KÖLNER ZOO

CASE STUDY

Visitor management during COVID-19

HOW DIMEDIS AND XOVIS USE TECHNOLOGY TO ENSURE A SAFE AND ENJOYABLE VISIT

At Cologne Zoo, the Visitor Control (ViCo) system – developed by dimedis and powered by Xovis technology – is the latest attraction. It controls admission to multiple wildlife areas and protects the health of visitors and staff. With the help of the newly implemented system, the Cologne Zoo fulfilled the regulatory requirements regarding the maximum number of visitors in certain areas. By utilizing the highly precise data gathered by Xovis 3D sensors, the digital admission control system ViCo completely controls access, automatically and reliably.

ABOUT DIMEDIS

dimedis stands for digital media distribution. Founded in Cologne in 1996, the software company develops web-based software solutions. Its main focus is on digital signage, digital wayfinding, and visitor and entrance management for trade fairs and events. These sectors are covered by these main products: kompas digital signage, kompas wayfinding, ViCo and FairMate.

CHALLENGE

Like most other places open to the public, the Cologne Zoo was faced with the challenge of fulfilling the regulatory requirements regarding the maximum number of visitors allowed at any point in time. Moreover, it was the zoo's clear aspiration to protect the health of their visitors and staff in the best way possible.

Manually counting the number of people entering and exiting the different animal houses and wildlife areas would require additional staff, leading to an increase in operating costs and posing an unnecessary risk to employee safety.

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SOLUTION

ViCo's automated control admission system, powered by Xovis technology, solves the problems associated with ensuring physical distancing and manual counting. By providing accurate real-time people counting data, ViCo empowers the Cologne Zoo to seamlessly manage admission. Depending on how many people are already in the building, a traffic light system informs the visitors whether they can enter or whether they must wait. When the maximum number of visitors has been reached, the traffic light changes from green to red. The zoo's staff can set the maximum permissible number of visitors via the ViCo service app and are able to manually intervene in the access control system at any time. Further expansion is planned with the installation of Xovis' waterproofed outdoor sensors at the Aquarium. Furthermore, all traffic lights will be equipped with loudspeakers to also acoustically keep the visitors up-to-date.

See the system in action at the zoo:
www.xovis.com/koelnerzoo

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Please contact us: **retail@xovis.com**

BENEFITS

Cologne Zoo installed the ViCo solution at three of their animal houses and can now fully control admission, automatically and reliably, in a cost-efficient manner. During these strange times, the solution supports the zoo in protecting the health of their visitors and staff.

The Cologne Zoo is entirely convinced that the newly integrated solution will prove its usefulness beyond the current pandemic. It allows the zoo to easily deduce how many visitors are present when and at which locations. This in turn lets visitors know where to go next.

"Beyond protecting the health of visitors and staff during these times, the implemented solution enables us to take targeted measures to better manage people flow and enhance the experiences at our Zoo."

Michael Wiese
Head of IT and Ticketing at Cologne Zoo

www.koelnerzoo.de

XOVIS

How does it work?

Xovis technology bridges the gap between conventional people counting and comprehensive in-store analytics. In times of a global pandemic, the 3D sensors become an elementary component in protecting the health of people on the move. Xovis provides a powerful tool for streamlining people flow in shared spaces, optimizing staff and infrastructure planning for businesses and ultimately increasing customer satisfaction and operational efficiency.

THE XOVIS PORTFOLIO

The Xovis PC-Series is the most complete portfolio of 3D sensors on the market; it masters people counting and people flow measurement challenges with Swiss precision, indoors and outdoors. Xovis 3D sensors have a wide angle of view that accommodates the architecture of any building. Mounted on the ceiling, one sensor covers up to 100 m2 or 1100 sq. ft and works from 2.2 m/7.5 ft all the way up to 20 m / 98 ft high. The unique multisensor technology allows the user to seamlessly cover large areas. All sensors run on Power over Ethernet (PoE), aka combining data and power in one cable, plus they have a mean time between failures (MTBF) of 25 years.

Xovis has developed AI extensions like Face Mask Detection, Gender Recognition, Staff Exclusion, Group Counting or View Direction to further enhance in-store analytics. The Xovis Cloud allows the user to flexibly manage all sensors, even activating AI extensions on demand. Xovis has supplementary hardware devices for in-store analytics in large areas with up to 200 sensors and software modules, like queue management and waiting times.

INTEGRATION MADE EASY

All Xovis sensors have an integrated setup wizard and a user-friendly WebGUI for an easy and fast initial setup. The sensor firmware enables the designation of up to ninety-nine counting lines and dwell zones per sensor as well as the setup of a multisensor with up to nine sensors to track object coordinates continuously through large areas. No additional hardware or software is required. Xovis 3D sensors can easily be integrated into an existing software environment and third-party applications via state-of-the-art APIs.

UNMATCHED ACCURACY

A cutting-edge firmware provides high-resolution 3D images with unrivaled precision, guaranteeing maximum insight. Individuals can be tracked through large areas without collecting personal data, ensuring people are recognized as distinct from one another even in densely populated areas.

Xovis 3D technology does not depend on signal-emitting devices and handles external influences such as fluctuating light and heat conditions without wavering from its task. A minimum light source of just 2 lux is required. The embedded data processing occurs in real time, providing actionable and swift information.

DATA PRIVACY & SECURITY

Data privacy with Xovis is a certainty. Image processing is performed on the sensor, so no images leave the sensor and data privacy is guaranteed. Only a data push of coordinates, representing a person, is sent out. The sensor provides a range of tools for data protection and secure network settings.

For more information about Xovis Retail:
www.xovis.com/retail

ABOUT XOVIS

Xovis is an international market leader for intelligent people flow solutions and meets challenges in retail, transportation, building management, at airports and public spaces. The insights gained from people flow measurements enable Xovis clients to improve the customer experience and their overall performance.

Founded in 2008, Xovis has evolved from a three-person start-up to a dynamic company with over 100 employees. Xovis is headquartered at the gates of Switzerland's capital and has branches in both USA and China.

XOVIS