

# **AV Specification & Cost Consulting:**

**Design, Procurement and Delivery of Audio Visual Technology** 



Photographer: Richard McAuley



Bradford Teaching Hospitals Sovereign Lecture Theatre

Understanding our clients needs and turning them into designs that deliver a measurable return on investment

#### What do we do?

AV technology is constantly evolving, with new products and services available that integrate the presentation and distribution of information appearing almost every day.

Selecting the right mix of products and services is the key to delivering successful projects, this process starts by gaining a clear understanding of our clients needs.

#### **Client Services Include:**

Planning and Strategy Days
System Design and Cost Planning
M&E Specification
Tender Authoring and Qualification
Project Management
Re-fit and upgrade design
Acceptance Testing
User Training and Support

For Clients, Architects and Main Contractors, from RIBA Stage 2 onwards, we generate specifications tailored to the individual project needs.



University of York Heslington East £200m campus development

## **Heslington East Campus**

#### **Brief:**

Deliver cutting edge HD display technology to a user defined specification in over 100 teaching spaces

#### Challenge:

Manage the deployment costs within the specified budget. Enable first fix M&E works to be completed prior to post contract AV fit-out.

#### Obstacle:

The main AV fit-out works were post contract, client sourced. The main contractor needed to complete all enabling works yet the specification was not clearly defined.

A fixed design specification was produced and fully price, allowing the client to issue a fixed specification tender and the main contractor to enable the M&E and Data deployment in readiness for post contract works.

Working to a defined display specification provided by the department of Film and Television, the facilities in all teaching spaces needed to support both traditional tutoring and advanced video work.

A fixed output specification was created using the latest available technology following negotiations with manufacturers on product lines and future pricing models.

The fixed specification created a level playing field for the tender document and facilitated the design of all enabling works before the AV contract was awarded, thus reducing post contract work measurably.

The risk to deployment was reduced by establishing the delivery methods and procurement routes in advance. This allowed for price negotiations without diminishing the final specification.

#### **Key Features:**

20% reduction in cost on £2.1M AV spend, saving £420K from the initial budget plan.

Enabling works during main build, eliminating most post contract costs

Full enabling specification for M&E and Data prior to AV contract award

Over 100 teaching and display systems with HD capability

Interactive systems and central technology management

Video Conference facilities

Fixed specification tender documentation

Cost management



Sunderland City Council Sunderland Software City

## **Software City**

#### **Brief:**

Design and specification for new build Innovation and Engagement Centre focused on providing workspace for technology companies in the North East.

#### Challenges:

Create a specification within the ERDF framework bid to maximise value for the client.

#### Details:

The task was to ensure that the technology chosen supported the functions of the Centre, these being training and development for local businesses. Ensuring that the technology deployed was suitable for a wide range of unspecified businesses. Anticipation of future needs and expected on-going development of the Software Centre.

We worked with the key client stakeholders, EU Bid team and the main contractor to develop a scheme that presented the maximum value for the given investment, both in terms of functionality and future flexibility.

One of the main aspects was that the procurement of key infrastructure systems within this project provided a wider benefit to the community as a whole.

The delivered system was handed over well before the official opening date to allow ample time for user training.

#### **Key Features:**

Cost Management £500K technology budget

**ERDF Bid Planning** 

Multi screen projection zone

Dedicated communication area

**Conference Rooms** 

**Private Meeting Spaces** 

**Digital Signage Systems** 

Adaptable exhibition space with room divide and distributed PA system



Ron Cooke Hub – University of York 3Sixty Immersive Audio Visual Experience

#### **Ron Cooke Hub**

#### **Brief:**

Design, procure and manage deployment of a 360 degree immersive space in a very short time window.

#### Challenge:

Limited timescale project, purchasing decision made five weeks before new campus opening date.

#### Obstacle:

A very short timescale from instruction to completion was the greatest challenge. The design needed to be robust but created from available technologies that could be procured on a short timescale.

Negotiations were held with manufacturers and distributors, to ensure that specified products would be available. This resulted in a fully-cost managed and deliverable specification.

Created as a cube within a building the 360 immersive space was envisaged as a showpiece for interactive and immersive technologies.

A key requirement was a space that allowed for a 28:4 channel '3D' surround sound system based on the theory of Ambisonics.

Ownership of the space, and thus responsibility, had changed during the course or the overall project leaving a very short timescale, and a limited remaining budget to complete the system.

Negotiations were held with manufacturers, supported pricing obtained and express delivery terms agreed.

A contractor from the pre-existing purchasing consortium was engaged on an agreed fee and the facility was opened two days ahead of schedule.

#### **Key Features:**

Supplier price negotiations

Project management

Short, 5 week, timescale

Restricted budget

360 Degree HD Immersive Space

7680x1200 Resolution

28:4 Ambisonic audio system

Projection 'inside' the cube



Smith & Nephew. European Training Centre Croxley Green Surgical Training Centre

### Smith & Nephew

#### **Brief:**

Deliver a World class surgical skills facility including cadaver laboratory, lecture theatre, training rooms and communal circulation spaces.

#### Challenge:

Create a balance between deployment of technology and cost whilst maintaining a flexible surgical training and conference centre environment.

Working closely with the Client, users group and medical equipment supplier we produced a fully priced technical design specification that met the business case for the facility.

Following clinical and financial approvals the specification was issued for tender and a delivery partner was chosen.

Commissioning and acceptance testing were the performed prior to end user training and demonstration of the facility.

The Centre opened to the first customers on time and has subsequently received several accolades for excellence.

#### **Key Features:**

System Design and Cost Management

Presentation of design to clinical group for approval

Integration with Medical Equipment Contractor and coordination of delivery process

Fourteen surgical skills tables with integrated camera and LED lighting system

Multiple connectivity points for minimal invasive endoscopic devices

Two way Video Conferencing link to adjacent lecture theatre and seminar rooms

Network video broadcast and recording systems

## **Milestone Projects**

**Keele University** Midland Hospitals, Perth WA BT (British Telecom), Asia Pacific **Qatar Petroleum** Metropolitan Police West Wales Hospitals **Brandon Medical** Synergy Medical Herne Bay Hospital University of Liverpool Imperial College St Mary's Morriston Hospital Wales Trinity College Dublin Private Hospital Zurich University of York Leeds NHS Trust Surgical Innovations, Leeds Leeds NHS Trust

Training and skills suite with lecture theatre Training Centre & Operating Theatre video systems Client experience centres, Singapore, KL, Jakarta, Dubai Head Office, Auditorium & 3D Visualisation Suites Rowan House, Driving school and conference facility Mortuary video recording and streaming Integrated surgical control screen with PACS Dublin Hospital integrated teaching theatres Digital OR with video conferencing links to desktop clients Leahurst Vets hospital and training centre Radiology department fibre video links and intercom Mortuary video systems and seminar room feeds Anatomical dissection surgical skills lab design Integrated OR with video recording and streaming Central Hall AV & DDA Induction Loop to BS7594 Leeds Institute of Skills Training and Assessment Schematic Design, New factory and surgical training centre Endosopy video recording and broadcast network



Qatar Petroleum, Doha

Head Office, Training Centre, Auditorium & 3D Visualisation Suites

