Mega-Challenges: Programming Management for Event Projects

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ABSTRACT

While the pursuit of signature event architecture never slows down, solutions to the post-utilization issues seem too slow to catch up, leaving behind many "white-elephant"-type event legacies. Despite such mega-failures originated from a dearth of long-term visions beyond the events on the organizer side, academic interest in the domain of programming event projects has long trailed its significance, resulting in an absence of a readily accessible pool of literature and experience both within and outside China.

As a preview to an ongoing case study on the Big4 public building projects of Expo 2010 Shanghai China, this paper first attempts to outline the general programming challenges of balancing temporariness and permanency implicit in such event architecture. In-depth explanations will then be given as to why the research pivots on how to manage the processes of programming the centerpieces of event-catalyzed urban renewal practices - high-profile public building projects from the client. Finally, a brief overview of the specific programming challenges of the Big4 will be provided based on the author's four years of work experience as a client member and project coordinator with the Expo Organizer during the project initiation stage.

KEYWORDS

challenge, programming management, event project, client organization, the Big4 of Expo 2010

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1. PROLOGUE

Expo 2010 Shanghai China has been often put on a par with Beijing 2008 Olympic Games as the two highly anticipated mega-events for a rising China in the new millennium. Increasing global clout of the Chinese economy endows the twin with a much more significant role beyond the aura of event. With Beijing Olympics lowering its curtain, all eyes set on the upcoming Shanghai Expo in anticipation of another best-of-all-time "Economic Olympics". For the Expo Organizer, however, it is enlightening to review the gentle reminder by Dennis Pieprz, President of Sasaki - the winner of Beijing Olympic Green International design competition, "you are making a city, not a spatial extravaganza that will be interesting for 16 days".

2. MEGA-PROBLEMS, MEGA-CHALLENGES

As long as the terms programming (briefing) and event run parallel, a question concerning their products - the program and the event project, is how to view them: as a beginning of an end in themselves, or as an end of a beginning towards a more sustained process? The reason for this enquiry is embedded in their long-term chronics.

2.1 Mega-Problems

Globally, urban renewal has become a catchword in search of an antidote against the fragmented city images inherited from the previous era of industrialization. This helps explain why there exists such an intimacy between ambitious cities and large-scale renewal projects that are not only ranked among the top policy agendas but also positioned in the prominent locations. In this connection, mega-events, such as the FIFA World Cup, the Olympic Games and the World Expos, have become a desired catalyst in stimulating such renewal programs. These influential events did produce many architectural masterpieces as the most visible legacies and effective branding tool for establishing or re-shaping city identities. However, an examination of the previous legacies shows a wide spectrum between successful transformation and miserable degeneracy among host cities (Usborne, 2008). While the pursuit of signature architecture in the name of mega-events has never slowed down until the outbreak out the global economic tsunami in 2008, solutions to the post-utilization issues seem too slow to catch up, leaving behind many purpose-built event buildings as white elephants. With a global surge of megaprojects since the 1990s, the affiliated mega-failures are never uncommon (Flyvbjerg et al., 2003). The post-event performance records of these physical giants are often notoriously poor representative of huge cost overruns and sharp benefit shortfalls. This phenomenon again validates Seeley's (1983) notion that the larger the financial input, the lower rate of fulfilling the client requirements.

A case in point is Sydney 2000 Olympics. The two purpose-built stadiums, once applauded as cutting-edge sporting venues (Allen et al., 2005), have already suffered from a major revenue declines resulting from a lack of steady flow of major events after year 2000 and the regional competition from existing venues (Searle, 2002). The redevelopment of the Sydney Olympic Park also fell short of expectation for lack of a legacy program for the site, as admitted by the Games' former chief planner (Usborne, 2008). While the list of poor-performers can go for a global tour, the Achilles Heel lies in the absence of long-term planning and programming considerations at the initiation stage. In fact, event projects are not the only victim. Despite a deepening awareness of its significance among practitioners

and a tremendously enriched pool of literature by researchers, programming itself has been a paradox for its intractable process and below-expectation effectiveness over half a century (Barrett and Stanley, 1999). Although research findings and practical experiences continue to show a strong correlation between careful preparations and building sustainability, the inputs in terms of time, money and human resources at the project initiation stage are still scarce compared with the later phases.

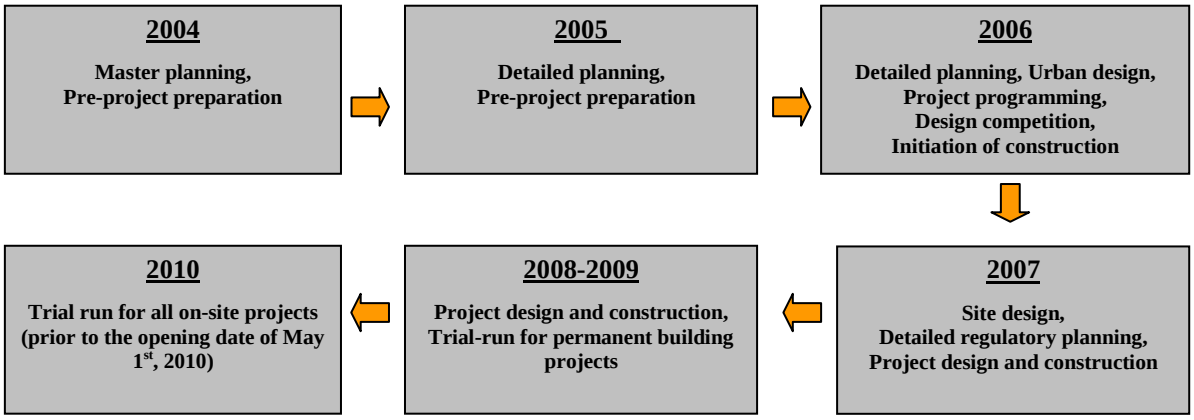
2.2 Mega-Challenges

To curb the post-event epidemic, it is high time to identify the major challenges facing these event projects explicitly and implicitly, so that tailored prescriptions can be made and precautious measures be taken. Accordingly, challenges in six major dimensions are identified in the following.

2.2.1 Un-Ambiguity of Deadline

In terms of time frame, what makes event projects distinct from other regular ones exists in the non-negotiable 'event deadline' for the completion of all major on-site construction and related citywide renewals. Expo 2010 Shanghai China is a case in point with Table 1 showing the overall project schedule. August 19, 2006, which was 1351 days before the Expo opening on May 1, 2010, is marked as the inception of on-site construction of over 2,000,000 sqm within the boundaries of 5.28 sqkm Expo Site astride both banks of the Huangpu River. Citywide construction has also been in full swing, including six new metro-lines, significant expansions in airport terminals and train stations and other infrastructural upgrades. Although such a mega-volume construction may seem a "mission impossible" to most previous Expo host countries, the real challenge for its organizer is how to avoid the same old pitfalls of event legacies in the first three years of the initiation stage.

***Table 1**: Timetable for Expo 2010 Project Development*



2.2.2 Sophistication of System

Because of their unusual physical scale, functional complexity and financial implications, major event projects are often achieved through interagency work at strategic, managerial and technical levels. In general, they are initiated by multiple government agencies or political groups, implemented by multi-headed state-owned enterprises or large-scale corporations, and supported by a pool of interdisciplinary consultants from well-reputed design and construction agencies. Such degree of project sophistication ranks the highest in the "Four degrees of sophistication" tool by Peña and Parshall (2001), which may easily incur value

conflicts among stakeholders and exponentially increase the management work in terms of coordination, collaboration and cooperation.

2.2.3 Duality in Programming

The dialectical unity of temporariness and permanency in event architecture gives rise to a pressing issue of how to tackle the unique challenges of balancing the different programming priorities during and after the event. Although almost all types of built environment nowadays are in need of embracing the shifting demands originated from organizational changes in different time scales, no other attains the same extent as does an event building whose greatest uncertainties lies in their future capacities for use after the mega-events. As the initial step towards the making of architecture, programming holds the key to the whole project in that it both incubates a direction-giving action plan and serves as a constant evaluation tool along the project cycle. In terms of programming event projects, the top priority is to prepare for multiple alternative scenarios ranging from the zenith and the nadir in demand. When buildings are eventized according to different strategic emphasis and market orientation, they are prone to experience a roller-coaster ride as a result of the great margin between the peak and off-peak demands. There is ample historical evidence that the required capacity for purpose-built convention, exhibition, performance, sports venues or the like usually drop to its off-peak condition immediately after the peak capacity in the event duration. In order to stay competitive in the post-event era, event buildings have to keep a balance between "stability and adaptability" (Emmitt, 2007). Hence, it is crucial to determine a rational design capacity as a trade-off.

2.2.4 Temporality of Organization

Time is an essential dimension not just for a building but for its client. Contradict to the relative permanency of major event projects, the intrinsic disadvantage of their client organizations is that they are not only multi-headed but also short-lived. Urban renewal schemes and World Expos, which are to be developed in a continuous mode, are among those large operations easily suffering from disjointed multi-agency efforts on a short-term contract (Lynch & Hack, 1984). This is further verified by both literature evidence in previous Expos such as Seville 1992 Expo (Maddox, 2004), as well as Expo 2010 official reports on study visits and training summaries by staff members stationing in the most recent Expo organizations of Aichi 2005 Japan (Deng, 2004) and Hanover 2000 Germany. Assembled on a one-off basis for the event preparation, these Expo organizations are usually comprised of three groups of people, 1) public officials from established governmental agencies on a job-trading mission; 2) professionals hired from public recruitment programs; and 3) employees temporarily 'borrowed' from corporations or public institutions. Such multi-agency collaboration effort is limited to the preparatory and operational periods of the event and the joint force will be disbanded soon after the closure of the event, which may result in the loss of shared experiences.

2.2.5 Scantiness of Experience

Such discontinuity in knowledge sharing and transferring between previous organizers and their successors may very well lead to yet another challenge: insufficient databank as an initial reference point to draw upon. On the one hand, as one of the event concomitants, the physical legacies are endowed with in-replicability. All the related internal and external parameters are never the same, being it the organization, the stakeholders, the location and the functions in short and long range. Expo buildings are even devoid of a possibility for benchmarking in building types or technical parameters as those purpose-built sports venues for Olympic Games. On the other, there exhibits a lack of serious interest from the academic

and professional arenas in this area, as most existing publications choose the visual side of event architecture, but seldom tell the stories of their formative stories behind those pictures. This results in an insufficiency, if not a total absence, of a readily accessible pool of literature and expertise worldwide. Empirically, such an awkward moment came in the early preparation stage of Expo 2010 when the author's team was working on the long-list of an international jury for an high-end design competition. We soon ran out of the candidates to fill up for the quota for domestic jury members, simply because it is the first time for China to host such a world event and there is a significant lack of experience and expertise in Expo projects among construction professionals.

2.2.6 Lack of Reference

Event organizations have to brace themselves for more un-precedentedness originated from the event itself, which make it distinct from those established organizations with readily available rules and regulations to follow. The fact that one-off mega-events occur outside the regular practice of routine organizations makes the above challenges boils down to a fundamental one for future event project clients: how to cope with the greatest level of risks and uncertainties embedded in building eventization. In this connection, great emphasis shall be put on how to establish a mechanism to enhance the performance of programming.

3. ACADEMIC LACUNA

Despite the mega-failures originated from a dearth of overarching visions beyond the events on the organizer side, academic interest in the domain of programming event projects has long trailed its significance, resulting in an absence of a readily accessible pool of literature and experience both within and outside China. Much of the previous research in programming has been stuck in an arguably long journey in search of technical programming models from the designer side of the 'aisle', while study on how to manage the process from the client side of the 'aisle' remains largely untouched. In the literature concerning how to improve the performance of the initiation stage and the programming process, there is especially a tendency in avoiding to discuss the client impact, which is very improper as decision-making within the client organization during the initiation is also critical to the success of a project. In fact, both the early stage and the client decision-making mechanism are paramount and devoid of discussions of either will end up with a partial and biased conclusion. This may explain why the past half century has witnessed an increase in the number of innovative approaches but not a proportionate increase in their effectiveness.

3.1 Programming Management

Accumulatively, here comes a highly-noticeable yet not widely-noticed vacuum at the intersection: *programming management* for large-scale event projects has gained very limited, if any, attention. The most likely reason for this might originate from the contradiction of the two related research areas. While most previous programming studies put focus on improving the process by standardized checklists and prescriptive 'best practice' models in a technical sense, event-initiated buildings have much more implications of the client organization on the strategic level. The volatility of the topic lends itself to easy negligence, as it appears more difficult to generalize a pattern for future applications.

Unlike other well-established management interests in such areas as project, design or facility, the term programming management is specially coined to underscore the significance of

looking at the process from the client's perspective. In other management issues, a design manager, a project manager or a facility manager will be appointed for respective managerial roles on behalf of the client organization. Nevertheless, as the initiator, coordinator and ultimate decision-maker for a project, the client has to take the lead in the formulation process of defining, refining, implementing and evaluating the program. Moreover, the communicative nature of programming gives rise to the necessity of a consciously structured mechanism to steer the process in that most related activities are widely dispersed, loosely structured and oftentimes unconsciously conducted among multi-stakeholders in overlapping stages. Therefore, the key roles of programming management lies in the many and varied interfaces, including deconstruction of multi-dimensional processes into independent working units and areas of responsibilities, identification of all key 'joints' for sub-contracting or outsourcing, setup of switching points and timeframe for both strategic decision-making and operational guidelines, and systemization of all sub-processes for an integrated solution.

4. SHANGHAI, EXPO 2010 AND THE BIG4

Although the problems and challenges embedded in programming event projects are global, the management response has to be tailored to the local situations. In view of the intricacy of large-scale event projects and their implication to the construction system, it is not a simple answer to transplant foreign theories into Chinese practice. This leads to a need to embark on a glocalized research for the future operation in general and for China in particular. A case to serve this duality is the Big4 public building projects of Expo 2010 Shanghai China.

4.1 Riverfront Renewal Trilogy

Figure 1: *Pre-construction site view from Pudong (River East) overlooking Puxi (River West) with the vista of Lujiazui Financial and Trading Zone (as of May 2006)*
Photo credit: Bureau of Shanghai Expo Coordination

Previously hailed as the 'Oriental Paris' for its glamorous international history as well as the cradle of China's early industrialization, Shanghai has long faced with the same pressing issue of post-industrialization as many other cities around the world. With an ambitious goal to re-image itself as a rising global center, the city unveiled a staggering scale of urban renewal practices since the early 1990s, and has since then witnessed a steady growth in the number of events. This in turn justifies a massive new construction and expansion of existing public facilities for conventions, exhibitions, performing arts and museums. A popular vocabulary

in the epoch of city imaging, the strategic alliance between staging an Expo and stimulating an urban renewal program is nothing new, as Seattle 1962 Expo was marked as the beginning of "the city renewal" era (Hall, 1992) in the World Expo history. Nevertheless, for the incoming Expo 2010 - the first World Expo themed on city and hosted by a developing country, the idea may be inherited but the scale is unprecedented; so is the affiliated high risk, were the whole scheme not well thought through.

The Huangpu River has witnessed a 19th-century Bund in the River West and a 20th-century Lu Jiazui Financial and Trading Zone in the River East. Distinctive from the previous two high-profile waterfront developments, the 21st-century Expo is strategically sited along both banks of the River to seek a more balanced outcome, which not only echoes the national campaign for social harmony but undoubtedly will be trend-setting in the riverfront development trilogy. Themed on 'Better City Better Life', the top priority for the Shanghai Expo construction is to knit the short-term master plan of the Expo into the long-term urban development strategy beyond the Expo.

4.2 Research Focus and Angle

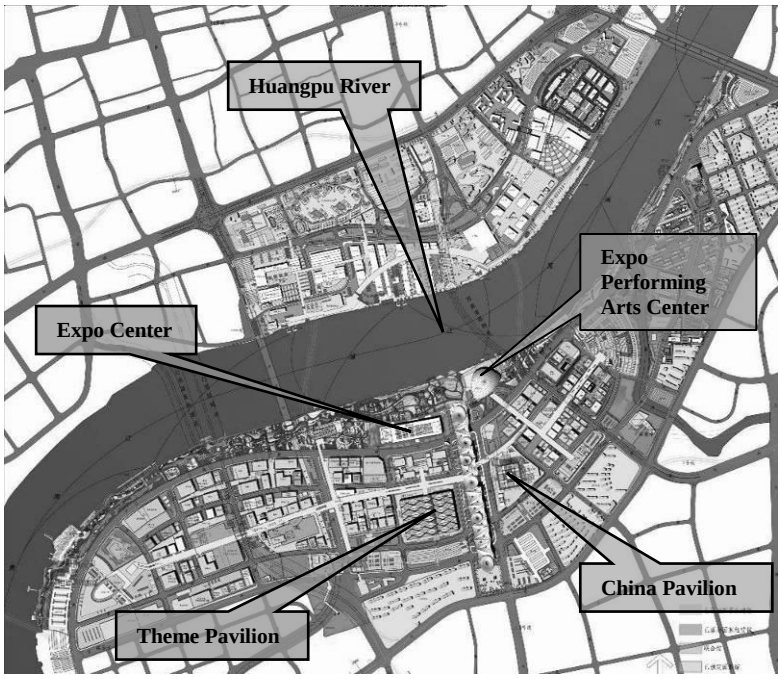


Figure 2: *The Big4 in the planned permanent zone of the Site of Expo 2010 Shanghai China, (updated as of January 2008*)
Source: Adapted from Shanghai Urban Planning Administration Bureau and Bureau of Shanghai World Expo Coordination

Accordingly, this explains why the research work mentioned at the beginning of this paper pivots on the dualism issue of programming management unique to the flagship of Expo 2010 construction - the Big4. Totaling some 500,000 square meters of floor area and strategically grouped in the core zone of the Expo site, the Expo Center, the China Pavilion, the Theme Pavilion, and the Expo Performing Arts Center will set the tone for redeveloping the site into a leading convention, exhibition, commercial and entertainment hub in the post-Expo era, as an integral part of the city's priority waterfront renewal program (Deng, 2005, 2006). By bringing the client organization to the spotlight, this research aims to come up with a

framework plan with specific operational guidelines which can hopefully manage, if not fully address the current concerns for future practices, as well as to raise awareness of long-neglected programming education and a newly-emerging service gap.

4.3 Challenges for the Big4

Prior to the planning and programming of the Big4, a survey concerning the existing comparable facilities in Shanghai and around the world was conducted by the Expo Organization where the author worked as a project coordinator. The result shows a surprising high rate of dysfunction and idleness of space among large-scale convention, exhibition and performing arts centers in Shanghai, with the resultant huge expenditures in operations and maintenance. Many become incompetent, since their fixed building programs formed years before have excluded the slightest possibility of convenient and inexpensive spatial re-arrangements to cope with the increasingly sophisticated and stratified user demands in the competitive market. A lack of elaborate programming research prior to the actual construction stands out among other reasons.

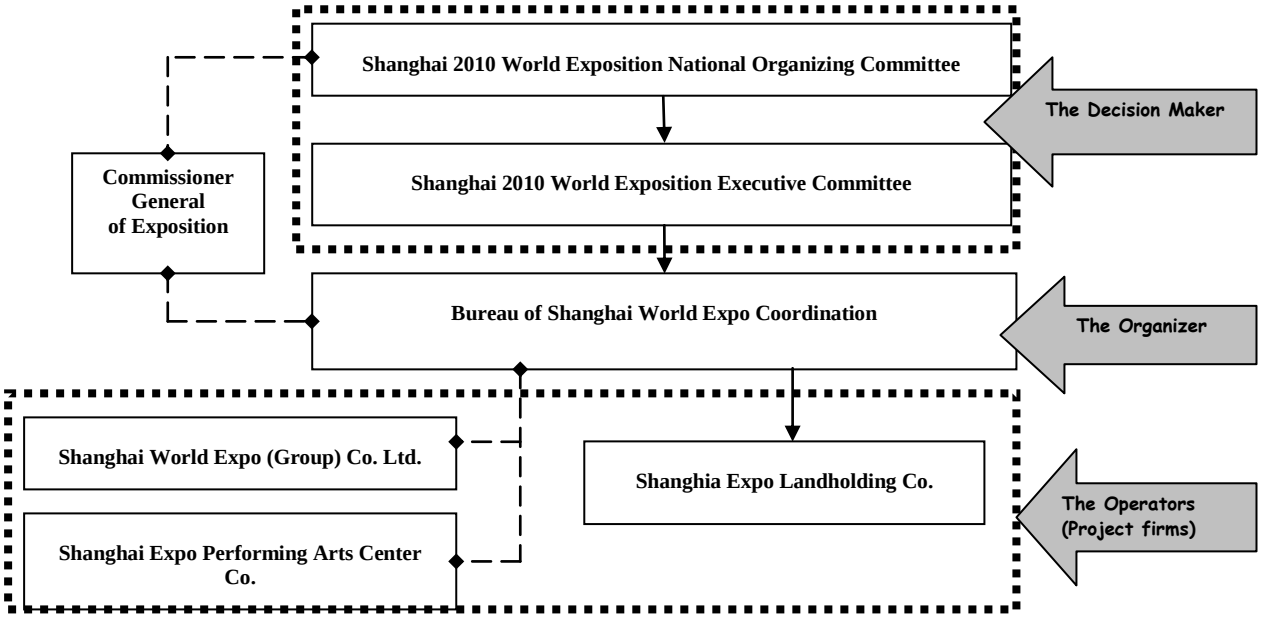


Figure 3: *Three-tier Organizational Structure of Expo 2010 Shanghai China*
Note:
Hierarchical *Not strictly hierarchical*

The process of programming the Big4 started as early as that of master planning of the whole Expo Site in early 2004, which is a valuable learning process for its twists and turns. In retrospection, the process has drawn upon the expertise and experience of individuals and organizations from both public and private sectors at home and abroad, thus providing a precious opportunity for all interested parties to communicate with each other for a better understanding of the client's needs. Unlike most other temporary Expo facilities, the Big4 each has a dual program on a very considerable scale and with multiple stakeholders under multi-layered management systems. The three-fold unconventional challenges for them lie not individually but as a whole, which makes them distinguished from those conventional major projects.

Firstly, how to keep a good balance between the functional requirements in the Expo duration and immediately afterwards? Since some of the building programs may overlap, some may differ in scale but not in kind, and still others may totally disagree with each other, this dualism introduces a difficult task of making a seamless transition between a six-month event and sixth-year development. *Secondly*, how to program the four big 'neighbors' as a complement to each other in both aesthetic and functional aspects while still keeping their individual distinctiveness? Drawn from previous lessons, this is in response to serious concerns over juxtaposition of a bunch of 'landmarks' with duplicated programs in a compact district. To avoid similar mistakes and to achieve the long-term vitality of the future sub-center, the client's priority shall not only give to shaping a harmonious landscape with diverse architectural styles, but more importantly, formulating a clearly-envisaged development strategy with operational programs. *Last but not least*, since routine project approval system is single-project oriented, the challenge from the organizer perspective lies in how to deal with the un-precedentedness in processes and procedures.

One the one hand, to ensure the mega-scale five-year preparation and the six-month Expo operation, a three-tier system in strategical, managerial and operational levels has been established by the Central Government in early 2004. As demonstrated in Figure 3, it consists of three major components: the Decision Makers, the Organizer and the Support Groups (Bureau of Shanghai World Expo Coordination, 2006). On the other, the substantial government involvement at national, regional and local levels will inevitably complicate the decision-making process, which makes it extremely paradoxical to draw a boundary line between strategic and tactical decisions during the limited event time frame. Accordingly, the emphasis on programming the Big4 is rather on the management, aiming at facilitating communication, coordination and cooperation among multiple stakeholders and providing sensible decisions based on such constructive discussion of project requirements in a timely manner. Through an in-depth investigation into the programming processes, the case study aims at establishing a programming management tool as an initial step to help future organizers to better handle event-initiated public buildings.

5. RETROSPECTION AND OUTLOOK

Retrospectively and paradoxically, the development trends of event projects and programming appear to have been gone by contraries during the same period of time. On the one hand, large-scale event projects thriving on economic prosperity would certainly consume much greater resources than their average-scale counterparts, and oftentimes occupy significantly large and strategically prominent urban areas as a branding tool for the city. Hence, they have potentially greater impacts on the cities and their inhabitants beyond the event. On the other, however, the development pattern of programming tends to be in contrary to that of economy, as demonstrated by the fact that programming has gained or regained some ground in lean time, but losing its appeal in boom time when the priority went to form-making as the cost factor was not of a great concern to clients.

While mega-events has been developed with indispensable linkages to the urban sustainability of their host cities, great care should be taken in achieving the maximum unison of building programs of these mega-projects during and immediately after the event, in order to shorten the transitional process, minimize the resource consumptions, and reduce the construction costs, thus making an intelligent balance between social, economic and environmental sustainability. As a specific domain of increasingly social, economic and political

significance, large and complicated event projects call for careful management to balance between short-term and long-term programming in order to embrace a time of change with great uncertainties. As the problems of programming event projects are deep-rooted and structural, it is not easy to grab for quick fixes. However, the right catalyst can trigger a difference. To solve the chronicles, a much more profound attitude shift will be needed. Therefore, the current global economic meltdown may arrive in time as a much-needed event to cool down the mania for event architecture, to regain the edge for programming, and most importantly, to catalyze a fundamental change in the attitude towards the intersectional vacuum among interdisciplinary areas of research: programming management of event projects.

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