

Analytics services

Privacy preserving video cameras

The Challenge

The software industry has dominated the beginning of the 21st century in terms of market value. A key similarity between software companies is their data-driven business model. The collection and analysis of large amounts of data enable objective and rapid decision-making, which in turn leads to better business outcomes. Over the past years, other industries embrace the data-driven business methodology making the analysis of data a strategic priority. A pre-requisite for success is the availability of data. In terms of market value, image sensors have consistently retained the largest share among sensors thanks to the accurate insights image processing techniques can produce. Nevertheless, the camera's ubiquity raise legal and ethical concerns over privacy as most famously depicted in Europe and Switzerland's revise of the data protection laws, preventing the collection and analysis of any biometrical data in the future. As such, it seems that cameras and privacy are mutually exclusive – A theory Exantas is destined to falsify.

The Solution

Exantas offers a privacy preserving video analytics toolbox to collect and analyze video data while protecting consumers in their privacy. Beyond compliance with the European and Swiss data protection rules, our solution is the state of the art in privacy protection as a study of the University of St.Gallen shows. The solution consists of 4 building blocks.

- **Hardware camera with inbuilt privacy**
A camera with a physical privacy enhancement protects biometrical data before data collection sets the solution apart from competitors.
- **Novel detection algorithms**
A novel machine learning algorithm detects and differentiates between human and objects in the scene.
- **Integrated web application**
Simple, user friendly application showing users and exposed individuals a live feed of the camera's analytics to build trust.
- **Analytics Dashboard**
Monthly web reports highlighting key insights and recommendations to attain business goals.

Key Benefits

- Capturing new data points to derive fresh insights
- GDPR compliant analytics
- Savings related to process optimization
- Improved user experience enabled by novel technologies

References



University of St.Gallen

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Retail Industry Case Study

Exantas offers a modular and integrated end-to-end approach which starts with the installation of the cameras with built in software to detect human and objects in the room. The illustration below shows blue quadrats indicating humans in the store.



The detection of humans and objects close to shelves, labels the shelves as being used. Data such as the walking path, dwell time in front of the shelves, the gender and an estimation of the age group can be obtained among others.



On a monthly basis reports of shelves usage and privacy-preserving consumer analytics are available to the client.

