

The Sydney Organising Committee of the Olympic Games and knowledge management: learning from experience

Kristine Toohey and Sue Halbwirth

The University of Technology, Sydney

KnowledgeScape Pty. Ltd.

The organisation of the Sydney 2000 Olympic Games was led by the Sydney Organising Committee for the Olympic Games (SOCOG) President, the Hon. Michael Knight, a NSW Government Minister. Although staging the Games was only possible because of the inputs of a variety of government and private organisations, three key organisations made up the Sydney 2000 team; SOCOG, the Olympic Co-ordination Authority (OCA) and the Olympic Roads and Transport Authority (ORTA), the last two of which were government departments directly responsible to the Minister. All three agencies were interdependent and over time their integration developed to the point where management was assumed under the one 'Sydney 2000' banner. This cooperative model of the organisation of the Sydney Games was not static. It evolved from the awarding of the Games to Sydney on September 23, 1993, to their celebration, from September 15th to 1 October 2000, with the most meaningful integration occurring in the 9 months preceding the Games.

Apart from Sydney 2000, management of Sydney's Games was based on cooperation between all three levels of government in Australia (the New South Wales (NSW) State government that underwrote the Games, the federal government and local government bodies e.g. the City of Sydney, which was a signatory to the Host City Contract), corporate business, the Australian and International Olympic Committees and national and international sporting federations.

Two distinctive features stand out in the Sydney Games organisational model: strong government involvement (including funding); and the key decision making input of Australian sport, specifically the Australian Olympic Committee (AOC).

Sixteen members of the Sydney Bid team joined SOCOG on its formation. From this core of personnel the organisation increased, so, by July 1995, there were 54 staff. Six months later numbers had grown to 97. In January 1997, SOCOG staff numbered 200. One year later there were 521 and, by January 1999, 870. Numbers almost doubled in the following year, so that in January 2000 there were 1424 SOCOG staff. From this point the greatest period of organisational growth occurred, so that by Games-time there were 2971 SOCOG employees. During the Games staff were assisted by contractors and 46 967 volunteers. 500 of these volunteers had been helping SOCOG since 1996. Before the Opening Ceremony the Pioneer Volunteers had contributed in excess of 160 000 hours (not including Games time), an average of 1000 volunteer hours per week.

One of the reasons that the Pioneer volunteers were needed was the complexity of the planning needed for organising the Games. For example, the Project Management Division monitored 27 000 activities throughout SOCOG in their milestone reporting schedule. The quantity and multiplicity of such information demanded a variety of knowledge management (KM) solutions.

People, using a technology platform, managed SOCOG's KM. This provided solutions for transferring knowledge throughout the organisation, rather than hoarding it within cost centres. The Sydney 2000 Games Information System (known as Athena) also provided the medium for the authoring of the Official Report and the Transfer of Know How Program.

The Corporate Knowledge Culture

In October 1997, although halfway through its lifespan, SOCOG was a relatively young organisation when compared to many other sporting bodies that it dealt with, such as the International Olympic Committee (IOG), the national Olympic Committees (NOCs) and international sporting federations (IFs). Staff numbers had just reached 500. It was small and manageable and the Games, scheduled for September 2000 seemed a long way off.

There was an established knowledge culture that had grown out of a long-standing recognition of the importance of information collection in the organisation. A legacy of the Sydney Olympic Bid Company (SOBL) was that SOCOG began its existence with a well-established corporate library and records management system. A research team assisted staff in data retrieval on topics ranging from: company searches for the Marketing Division; the amount of silver in medals and which Australian flowers would be suitable for bouquets for the Ceremonies Division; Australian standards for bed manufacture for the Villages Division; and many other varied requests. Data acquisition was a key element of this period.

SOCOG staff also included many people who had worked at the Atlanta or other Olympic Games and there was a professional respect for what they had accomplished. The tacit knowledge these staff brought to SOCOG was welcomed by the organisation.

After the Atlanta Games, SOCOG purchased paper-based files of their OCOG's documentation and incorporated these into the SOCOG library to supplement the tacit knowledge of its staff. These became the basis for much of Sydney's early planning. What was clear from Atlanta's experience was the need to share information across divisions of the organising committee. This became a SOCOG executive mandate to break down organisation 'silos' and share information across the organisation.

From this mandate, the experiences of Atlanta and the recognition that SOCOG would soon move from data acquisition to concentration on information creation, a project to develop an organisation-wide information sharing solution was scoped. The first step in designing a solution to the broad issue of information sharing! knowledge management was to analyse in detail both the internal and external information environments in which the solution would operate. One outcome of this research was the creation of an information technology solution to support the organisation's knowledge management.

Tradition of information management

As stated earlier, a centralised records management system and a library/research service was already established within SOCOG. While it provided an excellent foundation it was clear that these traditional information structures alone were not going to cope in the move towards Games time. Experience from Atlanta showed that there was loss of productivity and cohesive planning as staff needed to continually check the accuracy and currency of information with their colleagues.

A comprehensive electronic database had been developed in SOCOG. This managed and controlled the language of the Sydney 2000 Games and was known as the Games Codes System. This was an excellent foundation of professional information management from which to develop a solution to future information and communication demands. By Games time the codes database alone held approximately 50 000 records.

Information Sharing

In large organisations it is not unusual for individuals and/or departments to hoard information. Individuals value 'their' information. Knowledge is perceived to be power. The sheer scale and deadlines of SOCOG demanded that knowledge be actively shared yet some programs were reluctant to do so.

Viewing the 'big' picture and understanding the interrelationships between functional areas was crucial to the solution design process. It was necessary to change the organisation's culture to encourage sharing of information and to breakdown knowledge silos.

Statutory Requirements

SOCOG was established as a statutory corporation in 1993 by an act of the New South Wales (NSW) Parliament. As such it was subject to a number of legislative requirements that had implications for information management. These acts meant that any material deemed to be a 'record' had to be filed, maintained and handed over to the state of NSW after SOCOG's wind up. This included memorabilia (for example the Torch) as well as written and electronic records.

Exponential Growth, change, an immovable deadline and then a finite end

The growth of staff and complexity of the issues facing event organisations are well documented (see Goldblatt, 1997; Parks et al 1998). SOCOG, like many event organisations, was subject to a dynamic environment, characterised by massive changes to all facets of its operations. For example, in 1999, it moved from a functional area structure to a venue-based structure, with a matrix style reporting function for many staff.

While change is a feature of most current organisations and corporations it is the relatively short life cycle/ time frame in which SOCOG worked that created pressure on its information tasks. This created the challenge of coordinating information, especially when NSW government agencies (such as OCA and ORTA), Team Millennium Olympic Partners, other sponsors and providers, were an integral part of the process of delivering the Games. Corporate memory is fleeting. Education and performance support materials for any knowledge management practices were therefore crucial, as was the need to have a malleable and flexible solution.

The data-to-information-knowledge cycle from gathering, creating, retrieval and then dissolution was completed within less than 10 years. Any solution devised thus had in built obsolescence. Knowledge dissemination in such an environment had to be expedient and immediately of value to the organisation. The KM challenge was to build something that would be soon discarded.

Information within SOCOG was constantly undergoing changes to status, especially in the area of public information. What was highly confidential one day was public information the next. For example, the competition schedule for the Games was once restricted, but when it was released to the public SOCOG was very keen to promote the information. Some of SOCOG's information

however always will always be maintained as restricted access, even now the organisation is disbanded.

Disciplinary Diversity

While SOCOG's core business was to stage the Games, the sheer nature of the tasks required to do this presupposed that the specialised skill and knowledge of a range of professionals and disciplinary areas was required, for example, law, catering, waste management, finance, publishing etc. Eventually there were over 90 different functional areas (or cost centres) within the organisation. This meant that any KM solution had to cater for information in varying formats and from disparate subjects. The challenge was to develop a solution that met SOCOG's requirements while retaining elements of customisation for individuals with a wide range of skill sets. The control of language and terminology and the logical grouping of information were key components in the success of a solution.

Technology Limitations

SOCOG did not have an endless budget and there were limitations on its resources, including computing equipment. There was a shared PC policy, which meant that towards Games time there was a 5:3 ratio between staff and computers. This had implications for building a knowledge solution based solely on technology.

Building an Information Solution .the Sydney 2000 Games Information System

In 1997 approval was given to develop an organisational wide system for sharing information. The solution was designed to be technologically based and complemented the already existing records management system and processes.

It was proposed that the new system would provide a shared environment for the creation and dissemination of information and knowledge and also promote the sharing and linking of existing data. Increases in productivity and security of data and a decrease in the duplication of data collection were also envisaged. The concept was of the 'one stop information shop'. The challenge was to provide a method of codifying and organising the information within a user-friendly technical environment.

A Project Specialist, Information was appointed in October 1997 to consult on the design of the system and project manage it through to implementation. The project team included personnel from the onsite Lotus Consulting team.

Stage One . Analysis and Information Audit

Stage one of the project (November and December 1997) was a detailed analysis of the business needs and information seeking behaviour of staff and then devising a solution. The review's findings guided the technological development of a Lotus Notes solution. Lotus Notes was the preferred product because of the contractual arrangements, through IBM with the IOG and SOCOG. The audit results included the need for:

- key information groups to be included, with an analysis of the most used information groups;
 - groups of 'like' information to be clustered together (relevance);
 - breakdown of large groups of information into smaller units (chunking);
 - linking to other data and information;
 - ability to search for information;
 - a system that 'tells me when information has been updated' (push and pull);
 - only approved, current information "that I know is right";
 - a place in which authors can work on the same document and list of who has worked on the document (document history);
 - security, so at various stages of a work flow access to information is restricted; and
 - ease of use (consistency).

The audit process allowed staff to have input into the design of the system and built a sense of ownership.

Stage Two . Implementation of the Sydney 2000 Games Information System

On June 30 1998, the internal Sydney 2000 Games Information System (called in house "Athena" after the Greek goddess of wisdom and knowledge) and a Call Centre extract went live.

Therefore, 27 months out from the Games, SOCOG had achieved a sophisticated level of information management that included:

- a record management process and retrieval system, using a TRIM database

- a technology solution for managing key corporate, operational and public information based on Lotus Notes .Sydney 2000 Games Information System with:
 - information in logical clusters;
 - generic form design (all documents in the system needed to confirm to a set of characteristics);
 - navigation screens and a point and click environment;
 - search facility;
 - authoring;
 - security;
 - document history;
 - versioning and archives;
 - subscription and notification – ‘push’ functionality to send updates to users; and
 - linkages to key information outside the system
- an information infrastructure for call centre operations with:
 - public information only
 - current approved information only;
 - powerful search capabilities with sorted search results;
 - function that allowed ‘hot issues’ to be communicated immediately to all operators screens;
 - feedback functionality; and
 - work flow to manage the feedback internally within SOCOG and if required back to the call centre.

The objectives of the Sydney 2000 Games Information System were:

- to provide Sydney 2000 staff with access to consistent, up to date and approved corporate, operational and public information;
- to streamline authoring and approval processes for key documents;
- to minimise duplication of information production and storage;
- to be a ‘one stop shop’ for information by linking to other specialised information systems; and

- to provide a public information infrastructure for the call centre and other external users.

As of August 1999 the system held approximately 25 000 documents and had moved from merely a warehouse of information to the concept of a corporate portal and knowledge base. In October 1999 it was linked to a database which managed and controlled the still photograph images of the preparation and operations of the Games. As of January 2000 there were 28 000 documents in the Sydney 2000 Games Information System. By October 2000 this had risen to 39 983.

Call Centre Requirements

Simultaneous to the information systems development was the analysis and scoping of an outsourced call centre operation for SOCOG. It was decided that the Sydney 2000 Games Information System, should act as an information backbone for call centre operators. While this characterised the dynamic environment of SOCOG it presented a challenge. No longer was the information structure for internal use only; it now needed a purpose built designed extract and front end for use by a different client group, with different information needs. The need for immediate and accurate information for the call centre was crucial, due to the sheer volume of calls and the centrality of the call centre to public information dissemination. By the time the call centre closed, at the end of October 2000, it had received 2,252,908 calls.

The Official Report and the Transfer of Know How Program

The Host City contract that Sydney signed with the IOC to stage the Games of the XXVII Olympiad had, as one of its deliverables, the preparation of an Official Report, known within SOCOG as the Post Games Report (PGR). The report will be one of the enduring legacies and reference tools about the Games for researchers and sports managers.

SOCOG staff, from all program areas, had substantial input into the writing of the PGR, beginning two-and-a-half years before the Games and continuing until their last submissions were received, in November, 2000. Also, as a legacy, there was a formal agreement signed between the IOC and SOCOG, which formalised SOCOG's passing on of 'how we did it here' to the IOG and the organising committees in both Salt Lake City and Athens. This program was known as the Transfer of Know How (TOK). It involved both written and oral delivery of intellectual property from relevant SOCOG managers in 91 individual guides. The first written material was collected in January 2000, with interviews conducted over the first half of 2000. The final stage in the TOK process was a debrief of the Sydney Games, held in Athens during November 2000. This was a series of high level discussions that concentrated on Games times operations.

The knowledge provided by the TOK has formed the basis of a generic Olympic management guide, which, it is envisaged, will continue to evolve following each successive Olympic Games. Previous host cities have had to reinvent the wheel for organising their Games. The knowledge provided by the TOK program will form a valuable KM tool which will provide assistance and direction for future OCOGs. This was the first time that an OGOG has onsold its intellectual property through a formalised IOC program.

The TOK and PGR both used the Sydney 2000 Games Information System to author, store and edit data. This provided a technologically efficient solution, while concurrently giving the system organisational exposure and credibility. The demands of these projects has meant that the system was utilised to capture the tacit knowledge of staff as they wrote the story of their program and the Games. This also confirmed the importance of the transfer of knowledge and information as a corporate asset.

At Games time the Sydney 2000 Games Information System was primarily utilised as the public information infrastructure to manage the massive flow of public communications. After the Games the system and its information and knowledge store and archive will be a valuable resource and legacy.

Conclusion

The Sydney 2000 Games Information System has contributed to the planning, delivery and legacy of the Sydney 2000 Olympic and Paralympic Games. Understanding SOCOG as an organisation, its knowledge culture and information environment, were essential in developing the organisation's knowledge management solution. If a similar enabler was developed in other sporting or event organisations the following suggestions should be noted:

- It is highly desirable to have a development team which combines the skills of information management, systems design and graphic design;
- Success must be measured not merely in the "cleverness" of the technology solution but the usefulness of the repository;
- The resources required for effective training and implementation support must not be underestimated; and
- Successful knowledge management includes change management.

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