Case Studies

LEADING GLOBAL BUSINESS SCHOOL

Cambridge, UK
Introduction

How can...
Audio Visual infrastructure help build a global community of business leaders under one roof, in spaces which resemble workspaces more than classrooms?
Why a new building?

“The school is bursting at the seams”.

30% of the Business Schools’ degree programme lectures and 65 per cent of Executive Education programmes had taken place in locations scattered around Cambridge. Almost one in three members of faculty and over 30 members of staff had offices in buildings other than the main CJBS site.

“Cambridge Judge Business School is in the business of transformation
- of individuals, of organisations and society”.

For an internationally renowned Business School, which trains business leaders (both well-established and new) on the importance of collaboration and culture in the workplace, the campus arrangement for learning and collaboration wasn’t necessarily exemplary.

The focus of the expansion project was the development of a large building to provide world-class teaching facilities for executive-level programmes, two raked lecture theatres for degree programmes, and a combination of open plan and individual offices and meeting rooms.

Above all, these facilities had to be exemplary to allow the entire CJBS community to collaborate and learn under one roof.

Maintain the profile

Not only is the Business School one of the best globally, the new building is also a major development in Cambridge. The development of the school has been supported with grants from The Monument Trust.

The expansion project provides a collaborative and interactive environment that embarks on the next 25 years of the business school’s journey, enabling their aspiration to be one of the world’s best business schools.

Resembles a workplace.

With the focus of the school on executive education, the end-users are senior/board level corporate executives from around the world. Therefore, the spaces had to meet their expectations of global communication and collaboration facilities they are familiar with.
THE BRIEF

The ultimate objective was to enable a system which allows for easier interaction between various stakeholders to learn from each other’s experience - whether they are present in the building or outside it.

1. **Spatial design discipline** to blend with the clean aesthetics of the building design, including AV interior design and close coordination with architecture, construction and M&E design teams.
2. **Teaching spaces**: lecture theatres equipped with best of breed hardware but more importantly, the infrastructure should be interconnected with ‘Control Rooms’ for live lecture capture, streaming, editing and remote monitoring.
3. Full HD hard and soft **unified communication** / collaboration facilities.
4. **Lecture capture** and richer classroom interactions for students, outside of textbooks.
5. **Ease of Use**: technology should remain transparent allowing for staff to concentrate on teaching.
6. **Fibre infrastructure** to support up to 4K resolution signals throughout the theatres.
7. Creation of **digitised individual room booking**, wayfinding and information displays, complete with centralised management platforms.
8. **Simplification of M&E** – fire alarm, lighting and blind controls to sit on AVoIP control network.
9. **Self-reliance**: greater in-housing of AV operations to reduce time and costs.
10. **BYOD**: The varying technical prowess makes sense to inject flexibility for users to integrate their own devices as much as possible.
11. **Flexible and scalable**: the infrastructure in spaces designed for teaching/live events had to be flexible to host a wide-range of event/teaching formats.

INFRASTRUCTURE

✓ **Two Harvard-style Lecture Theatres** with identical specifications and capacity.
✓ **Two multi-modal, divisible Executive Education learning suites**, and Two non-divisible learning suites with the same specifications.
✓ **Three Executive Education Break-out spaces** with video conferencing and huddle facilities.
✓ **Two divisible dining spaces** with independent voice reinforcement and assisted hearing support. The two rooms can be joined to form a single contiguous audio space as required.
✓ **Compact meeting rooms**: small meeting/huddle spaces for up to 6 people
✓ **Medium size meeting & video conferencing room**, seating up to 14 people
✓ **Digital Information Screens**: 4K LED screens located throughout the building, which display information for staff, students and visitors.
✓ **Room Booking screens** flush-mounted by each door.
**Projection**

- 2x ceiling mounted EPSON LASER WUXGA 3LCD (1920 x 1200) projectors.
- 4:3, 16:9, and 16:10 input aspect ratios are supported. When the source offers a non-widescreen format, content is projected centrally within the widescreen area maintaining the original aspect ratio.
- Lumen output sufficient tested to ensure clear, readable, images from all seating positions within the room, within the normal operational range of the installed lighting system.
- Inputs other than the projector native resolution are scaled to the projector native resolution within the AV system
- A single interactive PC monitor fitted to the furniture (full HD, or native projector resolution).
- Within LT4 2x Panasonic Full HD PTZ cameras for a software codec of the installed PC, to capture the entire teaching area or a single presenter, or the audience as required.
- 1x Samsung fixed HD dome IP camera, offering a fixed view of the room for remote monitoring of the space.

**Lecture Capture**

- 2x Panasonic Full HD PTZ cameras for use with the Video Conference system, capture the entire teaching area or a single presenter, or the audience as required.
- The rear camera is mounted within the acoustic raft, while the front camera within the timber panelling at the front of the room.
- 2x fixed camera locations supply the video into the Video/Audio mixing control room [LT4]. These are located at either side of the space at the rear. They support HD-SDI and Fibre camera feed, and XLR and IP Talkback to the camera operator.
Audio

- Main program sound through Crestron ceiling speakers installed within the specific ceiling acoustic raft spaces. Multichannel sound is down mixed to mono as required to provide uniform coverage.

- Sound reinforcement through QSC SPA4-60 Amplifier.

- The system is designed to take input from any connected device within the space.

- 2x Shure Gooseneck Microphone and 4x Digital wireless microphones (2 x lapel, 2 x handheld).

- 4x Additional wired desktop Microphones and associated inputs presented as XLR connectors located in floor boxes at the front of Room for use in panel discussions. Phantom power is also available as required.

- 1x Balanced audio input presented as an XLR input onto the Furniture supplied.

- Each input has a dedicated processing channel for the control of audio levels and echo cancellation.

- Ampetronic digital hearing loop provides uniform coverage to the normal seating area within the room. Its input is a mix of the available audio.

Video Conferencing

- 1x Polycom RealPresence Full HD Video Conference with suitable cabling and camera for the provision of a software codec on the installed PC.

- Input sources within the space made available as Media Inputs for inclusion within a Video Conference in S.O.LT5.
In plain speak, we are an international supplier of integrated audio-visual systems, environments, and communications technology. We design, integrate, install and maintain robust AV systems and environments.

But ‘how’ we do it isn’t quite so plain.

Our roots go back to 1954 when Roy Snelling started his business selling and servicing Television and Radio sets in the early days of commercial broadcasts.

As more and more Television and Radio sets found a place in living rooms, Roy witnessed a major transformation – an entirely new medium for people to interact, engage and consume information. The same purpose for which we continue to design and build Audio Visual systems and environments.

We have come a long way.

“Snellings” quickly grew into a household name with Roy’s steadfast commitment to an unmatched retail experience – ‘customer first’ – from the moment they walk in the door to a lifelong relationship.

As we grew and evolved, we nurtured this belief in our internal culture – “customer first”, as well as our design/engineering philosophy – “Audio Visual Excellence. Operational Simplicity”.

Spot an opportunity. Respond to Change.

Technology will evolve. New platforms will emerge, and your needs will transform. Our culture allows us the flexibility to adapt and respond – to keep pace with transformation and change in our industry; to ensure our advice always keeps you ahead of the curve, and your competition.

We deliver all aspects of audio visual integration from design to the supply, installation and on-going maintenance - all backed by a service ethic, which continues to carry the Snelling signature of quality. Based in London and Norwich, we have maintained our portfolio of major clients and diverse projects across corporate, higher education, public sector, defence and aerospace, retail, medical and healthcare, leisure and hospitality, museums and attractions, and niche specifications.