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Consumer Segmentation in Forecasting Movie Box-Office Performance Based on Dynamic Awareness and Preference (Ap) Measures

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Forecasting consumers' new product adoption has been investigated by numerous innovation and marketing researchers primarily targeting durables and repeatedly purchased products. By comparison, forecasting consumers' adoption of entertainment products such as movies and books has been scarce because of those products' properties of one-time purchase and hedonic experience consumption. The unique properties make it ineffective applying common adoption models developed for durables or repeatedly purchased products. Based on the industry practice that movie studios use weekly survey data containing consumers' awareness and preference (AP) measures of new upcoming movies to forecast their box-office performance, we develop a theory-driven forecasting model based on the AP measures of such entertainment products. Specifically, our forecasting model captures four distinct AP-based consumer segments that can influence the new product sales performance in different manners. In other words, our forecasting model is based on our assumption that not only the nature of preference (positive vs. negative preference) but also new product awareness timing (early vs. late awareness) influences the sales differently. Since awareness and preference take place in two successive steps before new product adoption, this two (early vs. late awareness) by two (positive and negative preference) classification results in four distinct consumer groups in sales forecasting. Our movie-level forecasting model reveals that these four groups have distinctively different impacts on new product sales. In our empirical application, we demonstrate the distinct existence of the four consumer segments using recent data from the Korean movie market.

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EXTENDED ABSTRACT

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REFERENCES

Bass, Frank M. (1969), "A New Product Growth for Model Consumer Durables," Management Science, 15 (5), 215-227.

Eliashberg, Jehoshua, Jedid-Jah Jonker, Mohanbir S. Sawhney, and Berend Wierenga (2000), "MOVIEMOD: An Implementable Decision-Support System for Prerelease Market Evaluation of Motion Pictures," Marketing Science, 19 (3), 226-243.

Foutz, Natasha Zhang and Wolfgang Jank (2010), "Prerelease Demand Forecasting for Motion Pictures Using Functional Shape Analysis of Virtual Stock Markets," Marketing Science, 29 (3), 568-579.

Hirschman, Elizabeth C. and Morris B. Holbrook (1982), "Hedonic Consumption: Emerging Concepts, Methods and Propositions," Journal of Marketing, 46 (Summer), 92-101.

Hoyer, Wayne D. and Steven P. Brown (1990), "Effects of Brand Awareness on Choice for a Common, Repeat-Purchase Product," Journal of Consumer Research, 17 (September), 141-148.

Kalish, Shlomo (1985), "A New Product Adoption Model with Price, Advertising, and Uncertainty," Management Science, 31 (12), 1569-1585.

Liu, Yong (2006), "Word of Mouth for Movies: Its Dynamics and Impact on Box Office Revenue," Journal of Marketing, 70 (July), 74–89.

Luo, Xueming (2009), "Quantifying the Long-Term Impact of Negative Word of Mouth on Cash Flows and Stock Prices," Marketing Science, 28 (1), 148-165.

Mahajan, Vijay, Eitan Muller, and Subhash Sharma (1984), "An Empirical Comparison of Awareness Forecasting Models of New Product Introduction," Marketing Science, 3 (3), 179-197.

Moon, Sangkil, Paul K. Bergey, and Dawn Iacobucci (2010), "Dynamic Effects among Movie Ratings, Movie Revenues, and Viewer Satisfaction," Journal of Marketing, 74 (January), 108-121.

Villanueva, Julian, Shijin Yoo, and Dominique M. Hanssens (2008), "The Impact of Marketing-Induced Versus Word-of-Mouth Customer Acquisition on Customer Equity Growth," Journal of Marketing Research, 45 (February), 48-59.