Innovation Diffusion Seen through College Football Stadium Construction: An Ideal-Type Covering Late 19th Century to Present

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Bale (1980, 1984) and Hong (2012) noted traditional diffusion research on sport is generally limited to anthropological or cultural-centered diffusion and lacks a conceptual frame of reference. The Diffusion of Innovation Theory proposed by Everett M. Rogers (2003) serves as theoretical foundation for innovation and diffusion research within a variety of disciplines such as management, public administration, communications, marketing, psychology, and technology, among others. However, despite this interest shown by other academic fields, “the Diffusion of Innovation Theory (Rogers, 1983; 1993; 2003) to explain the diffusion of innovative products, policies, or technology” received little attention from sport management as a conceptual frame (Hong, 2012, p. 5). This lack of attention is notable because of the prominent status sport plays to innovation and its ability to support unique products and services like that offered by sport venues which possess the exceptional capacity to display technology and characteristics emblematic of the era in which they were built (Seifried, 2010a, 2011). As an example, many facility management scholars posited that the construction history of new facilities or renovation of existing structures promotes innovation through the revenue luxury suites, club seating, signage/sponsorship opportunities, concessions, and retail areas provide, in addition to the technology and other services supported within the building (John, Sheard, & Vickery, 2013; Seifried, 2010a, 2011; Trumpbour, 2006).

Interestingly, John Bale (1984) presented the growth and spread of modern sport should be “conceptualized as a form of innovation diffusion” because it occurred through a somewhat predictable non-random “series of events” greatly influenced by technology, geographic location, entrepreneurs, and environmental conditions (Bale, 1984, p.38). Rogers (2003) also attempting to define innovation diffusion described it as “the process by which the adoption of innovation by member(s) of a social system is communicated through certain channels and over time triggers mechanisms that increase the probability of its adoption by other members who have not yet adopted it” (p. 20). Within, Rogers (2003) argued the innovation diffusion process involves an: 1) innovation; 2) available communication system(s); and occurs 3) over time; and 4) among members of a social system (p. 11). Kimberly and Evanisko (1981) further identified the innovation diffusion research process as requiring scholars to appreciate “why and how an innovation—or group of innovations—spread in a population” with additional challenges to focus on promoting diffusion and asking “how an innovation should be designed and marketed to enhance rapid and widespread acceptance” (p. 86). The purpose of this study analyzes major American college football facilities of the Division I Football Bowl Subdivision of the National Collegiate Athletic Association from the late 19th century to 2013 in order to better understand the concept of innovation diffusion as presented by Rogers (2003) and Bale (1984) and to help answer why and how innovation will continue to influence the evolution of stadiums.

Studying the history and evolution of American college football stadium construction and renovation management uniquely contributes to the study of innovation diffusion because current and future trends in sport facility construction appear somewhat based upon the history of other sport venues (Chapin, 2004; Seifried, 2010a; Seifried & Meyer, 2010; Sheard, Powell, Cook, & Bingham-Hall, 2005). Bale (1984) and Seifried (2010a) further proposed American football and stadium construction spread between cities and states through various learning opportunities and communication processes. For instance, from the Northeast, as home to American football, a variety of stakeholders (e.g., students, alumni, faculty, administrators, and media) made note to transmit the rules of football, keep records, and promote the activity to attract more individual ‘carriers’ of the game to other potential receptive locations who eventually adopted the activity (Watterson, 2002). Preliminary results show the diffusion of stadium changes/innovations followed a similar path in that technology, geographic location, entrepreneurs, and environmental conditions within a social system to impact its changing shape over time.

Uniquely, a historical research methodology follows the five-step process outlined in Seifried (2010b) to complete this study which. Those five steps include: a) pursuing useful documents and records from primary and secondary
sources; b) engaging in an historical criticism (validity and reliability check); c) analyzing and interpreting evidence to establish themes; and d) recording conclusions through an understandable narrative. The construction of an ideal-type was selected as the preferred heuristic device to explicitly showcase what key events, opportunities, and constraints influenced the changing shape of college football stadiums. Following previous works completed by Bale (2001) and Seifried (2010) utilizing the ideal-type, this work honors the call of other research (e.g., Damanpour & Schneider, 2006; Russell, 1990; Wolfe, 1994) to build an integrated model with respect to innovation diffusion. Within, the researchers generated a list of new construction and/or renovation costs related to amenities (e.g., restrooms, concession stands, technology, luxury suites, etc.) those structures provided their stakeholders (e.g., students, alumni, players, event management, television, etc...) over time as representative examples and features of innovation diffusion. Scholars regularly use historical data to conduct research and plan future efforts (Seifried, 2010a). The present analysis attempts to promote more use of the historical method by future scholars and highlights the ideal-type as capable of storytelling which Flaherty (2009) and Pollock and Bono (2013) suggested was useful to help with theorizing and the knowledge acquisition of management concepts.

Bale's (1984) S-shaped curve for innovation diffusion similarly presented a viable tool to be used with respect to American college football stadium construction. Understanding the time 'lag' between introduction and saturation, the s-shaped curve suggests there was a slow period of growth (i.e., introduction), then a fast rate of progression (i.e., adoption), followed by a plateauing (i.e., saturation) of those schools slower to adopt. It is at the point of saturation that innovation diffusion ends (Bale, 1984). Notably, Bale (1984) added that the s-shaped curve “implies that some kinds of barriers exist which prevent instantaneous or even rapid diffusion of innovations” (p. 42). Bale (1984) positioned physical barriers as involving geography and economic barriers as encompassing movement from industrial to industrial advance and social hierarchy (i.e., classes of people). More specifically geographic barriers were acknowledged as possibly involving climate and nature [e.g., oceans, rivers, lakes, mountains, valleys, etc.] (Bale, 1984). We also utilize this perspective to frame our historical explanation on stadiums.

Finally, for practitioners, the proposed research (i.e., approximately 60% of data is complete), is important because campus leaders and sport administrators prefer to understand more about how to anticipate future developments of sport facilities and prepare more responsible management decisions focused on new construction or renovation activities such as rehabilitation, restoration, preservation, and/or reconstruction (Seifried, 2010a, 2010b). The inventory of information produced through this investigation is something that both practitioners and scholars could find useful to demonstrate the tangible results of the investment. Specifically, this work provides value because the audit captures information on a variety of items (e.g., construction costs, seating capacity, widths, site sizes, concession opportunities, technological devices, and permanent restrooms) over the lifecycle of current and past stadiums. Chapin (2004), Seifried (2010a), and Seifried and Meyer (2010) argued more sport facility information is needed to help planning professionals improve their economic situation.