

The Rocky Road to Legacy: Lessons from the 2010 FIFA World Cup South Africa Stadium Program

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ABSTRACT ■

This article describes how the management and organization of the South African 2010 FIFA World Cup stadium program shaped the current legacy of an oversupply of overdesigned and underutilized stadiums. The article identifies seven key factors that explain the differences between expected benefits and the actual legacy. Identification of these factors contributes to the increasing academic interest in explaining the poor legacy outcomes of mega-events. In conclusion, we recommend that future host country governments defragment their stadium programs by establishing a World Cup Delivery Authority (WCDA), with responsibility for the leadership and coordination of the stadium program.

KEYWORDS: mega-event; megaproject; major program management; stadium legacy; fragmentation; South Africa 2010 FIFA World Cup; grounded theory

INTRODUCTION ■

The South African Government described the 2010 FIFA World Cup as “one of the biggest infrastructure investment projects in South Africa,” with the explicit purpose of “fast-tracking growth and development” (South African Government, 2010). The direct cost to South Africa of hosting the 2010 FIFA World Cup was a minimum of R37 billion or US\$4.9 billion (X-Rates, 2010) with the stadiums and precinct program comprising two-thirds of the total spend (Sports and Recreation South Africa, 2011, p. 124; Cottle, 2011, p. 88). Such expenditure was a significant investment for an “upper middle income” country like South Africa, where 23% of the 50 million residents live below the poverty line (World Bank, 2012a, 2012b). The justification for committing to this level of expenditure was that major sporting events or “mega-events,” such as the FIFA World Cup or Olympic Games, enable the acceleration and realization of the host country’s development goals, which include poverty alleviation, infrastructure provision, and job creation. Yet, the extent to which these expected benefits are realized is increasingly questioned by researchers, policymakers, and local communities (for example see: Alegi, 2007; Bond, Desai, & Maharaj, 2011, p. 429; Pillay, Tomlinson, & Bass, 2009, p. 15; Tien, Lo, & Ze, 2011).

The gap between expected benefits and actual outcomes, the event “legacy,” is most obviously manifest in the venues built to host the mega-events, including stadiums, swimming pools, and velodromes that are often characterized by cost overruns in construction and post-event underutilization (Flyvbjerg & Stewart, 2012; Barclay, 2009). High-profile examples include Stadium Australia (Searle, 2002), the Beijing Olympic Stadium (Liu, Zhao, & Wang, 2010), the venues used for the Athens 2004 Olympic Games (Mathieu, 2010), and some of the stadiums built for the 2002 FIFA World Cup Korea/Japan (Baade & Matheson, 2004). Perhaps the most infamous example is the “Big Owe” Montreal Olympic Stadium, which took Canadian taxpayers 30 years to pay off and was not built in time for the 1976 Olympic Games (Newton, 2012). This effect is known as the “winner’s curse” (Andreff, 2012, p. 45), where a city or even an entire country, becomes financially worse off as a result of winning the bid and hosting the mega-event. Still, there are rare examples of where a positive legacy results. For example, The City of Manchester Stadium, now host to Manchester City Football Club (MCFC) is an example of an effective legacy plan, because the stadium was an integral component of the city’s long-term strategy prior to hosting the Commonwealth Games (ARUP, 2003), supporting Matheson’s (2010) reasoning that legacy planning should be undertaken at key stages, from event conception to post-event.

In this article we examine the expected benefits arising from the construction of the 2010 FIFA World Cup stadiums in South Africa and contrast these

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expectations with the actual legacy that is an oversupply of underutilized stadiums. We then show how the management and organization of the stadium program led to this shortfall between expected and actual benefits. In order to do so, we start with a brief review of mega-event legacy research and, in particular, the roles of stadiums and venues in contributing to legacy and highlight the need for more research on connecting legacy outcomes to the program management of mega-events, as well as the legacy of mega-events in developing countries. Next, we describe our research approach and discuss our findings, which identified seven key factors that led to the failure of the expected benefits to materialize from the FIFA 2010 World Cup stadium program in South Africa. We conclude with a summary of implications for theory and practice.

Mega-Event Legacy Research

The concept of “legacy” has been widely used by governments in developed and less developed countries alike to justify bidding for and hosting mega-events such as the FIFA World Cup and Olympic Games, yet the term itself appears to be evolving (Agha, Fairley, & Gibson, 2012; Cashman, 2003; Cornelissen, 2011; Cornelissen, Bob, & Swart, 2011; Davies, 2011; Dickson, Benson, & Blackman, 2011; Getz, 2002; Gold & Gold, 2008; Gratton & Preuss, 2008; Hall, 2001; HSRC, 2011; Matheson, 2010; Preuss, 2007). This situation led Thomson, Leopkey, Schlenker, and Schulenkorf (2010) to call for an agreed-on common definition in the context of mega-events. In the absence of an agreed-on definition, in this article we settle for a broad definition of “legacy” as simply *what is left behind* after a mega-event or a major program, while remaining cognizant of Preuss’s (2007) analysis and framework, which identifies the different elements of legacy as follows: social, cultural, environmental, political, economic (including tourism), sporting, psychological, physical (construction

and urban renewal), information and education, symbols, memory, and history. Stadiums and venue infrastructure more generally are important objects of attention because they often form the major part of the physical or “hard” legacy (LERI, 2007; Preuss, 2007) and account for a major proportion of the cost of hosting mega-events. However, stadiums are increasingly perceived as icons, or what Sheard (2000) calls, a “symbol of our times,” a fact reflected in the niche but expanding field of sports architecture. As such, stadiums also play a role as part of “soft” legacies such as the symbolic effect of hosting the event, and the cultural effect of enhanced national pride (De Moragas, Moreno, & Kennett, 2003; Preuss, 2007).

From an economic perspective, stadiums are interesting because there appears to be a widespread belief among host countries that financial legacy benefits will automatically flow from building stadium capacity. The Association for Project Management (APM, 2011, p. 2) label this the “Field of Dreams” belief, anchored in the assumption that “if we build it they will come.” The persistence of this supply side reasoning is remarkable given the extensive and tangible evidence to the contrary in the forms of abandoned and derelict stadiums and venues. Barclay (2009) and Nuttall (2011) have persuasively shown that these “white elephants” (venues that are a financial burden or underutilized post-event) arise from a complete failure to strategically plan and manage for effective after-use grounded in reliable demand-side analysis, an observation further supported by Masterman (2009) and Alm (2012).

The situation outlined above has attracted the attention of researchers in the development literature, the project and program management literature (e.g., Breese, 2012; Simon, 2003), as well as the research area of sports studies. There is now a growing body of *ex-post* studies that criticize overoptimistic *ex-ante* impact studies that promote mega-events as economic boosters

(Baade, 1996; Baade & Matheson, 2004; Coates, 2007; Coates & Humphreys, 1999; Collins Flynn, Munday, & Roberts, 2007; Matheson, 2002; Noll & Zimbalist, 1997; Porter, 1999). The consensus is that there is no discernible positive direct impact on development to the host city of the mega-event (Barclay, 2009; Crompton, 1995) or the mega-event stadiums as businesses in their own right (Baade & Dye, 1990; Coates & Humphreys, 2008; Leeds & von Allmen, 2005; Siegfried & Zimbalist, 2000, 2006), adding further weight to the critique that *ex-ante* economic impact studies are generally “weak” (Swinen & Vandemoortele, 2008, p. 3) when compared with the actual post-event economic benefits. Flyvbjerg (2009) notes this is most likely explained by “strategic misrepresentation” by interested parties rather than technical incompetence or political factors. Further, Szymanski (2011, p. 91) believes there is a “mismatch between the social perception of an event and its true economic significance.” He argues that the economic impact of mega-events, which is typically associated with construction costs and event-related revenues, is negligible in comparison with the entire economy of the host country and thus questions the economic booster effect claimed by many *ex-ante* studies (Szymanski, 2011).

While there is a wide range of literature on the actual legacy of mega-events, as noted above, there is limited research such as that found in urban regeneration (Davies, 2011; Matheson, 2010; Smith, 2012), that directly links specific legacy outcomes to the management processes and practices that led to them. In light of this, Flyvbjerg (2007a, p. 22) and Flyvbjerg and Stewart (2012) call for further research to test *ex-ante* estimates against *ex-post* outcomes in order to understand the causes of success and failure on major programs, including mega-events. By linking the expected benefits, legacy outcome, and the management and organization of the FIFA 2010 World Cup stadium program, this article aims

to modestly extend the literature that focuses on benefits management and benefits realization (e.g., Sapountzis, Harris, & Kagioglou, 2008; Jenner, 2011; McCartney, 2000).

Dickson et al. (2011, p. 292) argue there is a “paucity” of empirical research on mega-event legacy and, specifically a dominance in commentary and the use of secondary data resources in legacy research on the Olympics and Paralympics. Further, most mega-event literature is set in a developed economy context, reflecting the fact that most mega-events have, to date, been held in developed economies. Based on the International Monetary Fund’s (IMF, 2011) identification of “emerging and developing economies,” since 1896, the Summer Olympics has been held only twice out of 30 games in a developing economy (Olympics, 2011); since 1930, the FIFA World Cup has been held only six out of 19 times in a developing economy (FIFA, 2011a). This is an important point, because the next Olympic Games will be held in Brazil in 2016, and two of the subsequent FIFA World Cups since South Africa have, or will, take place in developing countries: Brazil 2014 and Qatar 2022. In short, mega-events appear likely to feature strongly among emerging or developing economies in the future. As a result, the extent to which our understanding of the factors that contribute to mega-event legacy expectations and outcomes in developing economies will apply in these contexts remains unclear and is a valuable subject for investigation. In the following section, we describe our research approach to connecting legacy expectations, outcomes, and management processes in the context of the FIFA 2010 World Cup in South Africa.

Research Approach

Data relating to both the overall stadium program and each individual stadium project were collected (Burgelman, 1983) to form one program case (overview) and 10 stadium project cases (detailed view) in nine host

cities, using a mixed method research design (Maylor & Blackmon, 2005). This consisted of primary data collection using semistructured interviews with selected individuals and secondary data collection using key documents for triangulation and validation (Maylor & Blackmon, 2005). Thirty-two interviews were conducted (10 at the program level and 22 at the stadium project level) totaling 37 hours (see Appendix). In addition, seven meetings were held with academic and industry experts at the outset of the research to establish context and later to provide further clarity on emergent issues. The primary fieldwork was conducted over a four-month period, between April and July 2012.

Interview participants were prompted by the interviewer to reflect and relate their stories of involvement with the stadium program (Gabriel, 2000). This process allowed for the “historical development of each case” (Burgelman, 1983, p. 224), leading up to its current state, and formed the “basis of a comparative analysis” (Burgelman, 1983, p. 224; Pettigrew, 1997). Interviewees were contacted via introductions and in advance by email. The list of potential interviewees developed as the research progressed, and participants recommended other contributors. Eventually, relevant contributors were interviewed, to the point of saturation (Isabella, 1990) from all 10 stadium projects, and this formed the 2010 World Cup stadium program.

Given the high degree of complexity within the data (Barrett & Sutrisna, 2009, p. 936), and the exploratory nature of the research study, Glaser and Strauss’s (1967) grounded theory method was adopted. Grounded theory required starting the research without a commitment to a particular theory, so that the theory that emerged from the data was not “contaminated” (Glaser & Strauss, 1967, p. 37). The choice of using grounded theory was informed by Barrett and Sutrisna (2009), Burgelman (1983), Eisenhardt (1989), Isabella (1990), and Korica and Molloy (2010);

these works were found in journals primarily in the field of management and organization theory. Although the data collection was within a case study approach (Remenyi, 2012), the grounded theory methodology drove the investigation. Crucially, as stated in the Introduction, the focus of the research was not only on establishing the stadium legacy outcome itself, but also on contrasting this with the expected benefits and the management and organization of the program, with a view to explaining the failure of the expected benefits to be realized.

A program life cycle budget history was compiled from triangulated sources of data and traced the budget from bid stage to final estimate and highlighted key shifts in the program that were discussed at the interviews. This is graphically presented in Figure 2 and will be repeatedly referred to later on. Each interview was transcribed, coded, and categorized (Barrett & Sutrisna, 2009, p. 938) to develop its story. Initial open coding resulted in approximately 160 codes, and refined using axial and selective coding (Barrett & Barrett, 2008; Isabella, 1990), leading to the emergence of core categories. Frequent memos were written to extract theoretical meaning. An axial coding framework for emerging theory (Strauss & Corbin, 1990; Barrett & Barrett, 2008) was used to dissect central issues that emerged into actions/interactions, conditions, and consequences. Keywords and codes from the cross-case analyses were pulled out of a general concept map to identify interconnections. Finally, key insights and findings, such as “overoptimistic estimating” emerged as explanations for how the stadium program failed to deliver the expected benefits. These are discussed in detail in the subsequent sections of the article.

A number of limitations and challenges to this research approach need to be highlighted here. First, the exploration of the stadiums’ legacies is limited to a relatively narrow timeline both pre and post the event in 2012. As a

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consequence, some relevant factors in shaping the legacies may have been overlooked, and of course, the ultimate future of the stadiums is uncertain. Second, the research was limited to the South African context; implying that generalization to other national contexts should be made with caution. Third, the estimated final cost of the stadiums varied across sources. The highest credible figure was used in most cases, because different sources had different interpretations of what the final cost meant. This ambiguity surrounding definitive costs is a reflection of the difficulty in researching such events, and also indicative of the extent to which apparently objective financial data are used strategically and politically (Hopwood, 1976; Macintosh & Quattrone, 2010). In addition, the competing sources of reliable data also present a challenge for policymakers and practitioners involved in such events. Finally, given the temporal nature of mega-event programs, as well as significant political reorganization in the South African cabinet and some cities during the period leading up to the World Cup (including the election of a new president in 2009), many of the job roles referred to in this research were historic; therefore, interviewees were found in different environments from those they occupied during the organization and delivery of the 2010 World Cup. Again, this is a hazard for all *ex-post* research into mega-events.

The research was carried out in accordance with established social science ethical codes of conduct. This was particularly important in this study, because a significant number of the participants could be described as “elite interviewees” (IRDEC, 2008, p. 1); these were senior, well-known people in South Africa. Thus, careful consideration had to be given to the management of informed consent, confidentiality, and anonymity. All participants were emailed a participant explanatory sheet and consent form prior to agreeing to meet. All paperwork, transcriptions, and recordings were administered with

the highest integrity and stored securely so that the participant’s anonymity was protected.

Results

Expected and Perceived Benefits of the World Cup Stadiums

Table 1 shows the key drivers for World Cup stadium development, which ultimately influenced its legacy and the “knock-on” benefits, as perceived by the interviewees. The perceived benefits can be split into two categories: (1) one-off benefits, such as “acting as a catalyst for public sector investment,” “free money,” “increased productivity,” “pull through financial crises”; and (2) long-term benefits such as “social good,” “economic booster,” “image booster,” “tourism booster,” “investment confidence booster,” and “readiness for future mega-events.” Most city managers interviewed confirmed that the key drivers for development of the mega-event stadium was that it acted as a catalyst for infrastructure funding and investment and, quite simply, was regarded as “free money” from the national government. Both these drivers are categorized as one-off indirect “benefits” from choosing to develop stadiums for the World Cup.

It is also important to note at this point, however, that we found a degree of skepticism among some interviewees regarding the actual extent to which this economic booster effect would materialize. For example, in the following quote, Interviewee 1 describes the perceived benefit of the stadiums as an economic booster, a “fallacy”:

Now the other fallacy was that we needed to upgrade this infrastructure because we have got this large scale influx of people going to come into our city and flood our city, etc. Except for Johannesburg there was no large scale influx of people in any of the other cities.... And you will find that the other issues of legacy like the hotels, the tourism industry etc., didn’t make as much as they thought they would.

Similarly, in relation to the expected benefits of job creation, a prominent critic of World Cup 2010 (Meeting 2) noted the following:

Leading up to the World Cup, job creation and economic growth were perceived to be the two main benefits of the World Cup. This was shaped by the media and government to legitimize a rip-off by FIFA and Co.... Early optimistic estimates by Company X, based on simplistic calculations contradicted the reality of job losses immediately post the event.

The observation that there wasn’t a complete consensus or agreement around expected or perceived benefits draws further attention to the political nature of decision making within the overall stadium program. This is discussed further later in the article.

The Actual State of the World Cup Stadiums

Table 2 compares the stadiums proposed in the *Bid Book* with their legacy outcome. The final stadiums used for the World Cup were six new stadiums, including FNB Stadium, and four existing upgraded stadiums. FNB Stadium, referred to as “Soccer City” during the World Cup, was “practically new-build” (Interviewee 19) and is thus referred to as new-build in this article. Although research findings, discussed later in this section, show that the overall specifications for all 10 stadiums changed substantially post-bid, an overview in Table 2 shows that four stadiums (Moses Mabhida, Cape Town, Peter Mokaba, and FNB Stadium) were significantly different from the original *Bid Book* intent.

Table 3 shows that all of the six new stadiums built for the World Cup had annual maintenance costs that exceeded revenue, as confirmed by the city and stadium interviewees. Five of the six new stadiums continued to require taxpayer support. FNB Stadium, on the other hand, though still publicly owned, was being administered by an independent company, along with three other City of Johannesburg sta-

Expected and Perceived Benefits	Illustrative Comments by Interviewees
Catalyst for infrastructure funding and investment and “fast track” development	“What the WC [stadiums] did do is give us the impetus and kick-start and also the ability to get funding that we wouldn’t have otherwise got” (Interview 4, 2012).
Free money from the government	“We knew that National Government was going to give us 70% of the cost of the stadium, now we had one option which was to sit back and go with the old stadium or we grab that money now and make sure that we can get a new stadium and other infrastructure” (Interview 31, 2012).
Social good	“In many ways a stadium is like a social good” (Interview 4, 2012).
Economic booster	“Although the stadium itself is one cost center—we bid for and look for hosting events that bring people from a wider field into the city—[they spend]. So it is very difficult to look at the stadium as its own entity” (Interview 4, 2012). “There was a huge amount of employment, etc., created, a lot of people got jobs working on the stadium and other projects—and a lot of training that happened—that’s always a win” (Interview 4, 2012).
Increased productivity and discretionary effort	“The intensity of work around the World Cup stadium—and the productivity we got out of people was phenomenal. I have never seen anything like that before or since” (Interview 4, 2012).
Aesthetics—flagship/landmark—image and tourism booster	“Having an iconic piece of structure makes a significant difference to a country’s brand image internationally” (Interview 5, 2012).
Proved to investors that Africa was technologically advanced (investment confidence booster)	“The stadiums are world class—we had inspections from the FIFA people who said these are the best stadiums they had ever seen anywhere” (Interview 24, 2012).
Catalyst for building post-apartheid relationships and bridging the gap between rugby and football	“The legacy is ... the [rugby club] in the new dispensation was also perceived as a white brand, Afrikaans and opposing the new dispensation. The stadium investment gave us an opportunity to let us know each other” (Interview 21, 2012).
Readiness for future mega-event bids	“We have strategically set up...to have the stadium...to maybe get the Commonwealth Games and thereafter pushing towards the Olympics” (Interview 10, 2012).
Pull through financial crises	“One of the things that sustained South Africa through this international financial crisis is the fact that we had a huge infrastructure project, the stadiums, the roads ... It’s short term, but it played a particular role” (Interview 11, 2012).

Table 1: Expected and perceived benefits from the stadium projects.

diums, on a “full financial risk basis,” where the company “independently funds the commercial business and manages the venues without receiving any management fee, subsidy, or grant” (SMSA, 2013, p. 8).

None of the stadiums management was able to commit to an exact maintenance cost figure. The figures at the time of interview ranged from R30 million to R70 million per annum, depending on what was included and excluded from the reported cost. These figures were comparable with European stadiums, such as the City of Manchester Stadium, but widely incomparable with European stadium revenues (Interview 18). Interviewee 31, a city executive, noted the deception, lack of “transparency,” and “creative accounting” used by cities in reporting maintenance costs:

What’s happening is that the stadiums are being run where the costs sides of the stadium is often disguised in city budgets, the revenue sides is in the account of the operating. Now it means it looks good ... [but it’s] actually not ...

Consequently, the burden on the taxpayer was significantly higher than that reported in the media or by stadium management.

Two new stadiums—Moses Mabhida (Durban) and Cape Town Stadium—had existing well-utilized rugby stadiums of similar size in the same city. In Durban, the new stadium was right next door to the old one; both new stadiums, according to their city managers, included rugby as part of their viability plans in August 2006 (see Ethekwini Municipality, 2006), which had not been realized post-World Cup because

of poor stakeholder engagement during the stadium planning phase. Cape Town was in the process of negotiating with the local rugby club but had a number of challenges to overcome. For example, according to the chief executive of the local rugby club, the city, among other challenges, needed to revisit the record of decision relating to the stadium and precinct, which restricted commercial activity, and the number of suites within the stadium needed to increase from 140 to 250 to make a move viable. In Durban, the local rugby club had no plans to move at the time of the interviews.

To summarize the utilization of the new stadiums by professional soccer, we developed a Premier Soccer League (PSL) Index (see Table 3). This index does not necessarily relate to

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City	Stadiums: Pre-Bid	Pre-Bid Ownership	2003 <i>Bid Book</i> Proposal	Post-Bid Change	Stadiums: Post-Bid (Legacy)	Post-Bid Ownership
New stadiums built for the World Cup that were a major change to the <i>Bid Book</i>						
eThekweni/Durban	Kings Park (Rugby)	City Long Lease	Minor Upgrade	Existing to New	Moses Mabhida	City
Cape Town	Newlands (Rugby)	Private	Minor Upgrade	Existing to New	Cape Town	City
Polokwane	Peter Mokaba (Soccer)	City	Minor Upgrade	Existing to New	Peter Mokaba	City
Johannesburg	FNB Stadium (Soccer)	City Long Lease	Minor Upgrade	Existing to Practically New	FNB Stadium	City
New stadiums built for the World Cup that were also in the <i>Bid Book</i>						
Mbombela	Mbombela	City	New	New	Mbombela	City
Nelson Mandela Bay	Nelson Mandela Bay	City	New	New	Nelson Mandela Bay	City
Existing stadiums upgraded for the World Cup that were also in the <i>Bid Book</i>						
Johannesburg	Ellis Park (Rugby)	City Long Lease	Minor Upgrade	Upgrade	Ellis Park	City Long Lease
Tshwane	Loftus Versfeld (Rugby)	Private	Minor Upgrade	Minor Upgrade	Loftus Versfeld	Private
Rustenburg	Royal Bafokeng (Soccer)	Private	Minor Upgrade	Upgrade	Royal Bafokeng	Private
Manguang	Free State (Rugby)	City Long Lease	Minor Upgrade	Upgrade	Free State	City Long Lease
Stadiums in the <i>Bid Book</i> that did not get built/used for the World Cup						
Other Cities	Kimberly		New	Not Built		
	Oppenheimer		Upgrade	Not Used		
	Rainbow Junction		New	Not Built		

Source: *Bid Book* (2003) and Sports and Recreation South Africa (2011).

Note: Only a small portion of FNB Stadium (known as Soccer City during the World Cup) was retained for historic reasons and is thus considered new for the purpose of comparison.

Table 2: The state of the World Cup stadiums at bid proposal and at final legacy.

World Cup Stadium Name	Size (Legacy Mode)	Maintenance Cost Exceeds Revenue	City/Taxpayer Bears Burden	PSL Index 2011–2012	PSL Attendance Rating 2011–2012
Moses Mabhida	56,000	✓	✓	2.80	3
Cape Town	55,000	✓	✓	1.53	4
Peter Mokaba	45,000	✓	✓	4.92	1=
Mbombela	43,500	✓	✓	1.62	5=
Nelson Mandela Bay	46,000	✓	✓	1.60	5=
FNB Stadium	95,000	✓	×	2.32	1=

Source of attendance figures is Soccerway (2012).

Note: PSL Index = total attendance at Premier Soccer League (PSL) Matches/Stadium Capacity.

Note: PSL attendance rating is ordered by total attendance for PSL games in the 2011–2012 season.

Table 3: Current status of the six new stadiums of the 2010 FIFA World Cup.

how total revenues were generated by the stadiums. For example, in the case of Durban, sport matches only comprised 25% of the total revenue according to the stadium manager at the time of interview. Instead, the PSL Index

showed how many occasions per season the venue was theoretically filled up for the PSL games. The idea of the PSL Index was derived from the World Stadium Index (Alm, 2012), which was based on total utilization. What the

PSL Index revealed was that the PSL games filled each new stadium, on average only twice a year (except for the Peter Mokaba Stadium), indicating very poor utilization by professional soccer teams.

In the city of Polokwane, the Peter Mokaba Stadium showed the highest PSL Index and attendance rating for the 2011–2012 season. These figures were distorted by the fact that the city adopted a “pay to play” strategy in which teams were paid as much as one million rands to play at the stadium in return for (according to their city executive, who was interviewed for this research), economic benefits and cost-effective marketing via television. However, at the time of the interview, the city was looking for an alternate strategy to help with utilization and viability, because the “pay to play” approach was, according to their city executive, not sustainable in the long run. Alm’s (2012) World Stadium Index found an association between successful legacy and high utilization; however, the Peter Mokaba Stadium showed that this measurement of successful legacy could be misleading because it did not take into account other influencing factors, such as the “pay to play” strategy. Although a strategy of “build it and pay them to come” increased utilization, it also increased the financial burden to the city and its taxpayers.

In summary, we found that the World Cup had left behind a physical legacy of six new, “gigantic” (Cashman, 2002) stadiums in a country that had a low attendance demand for football, and already had sufficient existing stadiums to fill its pre-World Cup rugby and football needs. Further, five of the six new stadiums were still burdening the taxpayer with high maintenance costs.

How the Management and Organization of the Stadium Program and Its Associated Projects Shaped the Stadium Legacy of the 2010 FIFA World Cup

Having looked at the expected benefits from and the actual stadium legacy outcome of the World Cup (i.e., what was left behind), we now turn to the question of “how things changed over time” (Van de Ven, 1992) and how this resulted in the stadium legacy, by exploring the management and organization of the

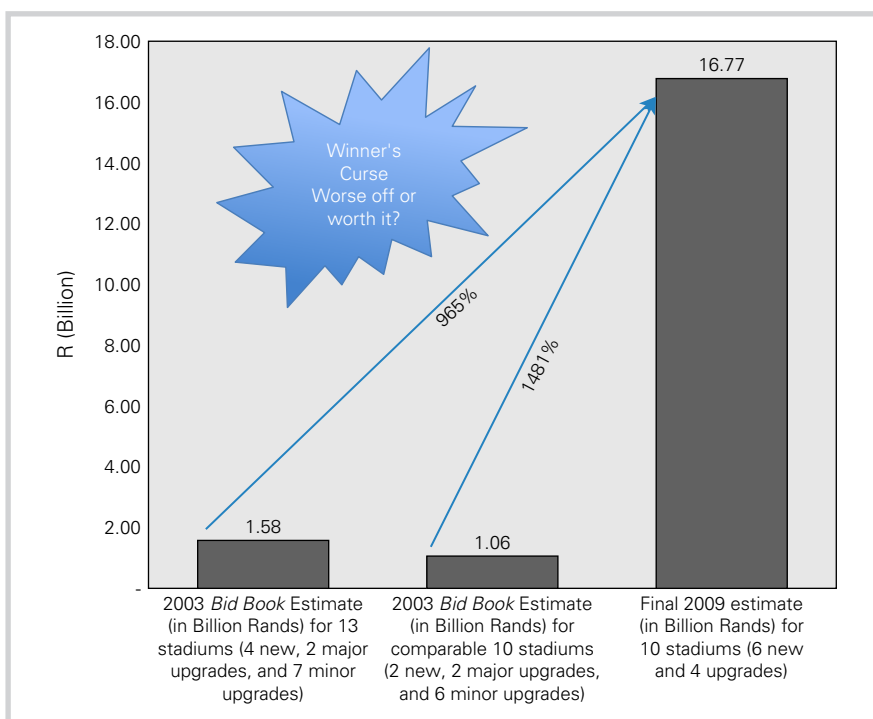
mega-event stadium projects from the *Bid Book* (2003) to the legacy of the stadiums in 2012. Using the grounded theory approach to analyzing our interview data (described earlier), we found seven main factors that explain the disconnect between expected benefits and the legacy outcome and they are as follows: Overoptimistic estimating; lack of national direction on funding; political decision making, that took precedence over economic rational decision making; unclear requirements from FIFA, including lack of knowledge about the complexity of hosting the World Cup; focus on the “TV Show,” which resulted in technical overdesign beyond the country’s needs; opportunities for collusion and corruption; and finally, a failure to engage key stakeholders.

These factors are discussed in the following section.

Overoptimistic Estimating

A desire to win, within a competitive bidding environment, resulted in overoptimistic bid submissions at three key decision-making points (country bid, city bid, and tender bid), which led to significant cost overruns on all 10 projects as illustrated in Figure 1.

Figure 1 shows an increase from Bid Estimate to Final Estimate of 965% (unadjusted). Despite this significant cost overrun, there were conflicting views between the interviewees about whether the city or the country was “worse off” (Interviewee 1; Interviewee 6) or whether it was “worth it” (Interviewee 11). At this point, it is



Source of Bid Book Estimate: *Bid Book* (2003) and Cottle (2011).
 Source of Final Estimate: Initially used Cottle (2011, p. 88), but verified and adjusted with data from Sports and Recreation South Africa (2011) and Interviewees.
 Note: No adjustment has been made for inflation. Construction on stadiums started in 2007. There is varying interpretations of Final Estimate depending on source. Research used highest estimate from credible source.
 Note: Andreff (2012, p. 3) describes the winner’s curse hypothesis to exist where for example the total investment in stadiums is significantly higher than the initial event bid budget.

Figure 1: Graphical representation of cost overrun.

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worth noting that there was a significant time gap between 2004 and 2006, corresponding to the period when FIFA selected the final host cities after South Africa won the bid, which was normal FIFA practice engrained in the host city contract and has since changed. Once the host cities had been selected, a real and significant change was found to the budget estimate of the stadium projects, increasing from R1.58 billion to R9.77 billion, as illustrated in the program life cycle budget history shown in Figure 2.

At bid stage, in an enthusiastic attempt to win the 2010 bid, and following an unsuccessful and controversial 12–11 voting loss to Germany in the 2006 bid, the bid company grossly underestimated the overall cost and the cost per seat of the stadium program, as illustrated in Table 4.

Furthermore, FIFA (2004, p. 64) were well aware of South Africa's overoptimistic financials, when they observed 15 days prior to awarding South Africa the right to host that:

It was not possible to check how these budget estimates were reached, nor was it possible to understand fully the philosophy behind them all ... We did not receive clear information explaining how the building of the prospective stadiums would be financed if the proposed venues were actually chosen for the 2010 FIFA World Cup.

With respect to estimated revenue from ticket sales, FIFA observed that (FIFA, 2004, p. 66):

In the opinion of the Inspection Group, the total amount of ticket sales revenue [\$467,459,448] will be very difficult to reach.

The actual *ex-post* ticket revenue was lower, at US\$300 million, which more importantly was not directly given to the country but was offset against FIFA's Local Organizing Committee expenses. The South African Football Association (SAFA), which formed the core of the Bid Company, had provided financial guarantees to FIFA for 10 of the *Bid*

Book stadiums. They confirmed that the estimates for the stadiums were based on FIFA compliant stadiums (*Bid Book*, 2003, B13/9) and provided Declarations of Undertaking. However, Interviewee 31 explains the inaccuracies found in the *Bid Book* estimate post-bid:

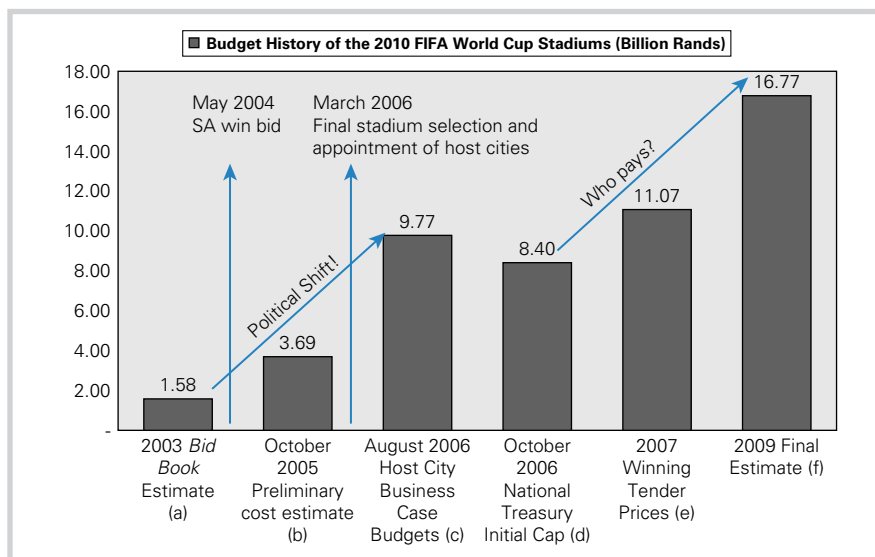
The proposal in the *Bid Book* had nothing to do with City Council, nor the National Government. The *Bid Book* said that we could upgrade the [existing] stadium for something like R48 million. Well, we started looking at that and it wouldn't even cover some of the consulting costs. Once we had won the bid, I then urgently now had to look into the issue as to what to do. The figure went in the space of a few months from R48 million to about R700 million to upgrade the stadium.

Lack of National Direction on Funding

Lack of understanding about project roles, definitions, and overall complexity of the mega-event program resulted in the national treasury failing to offer a national direction for stadium investment. This had several effects, the first of which was that the Bid Company neglected rigorous accuracy of the *Bid Book* estimate. Second, at the post-bid stage, it resulted in "iconic" or overdesigned stadiums, which went beyond the FIFA compliant specifications because of the initial belief that all the "free money" was coming from the government.

The gap observed in Figure 2—between 2004 and 2006—resulted in a slow start at the national level in preparing a strategy on sources of funding and later, with only four years remaining to deliver the stadium program, impacted significantly on the completion program and acceleration costs. Interviewee 26 reflected on the slow state of preparation in September 2006:

I would say there was a lot of talking but there was nothing concrete that had happened by that time. There was not even finance that was allocated for the stadiums at that time.



Sources: (a) *Bid Book* (2003); (b) National Treasury (2007); (c) National Treasury (2007) and Cottle (2011, p. 88); (d) National Treasury (2007); (e) Cottle (2011, p. 88) and verified and adjusted with interviewees post-interview where available; (f) Initially used Cottle (2011, p. 88), but verified and adjusted with data from Sports and Recreation South Africa (2011) and Interviewees.

Note: Cape Town supplied an estimated final cost of R4.14 billion, which was different to the Sports and Recreation South Africa (2011) figure of R4.5 billion.

Note: All figures are in Rand billion.

Figure 2: Program life cycle budget history showing cost shifts.

STADIUM CONSTRUCTION COSTS

Stadiums	Egypt	Libya	Morocco	S. Africa	Tunisia
Cost of new stadiums	872,710,000	1,227,600,000	670,900,000	141,100,000	87,000,000
No. of seats in new stadiums	370,000	456,200	369,000	221,825	43,500
Cost per seat in new stadiums	2,359	2,691	1,818	636	2,000
Cost of renovated stad. (USD million)	192,830,000		68,800,000	56,400,000	182,571,000
No. of seats in renovated stadiums	162,000		147,000	141,025	239,000
Cost per seat in renovated stadiums	1,190		468	400	764
Cost of partly renovated stadiums				26,600,000	7,280,000
No. of seats in partly renov. stadiums				303,600	110,000
Total cost of stadiums	1,065,540,000	1,227,600,000	739,700,000	224,100,000	276,851,000

Source: FIFA (2004, p. 94) in U.S. dollars.

SA had an optimistically low cost per seat on new and renovated stadiums compared to its competitors' stadiums.

Note Tunisia: 43,500 seats per stadium till quarter final and 65,000 for semifinal.

Table 4: Extract from *Bid Book* construction costs.

“Drift” (Macintosh & Quattrone, 2010, p. 208) became evident when host cities were called to submit business plans in August 2006. For many host cities this was a retrospective exercise because they were already in the advanced stages of design working on “iconic” and “sustainable” design proposals (Interviewee 4). At this stage, almost two years after winning the bid, the source and amount of budget funding were still not clear. The assumption outlined in a typical city business plan (Ethekewini Municipality, 2006) was that the national government was going to pay the full cost. According to Interviewee 26, the Treasury planned to base its budget on what the city designed and told them. This left the city designers with a free hand to design and build what they wanted. When the business plans were received, the *Bid Book* figure increased from R1.58 to R9.77 billion, as illustrated in Figure 2, with proposals for new “iconic” (Interviewee 4) stadiums. These stadiums went far beyond the definition of a FIFA compliant stadium as noted by Interviewee 26 below (and supported by Interviewee 1 and Interviewee 7):

The designs of the stadiums [we saw were] not necessarily necessary ... because what we’re looking at is a FIFA-compliant stadium ... [that

requires that you only have a roof on the western side. It does not require roof all over the stadium but the designs that came forward were beautiful but quite expensive.

In addition to going beyond the minimum FIFA requirements, host cities presented budgets that could not be compared with the *Bid Book* (2003). In the *Bid Book*, South Africa presented a strong and valid case for having existing stadiums and infrastructure far superior to its African competitors, which would be used for the event. According to Interviewee 19, who helped prepare the *Bid Book*, the goal was to build the minimum requirements:

The goal we set ourselves [SAFA, the LOC, and the technical team] was that everyone was to present stadiums to FIFA in the bid documentation that dealt with their minimum requirements set by FIFA and could be constructed as cheaply as possible.

There was a clear intention to use existing facilities, and where new facilities were being built, it would be done to the minimum standard. In the *Bid Book* (2003) letters to FIFA, senior political figures wrote about the strength of the countries existing facilities. For example, Nelson Mandela who was the

Patron of the South Africa 2010 World Cup bid stated: “We have the structural and organisational capacity. By nature in our hotels, and stadiums, in our transport systems ...” (*Bid Book*, 2003, p. 5) Similarly, President Thabo Mbeki claimed: “Our mission is to demonstrate our modern stadiums, world-class infrastructure” (*Bid Book* 2003, p. 2).

FIFA concurred with the view that South Africa had good sporting infrastructure by observing this in their inspection report (FIFA, 2004, p. 68) and identifying eight stadiums, which were already ready or required partial refurbishment to host the tournament. This raises the question of how the South African mega-event stadium program drifted from a state of near-readiness with respect to eight stadiums in 2004 to the August 2006 business plans in which six new stadiums and four upgrades were being proposed at a significant cost variance.

The reason why some of the cities opted for grand new stadiums despite having a large pool of existing stadiums to choose from is explained in the following section.

Political Decision Making That Took Precedence Over Rational Decision Making—First Price Shift

Fear of “losing-out” on the opportunity to invest in luxury sports infrastructure

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in order to address the historic imbalance of sport in South Africa (an opportunity that could not otherwise be justified beyond the World Cup given the challenges with unemployment, health, and education) resulted in a political shift from the *Bid Book* with respect to stadium investment and development. This was despite rational financial and technical indications that the stadiums would not be viable (Interviewee 1; Interviewee 26). This shift is illustrated in financial terms in Figure 2. Subsequently, it was found that the World Cup stadiums' prime use was not for soccer; many stadiums were primarily used for rugby or were considering partnering with rugby to attain viability. Many of the PSL teams preferred to play in smaller stadiums because of low attendance rates. In comparison with past FIFA World Cup hosts (Deutsche Fussball-Bund, 2012; ESPN, 2012; Nielsen, 2012; The Best Eleven, 2009; Wikipedia, 2012), South Africa had the lowest attendance with the lowest gross national income (GNI) per capita (World Bank, 2010), yet went on to build the best stadiums FIFA "had ever seen anywhere" (Interviewee 24).

The most valid explanation for the political shift was that the two-year gap between 2004 and 2006 mentioned earlier allowed sufficient time for the contemplation of a political shift to build stadiums that addressed the historic "imbalance" (Interviewee 11) of the sport due to the history of apartheid. This decision was strongly influenced by the "free money" the cities were expecting to receive. Fifty-percent of the participants interviewed mentioned this country's specific issue in their stories as the reason for the "shift." Politicians in some cities did not want to invest in the bid-proposed rugby stadiums as observed by Interviewee 31 and Interviewee 10, whereas other cities opted to refurbish the existing rugby stadiums and not burden the city with additional costs (Interviewee 32). The political battle between rugby and football was also commented on by Interviewee 5:

In South Africa because of history, partly, soccer is a very politically charged game. And so is rugby. And when you put the two in the same room—it is very hard to see eye to eye.

The second observable reason was that South Africa now found itself competing, not with other African nations to win the bid, but with past host cities for status. Interviewee 6 expressed concern about the political shift to build icons to compete with past hosts and the effect on the taxpayer:

We should spend within our means. I think we could have hosted a great World Cup event—not trying to outdo the rest of the world in terms of the way we design these buildings—creating icons—you are always going to lean on your population to fund ... [these mega-events]

Furthermore, Interviewee 14 observed that South Africa wanted to "show what we can do" to the rest of the world.

When presenting the host city's business plans, Interviewee 26 made an important observation about the presentation of clearly incorrect *ex-ante* studies that promoted and approved projects known to be unviable:

We had a session with all of them [Cities] and they all used a company called [X], oh, not all, most of them, 9 out of the 10. Company [X] is a market research company, okay? And [Company X] was supposed to do a business plan for them. It was laughable for me because [Company X] would say to stadium A: this thing would work but you'll have to have five major matches of Bafana Bafana [the national football team] in your stadium in a year. And they'll say the same thing to all of them. As if there's just one stadium in the country ... That business plan, in my opinion, was very flawed. We had a meeting at the DBSA (Development Bank of South Africa) with the DBSA, the cities, and one representative from FIFA and officials from the LOC. We said it in those meetings that this thing is all not going

to work because this [Company X] is assuming that this particular stadium is the only stadium in South Africa.

Interviewee 11, a senior government minister, summarizes how politics took precedence over rational economic reasoning:

[It was an] endeavor to address an imbalance at that point in time taking into consideration the peculiarities of the structures of our soccer, it was the right thing to do ... but using a keen logical economic agreement, it's not.

Hence, after a flexible approach to the budget, the Treasury eventually capped the government contribution to stadiums to R8.4 billion in October 2005 absorbing the political shift illustrated in Figure 2. Interviewee 31 reflected on the impact of the political shift on the opportunity cost of the Treasury using the money elsewhere:

Treasury in the end were hit with the fact that there were political decisions made around the additional stadia, which means they probably weren't able to do what they should have been doing.

The gap period between 2004 and 2006 allowed for the political shift because there was not a shared, coordinated vision for the stadium program at the national level from the onset. Instead, decision making for individual stadiums was delegated in a fragmented way to various local actors. Interviewee 31 highlights the lack of national direction and the fragmented set-up at the project level:

Remember all of that direction and investment was done by the cities themselves. So in effect there were nine program managers, the nine cities' managers across the country for the bulk of the expenditure—those were your program managers.

Hence, the cities felt that there was no central program-level organization and each city was allowed to organize

its stadium project around its own goals and political desires with an understanding that such desires were to be funded by the national Treasury.

Unclear Requirements by FIFA and Ignorance—Second Price Shift

Lack of clarity about FIFA stadium requirements, under the broad contractual umbrella of “FIFA compliance,” and an ignorant appreciation of its complexity, resulted in projects being designed, tendered, and built with incomplete information. This resulted in high levels of provisional sums for “unknowns” and continual changes to the specifications and, consequently increased cost, including acceleration costs, and “wastage” (Interviewee 4) under critical time constraints. Generally, lack of clarity from the onset on what “FIFA compliance” meant resulted in ignorantly assuring FIFA compliance in the *Bid Book* and then proceeding to design stadiums, which were interpreted as being

“FIFA compliant” as observed by Interviewee 18. The high provisional sums from lack of detailed requirements was noted by Interviewee 14 as a key reason, in addition to the construction boom, for the second significant shift in pricing from tender to final estimate:

... very bad provisional sums that were in the tender documents—in other words, some of the contractors couldn’t essentially bid accurately because, say you got in a tender document, 60% of the cost is provisions rather than accurate bills of quantities—so that essentially pushed it out. At the time we had a really booming economy ... and that pushed the escalation up to 15%. So it was a combination of a number of factors—but mainly provisional sums in the tenders were high so accuracy of tenders was low and the booming economy at the time.

Table 5 shows how each stadium was affected by the two big price shifts

and shows an overall 72% cost overrun between the 2006 revised host city budget estimate of R9.77 billion and the final estimate of R16.77 billion. This was the second big price shift to the stadium program as illustrated in Figure 2. The government contribution to the final estimate was eventually R9.80 billion (Sports and Recreation South Africa, 2011, p. 124), leaving the cities facing the difficult question of who would pay for the R6.97 billion of unplanned expenditure. For some cities this involved drawing down significant sums from the city reserves as well as city loan funds. For example, one city used R500,000 from city reserves and an additional R306,000 from city loan funding. Another city executive commented that they had a current debt of R1.5 billion from the stadium project, and the effect might have resulted in a “slow down” in “water or power” investment (Interviewee 17). In contrast to most of the other stadiums; for example,

Stadiums	2003 Bid Estimate ^(a)	2006 Host City Budget Request ^(b)	2009 Final Estimate ^(c)	Percentage Increase from 2003 Bid Estimate to 2009 Final Estimate	Percentage Increase from 2006 Budget Request to 2009 Final Estimate
	Original Budget	1st Price Shift	2nd Price Shift		
	Rands	Rands	Rands		
Moses Mabhida	53,750,000	1,893,607,000	3,100,000,000	5,667%	64%
Cape Town	14,375,000	2,961,473,000	4,500,000,000	31,204%	52%
Peter Mokaba	150,000,000	699,637,572	1,300,000,000	767%	86%
Mbombela	300,000,000	904,452,970	1,071,756,034	257%	18%
Nelson Mandela Bay	250,000,000	963,040,125	2,063,779,231	726%	114%
FNB Stadium	195,000,000	1,565,752,100	3,700,000,000	1,797%	136%
Ellis Park	34,375,000	267,052,632	254,000,000	639%	-5%
Loftus Versfeld	15,000,000	89,047,612	115,000,000	667%	29%
Royal Bafokeng	11,250,000	141,700,000	300,000,000	2,567%	112%
Free State	37,500,000	283,408,896	370,000,000	887%	31%
Sub-Total	1,061,250,000	9,769,171,907	16,774,535,265	1,481%	72%
Other Stadiums in the Bid Book	513,750,000	Not built	Not built		
Total	1,575,000,000	9,769,171,907	16,774,535,265	965%	72%

Sources: (a) *Bid Book* (2003); (b) National Treasury (2007) and Cottle (2011, p. 88); (c) Initially used Cottle (2011, p. 88), but verified and adjusted with data from Sports and Recreation South Africa (2011) and Interviewees.

Table 5: Details of cost overruns for each stadium and overall program.

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Mbombela—a new stadium—had a cost increase between 2006 and 2009 of 18%. Observers, for example Interviewee 14, believe their performance can be attributed to adopting a strict fixed-price contract at tender.

Strong Focus on the “TV Show” Rather than the Needs of the Country

FIFA’s focus on delivering a high-quality television show (Interviewee 7; Interviewee 14), given its major revenue comes from television rights and marketing (FIFA, 2011b, p. 37) was a contributory factor to technically overdesigned stadiums, which were in many cases beyond the needs of South Africa. The result was specification of expensive technical requirements that were often not used post-event and, in some instances, were not even used for the event but still required high post-event maintenance. For example, the installation of 99 ISDN lines for broadcasting in one stadium, where only three lines were used for the event for only one match (Interviewee 23), which impacted further on the legacy benefits. Interviewee 23 describes the extent of the over specification of certain technical requirements:

Even up to now you can run the whole exchange for the province, not even the city alone—we can use the exchange right here in the stadium. When you look at the proliferation of requirements their [FIFA] requirements were way too much.

A focus on what looked impressive on TV was also reflected in the political choice of the unviable location option for Cape Town Stadium over a more viable alternative (Interviewee 2; Interviewee 10; Interviewee 19).

On the question of who benefits and who pays (Cottle, 2011), the biggest losses fell to the taxpayer as noted by Interviewee 4. The findings discussed above show how the investment of public resources shifted from an *ex-ante* figure of R1.58 billion and *ex-post* final cost of R16.77 billion, resulting in some cities taking on the additional debt.

FIFA’s financial accounts (FIFA, 2011b, p. 37) state that FIFA earned US\$2.35 billion out of the 2010 FIFA World Cup, mainly from television rights, approximately equal to R19 billion. This is more than all the stadiums combined at their final estimated cost of R16.77 billion. Interviewee 7 commented on the conflict between FIFA’s interests and those of the host country.

It’s the way FIFA operate. FIFA is trying to blind-side its potential customer into a very elaborate event because that’s what makes television. They are in the business of TV—and for country, you are in the business of delivering infrastructure and cost curtailment. Therefore, those two are always in conflict.

Although FIFA’s interests and national interests may not have been aligned, as described by Interviewee 7, the fragmentation of the stadium program did seem to be to FIFA’s advantage, because the focus on infrastructure development at a local level, for which the city took the risk, detracted attention from the real source of revenue generation associated with the World Cup event, which was the sale of television rights.

Collusion and Corruption

Private desires to benefit from the mega-event resulted in cases of alleged collusion and corruption, which undermined the contractual process, resulting in breach of the law, the murder of whistleblowers (Yende, 2012), and overpayment for the construction of stadiums. The cost-per-seat pricing of many of the stadiums in South Africa were far in excess of other past “expensive,” “iconic” stadiums. For example, the cost of stadiums such as the Alliance Stadium Germany (built for FIFA 2006), Stade de France (built for FIFA 1998), and the Beijing National Stadium (built for Beijing 2004) all ranged between US\$5,500 and US\$6,300 per seat (The Stadium Guide, 2012; VINCI, 2012; Wiseman, 2012) adjusted for inflation.

In South Africa, the cost per seat of the Moses Mabhida Stadium was approximately US\$7,200 (in legacy mode) and in Cape Town was US\$10,600 (in legacy mode). Even more striking is the very low cost of the Orlando Stadium, a fully compliant FIFA stadium used as a World Cup training venue, which was completed in South Africa in 2008 at a cost of US\$1,150 per seat (N. Fourie, personal communication, August 27, 2012).

Collusion and corruption are significant challenges to development in South Africa. Although collusion and corruption are by no means restricted to developing countries, corruption indices such as those compiled by Transparency International suggest there is a relationship. Further, as Flyvbjerg and Molloy (2011) note, infrastructure projects in developing country contexts can provide an ideal environment for illegal opportunistic behavior; Interviewee 4 reflects on the personal disappointment she felt working in such an environment:

... and there were stories of collusion and all of that. We sat around the table with some of these guys and they would say: oh it’s so expensive to do this et cetera, but when you read some of the competitions collusion stuff—that it was just collusion [sighs]. When it comes down to that personal level when you look people in the eye and they say ... [Interviewee stops conversation in discontent].

Failure to Engage Key Stakeholders

Failure of the Bid Company to fully engage with host cities in the bid process resulted in lack of commitment by the cities to the contents of the bid proposal. Subsequently, stadium proposals that emerged from the cities conflicted with the original intentions of the winning bid and impacted significantly on the baseline bid estimate as illustrated in Figures 1 and 2. The host cities proceeded by ignoring the *Bid Book* and setting their own baseline budgets in August 2006.

Discussion

Our research findings support and extend a number of insights from the existing literature on megaprojects, mega-events, sports infrastructure legacy, and major program management discussed earlier. First, the existing state of the 2010 FIFA World Cup stadiums adds further weight to the existing literature on “poor” legacy (Barclay, 2009; Nuttall, 2011; Swinnen & Vandemoortele, 2008, p. 5) insofar as it is “underutilized” and is a “financial burden.” The findings also revealed, as in the case of the Peter Mokaba Stadium, where teams were paid to play at the stadium, that high utilization does not always equate to long-term sustainability and there are exceptions to Alm’s (2012) association between successful legacy and high utilization. Furthermore, the Peter Mokaba Stadium case also supports the critique made by authors, such as Coates and Humphreys (2003) and Zimbalist (2000) that sports teams and sports facilities intended as catalysts to stimulate the local economy do not always yield the expected benefits. In addition, the substantial change to stadium requirements post-bid, driven at the local project level rather than the national program level, led to six new “gigantic” stadiums that far exceeded the needs of the country, a criticism cited by Cashman (2002) for mega-events and their “luxury” projects generally (Cashman, 2002, p. 9).

Second, it is evident that the decision making that shaped the legacy of the 2010 World Cup stadiums was a reactive, fragmented approach, informed by the hosting of the mega-event and the associated indirect drivers. This finding is contrary to decision-making approaches for a viable legacy suggested by Masterman (2009), Matheson (2010), and Preuss (2007), which involve early planning for after-use and consideration for the cities (and nation’s) long-term development plan. However, the finding does offer support for Haferburg’s (2011, p. 33) observation that urban development and governance in host cities “are severely

affected” by mega-events and Cunha’s (2010) research on the “Olympic State” taking over the preconceived regulatory state.

Third, the findings support existing literature on the “mismatch” (Szymanski, 2011, p. 91) between perceived and actual economic benefits. For example, the “huge amount of employment” (Interviewee 4) creation was temporary, evidenced by the 5% increase in unemployment between 2008 and 2012 (Klein, 2012; Statistics South Africa, 2012). Furthermore, contrary to some, but not all, interviewees’ perceptions of events as economic boosters, a growing body of *ex-post* research shows that mega-events have no significant direct impact on development to the city of the mega-event (Baade & Matheson, 2004; Coates & Humphreys, 1999; Noll & Zimbalist, 1997; Porter, 1999) or the mega-event stadium (Baade & Dye, 1990; Coates & Humphreys, 2008; Leeds & von Allmen, 2005; Siegfried & Zimbalist, 2000, 2006). Thus, an event-led urban strategy (Interviewee 4) appears unlikely to boost economic growth.

Fourth, through exploring how the stadium program changed over time, we found over-optimism throughout the program. This supports findings by Flyvbjerg, Massimo, and Lovallo (2009), where misinformation—the root cause being optimism bias and strategic misrepresentation—undermines project implementation (Flyvbjerg, 2007b). What is evident is that a fragmented internalized view of individual projects blinded decision makers who failed to adopt an “outside view” (Flyvbjerg, 2008, p. 4) in their estimating of costs and benefits either at the project or program level. Indeed there is little evidence that bench-marking or comparisons of costs or benefits between the stadiums within the program or with previous World Cup events took place. For example, the *Bid Book*, which was prepared by the Bid Company, was clearly overoptimistic in its financial forecast. This raises the question about the legitimacy of the Bid Company in making critical public policy

decisions without long-term accountability as highlighted by Andranovich, Burbank, and Heying (2001). Furthermore, despite the poor forecasting in the *Bid Book* identified by FIFA, South Africa went on to be awarded the right to host the 2010 World Cup, suggesting that the quality or accuracy of a bid’s estimated financials was not a key consideration in FIFA’s bid selection, echoing Jennings’ (2009) argument that overoptimistic mega-event bids are a result of the competitive process in host selection.

A fifth observation, related to the above, is that the gap between what the *Bid Book* proposed and what emerged out of the cities can be attributed to lack of coordinated national direction on funding. At the bid stage, it meant that the Bid Company was speculating and making assumptions about funding and facilities that would be used for the 2010 World Cup. Overoptimistic estimating justified the public spending (Cashman, 2002; Crompton, 1995; Matheson, 2008), thus encouraging cost estimates to be kept low with no accountability on the side of the Bid Company. At post-bid, cities were free to design with an open budget with no central leadership. Overall, there was no program accountability and leadership with responsibility to translate and implement the vision of the *Bid Book* and oversee the stadium program. By the time FIFA selected the host cities in March 2006 and treasury capped the budget in October 2006 the proposed *Bid Book* stadium vision of 2003 was lost to a completely different stadium program. The focus thereafter was a reactive approach by the cities to deliver their stadiums by the event deadline.

Sixth, the research found that political decision making took precedence over rational decision making, which impacted on the first major price shift in the stadium program. Furthermore, business plans and viability studies that supported political decisions later proved to be unviable and inaccurate. This finding is supported by numerous other studies (Baade, 1996; Baade &

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Dye, 1990; Coates & Humphreys, 2008; Leeds & von Allmen, 2005; Siegfried & Zimbalist, 2000, 2006) that question the credibility and accuracy of *ex-ante* stadium viability studies. However, while the companies that prepare these reports can be criticized for professional inaccuracies, this research shows that cities and government knowingly use them as an “ammunition machine” (Macintosh & Quattrone, 2010, p. 330) to make “unfit” (Flyvbjerg, 2009) projects look good. This was exacerbated further by lack of overall program direction and leadership at the national level, with each stadium project vying to justify its own stadium business plan.

This dynamic is manifest in how the unclear requirements by FIFA allowed for a second major price shift and significant cost overruns. In turn, the strong influence of FIFA on the stadium technical specification supports the observation from Erten and Ozfiliz, (2006, p. 539) that the interests of event organizers such as FIFA and the IOC influence the development of stadiums. Our findings suggest that the concern for the TV show and therefore the influence of such sponsors and organizers may be greater when the stadium program is fragmented and more “projectified” in a “divide and rule” fashion.

Finally, although difficult to explore for reasons outlined earlier, there was a strong suggestion that collusion and corruption may have played a part at multiple levels within the stadium program. Flyvbjerg and Molloy (2011) have highlighted how major infrastructure projects, including mega-events, can become ideal environments for enabling collusion and corruption, particularly in countries where institutions may be relatively weak and decision making is carried out in a fragmented way. It is our argument that the organization of the stadium program reflected local political arrangements, which in turn, exposed the program to opportunism and exploitation in ways that may have been avoided had it been coordinated by a central authority.

Conclusions and Recommendations

This research set out to investigate how the management and organization of the South African 2010 FIFA World Cup stadium program shaped the current legacy of an over-supply of over-designed and underutilized stadiums. We began with a review of the expected benefits from the stadium construction program and contrast these with the actual legacy at the time of writing. Interview and documentary data relating to both the overall stadium program and each individual stadium project was collected to form one program case and 10 project cases in nine host cities, using a mixed-method research design. Our conclusion is that the dynamic activity of the 2010 FIFA World Cup stadium program and its associated stadium projects (which shaped the stadium legacy) were organized in a fragmented way that started at the bid stage, with significant changes over time resulting from poor central organization, leadership, and strategic direction. The cities found that they were operating independently, in “splendid isolation” (Buijs & Edelenbos, 2012, p. 29). Even though the government had appointed a Director General in 2010, this individual did not have the power to become a key central decision maker, and the CEO of the LOC was not responsible for the stadium development and legacy program.

Further, the research concludes that the stadium legacy of the 2010 World Cup may have benefited from the organization of a clearly defined stadium program at the central government level that was effective across all phases until handover for legacy. This major program needed effective leadership, capable of successfully managing the demands and influences that came with the “duality” (Deng & Poon, 2011, p. 25) of delivering the program for a successful mega-event while ensuring a positive post-event legacy. The mega-event stadium projects as part of the major program needed to be integrated

and viewed as a single organization. The projects, by their very nature, were interdependent (through, for example, sources of funding, the mega-event itself, liaison with various stakeholders, post-event utilization, understanding FIFA requirements); their success was hence dependent on a single clear strategy. The lack of such integration under a single clear strategy was a critical factor in the organization of the 2010 World Cup stadiums and ultimately the legacy left behind.

To avoid such issues, future World Cup hosts may consider establishing a World Cup Development Authority (WCDA), which is responsible for managing all World Cup venues and direct infrastructure for the host country. Such an entity would distinguish itself from the role of the LOC and provide a similar function to the Olympic Delivery Authority (ODA), an idea that originated for Sydney 2000 and was developed during the London 2012 Olympic Games (Jacobson, 2011). Rio de Janeiro, the city, has also adopted this strategy for managing the Olympics in 2016; however, the country of Brazil did not use anything similar for FIFA 2014 (Padovano & Bertacchini, 2011). According to Padovano and Bertacchini (2011, p. 5), the venue decision-making process for the 2014 Brazil World Cup was also highly fragmented with high capital expenditure and a legacy that was being “haunted by the white elephant syndrome.” One of the challenges the WCDA will face will be program management across an entire country, which in the case of countries such as Brazil and Russia, could be a vast landscape, compared with the Olympics, which takes place in a single city.

To overcome the lack of experience with major infrastructure programs, and the limitation with being an organization that needs to mobilize quickly, the WCDA could partner with an experienced, well-established organization that can provide the specific skills and resources. This approach was taken by the London 2012 ODA by having a

delivery partner. The reader can refer to the ODA delivery partner framework (Jacobson, 2011, p. 5) for further insight through its “Learning Legacy” website. Of course, the WCDA is not “a magic bullet,” bearing in mind the London ODA budget overrun of 101% based on bid estimate (Flyvbjerg & Stewart, 2012), and the evolving troubled legacy of the Olympic venues. There remains enormous scope for further research into the question of how to improve the management and organization of mega-event venue programs in ways that ensure the imagined positive legacy materializes. Such knowledge is likely to be of increasing importance, as developing nations increasingly turn to mega-events in the hope of reaping much needed investment and economic stimulus. Failure to improve knowledge and practice guarantees that the world’s sporting entertainment will be paid for by those least able to afford it.

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Meeting Number		Organization	Job Role
1		University of Oxford	Academic expert on the Olympics
2		Union	World Cup 2010 Critical Author
3		FIFA/LOC	Board Director/Bid Company
4		SA Treasury	Executive
5		LOC	Chief Officer
6		FIFA/LOC	Board Director/Bid Company
7		FIFA/LOC (Zurich)	Board Director/Bid Company
Interview Number	Stadium Type	Organization	Job Role
1		DBSA	Senior Executive
2		LOC	Chief Officer
3	Existing	Stadium (Rugby)	Manager
4	New	City	City Executive
5	New	Stadium	Consultant and Manager
6		LOC	Executive
7		SA Treasury	Executive
8	New	Lead Professional	Project Manager
9	Existing	Stadium (Rugby)	CEO
10	New	City	Manager
11		SA Government	Minister
12	New	Stadium	Consultant
13	New	Stadium	Manager
14		SA Treasury 2010 Unit	Senior Executive
15	Upgraded	City and Stadium	Managing Director
16	New	LOC	Venue Manager
17	New	City	Project Management
18	New	Stadium	Consultant and Manager
19	New	Lead Professional	Consultant and Bid Preparation
20		LOC	Executive and Bid Preparation
21	Upgraded	Stadium	CEO
22	Upgraded	Stadium	Director
23	New	City and Stadium	Executive
24		LOC	Chief Officer
25		PSL	Senior Executive
26		LOC	Executive
27	New	Stadium	Consultant
28	New	LOC	Venue Manager
29	New	Lead Professional	Consultant
30	New	City and Stadium	Executive
31	New	City	Executive
32	Existing	City	Executive

APPENDIX: Interview schedule.