Artificial Intelligence in Sport 101: Research, Education, and Practice

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Management - Other (Other)
60-minute symposium, roundtable, or workshop
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The incorporation of artificial intelligence (AI) to advance sport business and business at large is gaining momentum. While the concept of AI has roots in Ancient Greek mythology, training computers to mimic elements of human intelligence, such as “learning, problem solving, and pattern recognition” (Amazon, 2018, para. 1), represents the current state of the art. Business leaders boast that AI is the “way of the future.” In a study conducted by Davenport and Ronanki in 2018, 75% of business executives from 250 different companies believed that AI adoption would transform their businesses in the next three years. The proliferation of various AI developments into sport business both on and off the field is recognizable, well discussed in trade literature, and featured at sport analytics conferences (MIT SLOAN Sport Analytics Conference, 2018). Sport business AI adoption ranges from process automation (e.g., automated journalism; Sennar, 2018), to cognitive insight (e.g., using algorithms to detect patterns in terabytes of performance data; Gent, 2018), to cognitive engagement (e.g., natural language processing customer chatbots; Sennar, 2018) and beyond. Academicians in other disciplines have populated peer-reviewed literature outlets with articles investigating various aspects of AI adoption (Gurkaynak, Yilmaz, & Haksever, 2016; Jarrahi, 2018; Wright & Schultz, 2018) including strategies to integrate AI into curricula (Edwards & Edwards, 2017). AI incorporation into sport management research and education, however, remains under-addressed. Given the already established and potential importance of AI to sport business, there is tremendous opportunity to harness this subject. The challenge and barrier, though, surrounds the advanced terminology and machine learning processes associated with AI. From the assembly of neural networks to deep learning, join this workshop for AI in sport to gain a solid conceptual foundation. This workshop 1) outlines the current and proposed future use of AI in the sport industry; 2) describes the AI research landscape as a context for initiating sport management research in the area; 3) offers methods for AI inclusion in sport management coursework as well as reputable texts and resources; 4) demonstrates the creation of a neural network in RStudio code; and 5) concludes with resources for professional development and independent learning opportunities for both the researcher and instructor.