

Retrofit Project for the Digital Optimization of Retail Properties

Case Study: SNIPES - Hohe Strasse, Cologne

Leasable area: 600 m² | Year built: 1952 | Building type: Retail

Hohe Strasse ranks among Germany's busiest shopping streets, strategically located in Cologne's historic Old Town. The property is owned by Aachener Grundvermögen, a real estate investment firm specializing in urban retail properties. Since each of its special purpose vehicles is certified at least under Article 8 of the EU Disclosure Regulation, Aachener Grundvermögen is committed to making sustainability transparent and measurable through systematic digitalization. The property at Hohe Strasse 100–102 serves as an exemplary case study, currently housing a retail location used by popular streetwear retailer SNIPES. Thanks to a digital retrofit implemented by aedifion and Al-powered optimization recommendations, the property now meets the highest standards in terms of transparency, energy efficiency, and occupant comfort.



Total transparency over the building's technical operations.



Automated utility meter readings and remote data access.



Improved occupant comfort, while achieving greater energy and cost efficiency.

Starting Situation and Objectives

The aim of the project was to implement suitable digital retrofitting measures to establish comprehensive transparency with respect to systems performance. The collected data serves as the foundation for continuously identifying savings opportunities and developing concrete recommended action for the building operator and the contracted service providers.

Project Implementation

- **1. Baseline Assessment:** Detailed inventory of the current level of TBE digitalization conducted by aedifion.
- **2. Customized Retrofit Roadmap:** Following minimally invasive retrofitting principles i.e. avoiding any structural modifications developed by aedifion.
- **3.** Implementation of Upgrade Measures: Coordinated by aedifion in partnership with LineMetrics, which provided the hardware infrastructure. Through this partnership, aedifion continuously receives operating data and uses it for ongoing optimization.

Measures

The digitalization project focused on the targeted **retro- fitting of sensors** for digital monitoring and analysis of all relevant setpoints and control parameters:

a) Surface-Mounted Temperature Sensors

Verification of heating limits, heating curves, and night-time temperature reductions.

b) Current Sensors

Transparent visualization of energy consumption and runtime monitoring of the ventilation and air-conditioning (VAC) system.

c) Supply and Return Air Temperature Sensors

Assessment of heat recovery and VAC system control.

d) Space Sensors

Monitoring of climate control and comfort levels in retail areas.

Conclusion and Outlook

Due to the digitization measures, all the consumption and comfort-related operating states within the building can now be digitally monitored, enabling targeted recommended action for the building operator. This approach serves as a pilot project for additional comparable retail properties in the owner's Cologne portfolio, including properties at Hohe Strasse 108–110 and Wörthstrasse 32.

Customer Feedback

"Soon, no building will operate without intelligent monitoring. Scalable, digital solutions are paving the way for truly innovative real estate management. The digital retrofit implementation by aedifion was executed in a structured, swift, and highly efficient manner from a single source – setting the standard for future properties in our portfolio."

Raymond Wollenberg

ESG Manager | AACHENER GRUNDVERMÖGEN