

Press Release

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Sunrise UPC is helping to shape the future of the construction and real estate industry

- The Swiss construction and real estate industry is undergoing a massive surge in digitalization with an increasing focus on «Smart Buildings».
- Mixed-reality applications increase productivity in facility management. The Swiss startup Builcon is setting new standards using augmented reality (AR), Building Information Modeling (BIM) and 5G.
- Sunrise UPC offers a high-performance 5G network for digitalization and IoT connectivity using CAT-M1 or NarrowBand IoT.
- Joint Innovation Days: interactive webinar series for the construction and real estate industry

Digitalization in the construction and real estate industry is progressing at a rapid pace. From planning, to the construction phase, right through to management – digital innovation spans the entire building lifecycle and is generating more and more additional benefits for owners and inhabitants alike. «Telecommunications form an important component of smart buildings. Sunrise UPC is making digital innovations possible and creating the basis for digital construction and networked building management,» says Robert Wigger, Chief Business Officer of Sunrise UPC.

BIM (Building Information Modeling) as the central database of a building

Next-generation buildings, so-called smart buildings, are building on BIM. Not only the construction plans, but also any fitted sensors, used materials and their prices are seamlessly documented digitally. If this information is available to all parties involved in the construction and management of the building in real time, this opens up a range of novel applications. Examples include augmented reality applications, making pipes and sensors in the building visible during maintenance work, or surveys with drones, data-driven construction logistics and quality assurance with image analysis. «We are seeing a clear trend – more and more practical mixed-reality applications are now emerging. 5G has sparked off a veritable AR boom. The many innovations from startups like Builcon are showing us that the potential of 5G is increasingly being utilized in everyday life,» says Robert Wigger.

Digital helper for facility management

One such AR application can now be experienced in the <u>Sunrise UPC 5G Joint Innovation Center</u>. The «transparent building» innovation was developed by <u>Builcon</u>, a startup from St. Gallen that specializes in networked buildings.



A combination of Building Information Modeling (BIM) data and mixed-reality glasses that display interactive 3D projections in the immediate environment will simplify facility management considerably. With the glasses, the person using them can essentially see through walls, enabling them to detect where pipes, cable routes and ducts run. They can do so because the BIM model of the building can be accessed from a server in real time thanks to 5G.

The glasses use AR to import the sensor data into the building facility manager's field of vision in real time. To name an example, they can see the location of a defective heating valve in the ceiling and open the nearest ceiling panel to access the source of the problem without much prior knowledge. Without this technology, the facility manager would first have to pull out the physical plans or manually attempt to search for the source of the fault, ceiling tile by ceiling tile.

After the defect has been localized directly using mixed-reality glasses, the facility manager can then contact the manufacturer of the product directly. The expert can see what the facility manager sees in a video call and adopt the same perspective on the source of the problem. The specialist can give the in-house technician instructions on how to fix the problem.

Using augmented reality, the source of the fault can be identified quickly and specifically without any specialist knowledge. Thanks to remote assistance, there is no need to call upon additional experts.

Smart buildings need connectivity that grow with them

An excellent degree of connectivity is a prerequisite for innovative applications like the ones developed by Builcon. The multiple award-winning Sunrise UPC mobile network offers a wide range of connection technologies – from 2G, 3G, 4G and 5G up to NarrowBand IoT and Cat-M1 – to always ensure the best network for IoT projects. Thanks to Indoor Coverage as a Service from Sunrise UPC (ICaaS), reduced transmission and capacity bottlenecks inside buildings can also be avoided. The service guarantees 3G, 4G and 5G mobile reception, even inside buildings.

Joint Innovation Days – webinar series from May 27, 2021, 09:00

The Swiss construction and real estate industry is undergoing a massive surge in digitalization with an increasing focus on «Smart Buildings». Via an interactive innovation series for the construction and real estate industry, the Joint Innovation Sessions present practical examples of digital construction, exclusive insights into the latest 5G and IoT applications, new approaches to sustainable building networking, tangible evidence from successful projects and exciting insights from industry experts.

Click here to go to the program and sign up for the webinar series for free

More information at https://www.sunrise.ch/en/business/innovation/builcon-facility-management-ar.html

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