Predicting empirical patterns in viewing Japanese TV dramas using case-based decision theory

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Abstract

This article empirically analyzes consumer behavior of viewing TV dramas via case-based decision theory. The theory deals with an economic situation with structural ignorance, in which characteristics of goods are not known a priori for consumers. In the theory, consumers make decisions based on subjective evaluations of previous purchases for similar goods. Our empirical analysis is concerned with *getsuku*, the Japanese TV dramas broadcasted at 9pm Monday by the Fuji Television Network. The regularity of the schedule and the long-sustained popularity of the program enable us to collect consumer data easily. Then, we conduct a web survey of individual audiences on subjective evaluations of previously watched dramas. For empirical analysis, we utilize a simple linear model of the case-based model that allows the incorporation of flexible inference techniques. Our results demonstrate better performance by the case-based models regarding both statistical model selection and one-step-ahead prediction than traditional probit models for expected utility. We also reveal that the good performance of the case-based model in our analysis depends on the availability of individual subjective evaluations and that it is difficult to replace the individual-specific information by demographic information and aggregate data.

Keywords; Case-based decision models; TV audience rate; Japanese getsuku drama; Web survey; Kimutaku