

RFM Scoring to Measure Season Ticket Purchase Behavior Intention

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Aim

The purpose of the current research was to measure season ticket purchase behavior intention using RFM score.

Theoretical Background

Sport fans spectate their favorite events repeatedly. In 2016, approximately 18 million spectators attended the regular season games of all NFL teams, and 73 million people attended MLB regular season games (Statistia, 2018). Researchers have clarified the antecedents of sport event attendance behavior intention. Primary antecedents of sport event attendance behavior intention that are identified include but not limited to the followings: 1) psychological factors (Funk, Filo, Beaton, & Pritchard, 2009) 2) individual characteristic factors (Baker, Jordan, and Funk, 2018) 3) game quality and service quality (Theodorakis, Alexandris, Tsigilis, & Karvounis, 2013). Few studies have proved that a relationship exists between a fan's past behavior and future behavioral intention (Laverie & Arnett (2000); Trail et al., 2006; Shapiro et al., 2013). Laverie and Arnett (2000) provided that past attendance and satisfaction influence future attendance intention-based on identity theory. Shapiro et al. (2013) tested the effect of various past behaviors (e.g., sport event ticket purchase, tailgating, TV and radio consumption, and social media consumption) on various behavior intentions (e.g., ticket purchase and word of mouth). However, to fully understand the effect of fan's past behavior on future behavior intention, the notion of customer lifetime value (CLV) should be examined (Fader, Hardie, & Lee, 2005). In a customer-centric approach, CLV can be explained by the present value of the future value associated with customer (Pfeifer, Haskins, & Conroy 2005). In examining this work, we measured fan's past behavior with three key variables: recency (R), frequency (F) and monetary value (M). Several scholars predicted customer's purchase according to past purchase behavior pattern (Borle et al., 2008; Cheng & Cheng, 2009; Safari et al., 2015). Each variable is defined by "the interval between the time that the latest consuming behavior happens and present (R)", "the number of transactions in a particular period" (F), and "consumption money amount in a particular period (M)" (Cheng & Chen, 2009, p. 4179) Recency, frequency, and monetary value (RFM) have been used to identify customer segmentation related to direct and database marketing strategies (Hughes, 1994).

Research Design and Data Analysis

We measured recency, frequency, and monetary value for professional major sport event ticket purchase experience, then we assigned each sample with number 1 to 5 such as previous research (Miglautsch, 2000). 1 is assigned to bottom 20 percent, and 5 was assigned to top 20 percent. We measured the impact of this RFM scoring on season ticket purchase behavior intention. Season ticket purchase behavior intention is measured by a binary questionnaire: do you have a plan to purchase a season ticket in future?

We surveyed online data via M-Turk from individuals who attended North American professional sporting events in 2017. A total of 420 responses were collected, and after deleting unreasonable data, 403 data were used for data analyses. To test the effect of RFM score on season ticket purchase intention, a logistic regression was conducted (IV: RFM scores DV: season ticket purchase intention).

Results and Discussion

As a result, both frequency and monetary value were statistically significant. This model suggested that for one unit increase in *frequency*, the log-odds of the season ticket purchase behavior intention increased by 0.399 unit. It also suggested that for one unit increase in *monetary value*, the log-odds of the season ticket purchase behavior intention increased by 0.188 unit. However, recency was not found to be a significant variable. Although several variables were significant, overall model fit reported that RFM scoring is not sufficient to explain season ticket purchase intention because 0.062 pseudo R square, 0.077 Cox & Snell R square, and 0.107 Nagelkerke R square were not significant. These statistics were like an extant research result which explained the impact of STH satisfaction on the renewal behavior (McDonald, 2010). The extant research reported 0.080 Cox & Snell R square, and 0.161 Nagelkerke R square.

In discussing the result briefly, fans who visit sport events frequently and pay substantive monetary value for sport events are apt to purchase season ticket, but recency of sport event attendance was not critical.

Contribution and Implications

Through this study, we sought to add to limited empirical knowledge about past sport event ticket purchase behavior and season ticket purchase behavior intention. Annual or season contract for season ticket holder makes long-term relationship between fans and sport organizers, so season ticket holders are probably a loyalty customer. To predict loyalty customers, researchers have used a CLV measurement tool such as RFM scoring. We extended study of season ticket purchase behavior intention by empirically testing CLV on season ticket purchase intention.

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