

Royal Albert Hall engaged with us to help address their monthly and KPI reporting

They wanted to move from a manual time consuming process based on snapshot data to a fully automated reporting process utilising the Microsoft SQL Server product stack drawing real-time data from several core systems.



The Client

The Royal Albert Hall was built to fulfil the vision of Prince Albert (Queen Victoria's consort) of a 'Central Hall' that would be used to promote understanding and appreciation of the Arts and Sciences and would stand at the heart of the South Kensington estate, surrounded by museums and places of learning. Today it hosts over 350 events each year in the auditorium ranging from classical music and opera, rock and pop, jazz and world music to dance, tennis, award ceremonies, science events and events of national importance as well as offering an extensive Learning & Participation programme for young people.

The Challenge

Historically the Royal Albert Hall used disparate systems for its monthly and KPI reporting. Information needed to be collated from these disparate systems, such as the finance system, the event planning system and the central CRM system in order to produce reports. This meant that reporting was a manual process as each system had its own reporting tool and these reports needed to be "stitched" together

using Excel spreadsheets. Previous attempts to automate these processes through the use of cumbersome Microsoft SQL Select statement were unsuccessful.

Production of monthly reports was a time consuming process and, as they only used snapshot data, it was very difficult to get a 100% accurate view from any report. This scenario was further complicated by figures being adjusted retrospectively for costs not yet applied.

The Solution

We were engaged by the Royal Albert Hall as a Microsoft Gold Partner who had proven experience in addressing this type of Business Intelligence (BI) requirement, mainly through using the Microsoft SQL Server product stack.

Crispin Gray, Head of Information Systems, Royal Albert Hall says, "As a charity which receives no government funding, cost was obviously a key issue and therefore we didn't want the large capital outlay usually associated with some BI tools such as Business Objects. We felt that our environment

Client >

Royal Albert Hall

Sector >

Sports and Entertainment

Project >

Microsoft SQL Server, Reporting and Analysis

"Advanced demonstrated they understood what we wanted to achieve and how technology could best be utilised to meet our needs. They are committed to delivering the highest levels of client service, day-in, day-out to meet these needs."

Crispin Gray > Head of IS > Royal Albert Hall

Royal Albert Hall Case Study

wasn't overly complex and as a Microsoft house we could work with an established Microsoft partner to help us build a reporting system that utilised the technology we had already invested in – such as SQL Server."

Our initial engagement was a time-limited 5 day consultancy project to develop a proof-of-concept to prove that it is possible to produce the required solution using Microsoft SQL and Reporting technology.

Gray comments, "Initially it was assumed that all we needed to meet our requirements was to build a data warehouse to pool our data together for us to report on the top of it. What we learnt by doing the proof-of-concept was that there is actually some analysis work that we want to do on the aggregated data before we report on it. The proof-of-concept helped us specify and define our requirements in more detail to enable us to get the type of reporting the business really needed."

From the outset of the proof of concept it was initially thought that Microsoft SQL Server Reporting Services (SSRS) would form the backbone of the solution, although it was quickly realised that using this technology alone was only a 'sticking plaster' approach and would not provide all of the functionality required. Therefore introduced the full Microsoft SQL Server BI suite which was readily welcomed. Although the required output from the project was expected to be reports from SSRS, the process of creating these involved multiple technologies:

Microsoft SQL Server was used as a database repository to store data prior to manipulation. Many of the existing systems use SQL already and an existing server was used for this purpose.

- Microsoft SQL Integration Services (SSIS) was used as the data transformation layer to collate, regulate, manipulate and schedule the movement of data from multiple sources into a single SQL repository.
- Once all the disparate data was in a consistent and manageable state, Microsoft SQL Analysis Services (SSAS) was used to create OLAP data cubes that aggregate all the data and supplement it with any custom calculations or filters needed.
- > Finally, Microsoft SQL Server Reporting Services (SSRS) was used to query the SSAS cubes to provide real-time data analysis reports to the Royal Albert Hall executive.

The final solution was deployed on 2 servers and is hosted by the Royal Albert Hall in their data centre. The Royal Albert Hall plans to retain us on a support contract to provide ongoing support and additional development services for their BI solution.

The Benefits

Reports are fully automated and are scheduled to run on a monthly or weekly basis and can also be produced on an ad-hoc basis if required. The reports are delivered to the key stakeholders and decision makers in the business using Microsoft Office SharePoint Server 2007 and security is used to ensure that only the right people can view the relevant reports.

Cost has also been identified as a key factor as the project progresses and our ability to work in partnership with the Royal Albert Hall is essential to ensuring the projects continued success is as cost effective as possible.

"As a charity we always need to be mindful of costs and therefore re-skilling and cross training our existing staff in the new solution is key to the continued success of the project. We see Advanced as a trusted partner providing a pivotal roll supporting us to reach this objective."

Crispin Gray > Head of IS > Royal Albert Hall

More information

- **w** oneadvanced.com
- t +44(0) 8451 605 555
- e hello@oneadvanced.com

Ditton Park, Riding Court Road, Datchet, SL3 9LL

Advanced Computer Software Group Limited is a company registered in England and Wales under company number 05965280, whose registered office is Ditton Park, Riding Court Road, Datchet, SL3 9LL. A full list of its trading subsidiaries is available at www.oneadvanced.com/legal-privacy.