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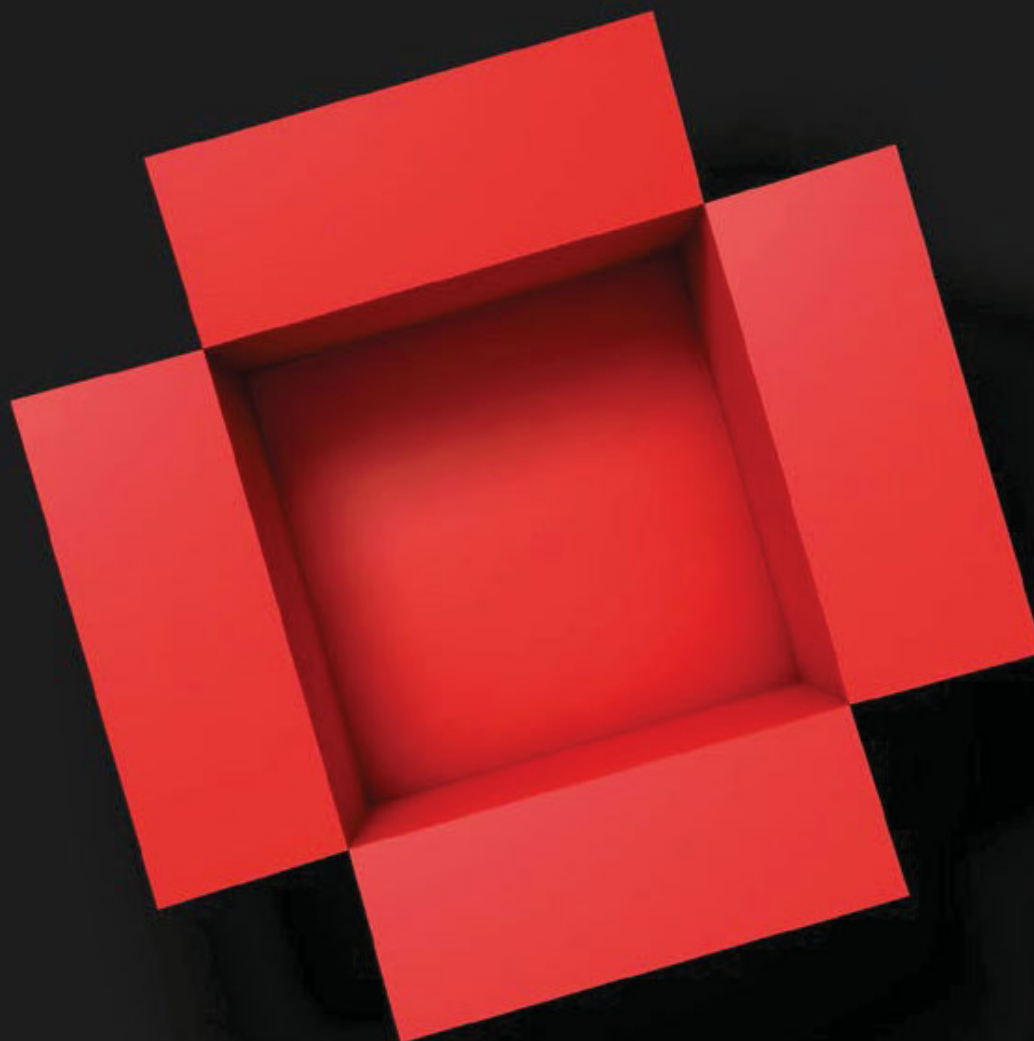
A comprehensive roundup of vox pops and panel debates filmed at ISE 2020

Inavation Awards

Your guide to all the winners and finalists crowned at the 2020 Amsterdam event

Case Studies

Three award winning projects demonstrate integration excellence



WORKS OUT OF THE BOX

Does prioritising ease of use stifle innovation?

Inavation Awards

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A COMPREHENSIVE GUIDE
TO ALL WINNERS AND FINALISTS



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Project Category Winners

Our 12 winning projects came from 10 countries and represent the best examples of AV integration seen across the globe in the last year. Dubai and Istanbul airports both featured as did a new room in the UN Office in Geneva and a 5D dome cinema of staggering proportions.

Control Room

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Winner: Aesthetix Technologies - Dubai Airport AOCC, UAE

Judging Notes: This entry clearly outlined tangible benefits to Dubai Airport's operations staff as well as passengers travelling through the transport hub as a result of the five videowall control room installation (the largest wall contains 60 NEC displays) in a 10,000 sq ft facility. Technology was selected to provide more flexibility, greater insight and higher-quality images than were previously available. Videowall layout and content can be quickly rearranged to suit current needs and maintenance access was carefully considered in the construction of the display walls. Aesthetix also had to navigate working within limited hours in a high security area.

Finalists: AV Media - Integrated Security Center, Czech Republic • Critical Room Solutions - Sydney Trains ROC, Australia • Electrosonic - Repsol Sinopec Resources, UK • Polymedia - Department of Emergency Situations of Almaty, Kazakhstan

Corporate

Sponsored by: **Unilumin**



Winner: Snelling Business Systems - Abcam Global HQ, UK

Judging Notes: Once again corporate facility was one of the toughest categories and judges deliberated long and hard on the winner. Snelling inched ahead of the close field with an immaculately presented and detailed description of a complex technology installation at scale that promoted easy collaboration, intelligent building operation and a fantastic example of networked AV systems built on Crestron NVX and QSC QSys. The advanced smart building incorporates a wide range of meeting rooms, conference rooms, boardrooms, informal spaces, hotdesk areas and soundproofed meeting rooms that allow easy connection to colleagues around the world via Skype.

Finalists: 3P Technologies - Generali Tower, Italy • AV Media - Deloitte, Czech Republic • AVMI - Project Millennium, UK • Display Systems - Boston Consulting Oslo Office, Norway • HMPL Consulting & Office 2000 - S&P Global, India • macom & Gleich - Accenture Campus Kronberg, Germany • Polymedia - Sberbank, Russia • Sigma AVIT Technology Solutions - Project Mobius, India • Smart Business - Coca Cola Office, Spain

Education

Sponsored by: **AV BEYOND THE BOX**



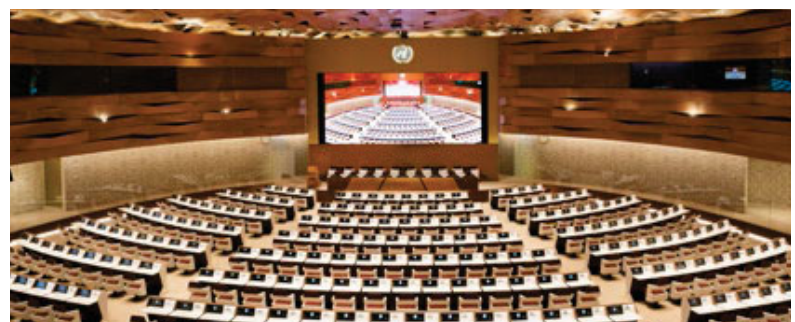
Winner: Polymedia - Engineering and Technology School #777, Russia

Judging Notes: This was an inventive and fun example of how AV technologies can be used to inspire and teach young people. Thanks to Polymedia's efforts the students at this St Petersburg school engage with engineering and technology subjects in unique ways. The astronomy classroom includes dome projection to create a planetarium, the biology classroom uses holographic models for demonstrations, five mathematics classrooms have large-scale interactive space for collaboration. This is all in addition to digital signage and navigation systems; a 450-seat assembly hall with sound and lighting systems, LED screens and panoramic projection; video production suite; and multimedia library. (More on page 67).

Finalists: Audio-Video Corporation - Magic Studios at Rochester Institute of Technology, USA • Hmpartner & BFE Studio und Medien Systeme - Hochschule Düsseldorf, Germany • Kinly - University of Northampton's Waterside Campus, UK • Partnership Education - Woodmansterne School, UK • Pro AV Solutions - The Sphere - Queensland University of Technology, Australia • Pure Audio Visual & University of Bedfordshire - STEM Building, UK • Recursive & Feltech - Institute of Physics, UK • Seal Telecom - Inspir - Education and Research Institute, Brazil • Visavri - Lower Mountjoy Teaching and Learning Centre, Durham University, UK

Government/Public Sector

Sponsored by: **DATAPATH**
EXCELLENCE BY DESIGN



Winner: Media Vision - Room XIX at The United Nations Office at Geneva, Switzerland

Judging Notes: A truly deserving winner, Media Vision handled this vast installation at a highly prestigious venue with ingenuity and technical skill. Collaboration with the architect to achieve the desired aesthetic and with manufacturers to deliver customised products is testament to MediaVision's strength in working closely with partners. The vast project - this is the largest hall for plenary assemblies at the United Nations Office at Geneva in Switzerland - was completed in just 10 months. The 800-seat capacity conferencing hall is fronted by a 45 sq m 4K LED video wall. Four channels of zero latency HD video are distributed to all 320 delegate seats with 12-in interactive displays.

Finalists: APG Technology - City of St. Petersburg Police Department Headquarters, USA • Polymedia - The Office of the Prime Minister of the Republic of Kazakhstan, Kazakhstan • Projection Nouvelle - CIGG, Switzerland • TEECOM & Rosendin Electric - San Francisco Moscone Convention Centre Expansion, USA

Project Category Winners

Healthcare

Sponsored by: 



Winner: Jones AV - New Papworth Hospital, UK

Judging Notes: This is an astonishing fifth win in six years for Jones AV in the healthcare category and in 2020 Jones AV left the judges with no choice. In a strong field the integrator rose to the top with this Smart Theatre installation that marks the first large scale 4K integrated theatre suite for the NHS. It solved a lot of issues including equipment downtime, concerns regarding confidentiality and GDPR in image storage and limited visibility for the surgical team. Simple operation via intuitive user interfaces, videoconferencing capabilities and greater analytics were just a few of the benefits recorded. (More on page 61).

Finalists: Avensys - Elekta - Executive Briefing Centre, UK • OM Interactive - Mobii Interactive System for the Fremantle Trust, UK • Projection Nouvelle - La Source, Institut et Haute Ecole de la Santé, Switzerland

Hospitality

Sponsored by: 



Winner: ALA Equipment Company - Parklane Hotel Luxury Collection Resort & Spa, Limassol, Cyprus

Judging Notes: In only the second year of the hospitality category this award boasts one of the strongest fields of 2020. After long deliberation the eventual winner saw off competition with a project where colossal scale was matched with no-expense-spared luxury. ALA approached the project with dedication, partnership and even built a software platform to handle a seemingly unmanageable number of technologies residing on the vast network. To offer an idea of scale the project covers 100,000 sq m of seafront land and boasts extensive banqueting and conference facilities, five restaurants, two bars, a spa and gym, 34 swimming pools, a play area for children and nearly 300 luxury rooms, suites and bungalows.

Finalists: Advanced LED Displays - Agua Caliente Casinos, USA • National Technology Associates - KAOS Nightclub at Palms Casino Resort, USA • Smartcomm - The Stratford Hotel, UK • tennagels Medientechnik - Spectrum of the Seas - Main Dining Room, Germany • Vanti & AVN Solutions - The Lodge, UK • Vega Global - Rosewood Hotel, Hong Kong • Qubix Technologies - Mayfair Lakeside Resort, India

House of Worship

Sponsored by: 



Winner: Stage Audio Works - Rivers Church Kyalami, South Africa

Judging Notes: Stage Audio Works delivered AV systems for this South African church that didn't compromise on quality or effect but were conscious of a limited budget funded by congregation donations. Where possible equipment was repurposed so the limited budget could be allocated where it was most needed. The project had some complex networking demands despite a tight lid being kept on cost. It incorporated 110 Dante endpoints, an expansive QSys installation and was delivered in a tight timescale. Care was taken to make sure the system could be managed by non-technical operators, an essential requirement in this sector.

Finalists: ACG and Martin Professional Middle East - Sheikh Zayed Grand Mosque Plaza Entrance Domes, UAE • Advantex - Djamaa el Djazaïr mosque, Algeria • Edigma - Interpretive Center of Baroque, Portugal

Leisure and Entertainment

Sponsored by: 



Winner: Kraftwerk Living Technologies - Magic Glaze 5D, China

Judging Notes: This 5D theatre project was truly unique, unleashing an arsenal of AV technologies to create staggering shows. In one of a number of feats, the projection mapping efforts delivered 2,214 square metres of projection surface on a 45 m dome. The theatre represents the largest project in Kraftwerk LT's company history. The integrator was responsible for the technical design, planning, delivery of goods, AV integration as well as programming and commissioning – including the 2D and 3D screens, the projection and audio system, 800 SFX Motion Seats, show control as well as the water and compressed air system, show lighting and special effects. (More on page 70).

Finalists: C2 Arctechology - Paradise City, Korea • Kraftwerk Living Technologies - Magic Glaze 5D, China • Neolight Design and Martin Professional Middle East - Bluewaters Island, Dubai, UAE • Pave System - Livewire, Singapore • Pioneer Group - Video Display System at Emirates Old Trafford, UK • Prismview - Chase Center - Golden State Warriors, USA • Stouenborg - Scandic Falconer Center, Denmark

Live Event

Sponsored by: **RGBlink™**



Winner: Alabama / Dushow - Fete Des Vignerons 2019, Switzerland

Judging Notes: An event three years in the making, Fete Des Vignerons delivered a visual and sonic spectacle that featured an 800 square metre LED floor (of 3,132 panels of Absen LED floor displays) and eight PA towers, each equipped with 7.5 tons of audio equipment. The event is only held every 20 years and in 2019 a 20,000-seat arena was constructed to host more than 5,500 volunteer performers and 900 singers and musicians every day for a month. The US\$100 million production took a 200-strong team to create.

Finalists: ART Polymedia - Presentation of the TNT TV Channel New Season, Russia
• AV Media Events - eventu, Czech Republic • AXIS ThreeDee Studios - Adiyogi Divya Darshanam, India • PDR China - 2019 FIBA Basketball World Cup Opening Ceremony, China • The Projection Studio - Northern Lights, UK

Retail

Sponsored by: **Absen**



Winner: Vichai Trading (1983) - The Prelude, One Bangkok, Thailand

Judging Notes: Vichai really put on a show with this retail project. Projection mapping, high end visuals and powerful audio combine to help sell the One Bangkok project. The Prelude show suite to sell the ambitious multiuse destination was split into four areas. In each one, AV technologies were used to engage, entertain and inform perspective clients. Guests are greeted with immersive projection that gives way to reveal a model of One Bangkok. Projection mapping and LED are also harnessed to explain more about the location of the development.

Finalists: 3P Technologies - Packable Cube Led Kleppierre, Italy • AMP Capital - 'The Timepiece', Australia • Necsum part of Trison - Entertainment & Experience Resort Lagoh, Spain • Snelling Business Systems - Samsung KX, UK • Pioneer Group - Selfridges New Order Digital Signage Project, UK • RIWA - IKEA retail store in Moscow, Russia • RMG Networks - Kennedy Space Center - Interactive Space Shop, USA

Transport

Sponsored by: **RIEDEL**



Winner: Astel LED - Istanbul Airport, Turkey

Judging Notes: This installation at the new Istanbul airport has enormous scale, complexity and quality. Highlights include more than 1,000 square metres of LED in creative formats throughout the transportation hub. At the heart of terminal, is the newly constructed 53,000 sq m, US\$250m Unifree duty-free area. LED screens include two 120sqm ceiling-mounted video screens and a 300m-long flowing, curved façade, while 240 LCD screens have been deployed within the stores for signage applications and wayfinding kiosks.

Finalists: Broadcast Professional - Changi Experience Studio, Singapore • EAS - Jewel, Singapore • Lanit-Integration LLC and United 3D Labs - MCD Information Center, Russia

Visitor Attraction

Sponsored by: **DIGITAL PROJECTION**



Winner: Electronics & Engineering - The Bicentennial Experience, Singapore

Judging Notes: This installation broke with convention to tell the story of Singapore in an engaging way. E&E got creative and playful with its use of technology for an experience that gives visitors an outing to remember. The visitor journey is spread across five "acts", each telling a different story. Technology creates an immersive experience including 360-degree projection, soundscapes and lots of LED. Unique effects such as "reverse rainfall" were created. Equipment was sourced to be durable with around 50 shows running non-stop each day.

Finalists: Ata Tech - Naturalis Biodiversity Centre, The Netherlands • Audio Technology S.A.E - 6th October Panorama Museum, Egypt • CROC - Alexander Solzhenitsyn House of Russia Abroad, Russia • Electrosonic - International Spy Museum, USA • Kraftwerk Living Technologies - experimenta Science Dome, Germany • Holovis - Royal Liver Building 360, UK • Projekt Multimedia - The Underground Town of "Osówka", Poland • Sarner International - Room on the Broom - A Magical Journey, UK • Simworx - Immersive Superflume - Trans Studio Ciburur, Indonesia

Smart Systems Award

Sponsored by: **Integrated Systems Europe**

Winner: Vanti & AVN Solutions - The Lodge, UK

Judging Notes: All project finalists were eligible for the Smart Systems Award.

The award recognises an integrator's role in contributing to the rise of smart buildings. Judges were looking for evidence of the design and deployment of intelligent building management and control systems. No finalist matched Vanti and AVN Solution's efforts when it came to applying smart systems at The Lodge. Their expertise delivered building management and control that intelligently provides guests with a tailored and comfortable experience, cleverly supports the staff that manage the facility and provides a powerful insight into technology for effective maintenance and troubleshooting.





The Russian city of Saint Petersburg is steeped in historical and cultural importance, but the city also has had a strong industrial significance too. Keen to foster the next generation of engineers, the Committee for Education of Saint Petersburg approved the creation of the new engineering and technology school #777. Awash with AV technology #777 is a unique project, its purpose is to generate students' interest in new technologies, help them choose a future profession, and demonstrate which professions will be in demand tomorrow.

Polymedia was the integrator tasked with creating an innovative educational environment, and it chose a range of multimedia systems, some conventional, some not-so, in a variety of different spaces. Polymedia designed and installed

AV for an astronomy classroom that features its own planetarium, and a biology classroom with holographic technology. Polymedia was also responsible for five mathematics classrooms, each with a large-scale interactive space for collaborative work, recreation areas with several multi-screen digital signage installations, an assembly hall for 450 people with an immersive AV installation, an in-house video production studio and a multimedia library.

From the very beginning, the client brief was to create an innovative educational environment, and for the students to develop scientific and technical competencies in the field of technology. The size of the task ahead of Polymedia was vast, six months were allotted for the planning with approximately three months given for the installation, which is not long

considering it's a new build project which will house 2,500 students.

One particular standout of the project is the astronomy classroom which features a sky full of stars thanks to a panoramic dome screen, driven by six Panasonic PT-EZ590E 5,400 lumens projectors. Image blending is managed by Immersive Display Pro software. The panoramic spherical screen is mounted to the ceiling of the classroom, and the screen is a specially designed 6-metre diameter structure with a height of 1.5 metres. The classroom also includes a wall-mounted AV Stumpfl Decoframe 4000x1500mm projection screen. The image is fed by two UST Casio XJ-UT351W projectors, again blended by Immersive Display Pro. The audio for the astronomy classroom is based on Extron SM3 speakers, an MPA 152 Plus

ENGINEERING THE FUTURE

The winner of this year's Education Project of the Year at the 2020 Inavation Awards is no ordinary school, far from it. **Paul Milligan** explores the stunning #777 in Saint Petersburg.



amplifier and is controlled via an Extron IPCP Pro250 processor.

The biology classroom features 18 NettleDesk holographic systems installed on individual students' tables with specifically developed learning material. The holographic effect is created via a combination of a 3D visualisation system based on the alternate frame sequencing of shutter glasses and a system for automated tracking of practice computer models. The automated tracking system uses high speed cameras installed directly on a monitor and active tags attached to glasses. Automated tracking system tracks the location of glasses with tags and the computer model on the screen is adjusted in real-time based on the position of the head that is wearing the glasses. In other words, the computer model readjusts itself based on the angle from which the user is looking. Such technology allows a student to look at an object from different angles and provides access to dimension and intuitive visualisation, unavailable while using classical 3D technologies. You don't see too many schools fitted with holographic technology, but it was chosen for a specific reason, many of the biological processes taught are at times impossible to observe in real life.

Five mathematics classrooms are equipped with systems for collaborative group work. ScriptoriUM systems help to put lessons on paper, on a PC or on a common interactive surface. The system includes a 5400x1275mm surface covered with a (invisible

to the human eye) microcode that forms a coordinate grid.

The image on the surface is formed by three Casio XJ-UT351W projectors. Miniature HD cameras integrated in a marker read the coordinate grid microcode and transmit the information about the position of the marker to a computer via Bluetooth.

In the lobby areas a Panasonic PT-JX200FWE projector and Brightsign LS423 player are used to animate an image of a robot projected on a wall at the entrance for primary school students. A videowall of 11 Iiyama displays (controlled by Brightsign players) fitted at diagonal angles is used to demonstrate the works of students in the Digital Design field. The lobby hall on the second floor features a large information stand consisting of two functional parts. The upper part hosts 3520x1650 mm PolyLED screen with a pixel pitch of 2.5mm. It displays information about the school and is controlled by a Brightsign XT1143 player. The lower part of the booth includes five Flame 55UNX-500 displays. The displays are installed in a portrait mode and equipped with infrared ZaagTech frames with protector glass. Each panel is connected to a Brightsign HD1023 player, and can work both in a videowall mode displaying information or individually, in an interactive mode, providing access to class schedules and the school website.

The Assembly hall, which seats 450 people, is another 'non-standard' install. Projectors here do not play the main role of a

display system but are there to create atmosphere in the hall. AV in the Assembly hall was chosen because of its flexibility, so the school could hold events in different formats. The Assembly hall includes a 6700x3800mm PolyLED videowall positioned centrally, featuring 5mm pixel pitch tiles. Two LED side screens are mounted each side of the stage, and are 2300x2300mm in size, with a pixel pitch of 3mm. A panoramic interior projection system consists of four Panasonic PTRW930LWE projectors mounted to the ceiling and projecting the image in pairs to the side walls of the hall. The image is formed by a video server and controlled by Dataton Watchout 6.

Audio is based on the Yamaha equipment, with mics from Beyerdynamic. The optimal sound level in various hall zones is achieved with the help of linear arrays mounted on the sides of the stage in the hall and two subwoofers on the stage. The stage features four stage monitors. A video recording system includes Blackmagic ATEM Television Studio Pro HD video mixer, one fixed Datavideo PTC-150 PTZ camera, three points to connect cameras from the video production studio selection and an Epiphan Pearl recording device.

Reaction to #777 has been understandably upbeat, with Alexander Beglov, the governor of Saint Petersburg saying after his visit, "I am sure that future Nobel laureates will study in this school."

Kit List

Audio	Casio XJ-UT351W UST projectors
Beyerdynamic TG V35D S microphones	Datapath VisionRGB-EIS capture cards
Extron SM 3 loudspeakers, MPA 152 Plus amplifiers	Dataton Watchout 6 software
Yamaha IS1118 subwoofer, XP7000 amplifier, IF2115 loudspeakers, TF5 mixing console	Extron IPCP Pro 250 control processor, DTP HDMI 4K 230 Rx DTP receivers
Video	Nettle 65-in hologram tables
AV Stumpfl Decoframe projection screens	Panasonic PT-EZ590E, PT-JPC200WE, PT-RW930LWE projectors
Blackmagic ATEM Pro HD live production switchers	PolyLED 2.5mm, 3mm, 5mm LED tiles
BrightSign HD1023, LS423, XT1143 digital signage players	Wize wall mounts

I am sure that future Nobel laureates will study in this school.

Alexander Beglov, governor of Saint Petersburg