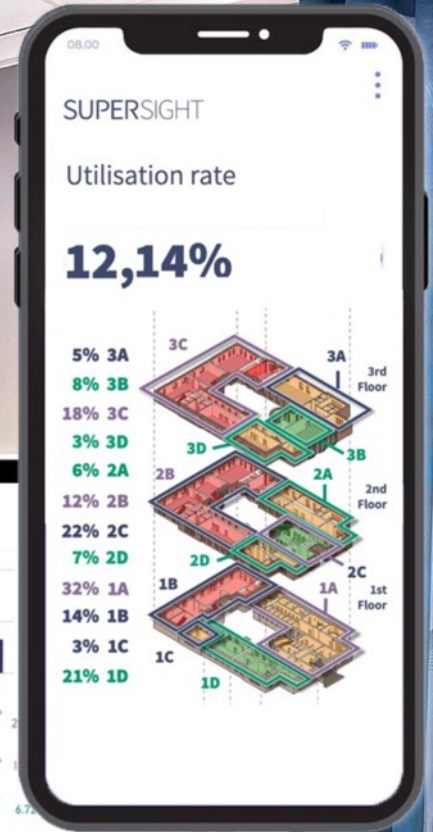


# SUPERSIGHT

THE WORLD'S MOST ACCURATE  
PEOPLE COUNTING  
Total privacy protection

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Analysis of the use of a building requires precision

# The world's most accurate

99% accuracy for people counting developed on the world's fifth fastest supercomputer in partnership with the world's leading research institutions.



UNIVERSITY OF OULU



LAPIN YLIOPISTO  
UNIVERSITY OF LAPLAND



“This cutting-edge automation is not only reshaping the built environment but also marking a significant milestone for AI in Europe.”

LUMI consortium, EuroHPC Joint Undertaking



**EuroHPC**  
Joint Undertaking

SUPERSIGHT

# Why using HPC like LUMI for making the AI model?

- 1. Large-Scale Data Processing:** Training complex AI models requires processing vast amounts of visual data. LUMI's parallel processing capabilities allow for the simultaneous handling of massive datasets, accelerating the training process.
- 2. Advanced Model Complexity:** LUMI is equipped with AMD Instinct MI250X GPUs that enables the development of highly sophisticated models, enhancing the model's ability to accurately identify and count people under varying conditions.
- 3. Rapid Iteration:** Supercomputers significantly reduce the time required for iterative testing and tuning of models. This is crucial in refining the accuracy to meet the 99% or higher target for real-world deployment.
- 4. Efficiency and Scalability:** LUMI can run multiple training processes simultaneously, ensuring that the final model is both optimized for performance and scalable to different environments.

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# The most precise solution on the market

During the day, people enter and leave a space several times, multiplying the calculation error. With a low accuracy, occupancy cannot be measured reliably



## Example for 9000 m<sup>2</sup> building

## Persons

Inbound and outbound traffic a day	2000
Actual average occupancy during the day	250
Calculation result with 95% accuracy	150-350
Calculation result with 99% accuracy	230-270

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# Superior accuracy with high security saves millions in buildings

The innovative technology we have developed transforms a smartphone into an easy-to-install smart sensor above a doorway. The solution has the highest cybersecurity and privacy protection on the market. Installation in 30 minutes with voice control by artificial intelligence.

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# Total privacy protection

We are the only counting service provider whose sensors are FIPS 140-2, 140-3 certified by the US government. Further also KATAKRI certified by the Finnish National Security Authority.

No personal data is processed or stored and therefore no personal register is created under the GDPR.

## SUPERSIGHT



Ministry for Foreign  
Affairs of Finland



# Case study: 1.4 MEUR savings

Our customer pays €2.7 million in rent each year for a 9 300 m<sup>2</sup> property. With our solution, they found out that the occupancy rate is only 30%. They increased occupancy to 80% and reduced the need for other rented space. This saved them €1.4 million per year.

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TURKU TECHNOLOGY PROPERTIES

PORVOO BORGÅ

SALON SEUDUN  
AMMATTIOPISTO



KAMK - University  
of Applied Sciences



COMPASS  
GROUP

PORT OF  
HELSINKI

Helsinki



UNIVERSITY OF HELSINKI



TURKU

LAU  
REA



LAPLAND  
SAFARIS

ÅLANDS  
Gymnasium



ESPOO  
ESBO





# Millions of EUR savings already for customers



“Now using Supersight can give us a competitive advantage. Later on, others will use them, making it necessary for us to do the same.”

Mikko Lehtinen, CEO, Turku Technology Properties



“Supersight data plays an important role in the port's long-term plans, including the development of better convoy solutions”

Leonard Sannemann, Passenger terminal supervisor at Port of Helsinki Ltd

“Supersight ensures 100% privacy and offers seamless people flow analytics in varied environments. ”

Eric Gargallo Serrano,  
Elisa Corporation Annual Report



“We use Supersight and point of sale data to optimize operations in campus restaurants. This reduces biowaste to meet CO2 emission targets ”

Andrew Rebeiro-Hargrave,  
Senior Researcher, University of Helsinki



## SUPERSIGHT

# Flexible counting also in open spaces

Equipment IP67 protected

The counting of the number of persons is done immediately on the mobile device installed for the count. The device identifies persons as objects and the AI model interprets the object's direction of travel as "in" or "out" and defines this as an event as the person walks across the virtual counting gate. The computing gate can be multimodal including n number of dimensions



**ESPOO  
ESBO**

The City of Espoo measures the occupancy rate of the swimming pool to analyse the efficiency of the sports facility in order to design more versatile and adaptable built environment.

**SUPERSIGHT**



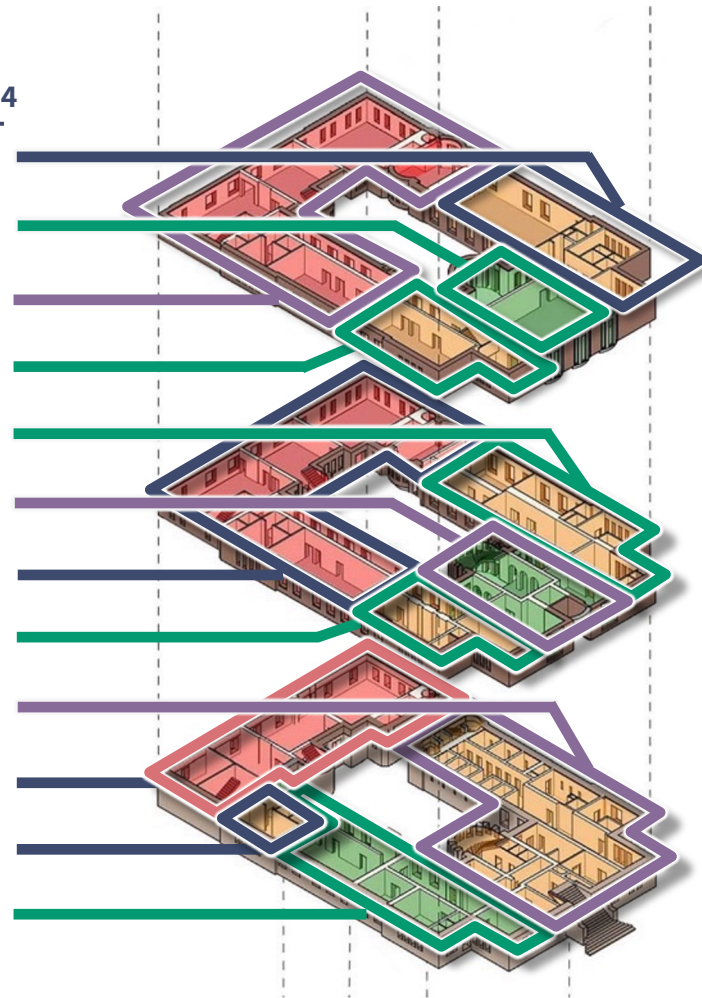
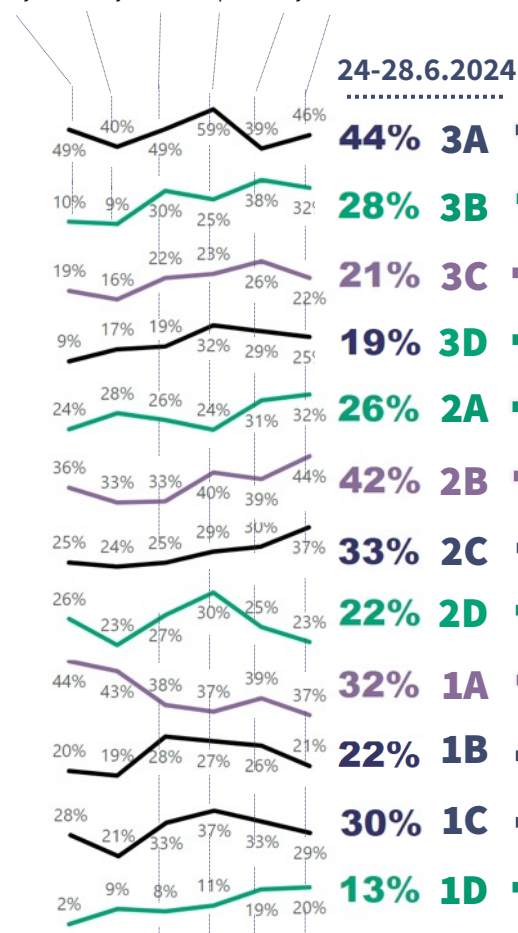


# Automated utilisation rate as a service

The number of persons in the area is calculated by subtracting the total number of persons leaving the area from the total number of persons entering the area. The utilisation rate is calculated as a percentage of the maximum capacity defined for the area. The utilisation rate takes into account the defined periods of days and times of day during which the number of persons in the premises is averaged, e.g. "weekdays 08:00 to 16:00". For the selected period, first the average of each hour is calculated and then the average of the hours over the period. We ensure the 24/7 automatic counting functionality with an accuracy of at least 98%.

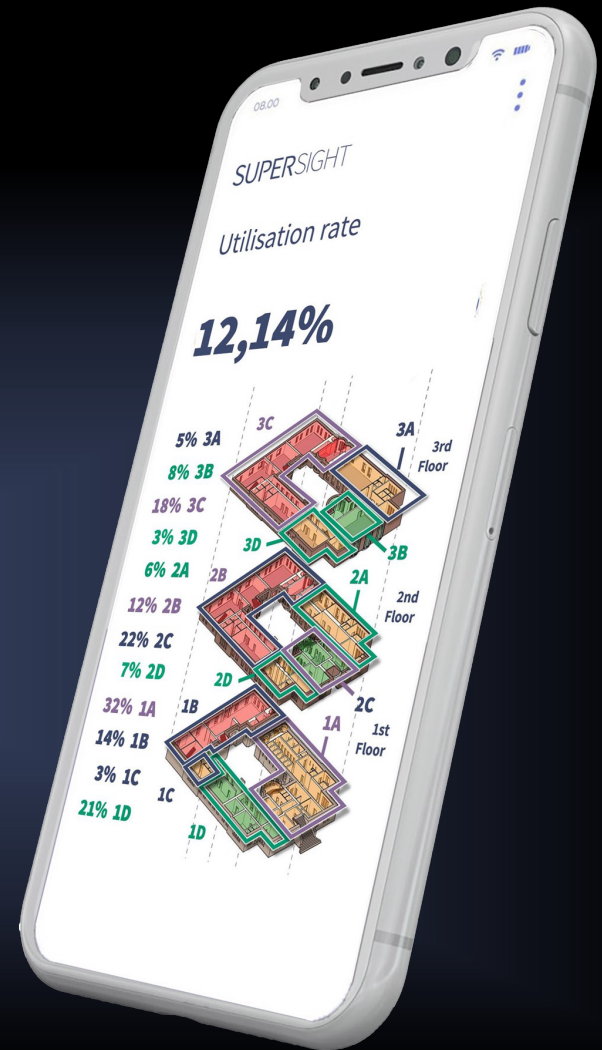
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January February March April May June



# View the utilisation rate in real time with the mobile app

Visualised in Microsoft Power BI for further analysis.  
Weekly executive summary of the reporting by email as a pdf report.



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# A revolutionary booking system that also reports actual usage

Users of the space can reserve their workstation before the start of the working day. Users can see in real time the number of available workstations on different floors and areas. The system guarantees complete privacy for all users and also allows them to monitor the utilisation rate of their workstations. No personal data is collected when users make a reservation or use a workstation.

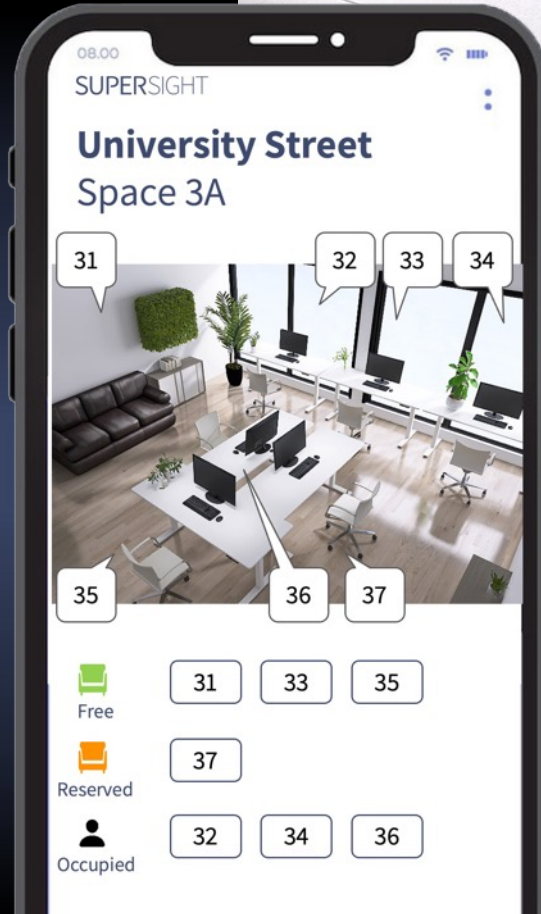
## No more no-show bookings

If the person making the reservation does not arrive at the workstation at the specified time, the workstation is automatically released for reservation.

## Book without booking!

The system will also automatically reserve a workstation if it does not have an existing reservation and is taken up.

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# Europe & US €1650 bn savings

Utilisation Rate optimisation in Education and Offices



Office space in Europe & US	7 232 000 000 m <sup>2</sup>
Educational space in Europe & US	5 407 000 000 m <sup>2</sup>
Utilisation rate*	31-36%
Potential savings a year	€1650 bn



# A rugged version for outdoor conditions

Mobile data connectivity of counting points allow easy mobility from one site to another



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# Create working zones

The solution provides real-time data via REST API to project management systems





THANK YOU!

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**SUPERSIGHT**  
supersight.eu



Elisa Corporation is our shareholder. Our innovations are the result of several years of research and product development at Elisa Corporation.