



COMPANY NAME

Xovis

XOVIS PARTNER

SenSource

LOCATION

Florida

INDUSTRY

Worship Facilities

APPLICATION

Attendance Tracking

CASE STUDY

Attendance Tracking in Places of Worship

HOW SENSOURCE AND XOVIS COUNT ATTENDANCE IN WORSHIP FACILITIES

CHALLENGE

Traditionally, churches manually count attendants. Because these manual methods are inefficient and inaccurate, Xovis partner SenSource comes to the rescue. In order to collect data consistently and quickly SenSource supports Grace Family Church to address the following challenges:

- How to accurately count congested, high-volume attendance?
- How to prevent people who enter and re-enter the church from being counted multiple times?
- How to consistently manage all five campuses across Tampa?

SOLUTION

SenSource's automated attendance tracking system powered by Xovis technology solves the problems associated with manual counting. By providing accurate attendance data that is automatically collected, SenSource empowers Grace Family Church to measure the following KPIs :

- Consistently reliable attendance statistics
- Time savings from an automated collection system
- Make better use of volunteers' time to serve the church
- Privacy filters can disable the sensor's video feed

"It just makes sense to use an automated attendance collection system when you want to accurately count 500+ people each week."

Brendon Badway,
Account Manager, SenSource

BENEFITS

Grace Family Church installed a SenSource solution at each of their five campuses and now have a church-wide view of attendance. They can quickly make historical comparisons and comparisons between locations.

The information helps gauge the growth of each campus and guide where resources should be allocated. Grace Family Church was also able to free up time and create a more straightforward method for their staff to understand congregation size.

Read more here: <https://www.sensourceinc.com>



CASE STUDY

Reliable statistics at Places of Worship

Traditionally, churches manually count attendants. Some use an usher to hand count people as they enter the sanctuary, others take a photo during service and count or estimate the attendance. These manual methods are inefficient and inaccurate, especially for congregations exceeding a couple hundred attendants, sanctuaries with multiple entrances, and when people leave and re-enter and are counted multiple times. Grace Family Church in Tampa, Florida faced another issue with manual counting. They have five campuses across Tampa and it was difficult to collect data consistently at each and combine the data in a timely manner.

Brendon Badway further states; "It was a pleasure working with Grace Family Church and helping them obtain a complete picture of attendance amongst their five campuses."

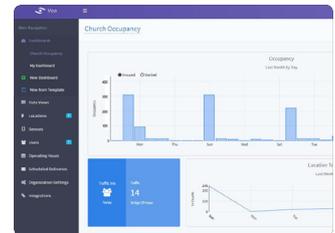
Information church directors need is available on-demand and ushers and volunteers can focus on serving the church as intended.

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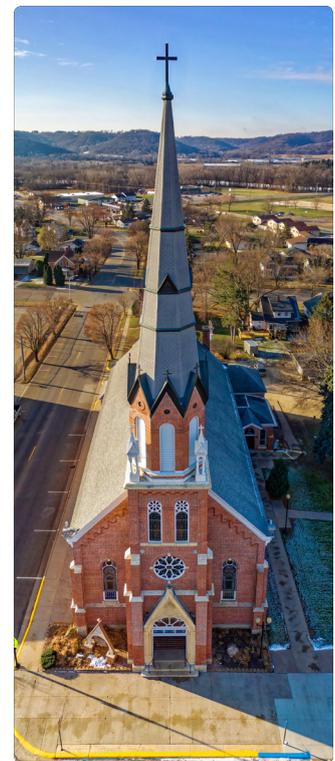
ONE SOLUTION FOR ALL CAMPUSES

SenSource's automated attendance tracking system powered by Xovis technology solves the problems associated with manual counting by providing accurate attendance data that is automatically collected in Ve Analytics Reporting tool. The infor-

mation church directors need is available on-demand and ushers and volunteers can focus on serving the church as intended. The information helps gauge the growth of each campus and guide where resources should be allocated. Even more than numbers, Grace Family Church was able to free up time and create a simpler method for their staff to understand congregation size. A key measurement to operating a church or other place of worship is knowing how many people attend a service. It's a baseline for measuring the size of the congregation as well as making operating decisions such as renovating the building or adding additional service times. The Xovis system prepares the ground for dialogue between these stakeholders.



Ve Analytics Reporting tool



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.

According to the study "Rise to Challenge – The Risks and Opportunities of Digitization for Airports," from Roland Berger, a five-minute delay for 25 percent of passengers at the security checkpoint could induce a drop in retail sales of 2 to 3 percent. People that wait more, spend less.

INTEGRATION MADE EASY

The userfriendly Web-GUI 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 Multisensor 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

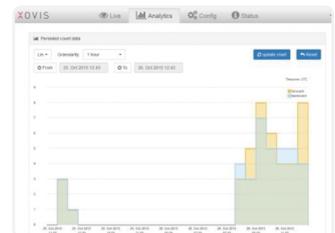
Power over Ethernet (PoE) to combine data connection with power in one cable and a Mean Time Between Failure (MTBF) of 25 years simplify installation and keep total cost of operation low. Image processing occurs directly on the sensor. No video stream leaves the sensors and, data privacy is guaranteed. 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.



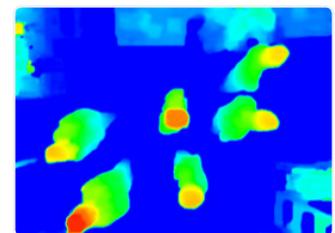
PC2R with WiFi-Module



PC3



Xovis 3D sensor and firmware can easily be integrated



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

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.