



COMPANY NAME

MEC Center Management

XOVIS PARTNER

IMAS GmbH

LOCATION

Various

INDUSTRY

Retail

APPLICATION

People counting

CASE STUDY

Hotspot spotting in over 50 shoppingmalls around Germany

IMAS AND XOVIS JOIN FORCES TO IMPROVE STORE MANAGEMENT

CHALLENGE

In over 50 shopping malls Xovis gold partner IMAS faces the challenge of acquiring real-time counting values. The centre management needs real-time insights to measure how many people are accessing a centre through a specific entry. Also, the system must be able to classify children and adults. The data should provide insights into developments over time. The previous system failed to deliver these KPIs:

- How to cover larger entries to retrieve live data adequately?
- How to extract historical data to visualize these insights accordingly?
- How to mount the technology in a simple and economic way to avoid unnecessary and costly investments?

SOLUTION

The Xovis 3D technology is the most accurate counting solution in today's market. The coverage of larger entries or areas is guaranteed by connecting multiple devices. The stereo vision technology also allows to detect children separately. IMAS integrates the data into their dedicated platform to provide the centre management with comprehensive consulting. These insights provide decision makers with robust tools:

- Hot and cold spots
- Dwell time
- Data-backed pricing model based on customer frequencies
- Insights on the number of present children
- Planning tool for store layout changes

„The extraordinary service of IMAS is mentionable, as the response time is always outstandingly concise. In case of questions, support is immediately available at any time. The implementation was highly effective and completed quickly. Maintenance by remote is also a significant success factor and marks a big advantage in comparison to other systems.“

Dieter Henke,
Center Manager

BENEFITS

The simplicity and the accuracy of the Xovis 3D Sensors empowered IMAS to perform an extensive roll-out of the technology. Accurately counting footfall in unstructured and large areas economised the following aspects of the centre management:

- Optimized sensor positioning and coverage improving counting data by 28%
- Optimized product placement
- Improved resource planning for services such as child care
- Measurable success of advertising campaigns
- Hot spots can be identified and taken into account
- Comparison of rental prices; highly frequented areas yield higher revenues



CASE STUDY

How does it work?

Responding to the fast-growing demand for solutions that bridge the gap from conventional people counting to comprehensive in-store analytics, a growing number of retail experts measure KPIs such as footfall, dwell times and conversion rates with the Xovis 3D Sensors and software. Unlike the conventional people counting solutions, Xovis can connect numerous 3D sensors to deliver insights beyond the doorstep.

A BROAD PORTFOLIO

There is a broad portfolio of Xovis 3D Sensors with the widest viewing angle available on the market to count and track people anonymously. One sensor can be mounted on ceilings from 2.2 to 30 m (7.5 ft. to 65 ft.) and covers up to 100 m² (1100 sq.ft.) of tracking area.

„Xovis opens the door for in-store analytics that other technologies cannot deliver. The Xovis Multisensor combines many Xovis 3D Sensors to cover large areas. Analyses enabled by Xovis provide our customers with an essential competitive edge.“

Susanne Neumann,
Regional Director
IMAS

INTEGRATION MADE EASY

The user-friendly WebGUI guides through the simple first-time set-up or any reconfiguration at a later time. The sensor software (firmware) also enables the designation of 99 counting lines and dwell zones per sensor as well as the set-up of a Multi-sensor with up to 9 sensors to track people continuously through large areas. No additional hardware or software is required.

Count statistics, heat maps, and other basic tools come along with the sensor software. For further visualization and analysis, Xovis 3D Sensors can easily be integrated into an existing software environment and

third-party applications via XML-based interface and API. There are also additional, easy-to-integrate Xovis hardware devices with new software modules for applications such as queue and POS management in large, hectic areas with an unlimited number of sensors.

UNMATCHED ACCURACY

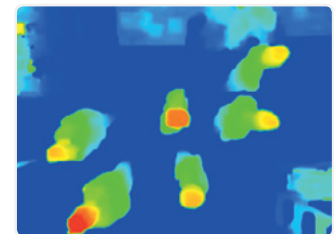
A high-resolution 3D image or stereo image of the covered/ recorded area is calculated on the sensor up to 30 times per second. Based on this, every person entering the covered area is counted and tracked anonymously. Persons are recognized individually even if they are next to each other. Counting Accuracy over 99% is guaranteed, i.e., 99% of the persons in the covered area are counted and tracked.

A FUTUREPROOF INVESTMENT

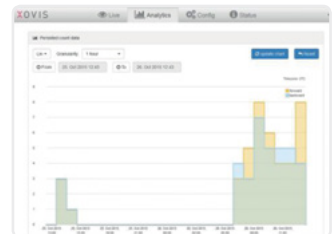
Power over Ethernet (PoE) to combine data connection with power in one cable and a Mean Time Between Failure (MTBF) of 25 years simplify installation and keep the total cost of operation low. Image processing occurs directly on the sensor. No video stream leaves the sensors and data privacy is guaranteed. The Xovis portfolio includes a model with wireless functionalities as an add-on, though the Xovis technology does not depend on signal-emitting devices and is highly robust against all kinds of external influences such as shadows, light changes, and heat emissions.



Xovis 3D Sensor (model PC2)



3D image computed by Xovis 3D Sensor indicating heights and distances by different colors



The sensor firmware features basic visualization/ analysis tools and can easily be integrated



IMAS software Xperio integrates the Xovis data

CASE STUDY

Technical Data

WORKING PRINCIPLE:	3D stereo vision / distance measurement
INSTALLATION ANGLE:	+/- 15° in x-axis +/- 5° in y-axis
OPERATION TEMPERATURE:	0°... 50 °C
WITH OUTDOOR HOUSING:	-20°... 50 °C
STORAGE TEMPERATURE:	-20° ... 70 °C
AIR HUMIDITY:	20 ... 80%
CONNECTION:	RJ-45 Ethernet
POWER SUPPLY:	PoE Class 0 / (IEEE 802.3af)
POWER CONSUMPTION:	< 5W
REQUIRED ILLUMINATION:	min. 2 lux
SIZE (LxWxH):	PC2/ PC2R/ PC2S: 13.0 x 9.4 x 3.0 cm PC3: 33.0 x 6.1 x 4.0 cm PC3-0: 38.5 x 9.0 x 8.6 cm
WEIGHT:	PC2: 350 g/ PC2R & PC2S: 250 g PC3: 600 g/ PC3-0: 1700 g
MOUNTING HEIGHT:	PC2/ PC2R/ PC2S: up to 6 m PC3/ PC3-0: up to 20 m

ABOUT XOVIS

With more than 60'000 Xovis 3D Sensors in the field, Swiss-based Xovis is the market leader in people flow monitoring in the airport and retail industry. More than 65 international airports and 150 system integrators in the retail industry count on the combination of Xovis 3D Sensors and software solutions to move people more smoothly through their facilities, optimize their resource planning and increase customer satisfaction as well as revenues. Founded in 2008, Xovis has evolved from a three-man start-up to a high-tech company with over 80 employees. Xovis is headquartered at the gates of the Swiss capital Bern. The US office is Boston, MA.

XOVIS

Contact us

Xovis AG · Industriestrasse 1 · CH-3052 Zollikofen
info@xovis.com · www.xovis.com · Phone +41 32 342 04 70

