



2010 WINNING CASE STUDY
Technology
Atos Consulting with CLM



Transforming the technology function for construction of the 2012 Olympic Park

With the contribution of a team from Atos Consulting, the technology was in place for construction of the Olympic Park to start on budget and three months early.

Executive summary

Staging the London 2012 Olympic Games requires completion of one of Europe's biggest-ever and most innovative construction projects. A consortium of three industry-leading construction companies called CLM was contracted by the Olympic Delivery Authority (ODA) as delivery partner for construction of the 202-hectare Olympic Park.

From zero IT capability on day one, CLM and the ODA needed to rapidly develop technology structures and systems that usually take years to evolve. After an intense mobilisation phase CLM needed consulting expertise to help establish a more strategic framework for joint delivery of the programme with the ODA. IT had to improve performance and rapidly meet the needs of the business. Any lack of cohesion would seriously threaten construction of the Olympic Park.

In very high-pressured and intense conditions, Atos Consulting helped CLM work with the ODA to create an accelerated high-performing, robust and agile IT function. The scale of the challenge was to establish all the IT infrastructure and systems for a FTSE 250-sized company – from a standing start.

All this was achieved in a uniquely complex and demanding stakeholder environment, with an immovable deadline and against a backdrop of the UK's highest-profile project.

IT has made an inestimable contribution to the success of the construction programme and continues to be an invisible enabler. Integrated systems contributed to the construction of the Olympic stadium starting three months ahead of schedule and at a forecast saving of £30 million, and to the construction of the aquatics centre starting two months ahead of schedule.

Problem/opportunity faced by client

In September 2006 the ODA appointed a consortium called CLM for the construction of all new venues and infrastructure needed for the London 2012 Olympic and Paralympic Games. CLM comprises three construction industry leaders: CH2M Hill, Laing O'Rourke and Mace. The Olympic Park contains nine state-of-the-art venues including the Olympic stadium, velodrome and aquatics centre.

Technology was a key enabler for every aspect of planning, designing and controlling the logistics and costs of building the venues. In addition to around 12 technology suppliers, CLM's own technology team worked alongside the ODA technology department to develop all the IT needed for the programme.

"Atos Consulting was critical in delivering an outstanding and truly credible IT function."

Iain Patterson Former Head of IT, CLM

The programme's mobilisation phase was characterised by an urgency to get the core IT systems in place to support the construction design phase. With the critical focus on meeting deadlines, less emphasis was inevitably given to reporting and controls – with minimal engagement between IT and the business. Complications arose between the respective IT functions of CLM and the ODA, which had different yet overlapping responsibilities and requirements.

Specifically:

- the IT strategy was embryonic, with the need to integrate the ODA and CLM technology teams around a common strategy
- IT needed to improve performance and rapidly meet the needs of the business
- effective budgetary control was needed on an IT project-by-project basis.

Any lack of cohesion would seriously threaten the construction programme and expose CLM to the risk of significant cost penalties. In September 2007 CLM asked Atos Consulting to help get control of the situation and establish a more strategic framework for delivering the IT programme.

Brief project background

The unique requirements of the Olympic Games meant this was uncharted territory for all the organisations concerned. Formed under intense public scrutiny, the ODA and CLM's partnership was culturally diverse. The consortium had all the dynamism of an entrepreneurial start-up where the urge to get things done can conflict with governance. In essence it was a FTSE 250-sized company which had to develop a complete framework of management information, control and information-sharing tools. The construction programme was extremely intense. With an immovable deadline, there was huge pressure on the partners to deliver multiple timecritical world-class projects to budget, with complex dependencies in both business and technology.

CLM had to deliver around 45 applications very rapidly with over 100 discrete development projects and an IT spend of over £140 million across multiple budget sources. This was a particularly diverse portfolio, with some applications mandated by government and the ODA, and some unique to the Olympic Games. In addition, London's bid made commitments to set new standards for sustainable development and to leave a legacy for London and the UK.

Consulting activity

Atos Consulting acted as trusted advisor to CLM's new Head of IT to transform the entire IT function. Consultants took key roles within the IT function to ensure that delivery deadlines would be met. CLM asked Atos Consulting to investigate the problems, establish a highperforming IT department, then manage the development and implementation of all technology needed for the 2012 construction programme.

The Atos Consulting team reached 20 at its peak, comprising a mix of technology, business, information security, change management, and programme management skills. It flexed to meet the changing needs of the overall construction programme, integrating and inducting consultants very rapidly to prepare for the demands of such a high-pressure environment.

Establishing governance

Faced with such a vast, complex set of requirements and budgets, Atos Consulting immediately proposed new governance to provide executive control of the IT programme.

One of its first key interventions was to implement a governance structure to ensure sufficient engagement with the business.

- A Business Systems Change Board brought together Executive Board members and senior business representatives from the ODA and CLM to drive high-level strategy requirements and changes.

- Reporting to this was a Steering Group to maintain oversight of delivery, with a series of project boards reporting and directing project progress.
- A new integrated organisational structure put the disciplines in place to manage the development of applications through the lifecycle.

Creating the IT strategy

Atos Consulting defined an overarching IT strategy which for the first time outlined the overall 2012 Olympic vision, and the organisation, sourcing, finance, processes, innovation, environmental sustainability, security, infrastructure and applications needed for successful completion of the construction programme.

A major milestone in the programme, the strategy was commended by a Gartner review.

Just some of Atos Consulting's interventions included:

- **Enterprise architecture.** This gave the big-picture view of the organisation, its processes and how they related to IT applications and services. It was essential in helping IT and business teams to jointly plan and deliver change.
- **Portfolio management.** Atos Consulting structured and managed delivery of the huge portfolio, establishing standard development lifecycles, quality gates and solution roadmaps.
- **Service improvement.** Atos Consulting identified and delivered improvements in operations using Information Technology Infrastructure Library best practice, improving service design and the transition of new applications into routine operational support.

Restructuring IT into one team

Atos Consulting worked with CLM to form one integrated IT function with the ODA which served the needs of both organisations. Atos Consulting invested time in intensive team-building, performance management and communication to create a high-performing team.

Atos Consulting centralised and managed what had been dispersed budgets so that priorities could be more usefully set and expenditure controlled.

For the first time there was a set of common standards, policies, projectmanagement processes, planning and forecasting.

With reporting lines and responsibilities clarified and assigned, performance and morale improved immediately and the new team felt motivated and inspired as an integral part of the construction programme.

Business plan

Atos Consulting helped produce a detailed delivery and operating plan for the entire IT programme until September 2012. This was a highly complex task in response to severely competing pressures to be fit for purpose, affordable within a tight budget, and operational to support unmovable deadlines.

The plan was extremely well received. Any conflicting priorities and pressures had been removed and CLM now had detailed plans, specifications and budgets for delivering the technology for the rest of the construction phase. All this had to be approved and audited by September 2008. It depended on extensive involvement of business managers across CLM and the ODA, and showed how much the IT function had matured.

Success factors and challenges

The technology for construction is unique to each Olympic Games, with no comparable projects of this complexity to offer a blueprint for the challenge.

This was one of the largest and highest-profile construction projects the UK has ever seen. With the political spotlight on the ODA, any overspend or slippage in deadlines would add costs – and very soon come to public attention.

In this challenging environment Atos Consulting's success was characterised by relentless rigour, balanced with flexibility and collaboration – and a strong focus on fostering relationships across multiple organisations and structures.

- **Embedded team.** Typical of Atos Consulting's approach is its ability to embed consultants within client and delivery teams. Team members felt there were no boundaries between organisations, with the real focus on making the programme work.
- **Robust governance.** The governance was critical in keeping the IT function agile while stopping 'scope-creep' early. In particular the Business Systems Change Board challenged project proposals to get agreement on conflicting drivers.
- **Extreme pragmatism mixed with long experience.** Atos Consulting combined a wealth of technology blueprinting experience with highly pragmatic business thinking to deliver unique solutions based on established methodologies.

Extent to which objectives have been met

Integrated systems contributed to the construction of the Olympic stadium starting in May 2008 three months ahead of schedule at a forecast saving of £30 million, and to the construction of the aquatics centre starting two months ahead of schedule.

In this highly demanding environment, Atos Consulting was a key factor in establishing systems and services which most organisations of CLM's size take years to evolve.

Innovation and virtualisation of the hosting infrastructure has delivered a technology function with green credentials higher than any government department.

The intellectual property for the IT enterprise is owned by the ODA and can be reused for other major government programmes.

All technology delivery was routinely audited by the ODA and met all criteria and requirements.

The percentage of total turnover spent on IT was significantly less than is typical in the construction industry – a particularly impressive achievement for a start-up operation.

The fact that the IT function could be fully outsourced by the ODA in April 2009 was an indicator of its operational stability and maturity.

Intangible benefits

Atos Consulting's approach directly contributed to London 2012's vision to be inspirational and inclusive, and to leave a sustainable legacy.

Lessons learned

While a project like this won't happen again in a lifetime, some of its lessons are universal.

Atos Consulting learned that the pragmatic application of its proven methodologies and experience can deliver exceptional results – even in an extreme and unfamiliar environment.

The client learned that:

- in a rapidly moving environment, success depends on getting the balance right between flexibility and rigid controls
- with investment in consulting expertise up front to establish stability, fewer resources were needed to manage ongoing delivery under strict project-lifecycle and change-control mechanisms.

Client/consultant relationship

Communication between CLM and Atos Consulting was full and frank. CLM trusted Atos Consulting to deliver, and both organisations were very open about the selection of the necessary consulting skills and experience. CLM particularly valued Atos Consulting's responsiveness and its ability to bring consultants up to speed very rapidly.

Atos Consulting fulfilled key roles while contributing vital skills and expertise.

The consultants' readiness to work hand-in-glove with all partners drove forward much of the partnership working that was needed to deliver the programme.

An indicator of the level of trust in Atos Consulting was the fact that Atos Consulting was the only non-CLM or -ODA representative invited permanently to sit on the Business Systems Change Board.

“Atos Consulting were instrumental in the successful delivery of the technology programme, showing commitment and tenaciousness in the face of considerable challenges. The consulting team flexed and adjusted its resource model to field the mix of technical and business skills and experience we needed to deliver in this unique environment.”

Peter Shipley, Chief Administrative Officer, CLM

“Atos Consulting was a trusted partner who consistently provided the necessary business focus and acumen to deliver results rapidly and to an incredibly high standard. They were ‘invisible’ as consultants, but omnipresent and credible as leaders in the team.”

Iain Patterson, former Head of IT, CLM