Lavazza Nuvola Corporate Campus Italy

Case Study

Lightware Visual Engineering

Market	Country
Corporate	Italy

Lightware Equipment Used in Project
25G HYBRID
HDMI-OPT TX100
MODEX
MX8X8 HDMI-Pro
MX-FR17 modular matrix

A family story when technology embraces a city

The name of Lavazza's new headquarters is Nuvola, the Italian word for "cloud". It occupies several buildings in Turin's city centre, all designed to integrate technology and culture. The A/V matrix switchers are by Lightware, and are configured to support any type of signal.

The name "Nuvola" was chosen for Lavazza's redevelopment of the former ENEL power plant in Turin's Aurora district. The project, designed by the architectural firm of Cino Zucchi Architetti, set out to design Lavazza's new headquarters, creating a new layout for the city block. The entire campus covers a total surface area of 18,500 square metres.

The new Lavazza head office is integrated with industrial buildings of historical interest: there are event spaces, conference rooms, restaurants, a design school, and an interactive museum to celebrate the brand's history. The project is also designed with the city in mind and it has completely redeveloped a neighbourhood in the heart of Turin: when construction work is complete, the city's residents will have new pedestrianized areas, a 3,500 square metre garden plaza, and an underground car park.

The Nuvola project was designed by the architectural firm of Cino Zucchi Architetti, and the interiors were designed by architect Michele Aruanno.

From mission to design

"*The decision to redevelop a former industrial site for Lavazza's new headquarters came from the Lavazza family's stated desire to invest in Turin through a process oriented to dialogue with the city's residents and to the company's environmental sustainability values*" explains architect Paolo Corradini, Director of the New Lavazza Headquarters Project Commission Office.

Paolo Corradini
Director of the New
Lavazza Headquarters
Project Commission Office

"With the design of its new headquarters, Lavazza wanted to take advantage of a major opportunity: to create a social innovation to integrate people and technology in a common working vision"

"*An opportunity like this has enabled us to explore new possibilities for innovation, to integrate technology and human resources. We took advantage of the transfer of employees to the new site as an opportunity to renovate the interiors –* designed by architect Michele Aruanno *– and how they are used in terms of available technology. We went from a traditional, classic model of walled-off offices to open spaces, conceived and designed to be spaces for sharing. Our idea was to create shared values, a relational approach to facilitate interaction not just with colleagues and with the internal administration, but also with the various different external facilities. We chose a technology that could enable better interconnection, to connect the head office with the other buildings and enable effective communication. All this has a transversal impact on productivity and on the relational component – which has now become an essential factor. For example, think of how technology can stimulate ongoing discussion and keeping up to date. The project has also been designed to reconsider an area that is often neglected these days: employee comfort. We know that health and happiness in the workplace has to begin by considering the wellbeing of the people who spend time there, by providing technology and complementary spaces like gyms, restaurants and break areas that make them happier. This was the guiding principle that the Lavazza family wanted to embody in the project: to take the person, and the entire city, and return them to centre stage*".

From mission to design

"*We started working with Lavazza several years ago*" comments Gabriele Magagna, owner of Acuson and responsible for the integration of the A/V systems. "*One of the first things we did for them was to reconfigure their Innovation Centre, a three-storey building used for research and development, opposite the factory in the town of Settimo Torinese. Since then we have worked increasingly closely with Lavazza. Later, we offered Lavazza comprehensive consultancy services*

"The advantage of a single control room with a Lightware matrix router is the flexibility of acting on a series of multiple requirements. In essence, it means setting up a system that can easily respond to any requirement"

Gabriele Magagna
Acuson

for activities to do with multimedia systems. After we were awarded the contract for the Nuvola site, we were involved at all stages of the technology installation plan. With the building in the new campus that was going to be used for office space – six floors accommodating around 600 people – we recommended which devices should be integrated based on the available spaces, with the goal of achieving the best possible result in terms of quality. There are forty meeting rooms in all, in sizes ranging from small (for 4 persons), medium (for 10) and large (for 20). To meet the design brief of shared spaces, we set up a number of open-space informal meeting areas, in total 34 quick meeting nooks and 8 meeting lounges. Panasonic laser projectors are used in two key locations: the board room – complete with videoconferencing facilities – for thirty people, and the meeting room for the group's shareholders. Digital signage devices have been installed in many places: in common spaces like the entrance atrium and in non-work areas like the gym, the cafeteria, shops and break areas, for an overall total of 120 displays. There are also 19 interactive 46" display stands using capacitive touch technology, as well as a room booking system. All the rooms have Wi-Fi and a content sharing system: there are around 120 devices in all, with access points for signal distribution, HDMI ports and USB power outlets. The crucial thing is that all this equipment is connected to a single central control room on the ground floor, managed by the Lightware 25G 80x80 matrix router, from where staff can monitor and manage all A/V content programming".

All rooms have Wi-Fi and a content sharing system, with HDMI connectivity and USB power outlets.

System Block Diagram
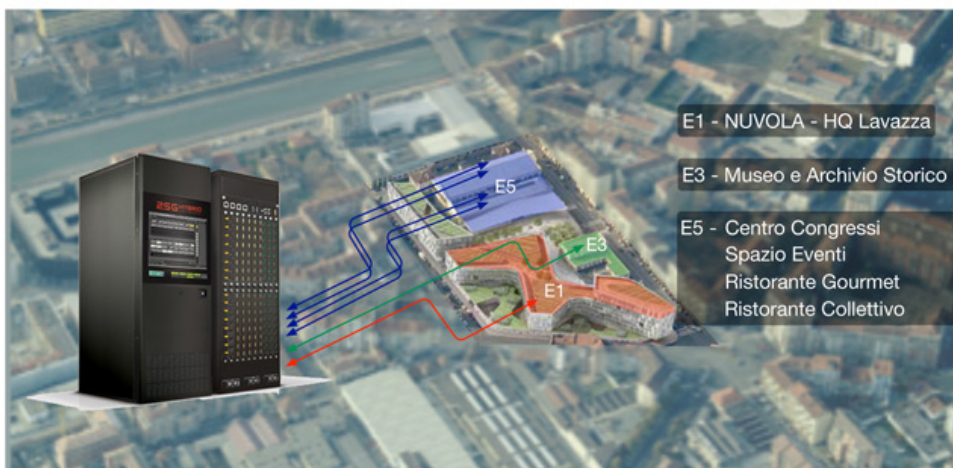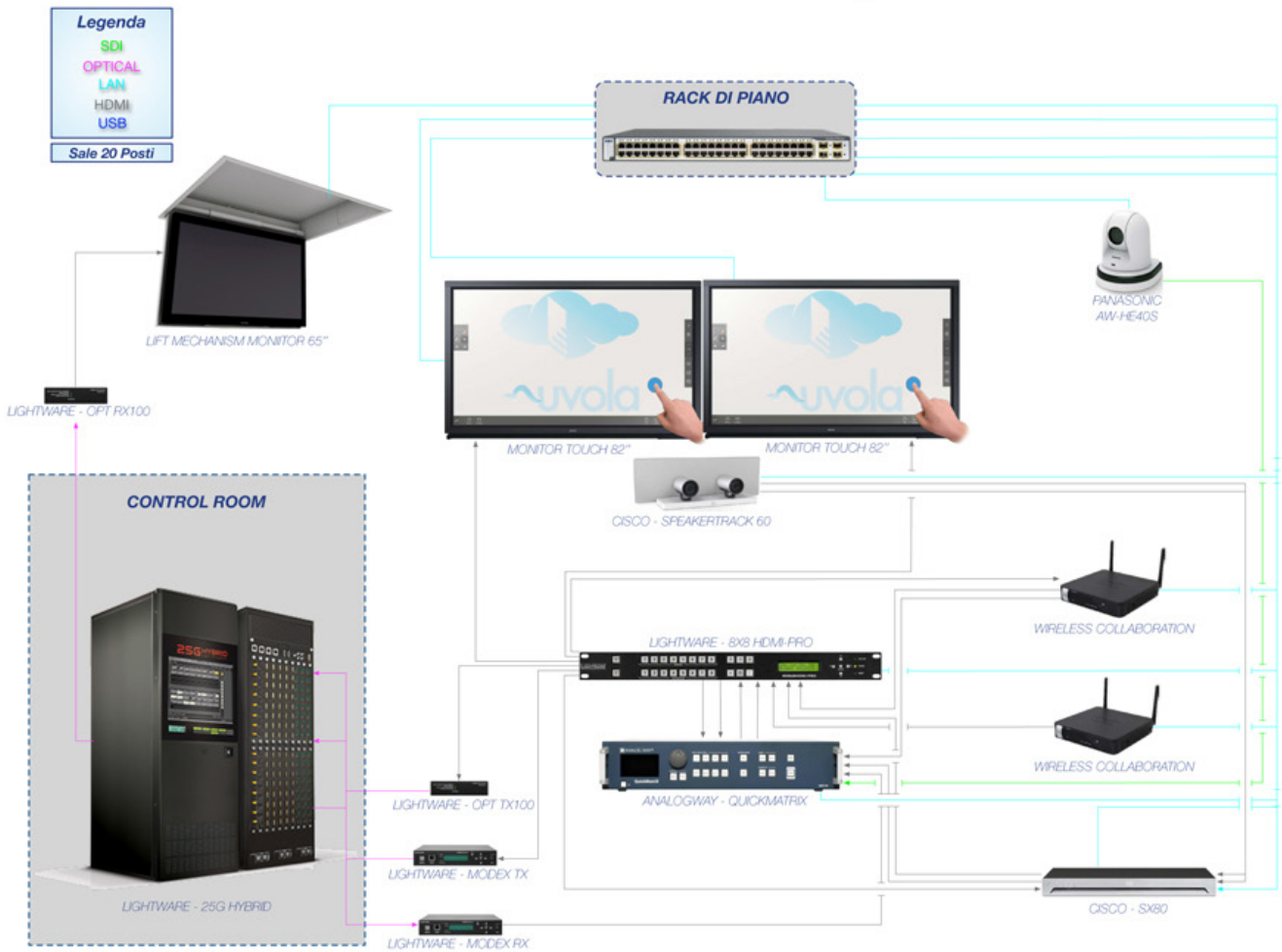
Lightware 80x80 Matrix Router

The central control room is the true beating heart of the entire campus. It contains a Lightware 25G 80x80 matrix router, configured with modules and cards in groups of 8 for input and output signals with HDMI, audio and fibre optic connectivity.

With this device it is possible to fully control the other two buildings that make up Lavazza's new campus as well, thanks to the cabling in multimodal optic fibre throughout. The configuration ensures excellent performance for exchanging A/V data, even for high-resolution signals. Adaptability is one of its strong points: in a system as extensive and complex as the one installed at Lavazza's new headquarters, it's essential to be able to send any type of signal on any physical medium.

The multi-level and multi-room architecture allows independent routing of all types of signal. Every video port can handle audio embedding and de-embedding, and the separate routing of control signals. In short, this ensures exceptional flexibility of use, and that's exactly what we needed. In the design phase, this configuration was conceived in order to build a flexible system that could be adapted to the yet-to-be-defined needs of six hundred people.

That meant being able to manage multiple buildings with different requirements, in order to provide immediate and prompt responses.

In addition to this main matrix switcher, we also used a Lightware MX-Fr 17x17 matrix router. This way, each room is independent and also connected to the central control room – whether copper or optic fibre is used as the physical medium. The system is certified for Cat 6A and for mono- and multimodal fibre optic.

There are 34 quick meeting nooks in the shared spaces.

The network topology

The relations that make up the network topology of the entire system are very extensive. To accurately describe it in short, we can say that the basements hold two rooms that route all service provider signals or MPLS signals to manage connectivity with outgoing and incoming flows.

From the switch rooms[CR1], the signal is transmitted to two redundant star points, which bring the connectivity distribution to the offices, with a dedicated data centre.

This network transfers the data to the individual floors, each one subdivided into wings A and B. Each wing has its own technical support room, dimensioned to serve that floor, which routes the distribution switches.

Top-class service and technical assistance

In assessing its choice of products to adopt, and particularly for the Lightware matrix switcher, Lavazza placed the emphasis first and foremost on quality and reliability, and factored in the right level of redundancy to handle any situation.

This is why the entire installation, with such an extensive and complex system, has been covered by an after-sales technical assistance service to match. It's important to ensure the fastest possible intervention to prevent any emerging critical situation.

The maintenance contract signed with Acuson is for 3 years and offers on-site technical support within 2 hours, 7 days a week, 24 hours a day, with local and remote assistance, in order to respond rapidly to a series of multiple and heterogeneous requests.

There are around forty meeting rooms, ranging from small (for 4 persons), medium (for 10) and arge (for 20).

Source:
http://www.sistemi-integrati.net/articoli/una-storia-di-famiglia--quando-la-tecnologia-abbraccia-una-citt_ID_175_IDa_2957.htm