The Fan’s Game: Engaging Consumers through Gamified Apps

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Gamified apps provide sport organizations with a platform to increase consumer engagement and enhance fan loyalty. By embedding gaming mechanics to traditional digital content, sport marketers may deepen customers’ relationship with the organization. One example of a gamified loyalty program is the rewards-based program delivered by the Miami Dolphins, where fans receive points for their engagement with the organization. These points are then used to rank fans, to influence their sense of achievement, and encourage consumption behavior. These type of apps provide an opportunity to investigate how gamified content may influence sport consumer behavior.

The current research is based on data from the ARENOO football fan engagement app. The app provides users a platform to engage with their favorite team via multiple gamified functions. In this study, the relationship between fan involvement and engagement behavior through gamified digital platform is examined. The results contribute to existing knowledge of how sport consumers engage in a digital environment and how gamified content influences consumer behavior.

Literature Review

Involvement is defined as “person's perceived relevance of the object based on inherent needs, values, and interests” (Zaichkowsky, 1985, p. 342). Consumer involvement manifests in three aspects: intensity, direction, and durability (Andrews, Durvasula, & Akhter, 1990). Engel and Blackwell (1982) classified consumers in low involvement and high involvement, where the degree of involvement influences consumers’ information seeking and purchase behavior, the complexity of their decision-making, and their cognitive and responsive activities (Andrews et al., 1990). In the sport literature, involvement has been classified how central the activity is in one’s life as well as the hedonic and symbolic value provided by the activity (Beaton, Funk, Ridinger & Jordan 2011). Previous studies on involvement indicate that high involvement consumers display complex team-related behavior, which includes high levels of frequency, breadth, and depth of team-related behavior (Funk, Ridinger, & Moorman 2004; Beaton et al., 2011). Therefore, we conceptualize that user behavior within a digital loyalty program is affected by consumers’ level of involvement with their favorite team. As a result, Hypothesis 1 states that: High involvement users engage more often with the app than low involvement user.

Gamification describes the trend of using “game design elements in non-game contexts” (Deterding, Dixon, Khaled, & Nacke, 2011, p. 10). Gameful experiences could enhance the service provided by organization to support users’ overall value creation (Houtari & Hamri, 2012), and the gamification of activities provides an opportunity to combine intrinsic and extrinsic motivation to increase consumer engagement (Muntean, 2011). Although, Frederick and Ryan (1995) point out that sport consumption is primarily driven by intrinsic motivation, users of a gamified digital loyalty program may also be motivated by extrinsic rewards as they gain points, badges, rewards, and social relatedness to others. Studies in health, education, and human resource management found that gamified elements can effectively boost users’ engagement not only toward the gamified app or software but also toward the organization that is promoted through the platform (King, Greaves, Exeter & Darzi 2013; Muntean, 2011; Neeli, 2012). In sport marketing, gamified user engagement within a digital loyalty program may have behavioral consequences towards consumers’ favorite team. Hence, Hypothesis 2 states that: Gamified engagement correlates with users’ team consumption behavior.

Method and Results

Data for this study was derived from users of the ARENOO app (N = 4555), which is a fan engagement app offering football fans to win points through gamified elements such as checking in on TV, answering quizzes questions, and tipping results of games. Fans are asked to select their favorite team and indicate their involvement on a 1 to 7 scale toward the team when they register on ARENOO. Users were categorized in high involvement (5-7),
medium involvement (4), and low involvement (1-3).

A one-way between subjects ANOVA with post-hoc tests was conducted to compare the effect of involvement on engagement behavior in high involvement, medium involvement, and low involvement conditions. There were no significant differences between the three involvement groups regarding TV check-in points (F(1, 4555) =1.226; p=.293). However, there were significant differences between the three involvement groups related to answering quiz questions (F (1, 4555) =4.931; p =.007) and tipping game results (F (1, 4555) =7.297; p =.001). A Pearson correlation coefficient was computed to assess the relationship between the two gamified behaviors tipping game results and taking the quiz, and media consumption behavior. Media consumption was strongly correlated with tipping points (r =0.722, N =4555, p< .001) and quiz points (r =0.811, N =4555, p< .001).

Discussion
This research contributes to the sport management literature by highlighting that consumers’ level of involvement influences their behavior within a gamified loyalty program, and exploring the relationship between gamified content and team-related media consumption. In regards to Hypothesis 1, high involvement with a sport team resulted in more interaction with the app. Checking-in on TV showed no significant differences between the three groups. However, answering quiz questions and tipping game results showed significant differences between the three involvement groups. These findings empirically supports Beaton et al.’s (2011) conceptualization that involvement is positively correlated with complex behavioral outcomes, and is consistent with Andrews et al. (1990) conceptualization, which outlined that consumers’ cognitive and responsive activities are influenced by the degree of involvement. However, within the context of a gamified digital loyalty program, results indicate that only team engagement activities that require specific knowledge related to the sport team are influenced by users’ involvement levels.

In regards to Hypothesis 2, gamified engagement was positively correlated with team-related media consumption. The more time users invest in tipping the game and answering the quiz, the higher was their frequency of checking-in on TV. This indicates that gamified elements may influence desired sport consumer behavior. It seems that the combination of intrinsic and extrinsic motivation provided by gamified loyalty programs not only drives mobile interaction but also real-life team consumption behaviors (cf. Muntean, 2011). These findings indicate that gamified elements may effectively motivate desired consumer behavior in sport setting.

Limitations, and Future Directions
We currently present correlations within the app and make inferences to team-related media consumption behavior, without being able to support these claims through data from outside the app. To overcome this limitation, we currently plan qualitative and quantitative follow-up studies to further explore the influence of this gamified digital loyalty program on team consumption behavior. These studies plan to recruit active and inactive users (i.e., users who signed-on but do not engage within the app). Furthermore, we will be able to longitudinally track the influence of the app on users’ level of involvement with their favorite team.