

Advertisers have placed a great emphasis on capitalizing on this growing market due to how effective and malleable advertising is through this method. CTV allows advertisers to target the audiences they want to prioritize using different pieces of information including demographics, location, preferences, and more (Majidi, 2023). Additionally, users seem to also prefer the ads they receive on CTVs as they perceive themselves as saving money, and consumers find CTV ads more relevant when compared to linear television. While this paints a picture of CTVs and their importance, it is crucial to present the landscape of current CTV companies and to provide more detail on the industry itself.

Samsung, Sony, and LG are considered the big three smart TV companies. Amongst the three however, Samsung has a revenue share equal to Sony and LG combined, with Sony having the least revenue share from the three (Laricchia, 2024). This creates interesting questions for Sony to tackle and explore how and why this gap between them and Samsung exists. Delving into this disparity and understanding the success behind Samsung can allow Sony to strengthen

its market position and narrow the major revenue gap against their most prominent competitor Samsung. Further, with advertisements being more reliant on the TV manufacturers themselves, Sony would benefit and profit from having access to a wider audience and consumer base.

Comparing Sony and Samsung requires a multi-faceted and complex perspective, as various factors may be in play when it comes to the dynamic between the two. This method can be achieved through a two-pronged approach; the first being whether brand identity and recognizability play a significant role in the revenue disparity and second if specific TV products Samsung sells are better than Sony's TV products.

Better understanding the brands themselves and their recognizability is important. As Evan Shapiro's *2024 Media Universe* map demonstrates, Samsung as a company has almost every vertical covered with Samsung competing in over 10 different markets, compared to Sony's primarily gaming and entertainment vertical. This lends credence to the idea that Samsung has a greater reach to audiences as a more diversified technology company, which could in theory translate to their success in the TV and CTV market. Before delving into surveys, crowdsourcing social media platforms, comment sections, and reviews to get an understanding of Sony, Samsung, and CTV users will be utilized. The strength of crowdsourcing is that it can help collect demographic data regarding users and consumers, which can further assist in designing the survey. The drawback of crowdsourcing for this specific case is technology products tend to polarize users greatly, so attitudes and opinions from crowdsourcing will be highly unreliable, which further adds value to a well-designed survey.

Surveys show that 66% of 18- to 29-year-olds, 75% of 30- to 49-year-olds, and 83% of 50- to 64-year-olds Americans own a smart TV (Kunst, 2024). Another survey for daily connected television viewers in the US shows that 63% of 18- to 34-year-olds and 58% of 35- to

54-year-olds use CTVs daily, while only 27% of those above the age of 55 watch CTVs daily (Stoll, 2024a). A joint Amazon Advertising and Ipsos survey found that the average household income for CTV consumers is $80,000 (Cole, 2021). These three reports indicate that the demographic is Americans with an average household income of $80,000 between ages 18 to 64, although those aged 55 and over do not have major CTV use, their smart TV ownership is the highest out of all age brackets surveyed.

An online survey, using these demographics combined with data from crowdsourcing, would be the best approach. About 115 million households own a CTV (Stoll, 2024). Thus, the survey sample will need to be quite large, ideally between 30,000 to 50,000 participants with a balanced distribution between the 3 age group brackets established in the previous section: 18- to 29-year-olds, 30- to 49-year-olds, and 50- to 64-year-olds.

As for the content, the recipients would first be asked a multiple-choice question on if they own a TV or connected/smart TV and a free response question regarding how many hours of TV they watch a day if they answered yes to owning a TV/CTV. Even if they answer no to owning a TV, the next couple questions could provide insight about consumers. Those two questions would be followed up with a question asking them to list 5 technology brands that come to their mind, followed by asking them to list as many smart TV brands as they can. This is important, as the current hypothesis is that Samsung transcends being a TV brand and is in the consciousness as a larger technology brand, while Sony does not have as strong of a greater identity. A multiple-choice question asking for what brand their parent's owned would also be asked following these questions, with the choices being: Samsung, LG, Sony, Multiple, Other, or N/A.

The rest of the questions would have to be more covert to try not to prime specific biases with a large focus on the participants themselves, with simple questions that provide multiple-choices such as what brand their TV is, and more nuanced questions, only allowing a few word responses, such as what function is most important to them in a TV and their strongest opinions on connected vs linear TV. Keeping free-response questions brief and minimally worded, and using as many multiple-choice as possible is important due to the sheer number of participants. Multiple-choice questions using the Likert Scale will also be used for questions regarding attitudes, likes, and dislikes for brands, TVs/CTVs, and related features, where Samsung vs Sony features can fully be pitted against each other. To further ensure respondents are honest about their own use of a technology brand, the survey will offer a 5% off promotion/discount code for the next Samsung, Sony, LG, and Vizio product the consumer will purchase, but they can only choose one. This survey is meant to explore the brand identity and familiarity reasons Samsung may be ahead of Sony, but a different approach is required to observe the functional aspects and user experience of TVs.

Perhaps Samsung TVs are preferred due to technological capabilities and better functions. There is merit in this as both Samsung and Sony offer various TVs of various prices, and Samsung generates significantly greater revenue. The actual TV watching experiences can be recreated and observed in labs to a certain extent. Participants who use and watch smart TVs would be invited to participate in studies where they would watch TVs. Participants will have their HR monitored, sweat rate measured, eyes tracked, brain activities measured, and more, while watching a Sony or Samsung TV, where they are randomly assigned, followed by a post-experiment survey about their experience. They would then be invited to a session to watch a similarly priced, Samsung or Sony TV, whichever they did not watch in the first session, with

similar features, and complete the exact same procedures. In the end of the second session, participants will be offered the same discount code from the survey to better gauge their use and preference of a brand.

While both methodologies are promising, there are potential drawbacks that need to be minimized or counterbalanced as much as possible. A prominent issue with the methodology is how the lab experiments are feasible theoretically, but in practice they require significant counterbalancing and cost, as these procedures are not easy to conduct. The lab sample would have to be significantly smaller in scale compared to the survey due to these reasons. The surveys have the drawback of sheer quantity, as not only does that limit the question format, multiple choice with limited free response vs short answer, but the discount code incentive could be costly. The data yielded can still be highly useful for our purposes.

The research approach was split into two parts with the first approach looking to explore the potentially higher-level, big picture reasons Samsung is outperforming Sony, with a focus on exploring brand identity and recognizability. As mentioned, this looks to utilize surveys with questions digging into recognizability, identity, and perceived quality of Sony. The first analysis would look at the list of 5 technology brands from survey-takers. The first step would be analyzing the descriptive statistics to observe the relationship between owning and not owning TVs and CTVs (initial question of survey), their brand of TV/CTV if they own any, and the 5 brands listed. The Likert Scale questions output quantitative data, so analyzing the descriptive statistics and potentially using correlations can have merit.

The covert limited free response questions regarding important functions in TVs and CTVs as well as overall opinions on CTVs vs linear TVs could yield a wide range of responses. These responses would be qualitative; thus, the data would need to be coded and grouped into

themes for theme analysis. The themes would be based on the category of questions, and a thematic analysis will be run using algorithms followed by human raters. While there is a high quantity of survey participants, the multiple-choice and limited free response should make human rating feasible in this case. Some potential examples for themes may include flexibility from CTVs, traditional vs newer TV user experiences between TVs and CTVs, general opinions (like good, bad, mediocre), access to the internet, and many more theme groupings and topics. A regression would be used to delve deeper into the relationship between ownership of a TV/CTV, the brand of the TV/CTV if owned, and the coded themes.

The second approach of the research should yield more quantitative data as it would look to test more of the biological responses that participants would have to watching and using Samsung and Sony TVs/CTVs. The combination of heart rate, EDA/sweat rate data, eye tracking, and brain activities could yield strong evidence regarding the actual response the participant is having to the stimulus. Multiple regression analysis would be a strong choice here to analyze the physiological quantitative data and if participants are Samsung users, Sony users, or neither. While this data does not directly translate to evidence for one direction or the other, these forms of data can provide physiological data that supports attention, heart rate, cognition, and more. A low heart rate and less excitatory bodily functions can potentially mean participants are calmer and using less of their brain when using either the Samsung or Sony smart TV, which could lend credence to the TV being easier and require less effort to use.

While it is true quantitative data would be highly important for the second approach, qualitative data would also have merit here. Recording the participants as they use the TVs/CTVs to observe body language, how easily they use the TVs/CTVs, and more, followed by coding these to run regression analyses could provide greater evidence to a result, especially when

paired with the quantitative data when relevant and overlapping. Additionally, the post-experiment surveys would output quantitative and qualitative data, so the methods mentioned in the previous first research approach section regarding surveys would be applied here.

This research approach and these specific data analyses are important as they can offer multiple pieces of evidence and support regarding consumer's beliefs, behaviors, and values. Forming a better, evidence-based understanding of these can allow Sony to better target certain consumers and gain new buyers, while also striving to improve their products to better match and potentially outperform Samsung. These methods will better convey to Sony what consumers value and what Samsung does better or is perceived to do better than them. The data from the in-lab experiences can additionally have UX/UI and technology implications, which can provide Sony with more concrete steps to take to improve their products.

These methods and analyses are a holistic and multi-angled approach, which, while being more time-consuming and expensive, will more than likely produce strong, relevant, and highly useful data. The CTV domain is a highly profitable space that is projected to grow significantly; doing everything possible to gain edges and be ahead of the industry can yield major benefits to Sony, while also providing consumers with better, desirable experiences.

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