

**Measuring Leader Innovativeness:
The Case of High School Athletic Directors and Digital Ticketing Adoption**

Armin Marquez, Georgia State University
Beth Cianfrone, Georgia State University
Timothy Kellison, Georgia State University

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50-minute poster presentation

Digital ticketing is a common feature experienced by most fans attending professional and collegiate sporting events. At the high school sport level in the US, however, the adoption of this technology is less common (Marquez, Cianfrone, & Kellison, 2018). Marquez et al. explored factors affecting spectators' digital ticketing usage when attending high school athletic events, but the reality is that if athletic directors do not choose to adopt the technology in the first place, this decision will not reach the fans. Recognizing the need to secure revenue through advanced ticket sales and meet the needs of cashless and technology-driven consumers, over 1,000 high schools nationwide provided spectators with the option to purchase tickets digitally during the 2017–2018 school year (Karkaria, 2017). Despite this trend, Griffin Pugh, general sales manager at Huddle Inc., attests that many athletic directors remain cautious about making the transition to digital ticketing despite the opportunity to do so at no added cost to the schools (personal communication, August 30, 2018).

When considering the adoption of new technology like digital ticketing, an individual's adoption of innovation has been considered a multi-step process. Rogers (2003) described the innovation-decision process as "an information-seeking and information-processing activity, where an individual is motivated to reduce uncertainty about the advantages and disadvantages of an innovation" (p. 172). He suggested that the process involves five steps that follow each other across time: (1) knowledge, (2) persuasion, (3) decision, (4) implementation, and (5) confirmation. The focus of this study is to attain an understanding of the process through which sport managers decide to make full use of digital ticketing technology as the best course of action available to serve their event attendees. More specifically, the purpose of this study is to identify critical factors influencing high school athletic directors' decisions to adopt digital ticketing as a strategy for securing revenue. Particular emphasis will be given to the effects that the perceived characteristics of the innovation (i.e., independent variables), which are influenced by prior conditions and knowledge, will have on the decision to adopt or reject the technology (i.e., dependent variable).

The diffusion-of-innovation theory defines the adoption of the innovation process, emphasizing that the perceived characteristics of the innovation (i.e., relative advantage, compatibility, complexity, trialability, and observability) are considered essential predictors of innovation adoption (Rogers, 2003). Adopting Rogers' (2003) explanation of these constructs to our digital ticketing scenario: Relative advantage is concerned with the user's perception of the innovation as more advantageously or efficient than the previous alternative (i.e., physical ticketing). H1: The relative advantage of digital ticketing over physical ticketing influences athletic directors' adoption of the technology. Compatibility refers to the perception that the new technology is well-suited to satisfy the current needs of high school athletic directors, their staff, and spectators. H2: The compatibility between digital ticketing and the current needs of high school athletic departments influences athletic directors' adoption of the technology. Complexity is a measure of an individual's perception of difficulty associated with operating, understanding, and learning about digital ticketing. H3: The complexity of digital ticketing influences the athletic directors' adoption of the technology. Trialability refers to the athletic directors' beliefs that there is a possibility to test the technology before the adoption. H4: The trialability of digital ticketing influences the athletic directors' adoption of the technology. Observability points to the degree to which the results of digital ticketing are observable by athletic directors (e.g., seeing the technology used at state championship events). H5: The observability of digital ticketing influences the athletic directors' adoption of the technology.

As Kellison and Hong (2015) point out, "adoption represents just one element of the larger diffusion process" (p. 250). Within the context of high school digital ticketing (i.e., the innovation), an athletic director's

2019 Sport Marketing Association Conference (SMA XVII)

decision to offer this option to event attendees represents innovation adoption, while the embracing of such technology across high schools nationwide represents diffusion. The present study is grounded on the diffusion-of-innovation theory (Rogers, 2003), which considers four distinct elements—the innovation, communication channels, time, and social systems. Despite the use of the diffusion-of-innovation theory's foundational basis for research conducted across numerous disciplines such as economics, sociology, technology management (Gopalakrishnan & Damanpour, 1997), interorganizational systems (Premkumar & Ramamurthy, 1995), engineering (Tornatzky & Klein, 1982), and sport management (Caza, 2000; Kellison & Hong, 2015; Loy, 1968; Newell & Swan, 1995; O'Brien & Slack, 2003, 2004), it has yet to be explored through a quantitative approach within a sport setting such as digital ticketing at the high school athletic space.

A 40-item survey will be distributed electronically to 21,483 athletic directors across the US. The measures were adapted from past literature (e.g., Compeau & Higgins, 1995; Kim & Ammeter, 2014; Moore & Benbasat, 1991; Rogers, 2003; Vannatta & Banister, 2009; Waheed, Kaur, Ain, & Sanni, 2015) and include prior conditions (i.e., previous practice/interaction with digital ticketing, need identification, innovativeness, norms of social systems), knowledge (i.e., socioeconomic characteristics, personality variables, communication behavior), persuasion (i.e., relative advantage, compatibility, complexity, trialability, observability), decision (i.e., adoption versus rejection), implementation (i.e., usage of the technology in current year), and confirmation (i.e., intention to use the technology next school year). Structural equation modeling (SEM) will be used to explore direct and indirect effects among the constructs within the model proposed (Hair et al., 2018).

Findings will provide insights regarding the process through which sport leaders decide to adopt or reject new technology. With an ever-changing environment where new tools become available by the minute, such insights may provide companies developing new tools targeting sporting organizations with the essential features that such technologies must possess. Marketing companies looking to attract sport consumers/adopters of new technology may identify which pillars of technology adoption they must emphasize to devise adequate marketing strategies.

Recognizing that athletic directors may not be sole decision-maker regarding the adoption of digital ticketing at any given high school, it would be valuable for future studies to consider other key stakeholders, such as school principals, to gauge if the perceptions differ between groups.

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2019 Sport Marketing Association Conference (SMA XVII)

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