

Retail solution



JACK & JONES

TOPSHOP

TOPMAN

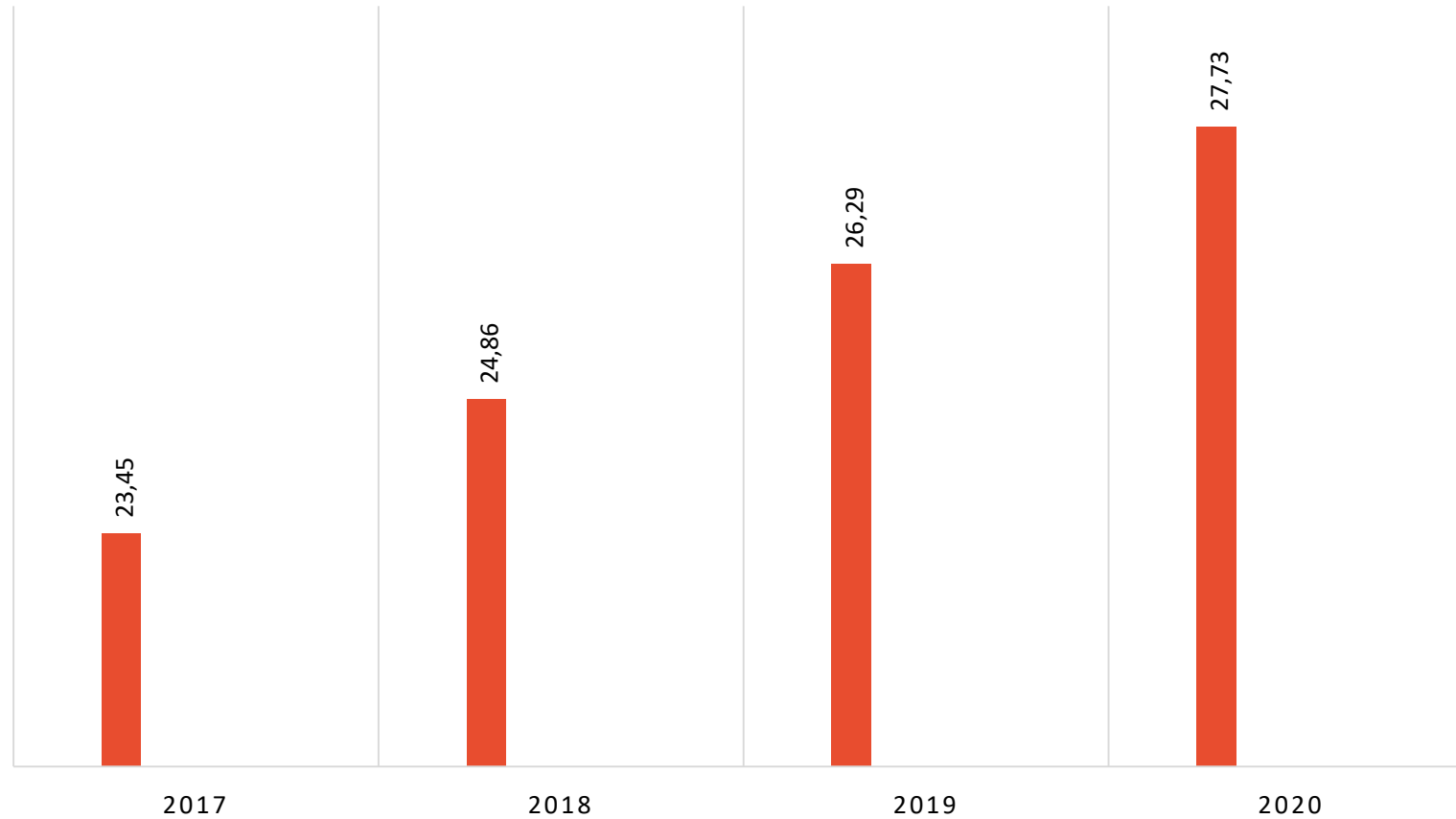
John Lewis

SEASONAL OFFERS
30% OFF
30% OFF
30% OFF



Total Retail Sales Worldwide

SALES IN TRILLION U.S. DOLLARS



Retail problems



Shoplifting



**Inefficient store
operation**



**Deterioration of
customer loyalty**



modules for retail



Tracking



Unique visitor counting



Shelf Fullness Check



Suspect Search



Heat Map



People Counting in Queue



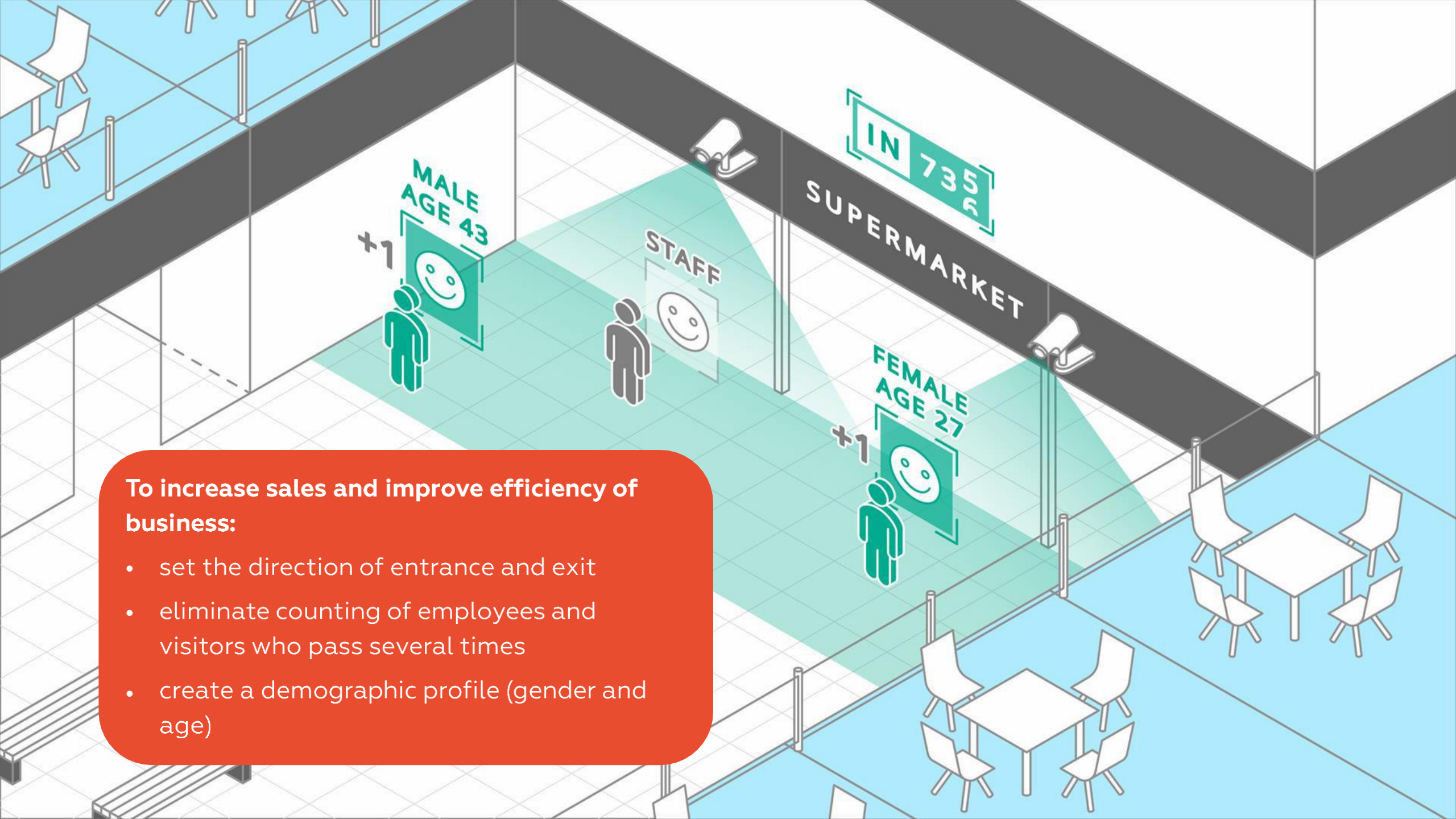
Face Recognition



Sabotage detection



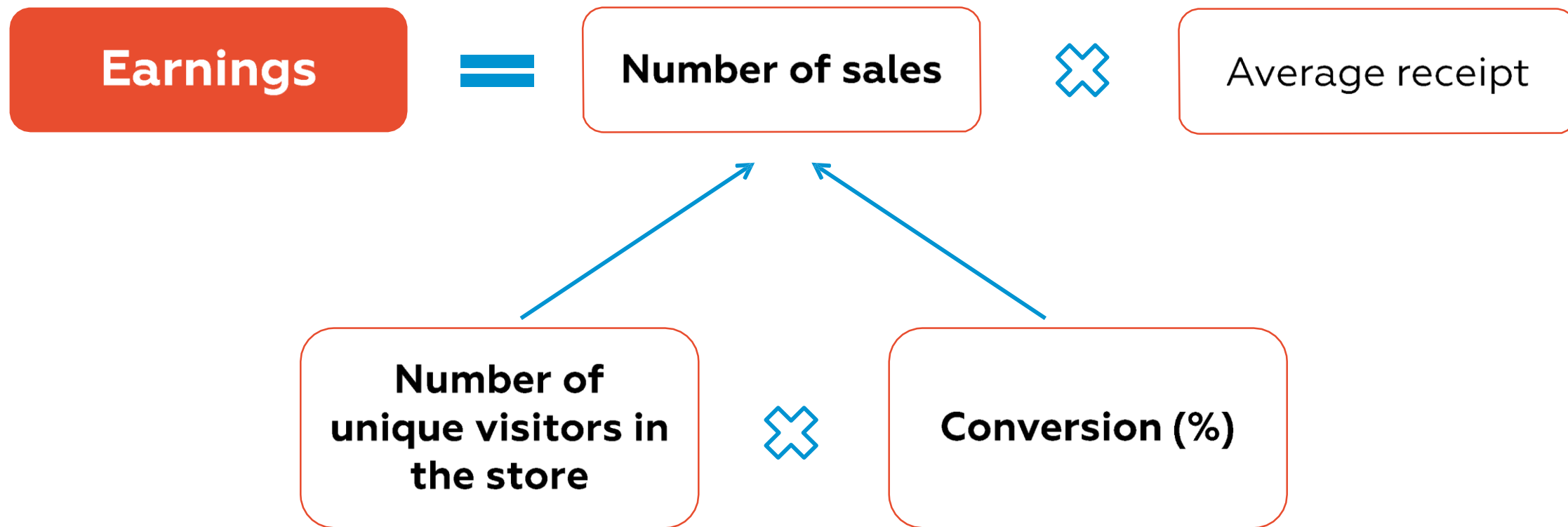
**Counting of visitors and calculation of
conversion using the Unique Visitor
Counting module**



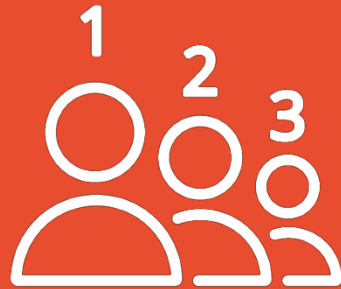
To increase sales and improve efficiency of business:

- set the direction of entrance and exit
- eliminate counting of employees and visitors who pass several times
- create a demographic profile (gender and age)

Earnings formula for the store



To work with conversion, you need to know the exact number of visitors that can be included in this formula.



**Increase of sales revenue with the help
of the Heat Map module**

Heat Map



Purpose

To increase the efficiency of the sales area

How it works

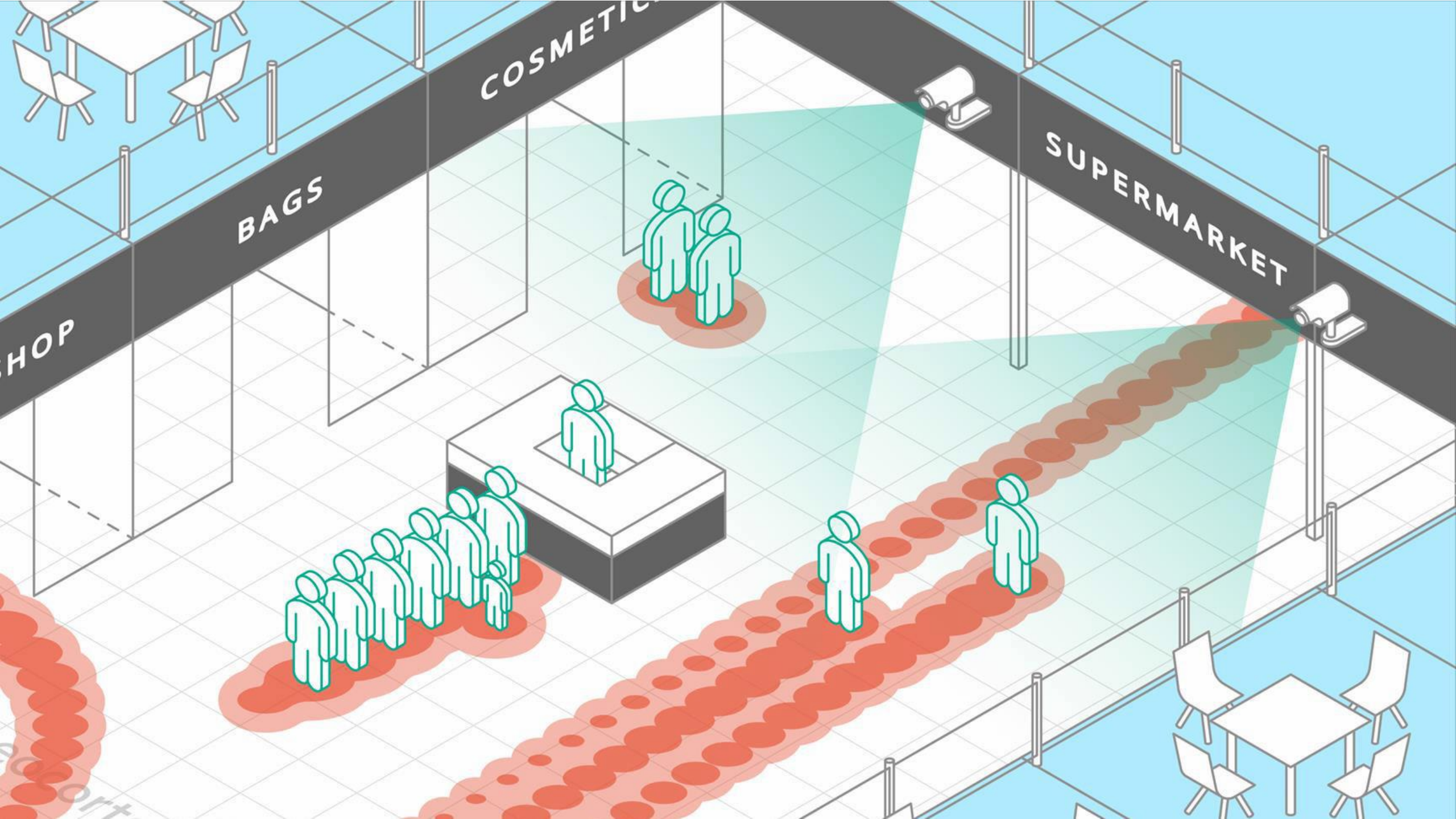
You can:

- ✓ superimpose a heat map on the image from the camera
- ✓ create a heat map on the facility layout
- ✓ make reports of traffic density analysis within the specified time intervals
- ✓ determine the most visited areas using visualization

Your benefits

This module will enable you to determine the busiest areas and optimize the display of goods in order to increase sales. The Heat Map module will allow you to:

- ✓ analyze customer behavior
- ✓ determine preferred areas of foot traffic
- ✓ optimize layout of goods or lease conditions



HOP

BAGS

COSMETIC

SUPERMARKET

soft

Deterioration of customer loyalty

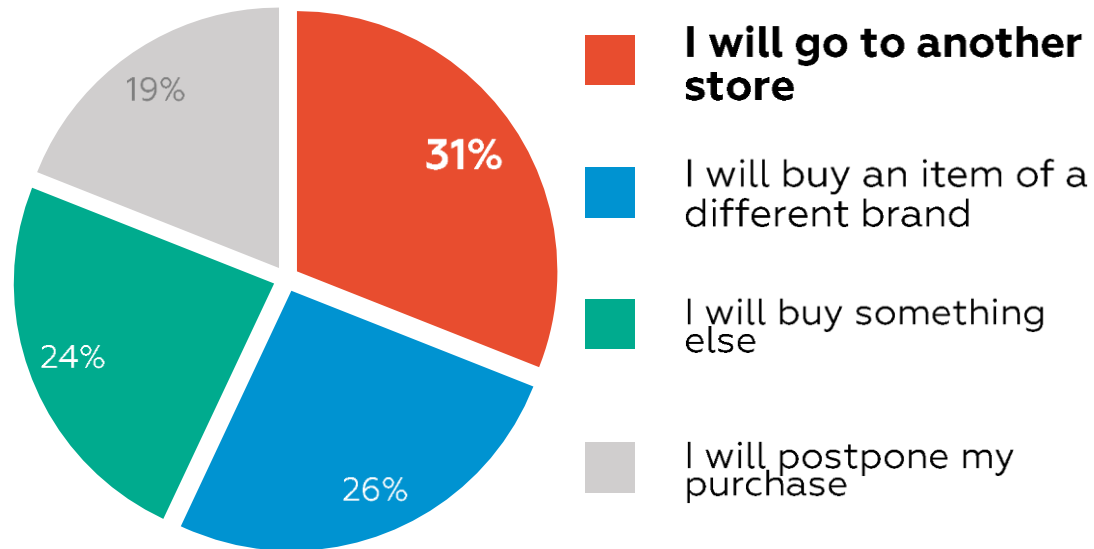
According to the Retail Out-of-Stocks: A Worldwide Examination of Extent, Causes and Consumer Responses study of 2018, the stores lose 3,9% of the profits annually due to Out-of-Stock problem.



**Increasing a store's revenue with the
help of the Shelf Fullness Check
module**

In average, stores lose 4% of revenue due to out-of-stock issue

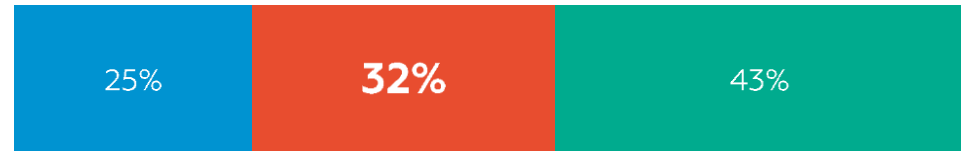
What are you going to do if the item you need is not on the shelf?



Grocery Manufacturers of America (GMA):
Retail Out-of-Stocks: A Worldwide Examination
of Extent, Causes and Consumer Responses

[See Report](#)

Out-of-stock reasons



- An item is in the store but not on the shelf**
- Supplier fault
- Order procedure and forecasting errors

According to ECR-Rus OSA research
done by MEMRB

[See Report](#)

Increase of profits



Purpose

To save 4% of the store turnover

How it works

You receive an immediate notification to the monitor, phone or e-mail:

- ✓ when the shelf's fullness has dropped to a critical value preset in the settings

The Shelf Fullness Check module analyses the video from the camera installed in front of the shelf and calculates the percentage of its fullness.

Your benefits

Thanks to the Shelf Fullness Check module, you boost the profits of a store. You can:

- ✓ fill the shelf with goods in time
- ✓ solve out-of-stock problem

Your customers are happy to buy the goods that they need.

BILLA

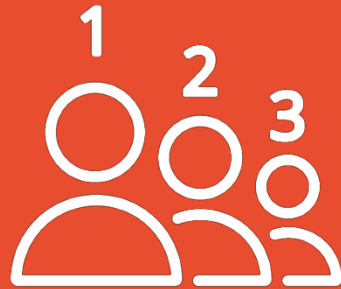
> 30 IP cameras / ST license

CCTV tasks

- To ensure constant availability of goods on the shelves

Macroscop advantages

- Saving on staff costs due to the fact that Macroscop performs automatic shelf fullness monitoring
- Convenient notification channels: mobile phone, email, messengers
- Ability to promptly respond to a notification and fill the shelf with goods



**Increase of sales revenue with the help
of the People Counting in Queue
module**

People Counting in Queue



Purpose

To increase sales and service level

How it works

You can:

- ✓ set up to 6 checkout areas using a single camera
- ✓ receive a notification when a queue appears in a preset area
- ✓ create reports and schedules by hours, days, months, years based on the data from different cameras
- ✓ optimize the number of employees at the checkouts using the traffic increase and reduction data
- ✓ open or close additional checkouts

Your benefits

With the help of this module you will be able to provide a high level of service for your customers.

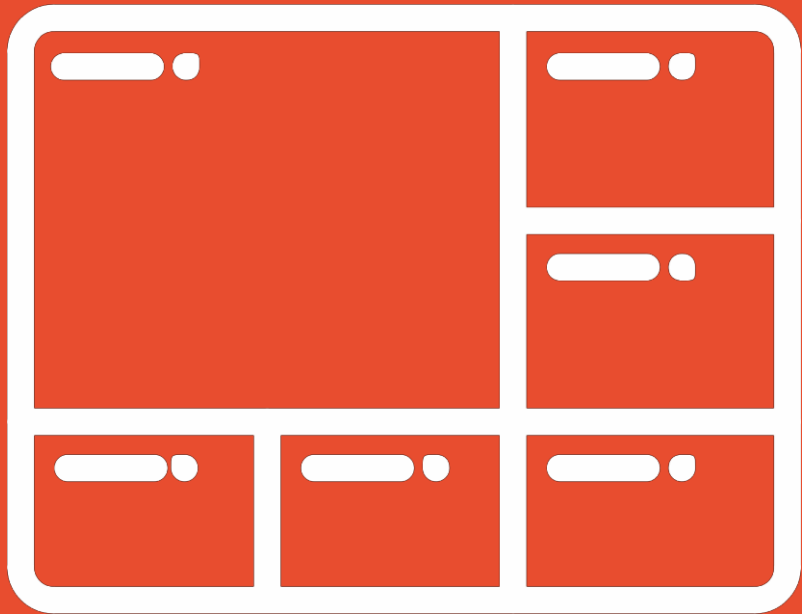
This will allow you to:

- ✓ analyze and increase sales due to the improvement of efficiency of your business processes
- ✓ improve the quality of service rendered to your customers

Shoplifting

According to the Retail Security in Europe study of 2018, the stores lose 2,1% of the profits annually due to shoplifting. The total loss due to theft in the European countries amounts to 35 million euros. The loss of the U.S. retail industry is more \$50 billion

Automatic video confirmation of alarms and events





Tracking movement of a suspect in the store using the Suspect Search module

Tracking movements



Purpose

To monitor movements of the suspicious individuals and prevent or investigate theft

How it works

You can:

- ✓ select a person on a video clip recorded by a camera
- ✓ make freeze frames and create video sequences with the images of lookalike people from the different cameras in a chronological order
- ✓ view trajectory of an object's movements on a preloaded site plan
- ✓ look for the objects by their shape, color, size, position in the frame on the archive using the downloaded images

Your benefits

With the help of this module you will be able to:

- ✓ quickly find the suspect and build a trajectory of his or her movements
- ✓ swiftly respond in order to apprehend a suspect
- ✓ prevent theft from a store or other crime



Stock Luyckx

> 90 IP cameras / ST license

CCTV tasks

- to reduce losses associated with shoplifting
- to prevent further theft
- to organize fully controlled and automated access of people and cars to the area

Macroscop advantages

- availability of the Suspect Search module
- Face Detection and Face Recognition modules
- compatibility
- user-friendly interface



**Prevention of entrance of shoplifters
to a store using the Face Recognition
module**

New features of Face Recognition



	Light	Complete	Unique Visitor Counting	Unique Visitor Counting + Complete	
Computing	CPU / GPU	GPU	GPU	GPU	
Face database	1	20+	20+	20+	Max. faces in the frame
	500	Unlimited	No	Unlimited	
Determining of gender and age	No	Yes	No	Yes	Search in the archive
	No	Yes	Yes	Yes	

Before and after

	Basic Face Recognition	Complete Face Recognition	
Equipment cost	Expensive due to high CPU load	Affordable due to usage of video card	
	No	Yes	Recognition of faces in a crowd
Determination of age and gender	No	Yes	
	No	Yes	Search by faces in video archive
Cost of database of 500 people	3090 \$	Free	



To bar access to the store of the interlopers or offenders:

- create databases with photos of visitors who were caught stealing and enter them in a black list
- receive immediate notifications when the persons from the list appear in the store

You will receive an alarm notification every time a face from this database is recognized

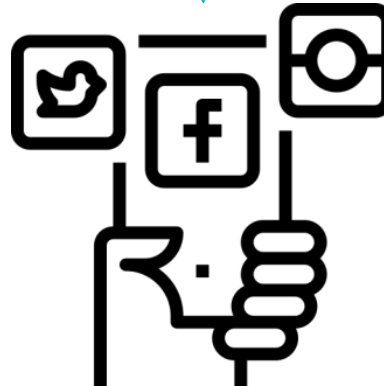
«Shoplifter» identified



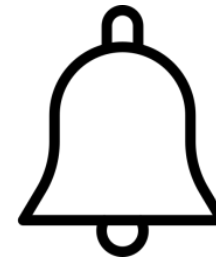
E-mail message



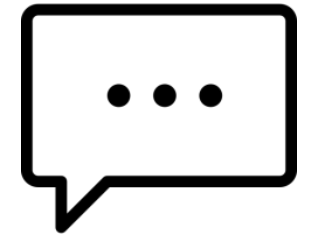
Notification on video surveillance operator's monitor



Notifications sent to messengers (Telegram, Facebook) by Macroscop bot



Push notification from Macroscop app on your mobile device



SMS message



**Prevention of breaking and entering
using the Tracking and Sabotage
Detection module**

Media Markts

4 IP cameras / ST license



CCTV tasks

- ensure basic level of safety
- set up the anti-burglary system

Macroscop advantages

- instant alarm messages via three channels (Client, email, messenger)
- optimization of the number of cameras (4 cameras – 1 roof)
- possibility to detect a theft in progress and prevent it

Prevention of intrusion



Purpose

To prevent intrusion into a store of a warehouse in order to avoid subsequent theft

How it works

You can set up the following control events:

- ✓ when an object crosses the control line
- ✓ when an object moves in the area
- ✓ when an object has remained in the area for a long time
- ✓ camera defocusing
- ✓ turning the camera away from its set position
- ✓ long-time deliberate flaring
- ✓ blocking the camera's field of view

Your benefits

The combination of these modules allows to obtain timely notification regarding the intrusion of an unauthorized person to the territory and prevent an infiltration attempt.

Your customer will keep their property safe and minimize theft-related losses:

Inefficient store operation

2% increase of conversion from visitor to buyer leads to 20% increase in sales proceeds

		Strategy 1	Strategy 2	Strategy 3
	Before modifications	Attendance +10%	Conversion +2%	Average receipt +10%
Visitors, pers.	881	969	881	881
Receipts, pcs	88	94	106	88
Conversion	10%	10%	12%	10%
Average receipt(\$)	30	30	30	33
Proceeds(\$)	2640	2820	3180	2904
Impact(\$)	-	180	540	264
Efficiency	-	+7%	+20%	+10%

build GDPR ready system

End-to-end encryption:
camera-server-
Macroscop

User Rights
Management

Setting archive
storage period

Video Analytics

Possibility to delete
user data from system

