

DISSERTATION PROPOSAL

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“Strategies and Implications of Entertainment Media Consumption”

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Entertainment consumption has changed drastically in the last decade, presenting new problems and questions to the entertainment industry. My research addresses three different problems in this industry. First, we study how to rank songs optimally in a trial-offer marketplace where consumers present heterogeneous preferences and are influenced by past purchases. Second, we study the strategic implications of binge consumption of entertainment for traditional TV. And third, we aim to study the optimal release timing of movies in theater and home video, as the quality of the latter approaches the quality of the former.

In the first chapter, we study optimal ranking policies in a stylized trial-offer marketplace model, in which a single firm offers multiple products and has consumers who express heterogeneous preferences. The platform owner needs to devise a ranking policy to display the products to maximize the number of purchases in the long run, and to decide whether to display the number of past purchases. We find that when past purchases are displayed, consumer heterogeneity makes buyers try sub-optimal products, reducing the overall sales rate. We then show that consumer heterogeneity makes the ranking problem NP-hard and we analyze the benefits of market segmentation. We find tight bounds to the expected benefits of offering a distinct ranking to each consumer class and we show that the market segmentation strategy always benefits from social influence. The firm is better off using an aggregate ranking policy when the variety of consumer preference is limited, but it should perform a market segmentation policy when consumers are very heterogeneous. This result is robust to relatively small consumer classification mistakes; when these are large, an aggregate ranking is preferred.

In the second chapter, we study the strategic implications of binge consumption of entertainment for traditional TV. As on-demand video streaming services succeed, broadcast television (TV) has begun to look for new variations on the traditional weekly or daily release schedule of its shows' episodes. One such variant is an all-at-once schedule distributed through the broadcast television networks' online interfaces. This lowers consumers' viewing costs, but diminishes the consumer response to advertising. We study the impact of the introduction of this new release timing decision with a signaling model. Particularly, we analyze whether release timing of episodes may signal show quality and moderate non-dissipative advertising levels. First, we show that adequate levels of non-dissipative advertising alone may signal quality. We then show that by adding a channel that allows for non-linear (all-at-once) release timing, we find that there exists a separating equilibrium under which high and low quality firms choose different release timing strategies. Furthermore, the introduction of the non-linear release timing reduces the advertising level high quality shows need to incur in order to signal their quality through the traditional linear release schedule, whereas low quality shows select an all-at-once release timing. Although high quality shows do not release non-linearly, with a more profitable alternative for lower quality shows, they are better-off.

In the third chapter we study the movie industry and we aim to provide managerial insights on its optimal release timing strategies. As the home viewing experience approaches the quality of the theater experience, it is unclear if they are becoming complements or substitutes to each other. An important question we aim to address is how innovations in the home viewing experience affect the movie industry and its optimal release timing strategies. The home video release date is a decision mainly dependent on theater performance, but it could also be the case that home video quality plays an important role in release date decisions. We specifically analyze the changes in the time window between theatrical release and home video release over time, as the quality of home video releases improve from DVD to Blu-ray, and we find a downward trend. We aim to build a structural model that help us address these questions.