



Case Study

Horsforth School invest in a cutting edge display

Client: Horsforth School & Sixth Form

Technology Partners: Computeam & Visualization

Project Date: Summer 2022



Computeam were the successful tenderer for the EdTech solutions for the new sixth form facility at Horsforth School, a large high school in Leeds. The project which was being run and managed by the education consultancy, Moxton Education.

As well as providing all network, infrastructure, and classroom audio-visual solutions, part of the scope of the works included the design, supply, and installation of a display solution for the multi-use atrium space within the building.

Dr. Paul Bell, the principal at the school, wanted the sixth form block to be the best in the area and envisaged the space being used for lunches, lectures, performing arts, and film nights. The room was also being installed with retractable seating.

The Challenge

The space was quite challenging for a display and audio solution: a two-storey open area with a gallery around it leading to the classrooms, lots of natural light with no blinds, and acoustically problematic with a very high ceiling. With the dimensions and properties involved, the projection area needed to be very large, approximately 4m x 3m.

The Solution

The Computeam lead on this element of the project, Cris Cadby (CCO), decided to engage their long-term specialist audio-visual integration partners, Visualization, to assist with the specification and design process.

Working together, we produced detailed and costed options for the school to consider. This included laser projection, LCD panels, an DVLED video wall with full room control, a presentation area, and a full audio system—including microphones and multiple speakers.

The budget for each of the options put forward ranged from £15k up to £75K, so the school needed to consider multiple factors during the decision-making process.

The large budget range reflected the functionality of each solution—and, as requested by the school's EdTech consultants on this project, Computeam produced various return on investment/total cost of ownership models to aid in the decision-making process.

In addition, Computeam and Visualization arranged a visit to their customer experience showroom in Manchester, where the client was able to see the physical differences between the solutions. After very careful consideration, the client decided to proceed with the MacroPix DVLED video wall.

The Result

Computeam produced a comprehensive AutoCAD design, and after assessing and deliberating the proposal, the school proceeded with the MacroPix DVLED video wall with full surround sound at 4.877m x 2.743m wide. This was considered the best option due to its longevity, modularity, full HD resolution image, brightness, and clarity under high ambient light conditions.

For the audio requirements of the project, a sound reinforcement system was designed to provide media playback for content displayed on LED screens, as well as presentation speech.

Elements of this include a Powersoft Quattrocanali 1204 (4-channel) Audio Amplifier to drive four separate speakers (two larger speakers at the front of the hall and two smaller for reinforcement at the rear). A Symetrix Radius NX 12x8 handled all digital signal processing for the system, allowing for the mixing of microphone signals, implementation of external sources when required, and management of all routing, equalisation, and limiting of the system.

A simple SY Electronics multi-button keypad control system was also specified, enabling the user to select sources and adjust the audio level in the room. The 27u rack system was specified to house the hardware required to deliver the solution. This included the LED driver, wireless microphones, network switch, audio amplifier, and loudspeakers.

It was vital for the school to compare energy uses versus lifetime in the consultation stages. Although it was more expensive for the initial setup costs with the DVLED solution, it will save money in the long run and gives a much higher quality audio-visual experience. The cutting-edge facility will also support the school in generating revenue from outside conferencing and events. Strong project management and coordination between Computeam, Visualization, Moxton Education, and the main contractor Morgan Sindall, were fundamental to the project's success.

Client Comment

"We're aiming for these fantastic new facilities to support large lecture hall delivery, and at the same time, give that really high-quality audio-visual experience for larger events—hopefully to expand our lettings and to use it as a conferencing facility. All schools need to generate income at the moment.

It's really important that this space is multi-use, so we need to use it for lecture hall delivery. It will also allow us to be in a situation where we have these very special events where we get to get everybody up from the local community, and hopefully, form those special relationships and links.

Students have been very excited about it. You can see from the quality of the screen, the really quite detailed diagrams on it, and it's got as good, if not better, resolution as the large screens we have in the classroom."

Dr. Paul Bell, headteacher, Horsforth School

Computeam Comment

"I was delighted to be engaged in this project from the outset. Having worked in the EdTech sector for over 20 years, I was very excited to work with such a forward-thinking school who were willing and open to look at a cutting-edge technological solution to fulfill their needs.

It was clear to me that engaging early with our specialist integration partners, Visualization, was key to the success of this project. Not only do they bring all the technical expertise, their account managers also assisted hugely in the sales cycle and enabled the all-important user experience visit to the showrooms—which really helped our client reach their decision.

The system is one the school should rightly be proud of, and we really look forward to hearing how they use the space over the years."

Cris Cadby, Chief Commercial Officer

Visualization Comment

"Working with Computeam to deliver a collaborative teaching and social experience to The Horsforth School was an exciting and unique project for Visualization. It is rare to see such a large-scale leading LED video wall technology in an education environment, and we embraced the opportunity to work together to specify, design, and transform this facility."

Chris Brittan, Business Development Director, Visualization