

*Full Length Research Paper*

# Collaborative innovation in sport: Conceptualizing the adoption of new stadium construction from professional sport team and government perspectives

Sung IL Hong<sup>1\*</sup>, Marshall Magnusen<sup>2</sup> and Michael Mondello<sup>3</sup>

<sup>1</sup>Hong Kong Baptist University, Hong Kong.

<sup>2</sup>Baylor University, United States.

<sup>3</sup>University of South Florida, United States.

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The topic of innovation adoption and diffusion has yielded a voluminous body of research whose general purpose is to account for: (1) why one business firm/governing body is more likely than another firm/governing body to adopt an innovation, (2) what factors impact business firms'/governing bodies' decisions to adopt an innovation, and (3) what influences the adoption of an innovation to spread to other business firms/governing bodies. Curiosity about these areas led the researchers to explore the following question: what factors influence a professional sport team and its corresponding city/state governments to adopt the construction of a new sport facility? The literature on professional sport facility financing is limited in that collaborative innovation has received minimal explicit attention from scholars in comparison to areas such as the economic impact of sport facilities and the political and lawful processes of public financing for sport facility subsidization, both of which benefit from a sizeable body of scholarship. Using Rogers' diffusion of innovation theory and Berry and Berry's unified theory of policy innovation as a theoretical foundation, a conceptual model of professional sports stadium construction adoption is established to account for determinants from the perspectives of professional sport teams and city/state governments.

**Key words:** Diffusion, facilities, governance, policy, sport venues.

## INTRODUCTION

Santo (2010) divided the historical trends in the construction of professional sport facilities into four separate eras: (1) The dawn of the modern professional sports facility (1909-1942), (2) The rise of the sport facility subsidy (1945-1959), (3) The era of subsidy writ large (1960-1980), and (4) The era of escalation and extravagance

(1990-present). The current phase of professional sport facility construction in the United States has been demarcated by sport scholars as the most prolific period of facility construction in modern American history (Alexander and Kern, 2004). A total of 107 facilities have been built or significantly renovated since 1990 for the 120

\*Corresponding author. E-mail: [sungil@hkbu.edu.hk](mailto:sungil@hkbu.edu.hk).

teams comprising the National Football League (NFL), National Basketball Association (NBA), National Hockey League (NHL), and Major League Baseball (MLB). Given that just 60 sports facilities were constructed in the previous 30 year period (Long, 2005), it is axiomatic how many more facilities have been constructed or significantly renovated during the current era of American professional sports.

New stadium construction represents an important form of organizational innovation for professional sport organizations. The term, organization innovation, refers to the “implementation of an idea – whether pertaining to a device, systems, process, policy, program, or service – that is new to the organization at the time of adoption” (Damanpour and Evan, 1984, p. 393). A defining feature of new stadium construction during the present age of proliferation is the increased union of private (e.g., professional sport teams) and public (e.g., city governments) partnerships to create collaborative innovation opportunities (Santo, 2010). Joint collaborations are not entirely novel occurrences in the American professional sport industries; however, since the 1990s, “team owners have increasingly contributed to the financing of publicly owned stadiums and arenas, and governments have shared in the development costs of facilities that are privately owned” (Santo, p. 74). The NFL’s Dallas Cowboys, for example, played their football games in Texas Stadium from 1971 to 2008. In 2009, construction of Cowboys Stadium (now known as AT&T Stadium) in Arlington, Texas was completed. The new facility, which cost over a billion dollars to construct, received over \$300 million (including interest) in bonds from the City of Arlington to aid in covering the costs of building the monolithic sport facility (Sauer, 2010).

The majority of professional sport venues built in the US since the 1990s have been partly or entirely financed by city or state governments (Humphreys, 2006). The construction boom also has contributed to a boom in research about the financial, political, and social impacts of professional sport stadium construction on local and regional communities. For instance, studies about the public financing of sport stadiums tend to reach a similar conclusion: the economic impact (benefit) of a new sport stadium to a host community is either non-existent or grossly overstated by city officials and team executives. Indeed, the “political reality of economic impact analyses is that they are frequently undertaken to justify a position that either sport organizations or community elected officials have adopted or are proposing” (Crompton, 1995, p. 15). Even though taxpayers can be swayed by compelling but erroneous economic arguments (Fulton, 1988), the truth of the matter remains that new stadiums and arenas do not often make substantial contributions to the local economy (Johnson et al., 2007; Hudson, 2001; Siegfried and Zimbalist, 2002). Accordingly, research about sport stadiums has expanded to include discussions about social leverage opportunities and the public

public good externalities (intangible benefits) generated by sports franchise or venues (Crompton, 2004; Johnson and Sack, 1996; Sparvero and Chalip, 2007).

Various public good externalities of sports franchises (intangible benefits) have been proposed. Crompton (2004) suggested four sources of public good externalities: (a) increased community visibility, (b) enhanced community image, (c) stimulation of other development, and (d) psychic income. Elected officials may view major sport events and professional sport teams as useful marketing engines that can make the respective city more visible and attractive to tourists, businesses, and taxpayers (Burns and Mules, 1987; Crompton, 2004). Moreover, several stadiums, including Green Bay’s Lambeau Field, Chicago’s Wrigley Field, and Boston’s Fenway Park, have historical significance and may be viewed by both locals and non-locals as the symbolic embodiment of the city (Euchner, 1993; Willis and Garrod, 1998).

In addition to research on economic and intangible benefit, an area of scholarship that has grown in popularity over the past couple decades is the political processes associated with new stadium construction. It is not uncommon for the ownership of a professional sport team to threaten to leave a city over stadium issues (“A number of teams”, 2010). As a result, team owners can find themselves in positions of great power because they can arbitrarily bring on a sport crisis of sorts that creates a political and social environment that benefits them and their desire for organizational innovation (Schein, 2010). On the other side of the matter are elected officials.

Elected officials contemplate the political advantages and disadvantages of supporting or rejected proposals for using taxpayer dollars to fund new stadium construction efforts. They may consider a no-vote stadium subsidy or allow the matter to be finalized at the ballot box. Such contemplation may be grounded in notions of civic paternalism, which is “a political decision-making strategy grounded in a trustee form of representation and belief that a city’s economic growth will optimally benefit the local collective” (Kellison and Mondello, 2014, p. 165). In some cases, civic paternalism may correspond to community sentiment, especially if the community leaders are concerned about re-election (Berry and Berry, 1992). In other cases, elected officials’ perceptions of civic paternalism may contradict community sentiment. Either way, elected officials balance pressure from sport team owners, economic impact information, and community sentiment with an acute awareness of how their decisions could impact their political futures.

The connection between the taxpayers, elected officials, and professional sport teams is significant regardless of whether the lens through which a researcher, manager, or elected official approaches new stadium construction is grounded in economic benefits, social leverage, or politics. Even so, minimal exploration of specific factors that may influence the probability of collaborative stadium

construction adoption has been conducted despite the fact the aggregated total of public subsidies for the NFL, NBA, NHL, and MLB from 1990 to 2006 was \$12 - \$15 billion (Humphreys; Long, 2005). Indeed, a fundamental question that needs to be addressed is: what factors influence a professional sport team and its corresponding city/state governments to adopt the construction of a new sport facility? Bearing that question in mind, the objective of this exposition is to broaden understanding of sport facility financing and policy research by addressing the aforesaid question through the development and explanation of a conceptual model of collaborative stadium construction adoption grounded in Rogers (2003) work on the spread (diffusion) of innovation and Berry and Berry's (1990) unified theory of policy innovation.

## THEORETICAL FOUNDATIONS

Organizational innovation research is usually conducted from either an adoption perspective or a diffusion perspective. Such lines of research are centred on accounting for why an organization is or is not likely to adopt innovation as well as examining what leads innovation adoption to spread (diffuse) from one organization to other organizations. Kimberly and Evanisko (1981) provided succinct explanations of how adoption and diffusion perspectives differ. With regard to adoption perspectives, they wrote (Kimberly and Evanisko, p. 85-86):

The general theoretical issue from the adoption perspective is understanding what makes an organization responsive to change in its environment. The specific issue is understanding what makes one organization more receptive to managerial innovation than another. A normative question asks how an organization should be structured in order to enhance responsiveness in general and receptivity to managerial innovation in particular.

With regard to diffusion perspectives, they wrote (Kimberly and Evanisko, 1981, p. 85-86):

*The theoretical issue in the diffusion perspective is understanding why and how an innovation – or group of innovations – spreads in a population. A normative question, raised by organizations interested in promoting diffusion, asks how an innovation should be designed and marketed to enhance rapid and widespread acceptance.*

The determinants of innovation adoption and innovation diffusion are often studied together even though they are distinctive concepts. When the determinants of innovative products, services, or policies from multiple organizations have been studied longitudinally, for example, the diffusion effect frequently has been included as an influential determinant of innovation adoption (Berry and Berry, 2007). Such evidence points to the relevance of integrating, rather than separating, the adoption and diffusion approaches of organizational innovation when it

comes to examining factors that may impact new sport stadium construction from a professional sport team's perspective. Accordingly, diffusion of innovation theory (Rogers, 2003) is used as a theoretical foundation for the proposed conceptual model because it establishes the adoption process, described as the innovation-decision process, as a sub process of diffusion.

Rogers (2003) viewed innovation adoption as the actual "decision to make full use of an innovation as the best course of action available" (p. 177). Relatedly, innovation diffusion refers to "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" (Rogers, p. 20). Diffusion occurs from the sharing of information by way of communication channels (e.g., mass media or interpersonal interactions) within a population over time whereas the adoption process pertains to an individual adoption event. Innovation adoption represents an event (subprocess) in the innovation diffusion process because diffusion is composed of individual adoption events.

In connection to the work of Rogers (2003), which is used to explain a professional sport team's perspective, a large body of government policy innovation research has amassed over the past several decades. This line of research is used to understand the other half of collaborative innovation in sport stadium construction, i.e., the perspectives of city and state governing bodies. A key focus of this line of research is capturing diffusion effects, which occur over time or space in Rogers' model. Expressly, Berry and Berry (1990) argued that the application of a single model, either the internal determinants model as proposed by Mohr (1969) or the diffusion model as proposed by Walker (1969), cannot provide a plausible explanation of policy innovation by governing bodies. Hence, echoing Rogers, Berry and Berry posited that a governing body, much like a business firm, is unlikely to blindly emulate its neighbours' policies or programs without any considerations of its own political or economic conditions (internal determinants). To address this conceptual weakness, Berry and Berry incorporated Mohr's work with Walker's research to create a comprehensive approach to innovation in public policy that combines internal determinants and diffusion effects.

The aim of this exposition is to better understand the factors influencing the probability of new stadium construction from professional sport teams' and city/state governments' perspectives. The combination of diffusion of innovation theory (Rogers, 2003) and the unified theory of policy innovation (Berry and Berry, 1990) represents a suitable theoretical foundation for the development of the proposed model because they account for the adoption of professional sport stadium construction from the perspectives of both professional sport teams as well as city and state governments.

## **Collaborative innovation in professional sport stadium construction**

The proposed model depicted in Figure 1 is developed from research evidence and theory from the adoption and diffusion perspectives to construct a theoretically sound conceptualization of professional sports stadium construction and public subsidization that is inclusive of both aforementioned viewpoints. Innovation adoption and diffusion perspectives are separated between factors germane to a professional sport team standpoint and a governmental standpoint. With regard to a professional sport team's perspective, three broad innovation adoption categories are identified from the research of Kimberly and Evanisko (1981), Rogers (2003), and others (Damanpour and Schneider, 2006; Vincent et al., 2004): individual-level determinants, organizational-level determinants, and environment-level determinants.

Individual-level determinants are captured by the factors of professional sport team ownership tenure, ownership attitudes toward innovation (openness to change), and self-monitoring. Organizational-level determinants are represented by the factors of organizational culture, organizational resources (slack resources), organizational size, and organizational structure. Environment-level determinants are captured by the factors of environmental uncertainty (also known as environmental turbulence) and market competition.

For innovation diffusion, the probability of new stadium construction adoption from a professional sport team's perspective is linked to divisional diffusion effects (Rogers, 2003). Divisional diffusion effects represent network externalities "whereby the value a user derives from a good increase with the number of other users of the same or similar good" (Schilling, 2002, p. 387). Herein, divisional diffusion effects describe the divisions within US professional sport leagues and how the building of a new sports facility in one division might influence construction adoption by other teams considering stadium construction in the same division or a rival division. Consider how the NFL is divided into the National Football Conference (NFC) and American Football Conference (AFC). Both the NFC and AFC include four divisions (North, South, East, and West). Therefore, if an AFC East team such as the New England Patriots builds a new stadium, it could impact the decision of an AFC North rival, such as the Baltimore Ravens, to construct a new stadium.

Next, specific factors of innovation adoption and diffusion from a governmental perspective are derived from the unified theory of policy innovation (Berry and Berry, 1990).

The probability of government innovation is "directly related to (1) the motivation to innovate, inversely related to (2) the strength of obstacles to innovation, and directly related to (3) the availability of resources for overcoming such obstacles" (Berry and Berry, p. 114). Policy adoptions

by neighbouring states or geographically proximal cities (regional diffusion effects) is also likely to provide critical information (a resource) and reduce uncertainty (an obstacle) to the city or state governments considering whether or not to adopt a certain policy or project.

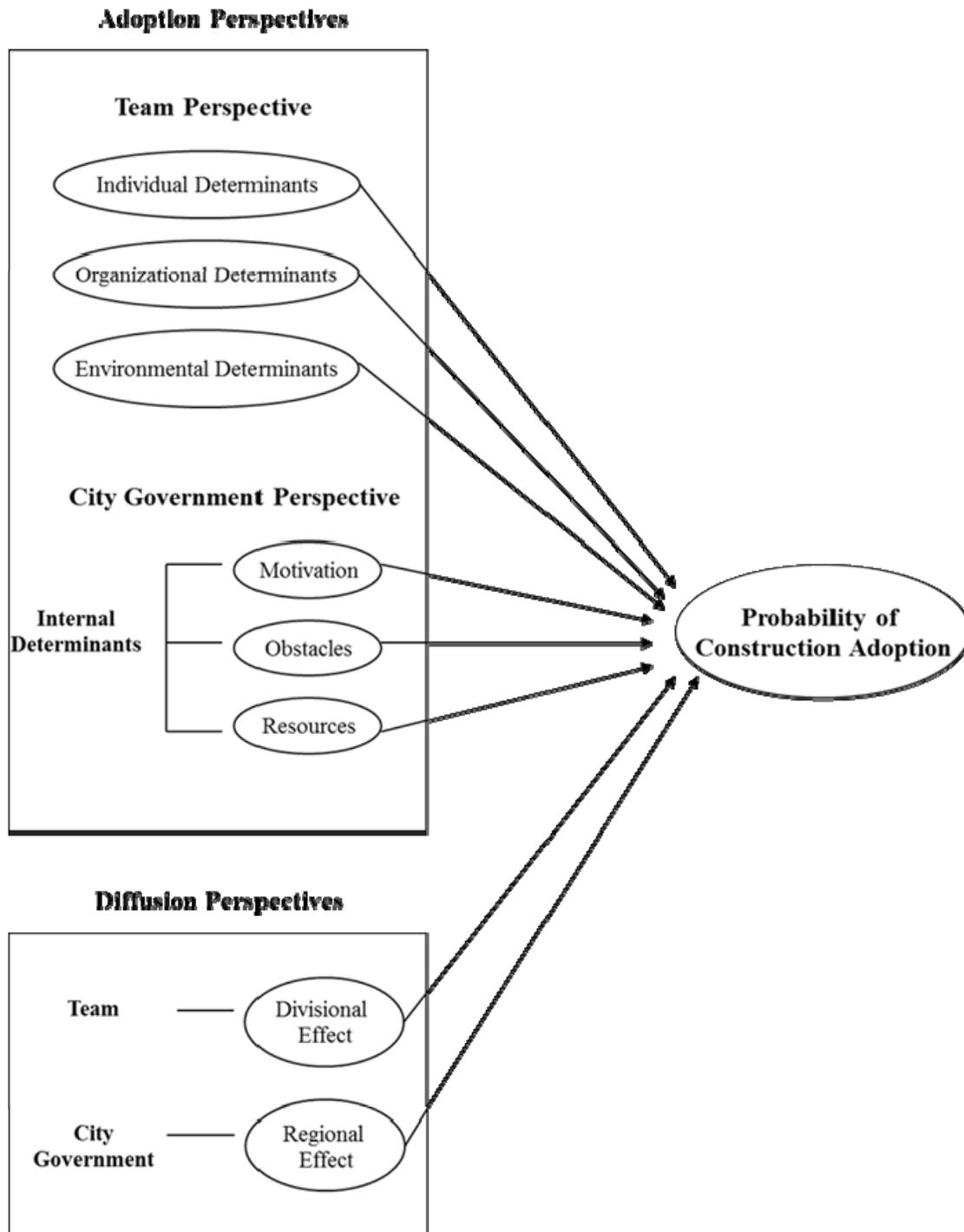
In Figure 1, the factors of election proximity, political ideology, and fiscal health capture the categories of motivation to innovate, obstacles to innovate, and resource availability to overcome obstacles, respectively. The fourth category, regional diffusion effects, refers to the observed advantages or disadvantages from stadium construction adopted by nearby cities or states that can be used as experimental laboratories by the city or state considering whether or not to help fund the building of a new professional sports stadium (Berry & Berry, 1990). If a city government engages in the construction of a professional sports facility, it may influence nearby cities to also engage (or not engage) in the construction of professional sports facilities. Thus, along with internal determinants, regional diffusion effects represent an additional possible explanation for innovation adoption by city and state governments.

## **Construction adoption: Professional sport team perspective**

### **Individual-level determinants**

Organizational leaders can strongly influence innovation adoption because they control resources and have the authority and power to enact major decisions (Daft, 2001; Damanpour and Schneider, 2006). Though numerous possible individual determinants have been recognized in the extant business literature, complete coverage of these factors exceeds the scope of this study. Therefore, drawing from both research evidence (Vincent et al., 2004) and personal interactions with several professional sport league executives, three individual-level factors that may be particularly apropos to organization innovation are included in the proposed model.

**Length of job tenure:** Two prevailing perspectives on the impact of job tenure length (i.e., how long an organizational leader or key decision-maker has been in his/her current job role) on innovation adoption are present in the economics and public policy literatures. According to the first position, the longer the period of time an organizational leader has been in a job role, the greater the likelihood of innovation adoption by that leader's organization. This position stems from the belief that job tenure corresponds to industry experience and legitimacy. More experienced organizational leaders should have a track-record of completing projects of varying degrees of difficulty. As a result, when it comes to proposing and executing an innovative project idea, leaders with longer tenure periods should possess the



**Figure 1.** Proposed model of professional sport stadium construction adoption from team and government perspectives.

legitimacy, capability, and requisite social connections to make and then successfully execute an innovative project proposal (Kimberly and Evanisko, 1981; Mumford, 2000).

The second position holds that organizational leaders with longer job tenure will be less inclined to consider new ideas and be more restrained in engaging in projects

that offer a fresh perspective to their organizations (Damanpour and Schneider, 2006). Leaders who are new to their organizational positions also may experience greater pressure from consumers, peers, shareholders, and boards of directors to perform at a high level because they have yet to establish a track-record of success

with their current organization. In response to the pressure, leaders may enthusiastically seek out and start some form of innovation adoption (e.g., product, service, and/or administrative process innovation) (Damanpour and Schneider).

Of the two positions, research evidence more strongly supports the latter. Thus, professional sport team owners and executives new to their organizational positions may be more likely to proactively pursue and adopt new stadium construction (innovation) initiatives than owners and executives with longer tenure periods. Though job tenure may not impact innovation adoption (Damanpour, 1991; Kimberly and Evanisko, 1981), the available body of research findings, including Vincent et al.'s (2004) meta-analysis, demonstrates strong support for leaders with shorter tenure periods being more likely to innovate than leaders with longer tenure periods. In effect, even if an organizational leader with a longer tenure period is open to innovation (e.g., Jerry Jones, owner of the Dallas Cowboys), those leaders with shorter tenure periods are expected to pursue innovation in a more proactive, if not aggressive, manner. For example, Joe Lacob and Peter Guber, who bought the NBA's Golden State Warriors in 2011, immediately put into action a strategic plan to build a new, cutting-edge arena for the team that would also see them return from the city of Oakland (California) to the city of San Francisco (California) for the first time in 40 years (Matier, 2013).

**Ownership attitudes toward innovation (openness to change):** Openness to change can be understood as the degree to which executives possess a long-term perspective, appealing visions, and encourage and accept new ideas (Yukl, 1999). A leader, such as a professional sport team owner or other team executive (e.g., team president), can be a very powerful force for organizational innovation (Daft, 2001). Organizational leaders who possess favorable attitudes toward innovation are very likely to create an organizational culture that is very open to change and innovation, and they are going to be more inclined to allocate the requisite resources needed for accomplishing innovative projects (Vincent et al., 2004).

American businessman, Paul Alan, the co-founder of Microsoft and founder and Chairman of Vulcan Inc., owns the NFL's Seattle Seahawks, the NBA's Portland Trail Blazers, and also is a part-owner of the Seattle Sounders FC, a MLS team. Paul, whose memoir is titled, *Idea Man*, embodies a leader who is very open to innovation across myriad industries, having invested hundreds of millions of his own wealth in space transport systems (Stratolaunch Systems), ticket sales (Ticketmaster), and medical research (e.g., Allen Institute for Brain Science and Fred Hutchinson Cancer Research Center). Given that a leader's openness to change is expected to demonstrate a positive relationship with the adoption of organizational innovation (Damanpour, 1991; Camison-Zornoza et al., 2004), professional sport team owners and executives

who possess favorable attitudes toward innovation should be more likely to consider and then adopt new stadium construction initiatives than owners and executives who are less open to implementation innovative policies and practices.

**Self-monitoring:** A third determinant that may demonstrate a positive relationship with the adoption of organizational innovation pertains to the extent to which individuals have an ongoing interest in how others observe and assess them. This determinate is the personality variable of self-monitoring (Snyder, 1974). Low self-monitors are "less responsive to situational and interpersonal specifications of appropriate behavior" whereas high self-monitors are "markedly sensitive and responsive to social and interpersonal cues to situational appropriateness" (Snyder and Ganestad, 1982, p. 123). In other words, low self-monitors are not attuned to role expectations (e.g., team president expectations) whereas high self-monitors are likely to act in accordance to social expectations even if it means they compromise their sense of authenticity.

The ability of organizational leaders to demonstrate competency and control of their environments and the outcomes of their organizations tends to receive a high level of scrutiny from stakeholders, peers, and rivals (Leary and Kowalski, 1990). Businesses across sport and non-sport industry segments typically have norms and expectations of their executives. Conformance to and the fulfillment of these norms and expectations may offer organizational leaders a sense of legitimacy – that they "fit in" and are accepted by others (e.g., peers, stakeholders) – which can then have a strong influence on their attitudes and decision-making behaviors. Pfeffer (1981), in particular, referred to this as the "symbolic" role of managing in that a leader must both direct organizational activities as well as create the appearance of efficacy and control among other parties (e.g., stakeholders, peers, rivals) if they are to be successful in the workplace.

Leaders' levels of self-monitoring influences the extent to which they perceive their social environments accurately and adjust their behaviors accordingly so that they might achieve (or maintain) a desired image amongst their peers and benefit from a high level of social effectiveness. High self-monitors may be especially willing and able to tailor an image to match social expectations of the position for which they seek or currently hold. They will seek to understand who the situation requires them to be and how they can go about becoming that person (Snyder, 1979). Thus, high self-monitoring sport executives who find themselves in business situations where they want to portray themselves as competent (e.g., building a new sport facility) will likely engage in behaviors that correspond to what they believe valued others (e.g., other sport executives) would expect a competent executive to do in their position.

### Organizational-level determinants

**Organizational culture:** Organizational culture represents “a system of shared values and beliefs that produce norms of behaviour and establish an organizational way of life” (Koberg, 1987, p. 397). Culture is an essential element of an organization’s potential for innovation adoption because it can supplement organizational structure and complement organizational leadership (Hauser, 1998). Given that innovation typically represents a complex process with uncertainty of success, firms with innovative cultures, rather than cultures guided by a strict following of traditional rules and procedures, are more likely to foster innovative thinking and adopt innovative policies.

Flexible culture is also effective in motivating and directing the solution of unstructured problems because it helps generate individual creativity, which can spur innovative organizational ideas (Jaskyte and Dressler, 2005). For instance, MLB’s San Francisco Giants are widely viewed across the professional baseball industry as an organization that is at or near the leading edge of the integration of technology and sport business to better understand their players and fans (Swartz, 2013).

Innovation is a part of the San Francisco Giants organizational cultural, manifesting itself in a variety of areas within the organization from scouting to marketing to ticket sales. They were the first team in MLB to use Field F/X, which is a technology that captures defensive data about players (Swartz, 2013). Also, with regard to adopting innovative ticketing ideas, the Giants are pioneers because they introduced dynamic ticket pricing strategies to MLB. Dynamic ticket pricing, or variable ticket pricing (VTP), refers to “changing the price of a sporting-event ticket based on the expected demand for that event” (Rascher et al., 2007, p. 407). The Giants adjust ticket prices the morning of their home games in order to compensate for existing conditions (e.g., weather, opponent, etc.) and compete with secondary market distributors. Therefore, when it comes to organizational culture and the construction of professional sport stadiums, a sport team with a flexible organizational culture should be more likely to consider, develop, and adopt new stadium construction initiatives than a sport team with an inflexible organizational culture.

**Organizational resources (slack resources):** Organizational slack resources refer to “the pool of resources in an organization that is in excess of the minimum necessary to produce a given level of organizational output” (Nohria and Gulati, 1996, p. 1246).

Redundant employees, unused capacity, unnecessary capital expenditures, and unexploited opportunities to increase outputs are all examples of slack resources (Nohria and Gulati, 1996). Several ways in which slack resources are likely to enhance a firm’s ability to adopt innovation are provided next.

Slack resources afford firms an opportunity to develop

innovations because they represent available organizational resources that surpass what is required to maintain an organization’s routine operations. Surplus resources also bear the costs of instituting innovations thereby absorbing the risk of failure in innovation adoption. Finally, because using slack resources protects the resources required for organizations to optimally function on a daily basis, they can create an impetus among organizational executives to use extra resources for the continued development of their organizations.

A positive relationship between slack resources and innovation adoption in industries that rely more heavily on product or process advancements is expected to exist (Damanpour, 1991; Herold et al., 2006). Herold et al. (2006), for example, using a database of 350 US companies reported a significant positive association between slack resources and innovation adoption. Therefore, it is highly probable that as a professional sport team’s slack resources increase, team leaders and key decision-makers will be more inclined to view the construction of a new sport stadium favourably.

**Organizational size:** The size of a business firm represents one of the most important organizational-level determinants influencing innovation adoption (Kimberly and Evanisko, 1981; Camison-Zornoza et al., 2004). The number of employees within an organization, a firm’s total assets, a firm’s market share, and the ratio of a firm’s employment numbers to industry employment averages are all ways in which firm size can be operationalized. Two dominant positions about the firm size – innovation adoption relationship are debated in academia (Damanpour, 2010).

The first position about the effect of firm size on organizational innovation is that small organizations, more so than large organizations, will be less bureaucratic and more flexible in accepting and implementing organizational change in the form of innovation. The second debated position is that large organizations are more likely to adopt innovation than small organizations due to their superior financial and technical capabilities. Such capabilities allow for the hiring of a larger and more diverse workforce, which is relevant to organizational innovation because diversity within an organization has been linked to a greater number of innovative ideas being developed by that organization (Bolton, 1993).

While each of the aforementioned positions has received research support, anecdotal and empirical research evidence mostly points to a positive relationship between large organizational size and innovation adoption (Camison-Zornoza et al., 2004; Damanpour, 1991; Vincent et al., 2004). Notably, in Vincent et al.’s meta-analysis of 83 empirical studies from 1980 through 2003, organizational size was reported to have a positive relationship with organizational innovation. Hence, the size of a professional sport organization is a factor that is expected to be positively associated with team owners and executives deciding to adopt the construction of a new

sport stadium.

### **Environmental-level determinants**

Innovation is a means of creating a dynamic capability to cope with environmental uncertainty. A dynamically changing market also requires firms to continually innovate their products and/or themselves in order to respond to rapidly changing market demands (Nohria and Gulati, 1996). Of the various environmental determinants that have been studied, environmental uncertainty and market competition are two factors in particular that have strong potential to impact organizational innovation (Damanpour and Aravind, 2006; Nohria and Gulati).

**Environmental uncertainty:** The concept of environmental uncertainty refers to the challenges associated with predicting discontinuities in a specified business environment. Two separate dimensions comprise environmental uncertainty: environmental complexity and variability. *Environmental complexity* (also known as heterogeneity) refers to “the diversity and interdependence of environmental factors that organizations have to contend with” (Sia et al., 2004, p. 255). *Environmental variability* (also called dynamism or environmental volatility) represents “the rate and volume of changes in the environmental factors” (Sia et al., 2004, p. 256).

Emerging trends, threats, and opportunities to a business (i.e., complexity) can greatly enhance its level of environmental uncertainty. Rapid changes as well as large numbers of changes (i.e., variability) also create an uncertain environment for business firms. Consequently, complex environments require firms to devote a significant amount of time and energy to information processing and identifying new opportunities and strategies for success if they are to remain competitive among rival firms (Han et al., 1998; Sia et al., 2004).

Market-oriented firms typically will exhibit superior responsiveness through innovation in turbulent business market places because innovation represents a salient way in which they can effectively respond to environmental uncertainty (Han et al., 1998). Innovation is expected to be positively associated with environmental uncertainty because firms are more likely to pursue aggressive innovation strategies as uncertainty increases. Thus, the adoption of new stadium construction by professional sport organizations is anticipated to increase as the level of environmental uncertainty increases.

**Market competition:** Organizational executives face immense pressure from peers and stakeholders to relentlessly evaluate their business landscape if they are to survive heavy competition from rivals and sufficiently meet the discriminating and evolving demands of consumers. This is done by leaders so that they may possess a high level of cognizance about rivals’ activities as well as pick up new knowledge and then adjust that information to their respective industries (Frambach and

Schillewaert, 2002). Organizational leaders and decision-makers from a diverse array of companies, including Apple, Google, International Business Machines (IBM), Samsung Electronics, Nike, and Under Armour have all emphasized the importance of innovation in determining the extent to which their respective businesses can be competitive and prosperous in dynamic domestic and international marketplaces (Sauter et al., 2014; Stern, 2012).

Market competition is one of the most important and widely used predictors of innovation adoption (Bernstein and Gauthier, 1998; Vincent et al., 2004). This predictor pertains to “the degree of competition reflected in the number of competitors and the number of areas in which there is competition” (Miller, 1987, p. 35). Competition in the market place can lead to innovation because it creates strong motivations among firms to obtain new information in order to compete with rivals. Market competition also can lead to innovation because it exposes businesses to new ideas, services, and/or products.

Two types of market competition are of particular importance to innovation adoption in a sport context. The competition between teams in the same professional league is one type of market competition. When speaking of MLB’s Oakland Athletics, for example, baseball commissioner Bud Selig insisted, “You can’t ask people to compete [against other MLB teams] if they have a stadium that doesn’t produce any kind of revenue to give them a chance to compete. So that’s a given” (Associated Press, 2012). A second type is competition with other professional leagues’ teams that share the same regional market, such as the NBA’s Miami Heat competing for consumer dollars against the NFL’s Miami Dolphins and MLB’s Florida Marlins. Overall, there exists a strong probability that competition with teams in the same professional league and/or teams in other professional leagues will increase the likelihood of new stadium construction adoption by a sport organization.

### **Construction adoption: Government perspective**

The unified theory of policy innovation (Berry and Berry, 1990) consists of four categories of determinants that influence the probability of governing bodies adopting large scale innovative construction projects: (1) the motivation to innovate, (2) existence of innovation obstacles, (3) resource availability to overcome obstacles, and (4) regional diffusion effects. The latter three categories represent internal determinants whereas regional diffusion effects represent an external determinant.

#### **Internal determinants**

**Election proximity (motivation to innovate):** A key goal of most elected officials (policymakers) is to gain re-

election. Corresponding with this goal is the strong motivation by elected officials to highlight the successes that have taken place during their term in office in order to improve their chances for re-election (Berry and Berry, 2007). Relatedly, when it comes to policy adoption, politicians also have a strong motivation to put forth proposals at times in an election cycle that are most beneficial to their political futures (Berry and Berry, 1992).

Politicians supporting the building of new sport facilities have the potential to further their political careers through the manipulation of constituents' (many of whom may be sports fans) emotions and levels of identification with a sport franchise. Consider a scenario in which the ownership of a professional sport team is making it known to the local community they are considering relocating unless they get a new or renovated stadium. In fact, Arthur Blank, the majority owner of the NFL's Falcons, behaved along those lines. Investors in Los Angeles, the second largest media market in the US, expressed strong interest in moving the Falcons to LA. Blank reportedly used that information to pressure Atlanta politicians and the state governor of Georgia to take a more aggressive lead on public financing of a new stadium to replace the Georgia Dome, a facility that opened in 1992 (Manasso, 2013). With such a situation in place, regardless of whether the team ownership is sabre-rattling or seriously considering relocating a team, city- and state-level politicians can position themselves to be viewed by constituents as intermediaries of the situation, if not saviours of a professional sport team, because they present or sponsor a policy that would secure a new stadium deal for the team with the city.

Policy makers are keen to encourage and implement policies around election time that are expected to be perceived favourably by their constituents, irrespective of the true benefits of such policies, in order to exploit their political advantages (Berry & Berry, 1990). Thus, elected officials will be more likely to publicly consider and adopt policy innovation, such as the construction of a new sport stadium, if it is relevant to their political calendars and can be leveraged in such a way by these politicians so as to benefit their own futures as elected officials.

**Political ideology (obstacle to innovation):** Regardless of policymakers' motivations to innovate, there exist subjective and objective obstacles that may prevent such motivations from becoming a reality. In terms of subjective obstacles, political ideology represents a key factor that may play a noticeable role in politicians' taxing and spending policies when it comes to policy innovation adoption (Berry and Berry, 1992). Political ideology is not restricted to the political affiliation or party of a policy maker (e.g., Conservative, Green, Democrat, Independent, Libertarian, Republican). Instead, it refers to the underlying political philosophies of individuals in control of a governing body. Fiscally liberal individuals and/or political parties, rather than fiscally conservative individuals and/or political parties, are more inclined to support tax increases

as a way to generate revenue and inspire economic development through innovation (Berry and Berry, 1992). Hence, it is expected that policymakers with a fiscally liberal political ideology will be more willing to adopt new stadium construction (through means such as tax increases) than policymakers with a fiscally conservative political ideology.

**Fiscal health (resources to overcome obstacles to innovation):** The fiscal health of cities and states is an objective obstacle to innovation. Ideology represents a personal belief that can be changed if it is politically beneficial to an elected official while, in comparison, the financial resources of cities and states are not easily altered by policymakers. Mention of fiscal health as an obstacle to innovation also connects the present discussion to the aforementioned topic of slack resources. Just as a business firm's ability to innovate is linked to slack resources, a city or state government's ability to innovate, much like a business firm's ability to innovate, is linked to the availability of financial resources (Berry and Berry, 1992). Accordingly, fiscal health is expected to have a significant impact on whether or not elected officials are willing to adopt new stadium construction policies.

### Construction adoption: Diffusion effects

#### Professional sport team perspective (Divisional effect)

As the number of business organizations demonstrating a positive effect from innovation adoption increases, the probability of rivals adopting that same innovation also increases (Frambach and Schillewaert, 2002). Essentially, "the value a user derives from a good increase with the number of other users of the same or similar good" (Schilling, 2002, p. 387). This demonstration of diffusion is known as 'network externalities.' In the context of inter-organizational relationships, network externalities enable the rate of adoption and speed of diffusion when the inherent value of an innovation increases because an organization's competitors also use the innovation (Frambach and Schillewaert, 2002). Thus, as the number of competitors who have adopted an innovation increases, the number of non-adopters also adopting the innovation is expected to increase (Schilling).

The occurrence of subdivisions and the regularity of games between teams in the same division create divisional rivalries for US professional sport leagues. Correspondingly, competition between rival firms (e.g., Apple and Microsoft, Adidas and Nike) outside of professional sport teams is strongly linked to innovation behaviours (Rogers, 2003). Hence, it is very possible that divisional rivals' stadium adoptions will positively influence team owners and key decision-makers considering professional sport stadium construction in the same

division.

### Government Perspective (Regional Effect)

Regional clusters exist among US states. Within these regional clusters there is interstate competition, which can spur non-adopters of innovative policies or practices to adopt them in order to gain the observed benefits of such policies or practices as well as remain competitive against interstate rivals (Berry and Berry, 1990). States emulating one another describes a regional diffusion effect, and there are several reasons why it may occur at the city level as well.

First, “states learn from one another as they borrow innovations perceived as successful elsewhere” (Berry and Berry, 2007, p. 225). Likewise, rather than adopt innovation without a point of comparison, emulation of other cities’ innovations is a simple and cost-effective method for policymakers to identify innovation solutions to their cities’ problems because evidence already exists of other cities successfully employing the proposed policies or practices. Next, as it was previously noted, “states compete with each other” (Berry and Berry, p. 225). American cities (e.g., Austin, Los Angeles, Miami, New York), no differently than American states, compete with one another. Therefore, due to both interstate and intercity competition, the economic rewards or shortcomings observed from other states’ and cities’ adopted innovations can encourage or discourage non-adopters’ decisions to accept innovations.

Additionally, despite the assumed autonomy that states possess in the US, there still exists peer pressure (so to speak) at both national and regional levels. Such peer pressure exists at the local government level as well. As a result, widely adopted policies or practices by a majority of states or cities can act as pressure on individual states and cities who have yet to conform to the majority position (Berry and Berry, 2007). For example, almost half of the 50 US states have adopted “right to work laws,” which prevents unions from forcing workers to join and pay dues. Michigan was the 24<sup>th</sup> state to adopt such a law, a move which was made in part because the neighboring state Indiana adopted such a law and Michigan did not want businesses to leave for a rival state (Koba, 2012). Therefore, cities and states with professional sport team may be more likely to adopt new stadium construction as the number of other cities and nearby states with professional sport teams successfully adopting stadium construction increases.

## DISCUSSION AND PRACTICAL IMPLICATIONS

Inadequate consideration has been given to the numerous factors that may influence new stadium construction adoption. The proposed model (Figure 1) does not account for every possible variable that may be important to new stadium construction adoption. Still, the proposed

model helps to advance the study and practice of sport management by providing an integrative innovation model that captures key elements of both private and public sectors.

Rather than explore a team’s perspective or a city and state government’s perspective separately, diffusion of innovation theory (Rogers, 2003) and the unified theory of policy innovation (Berry and Berry, 1990) are integrated in the conceptual model. This model provides a useful way for scholars and practitioners alike to view the salient area of new sport stadium construction through the development of a conceptual paradigm that identifies, organizes, and explores the possible relationships between various team- and city-/state- level factors and new professional sport stadium construction adoption. The model, along with the accompanying exposition, should help familiarize and inform sport professionals and policy-makers about key variables that may influence collaborative innovation opportunities. With this basic level of understanding in place, these individuals should then be able to better evaluate construction adoption opportunities, ask informed questions, and make educated decisions.

Organizational determinants, for example, are important, if not *the* most important predictors of organizational innovation because a firm’s resources and internal capabilities play an indispensable role in its ability to achieve a competitive advantage in the business marketplace (Vincent et al., 2004). If a leader’s respective business organization lacks the internal capability to accept innovation, it will be unable to do so, regardless of whether the leader is open to innovation. Therefore, of the three categories of determinants for innovation adoption from a professional sport team’s perspective, the organizational-level factors presented in this study may be especially significant factors for sport managers and policy-makers to identify and understand before seriously pursuing new stadium construction efforts.

Another interesting determinant to consider is the significant impact that regional and divisional diffusion effects can have on stadium construction adoption. Cities with professional sport teams may take seriously the adoption of stadium construction of neighboring cities with professional sport teams in order to gather critical information and reduce uncertainty about the new stadium construction process. Key decision-makers with professional sport teams therefore should consider how many neighboring cities with professional sport teams have adopted the construction of a new stadium prior to taking their proposals to their respective city governments because city government officials are unlikely to adopt stadium construction absent sufficient understanding of the matter.

### Conflict of Interests

The authors have not declared any conflict of interests.

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