

OPTIMIZING THE SEQUENTIAL DISTRIBUTION MODEL FOR MOTION PICTURES

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SUMMARY

Making a product available to consumers through different sequential channels is a distribution strategy common to several media and consumer goods. A major question associated with sequential distribution is the timing and order of the different channels. This paper addresses this challenge empirically by studying the motion picture industry, one of the most recognized fields of application of the sequential distribution strategy (Eliashberg, Elberse, and Leenders 2005).

The traditional distribution model for a film begins with a premiere in theaters, followed by a release to retail markets (sale or rental), display on premium satellite or cable channels, and, eventually, television. The traditional sequencing of channels has come under siege by motion-picture studios because revenues generated by these secondary, or “ancillary” markets now clearly exceed theatrical box-office grosses. In 2004, the U.S. theatrical box-office generated \$9.5 billion, while the sales and rentals of DVDs and videos produced revenues as high as \$24.3 billion (MPAA 2004). As some non-theatrical channels provide higher margins, studios are articulating interest in shortening the time gap between a movie’s theatrical premier and its release into sequential channels, perhaps even changing the established order of channels. Industry executives such as Warner Bros. Entertainment chairman Barry Meyer publicly propose that future premieres “will be in Wal-Mart” (Bond 2005). Would changes in channel sequence or timing destroy any current channels? Theater owners argue that “The shrinking window of theatrical to video does concern us . . . [I]f a negative impact occurs, it will be too late to reverse course” (Sweeting 2005).

No research has yet modeled the multi-stage sequential chains that reflect normal marketplace conditions, i.e., involving three or more channels and, thus, two or more release windows that have to be optimized simultaneously. Moreover, extant studies were developed against the background of the current channel order and none has considered order changes as part of the sequential distribution strategy. Finally, they draw on aggregate-level secondary data which reflect past consumer decisions.

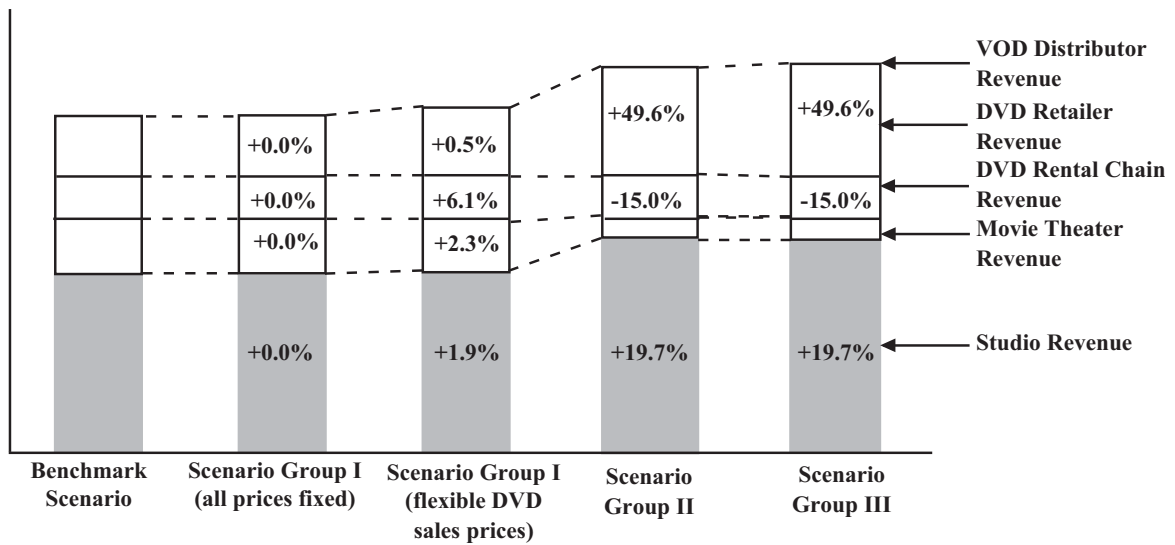
The extent to which these findings would generalize to future decision making in a novel consumption environment (e.g., simultaneous releases, or order changes) is unclear.

In this paper, we thus develop a conceptual framework of factors that determine the impact of a sequential distribution chain’s structure on studio revenues, considering four channels (theater, DVD rental, DVD sales, and video-on-demand) simultaneously. Our literature review suggests that four characteristics of sequential distribution chains impact revenue generation: inter-channel cannibalization, perishability, customer expectations, and success-breeds-success effects. In addition, when calculating studio revenues for alternative sequential channel structures, researchers must discount future revenues and consider differences in channel-specific margins. Based on the sequential distribution chain characteristics described above, we develop a model for assessing the net present value of movie studio revenues that allows us to study channel combinations for which secondary data is not available (e.g., simultaneous release in theaters and on DVD).

Using a multi-indicator approach that combines choice-based conjoint data with other information and data from a nationwide-representative random sample of 588 consumers for the U.S. market, our results provide evidence that the studios that produce motion pictures can increase their revenues by almost 20 percent through changes in the timing and order of the sequential distribution chain. The channel configuration that performed best included opening a film simultaneously in theaters, DVD rental, and through VOD, followed three months later in the DVD sales channel at a slightly higher price (see Scenario Group: III in Figure 1).¹

While this scenario would be financially attractive to movie studios and DVD retailers, U.S. theaters stand to lose 40 percent of their revenues. These results raise the question of whether theater chains would be able to scale down their operations, or whether such scenarios would be fatal for the theater industry. If novel distribution strategies were to trigger the disintegration of entire industry branches such as theaters, this outcome would

FIGURE 1
Revenue Changes for Top Scenario per Group (% versus the Benchmark Model)



not only prove to be a financial setback for studios, but would also have more widespread consequences such as a disastrous loss of cultural heritage and jobs. Accordingly, the changes implied by our findings will likely be

met with fierce resistance by the respective industry players who perceive a threat to their stakes. References available upon request.

ENDNOTE

¹ As several channel participants are involved, each of whom impose restrictions on the implementation of distribution chain changes, we choose a stepwise

approach to apply our model to the data. Specifically, we test three different groups of scenarios which differ in terms of restrictedness of channel configurations.

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