TRASSIR smart video surveillance systems

Ready-made solutions in video surveillance for the bank sector

The TRASSIR trademark was created to bring high-tech video surveillance systems to the market. The brand integrates professional video processing equipment (cameras, servers, analytics modules) and neural network software. TRASSIR analytics modules are used for access control, perimeter tracking, limiting the hazardous areas, and monitoring compliance with overalls requirement.

The core function of the equipment is to ensure client security and to improve their business efficiency. Breakthrough technologies have been developed and patented under the TRASSIR brand: IP-video server and own-produced IP-cameras.

20 years
of experience in video surveillance

5000+
loyal customers worldwide

800+
qualified staff

28
countries
with TRASSIR solutions integrated

United Kingdom
Estonia
Russia
Latvia
Belarus
Germany
Moldova
Ukraine
Romania
Armenia
Kazakhstan
Georgia
Israel
Spain
Azerbaijan
Tajikistan
Kyrgyzstan
USA
Turkey
China
Kuwait
India
Taiwan
Mexico
Thailand
Vietnam
Brazil
Ecuador
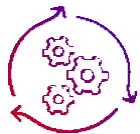
Advantages of working with us

ADVANCED TECHNICAL SUPPORT
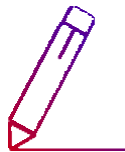by pre-sale engineers during testing at the customer's facility

TECHNICAL SUPPORT
24/7 professional assistance by phone, Telegram and Viber

REPLACEMENT EQUIPMENT
Replacement on the day of request and without "preliminary check"

DESIGN TOOLS
BIM-families, equipment drawings, connection diagrams and installation

LABORATORY OF TECHNOLOGIES
Customization by TRASSIR experts to meet client's individual demands

TRASSIR installations in banks

Bank VTB PJSC

Sberbank of Russia PJSC
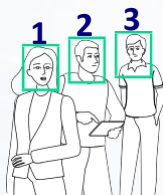

Alfa-Bank JSC

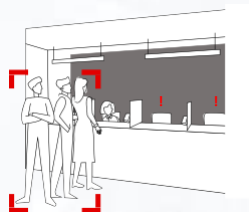UniCredit Bank JSC

Raiffeisenbank JSC

TRASSIR solves the following tasks

Business tasks

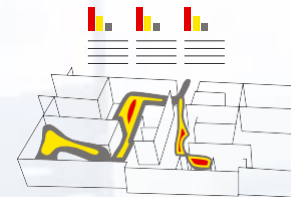Calculation of unique visitors of branches

Queueing control

VIP

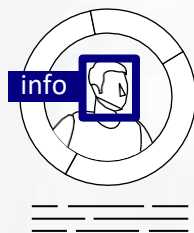Manager's notification of an VIP-visitor entering the branch

Notification of a visitor entering the bank branch without a mask

Analysis of visitor's behavior with use of thermal cards

Staff attendance record

info

Branch visitors' analysis for marketing purpose

Detection of collusion among the staff and offenders

Rapid reaction to presence of offenders and undesirables

TRASSIR solves the following tasks

Security tasks

1

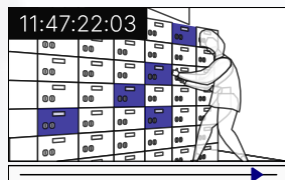Search for a persons by signs: gender, age, hair color, haircut, glasses
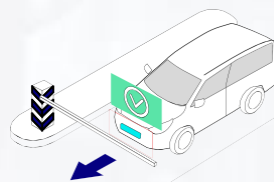
ATM protection from damage
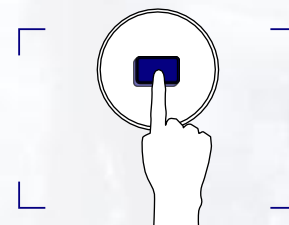
Detection of cash theft by staff

A point of sale transaction monitoring

Search for a video fragment in motion record archive in the selected area

Car access to a parking lot

Rapid reaction to emergencies

Detection of black - listed visitors of the office and branches
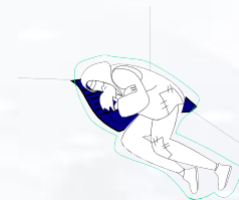
TRASSIR solves the following tasks

Security tasks

(2)

Detection of changes in the camera's view

security post

Monitoring of a guard presence at the post

Detection of people lying on the floor next to an ATM. Detection of the homeless

BANK

Security monitoring in case of people gathering close to the bank branch

Tracking suspicious people visiting a depositary

Detection of potential bank card fraud

Detection of left behind and potentially dangerous items

Notification of fire and smoke detection in a room

TRASSIR®

Ready-made solutions for security zones

TRASSIR

✓ The task we solve

● Improving the services provided to clients through queueing monitoring and predictive analytics

✓ How do we do it?

● When a number of waiting visitors in the operating halls increases, a manager is notified of the necessity to increase the number of the servicing staff of some of them were absent at the workplace

● The analytics module allows analyzing the schedule of visits to the bank branches and forecasting the required number of staff at the specific period of time

Queue Detector is a module to calculate people in a queue

Neural network based module to calculate precise number of people in a queue. It includes a reporting and queue size notification module

TRASSIR®
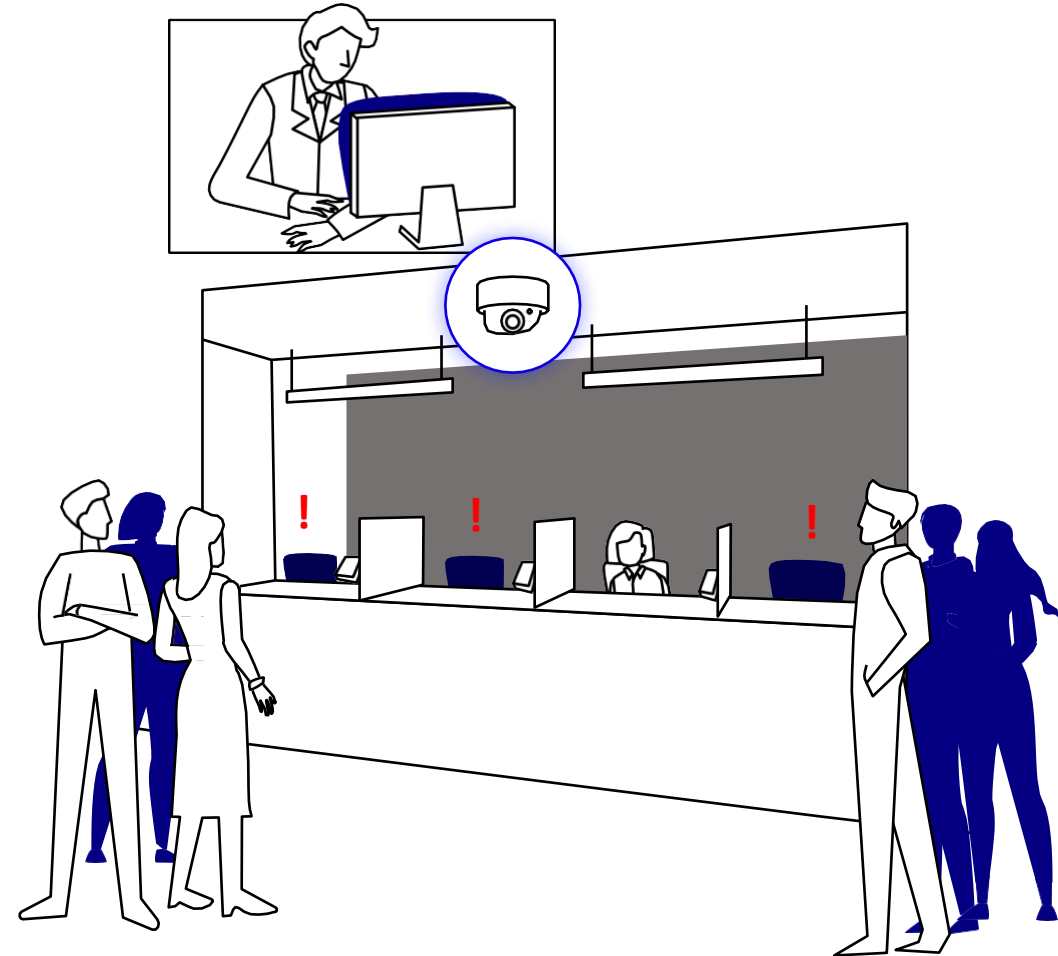
✅ The task we solve

- Detection of black-listed visitors of the office and branches
- Manager's notification of a VIP-visitor entering the branch

✅ How do we do it?

- The clients are recorded in the database as VIP or Black-listed clients
- When a client enters a branch, the respective staff, either a manager, a security officer or a VIP manager is notified

Face Recognition is a module for recognizing and searching for people using a pre-configured database.

The module provides face recognition and its search by time, date, camera, and export of detection video data to a file and generation of an alarm if persons of the selected group are detected

VIP
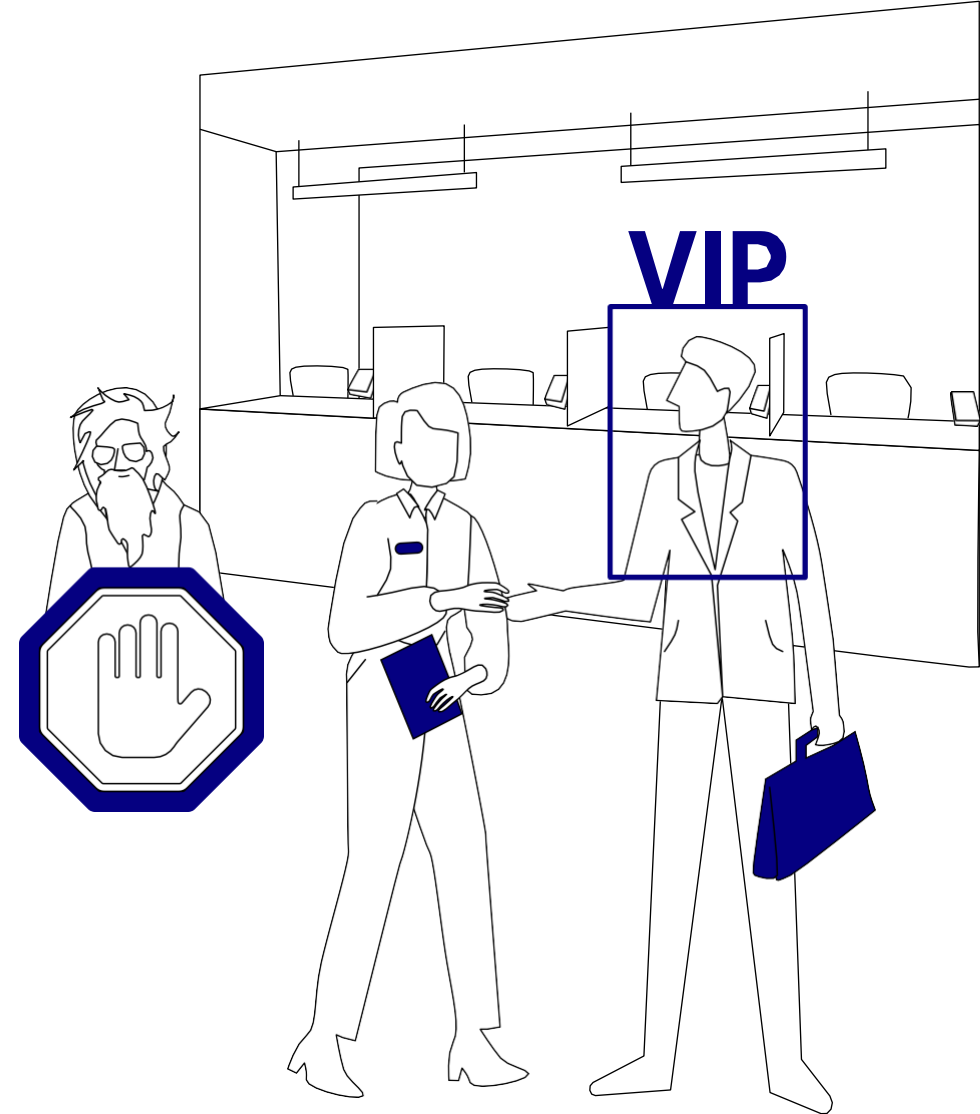
✔ The task we solve

- Monitoring of wearing personal protective equipment during pandemic
- Generation of a report on a number of people without a mask with information on time and name from the staff database

✔ How do we do it?

- The module detects faces and finds presence of a mask

Face recognition module + Face mask detector module + Face analytics module

The module checks wearing of masks in public places thus allowing detection of faces without masks

face_without_mask 95%

face_with_mask 97%
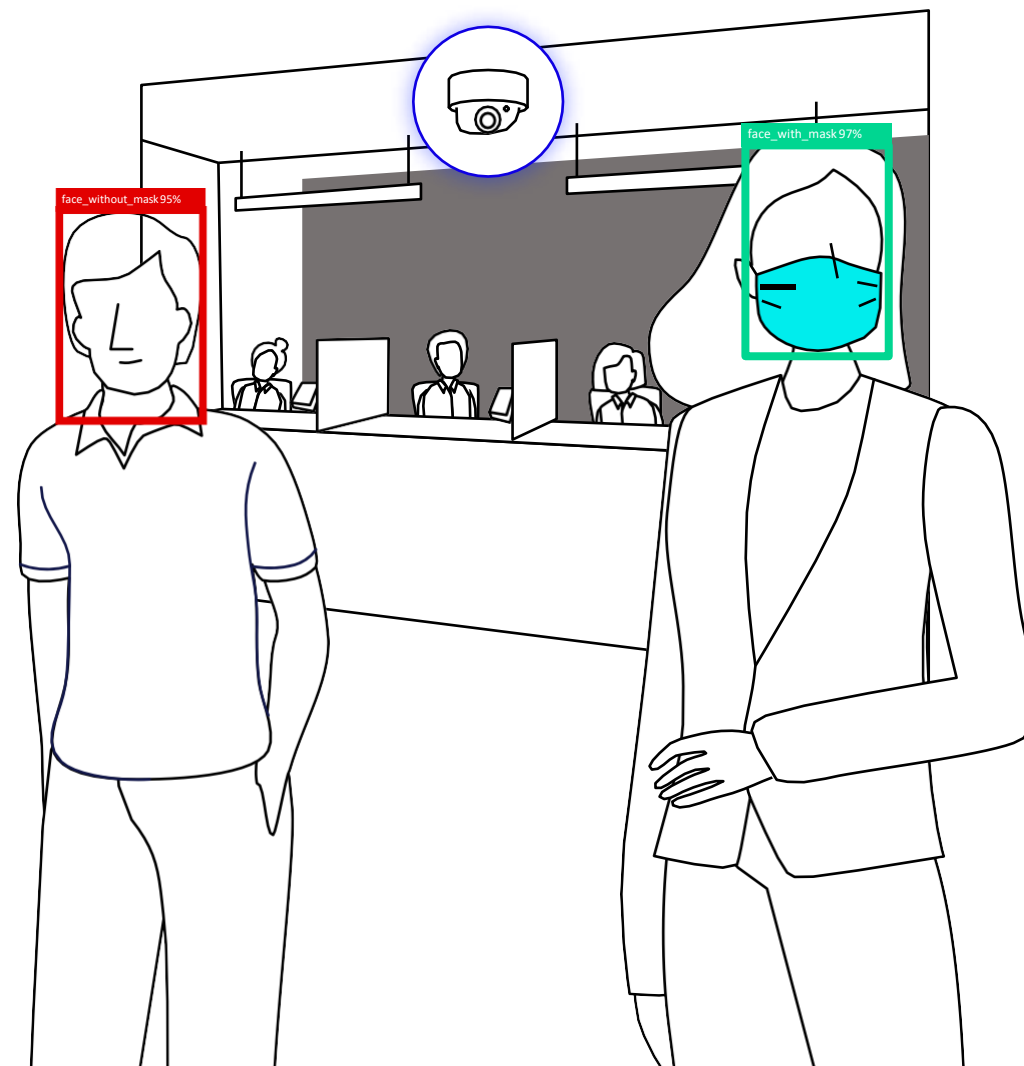
The task we solve

- Calculation of bank branch visit conversions, calculation of unique visitors and compilation of a gender-age analysis of the audience to determine target audience of a specific branch

How do we do it?

- Detection by recognizing faces, gender, age and other signs of visitors generation of reports and dashboards basing on the received data
- Calculation of a number of visitors broken down by preset time intervals — hours, days, weeks, months, years

Face Analytics is a face recognition module

The module providing face recognition and analysis by specific metrics
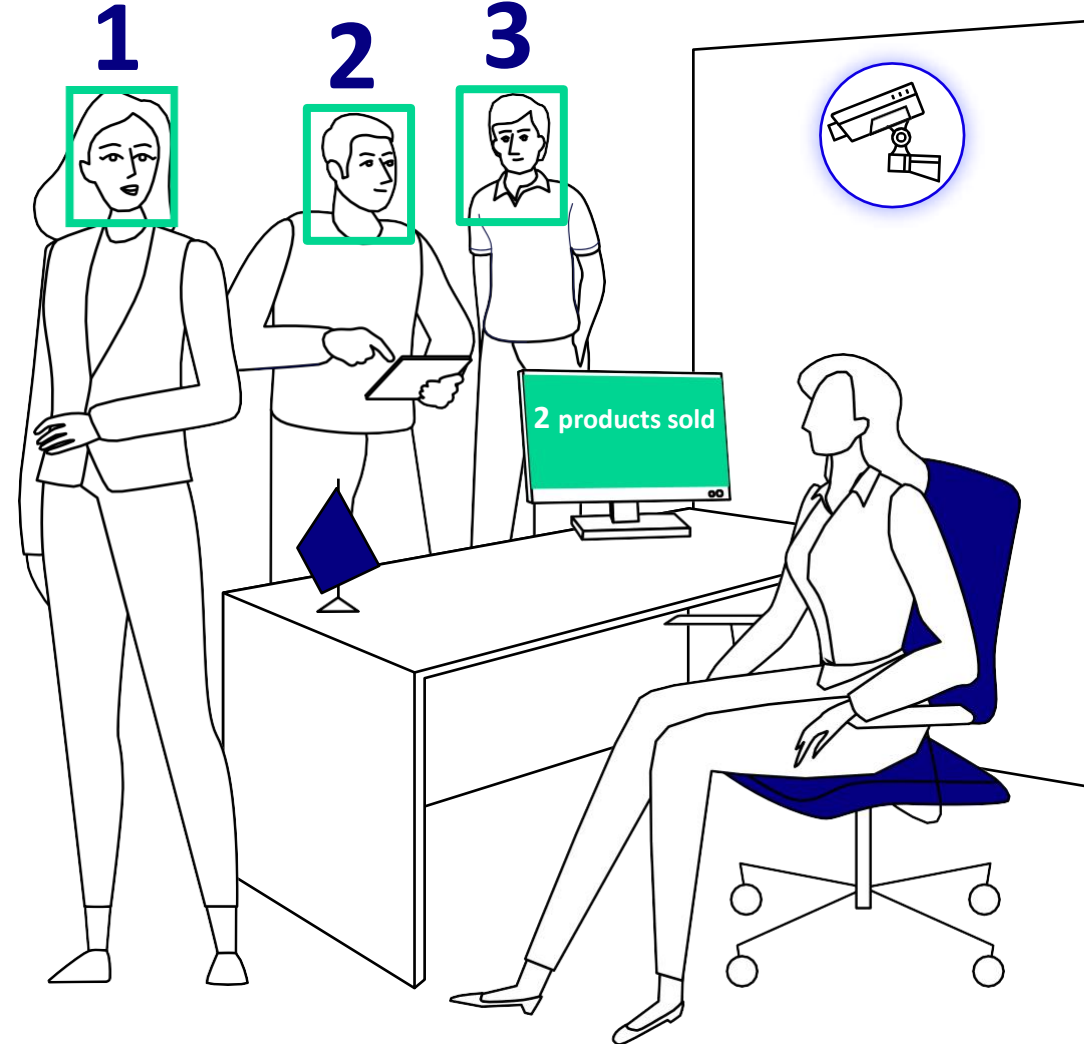
The task we solve

- Analysis of visitors' behavior with use of thermal cards
- Measuring the efficiency of servicing zones, location of promotional material and planning of operating halls

How do we do it?

- The activity color chart is laid over a video in a dynamic mode, any object moving within a camera view leaves a trail of color that fades with time
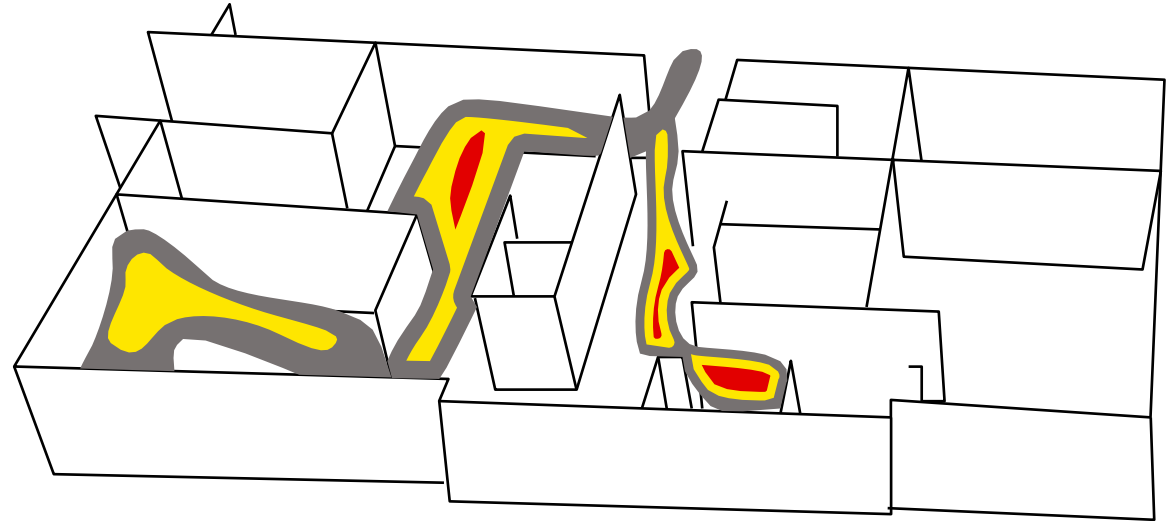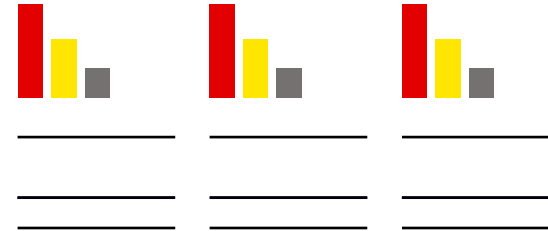
Heat Maps is a video thermal analysis module

The Heat Maps module lays the activity color scale over the video in the monitored zone

TRASSIR

The task we solve

- Monitoring of staff presence at the working place, a guard presence at the post and record of attendance

How do we do it?

- The person in charge shall set the parameters required for the module operation: working zone area, staff schedule, allowed time of staff absence
- A camera with a connected module is installed inside an office or any other working zone
- The module generates a notification and sends a message to a person in charge if an employee is late, leaves early or is absent more than allowed
- The module generates daily reports on actual time of staff attendance and absence, emails reports to a person in charge It can be used to detect situations when all employees leave their working places

Staff Tracker is a staff tracking module

Staff work quality measuring module Keeps statistics and generates notifications with reference to staff work quality markers Functions basing on object neural detector that provides recognition of objects with high precision.

Security post

The task we solve

- Search for a client who lost anything, i.e. a telephone.
  Or search for a person by signs: gender, age, hair color, haircut, glasses

How do we do it?

- Filtering of visitors from the video archive by age, race, haircut, hair color and other characteristics.

Face Analytics - a face recognition module

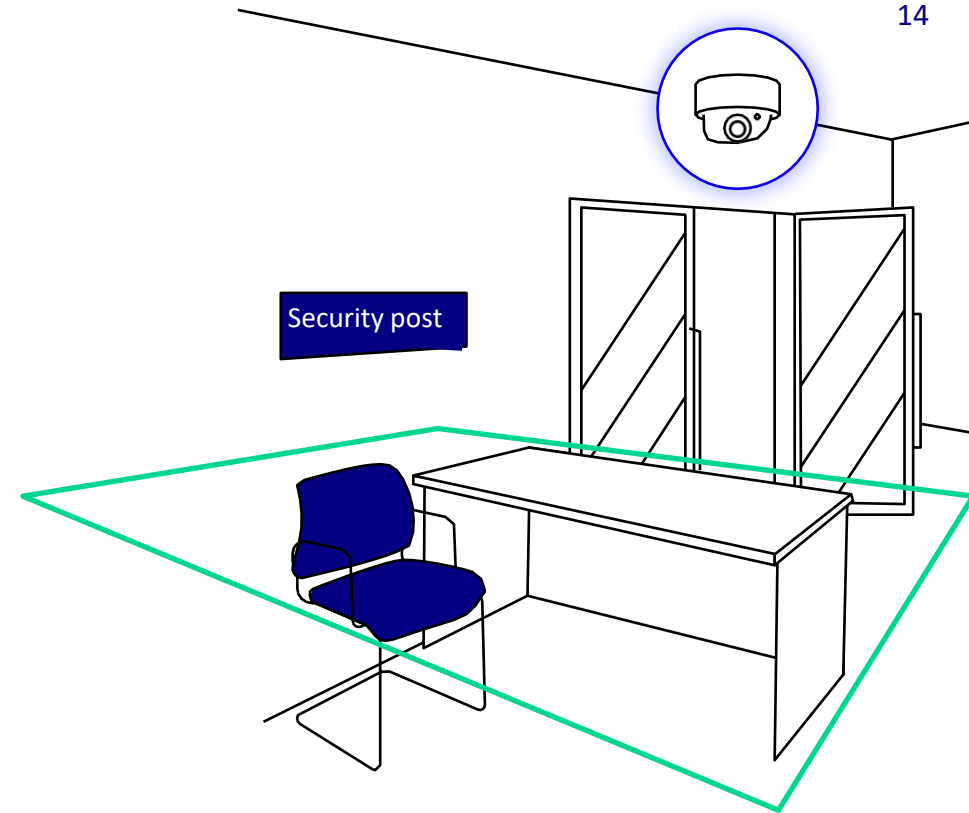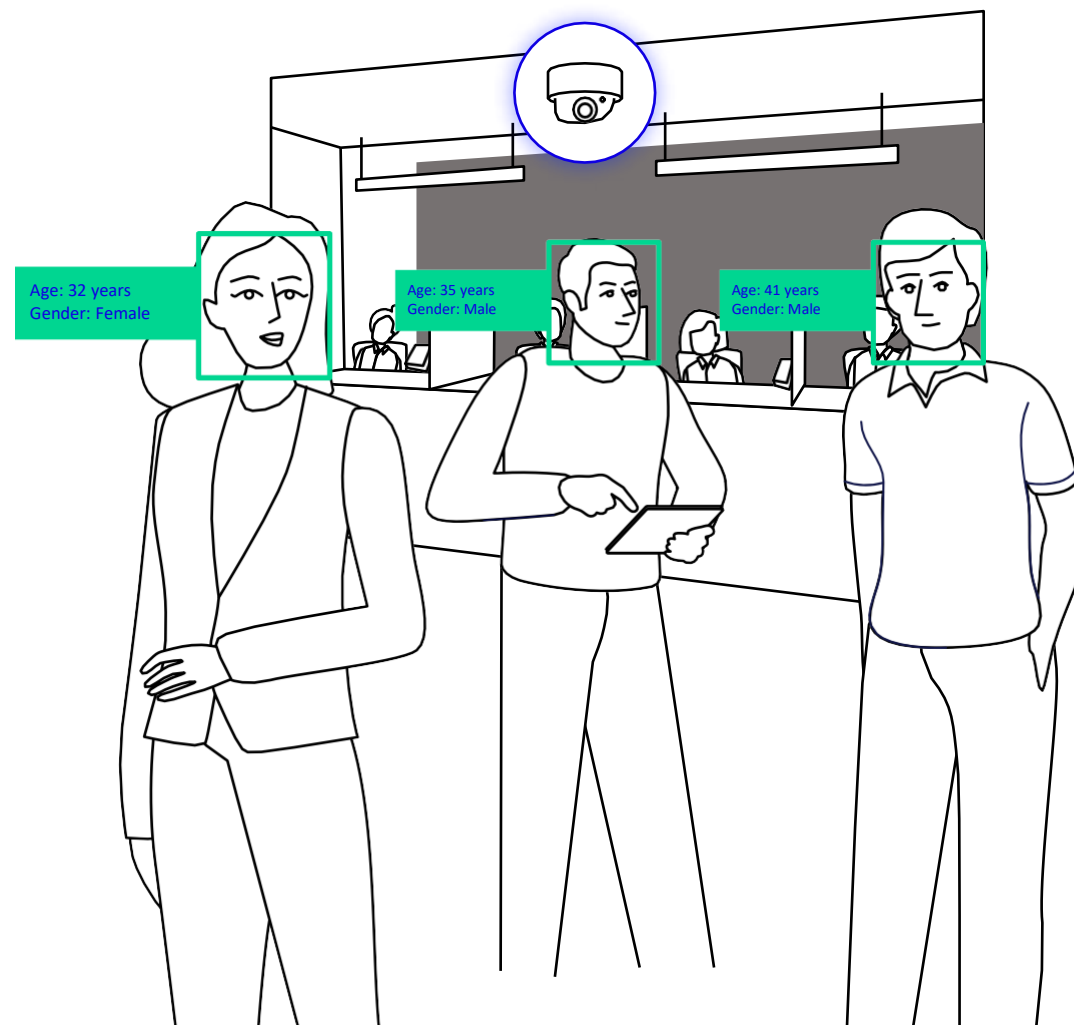The module providing face recognition and analysis by specific metrics

The task we solve

- Accelerated detection of shortage of money according to recalculation results

How do we do it?

- The module functionality provides searching through data from the counting machine. Data selection results in move to a required moment in the video archive

11:47:22:03   ● REC

Active POS is a point of sale transaction monitoring module

The module synchronizes video stream with all events of a banknote counting machine in a single window
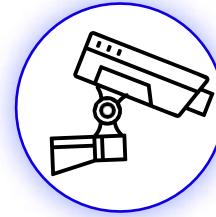
The task we solve

- Security monitoring in case of people gathering close to the bank branch or ATM during pickets, sudden evacuation and other emergencies
- Staff notification of people gathering in front of the office and in atriums

How do we do it?

- If the number of people in the selected zone exceeds the allowed figures, the module sends an online notification to the bank security service

Crowd Detector - an overcrowding detection module

The module detects overcrowding and sends a notification to an operator if the number of people in the selected zone exceeds the allowed figures
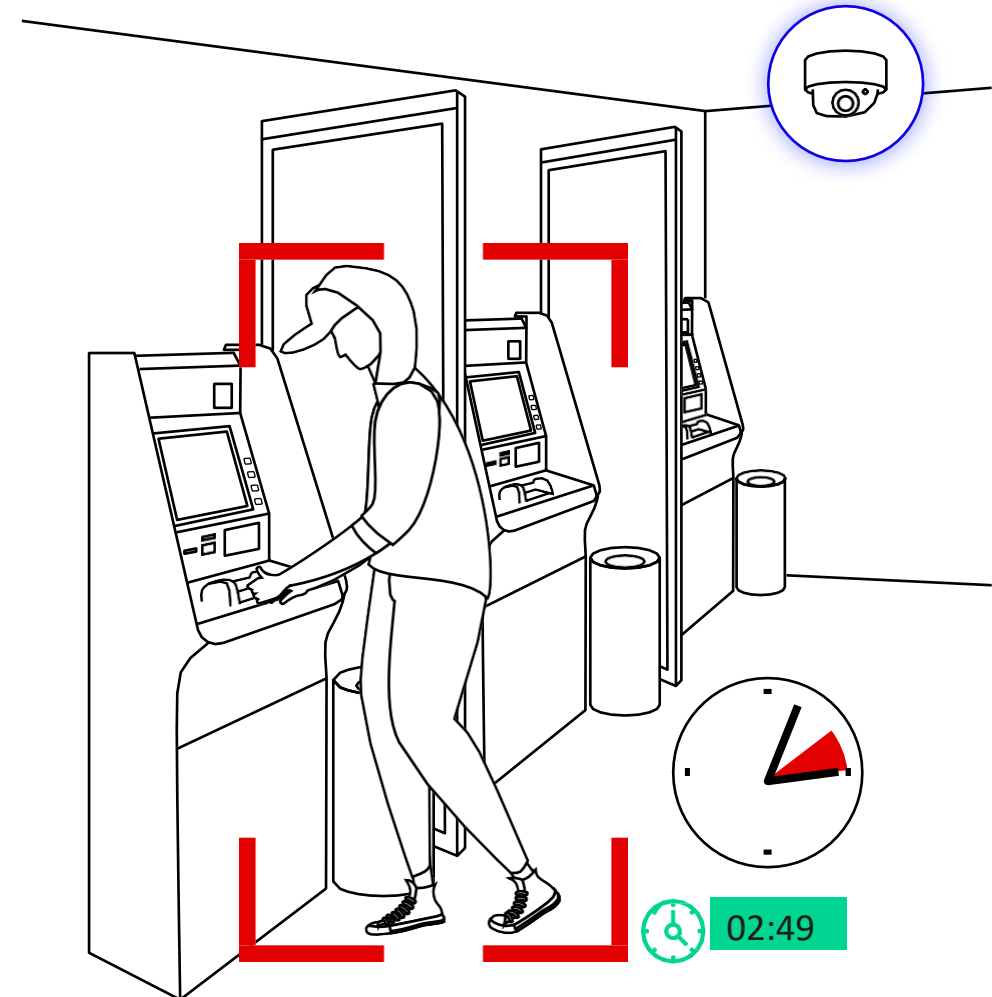
⌄ The task we solve

● Detection of potential bank card fraud, including cashing out, skimming

⌄ How do we do it?

● The time a person spends at the ATM is recorded
● If the time exceeds a limit of 3 minutes, then an internal security staff is notified of potential fraud related to cashing out different bank cards
● Or a different type fraud - skimming, when an offender installs a skimmer and a pad over the keyboard to steal money from a bank card or to capture a password

Neuro Detector + ActivePos + script

Joining modules with a script provides high precision recognition of objects in the camera view and generation of alarms. An alarm is generated with use of a detector when a foreign object enters the specified zone

02:49

✔ The task we solve

- Accelerated investigation of incidents, including theft and damage to a property, by searching a video fragment in motion record archive in the selected area. Example: depository cell tampering, theft of property from an employee's table

✔ How do we do it?

- A search area shall be marked directly on the image to launch a fragment selection process

Active Search is an archive interactive search module

An archive data interactive search system that searches a motion in the selected area and with selected parameters
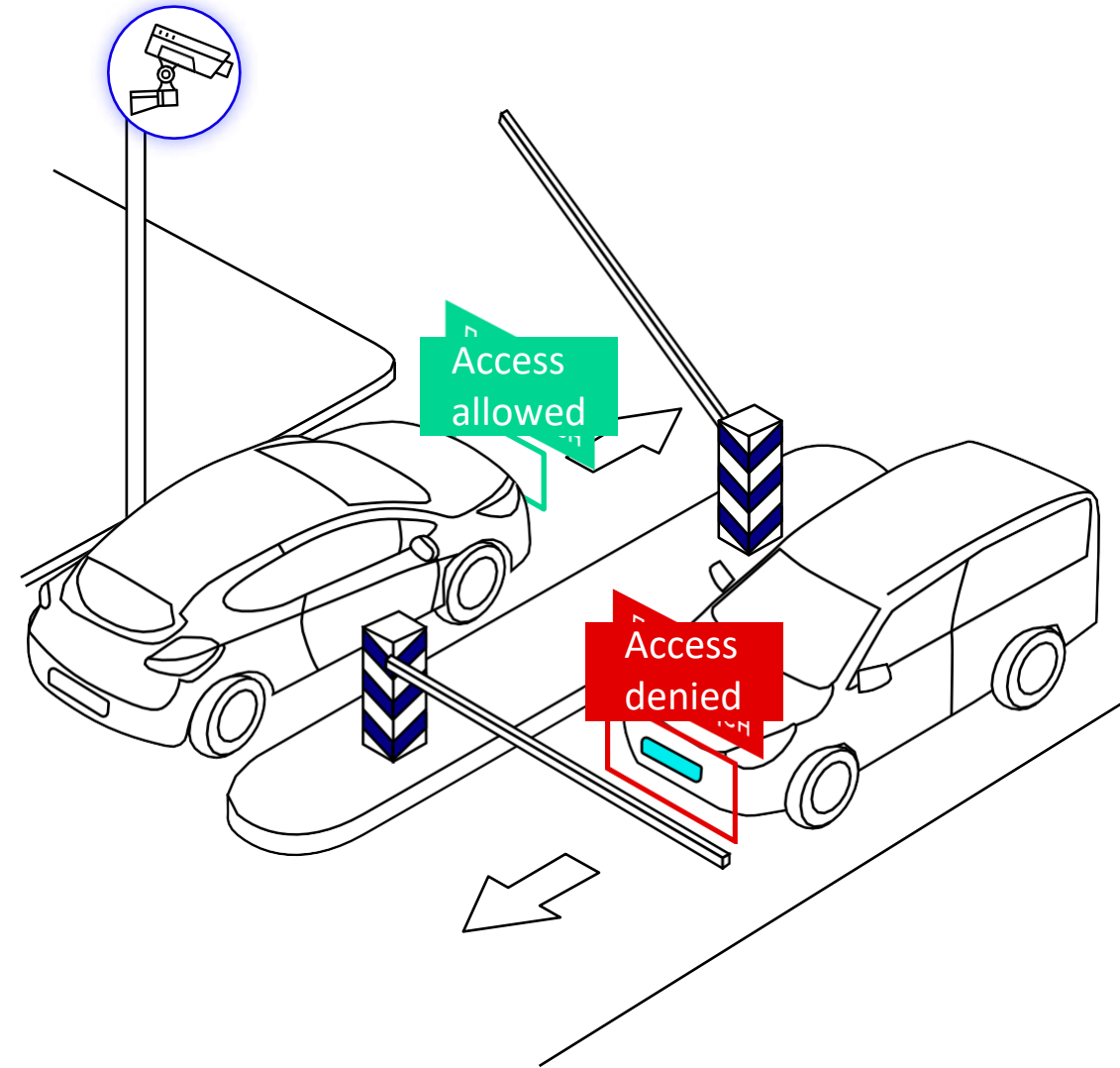
11:47:22:03

TRASSIR
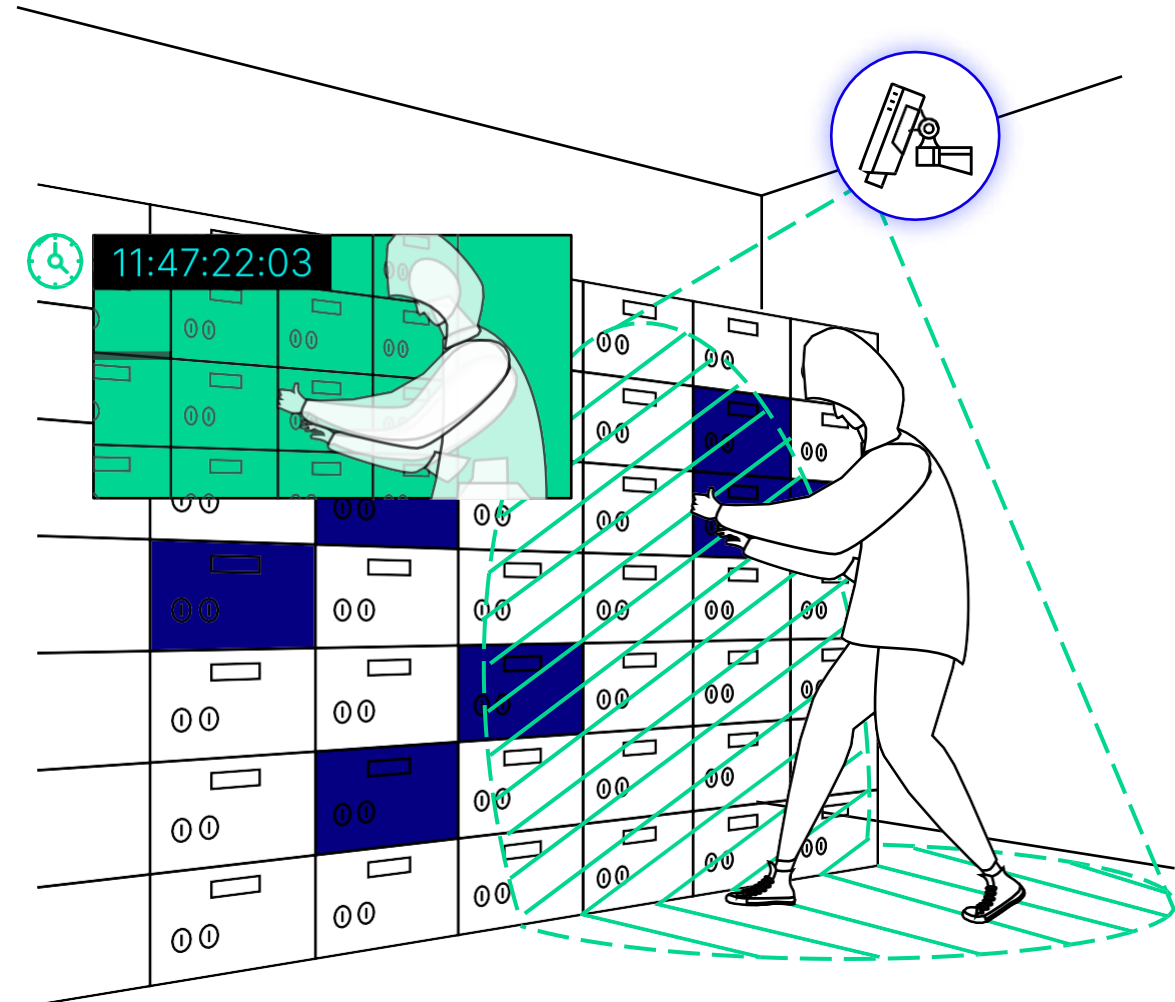
The task we solve

- Parking lot access monitoring
- Investigation of controversial incidents at the parking lot

How do we do it?

- Only cars with permanent or guest pass are allowed to the parking lot Search by license plate in the license plate register and pass list is used for investigation

Auto TRASSIR is a license plate recognition module

The module is used to automatically identify license plates of the vehicles within the camera field of view

Access allowed

Access denied

✅ The task we solve

● Prevention of unlawful acts by a client from a

Black-List

✅ How do we do it?

● A security officer is notified when a Black-listed visitor enters a depository

Face recognition is a module for recognizing and searching for people using a pre-configured database

The module provides face recognition and its search by time, date, camera, and export of detection video data to a file and generation of an alarm if persons of the selected group are detected

Black list

Black list

**Black list**
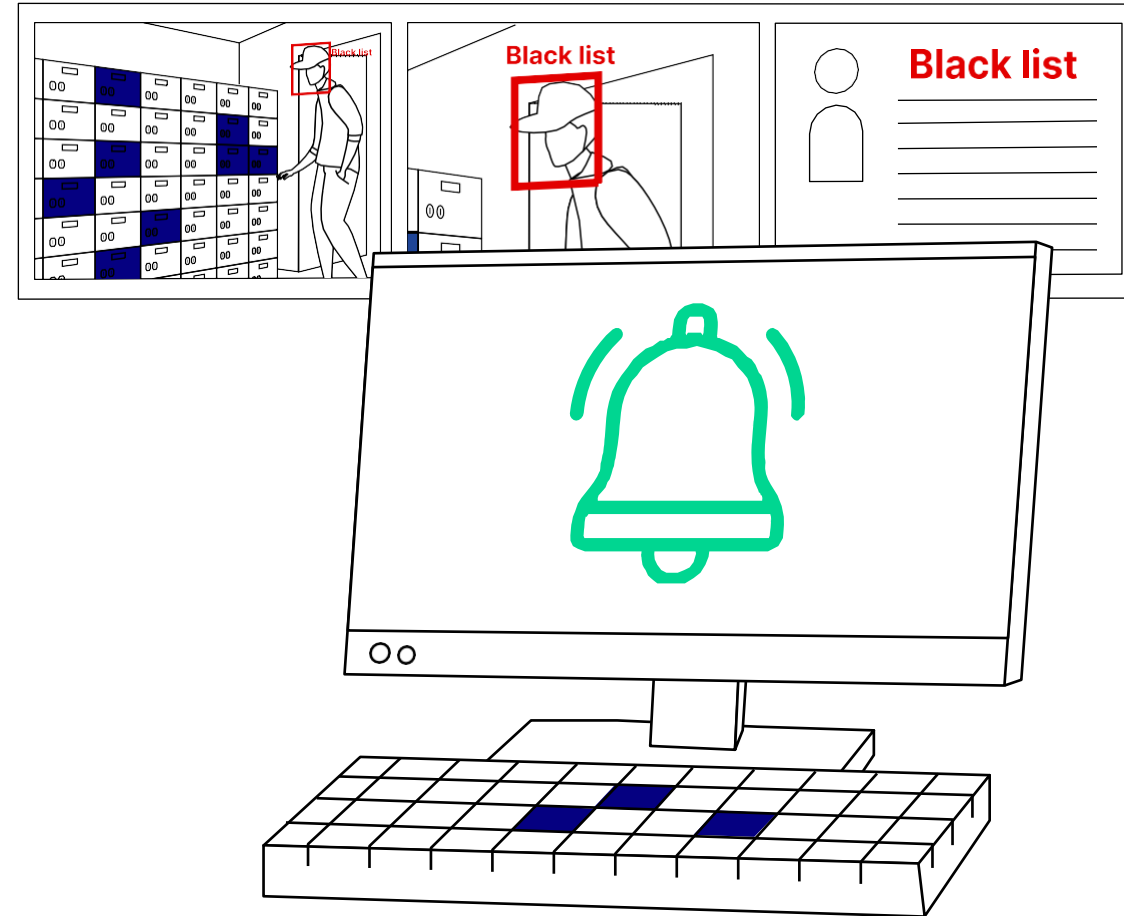
✓ The task we solve

- Prevention of offender unauthorized entry into an office
- Prevention of attendance record fraud by employees

✓ How do we do it?

- Integrating a face recognition module and an access control system provides two-factor authorization by a proximity card and a face

Face recognition + ACS - a module for recognizing and searching for people using a pre-configured face database + access control system

The module recognizes and searches for people against the pre-configured database at the facilities which require registration, identification and people restricted access
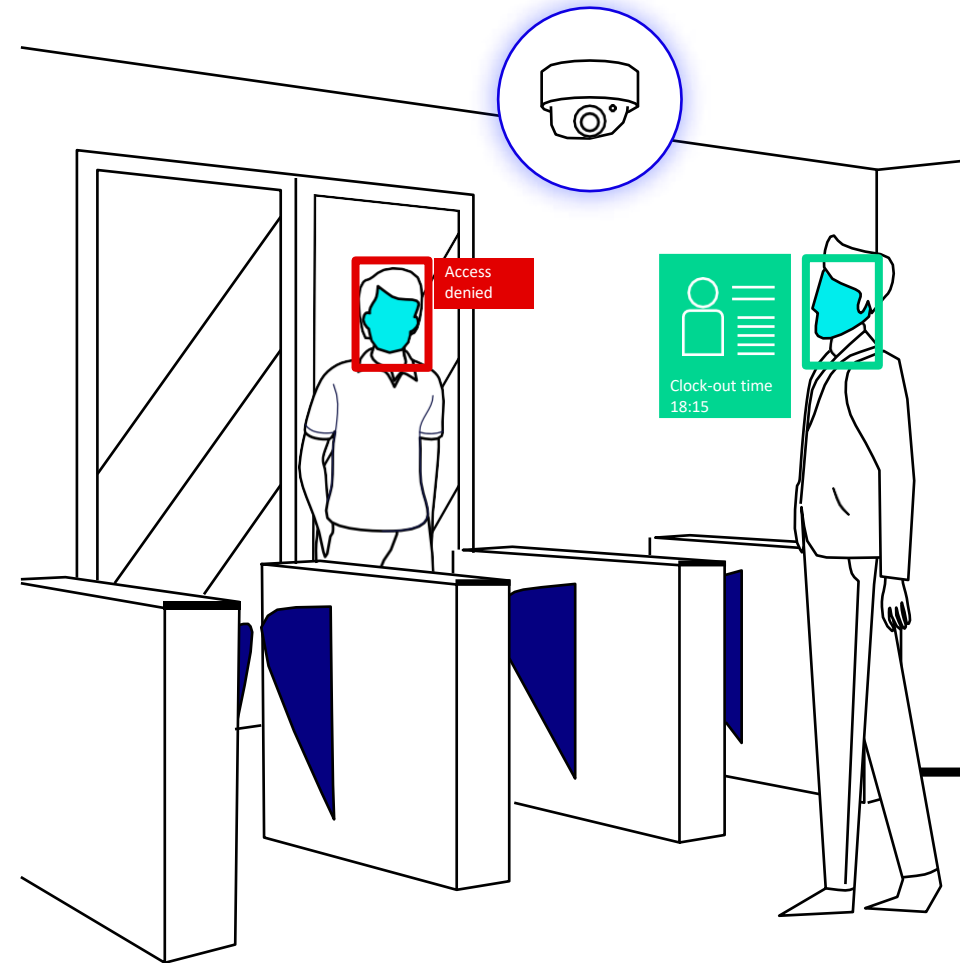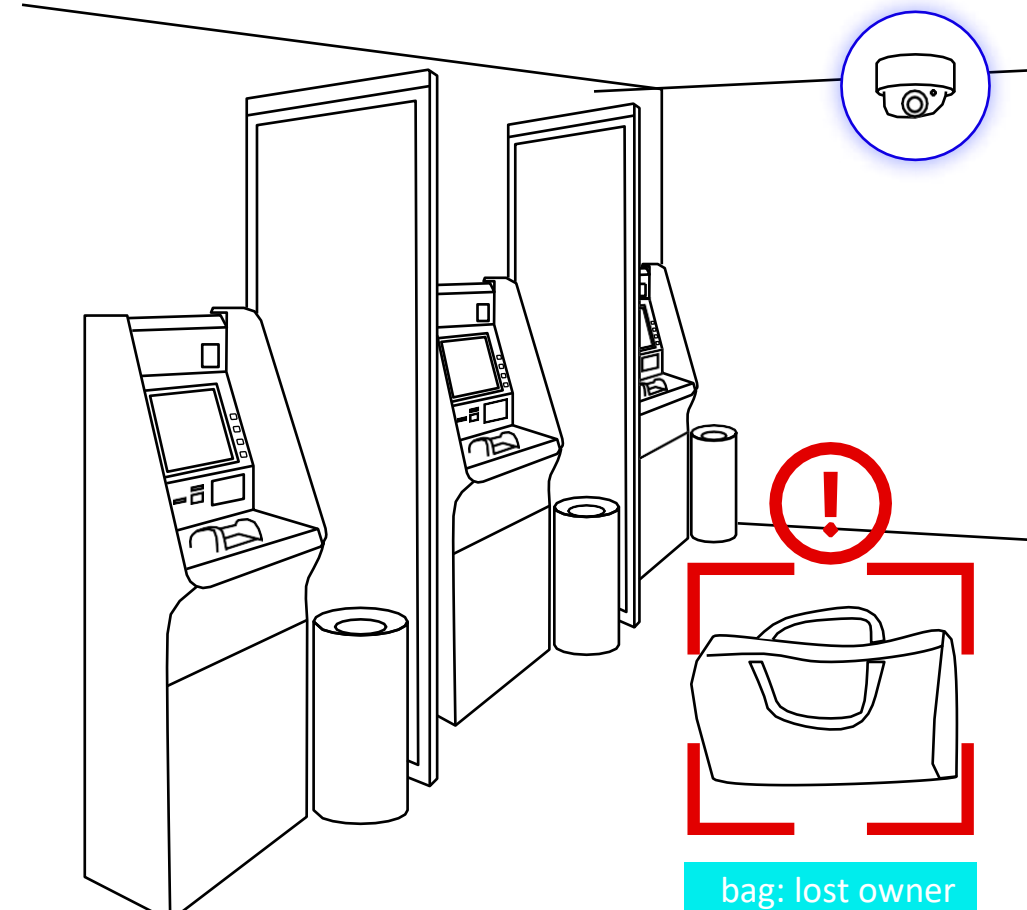
✔ The task we solve

● Notification of the security officers in case left behind and potentially dangerous items are detected

✔ How do we do it?

● A neural network detects an item owner by movement nature and proximity to the item
● If an item owner leaves a camera view or steps out to a certain distance, a notification of a security officer is generated to inform of the potentially dangerous item left behind

Neuro Left Object Detector is a left behind item detection module

The module is designed to detect abandoned and left behind items which fall within the camera view. It is able to detect items which potentially threaten the security

bag: lost owner
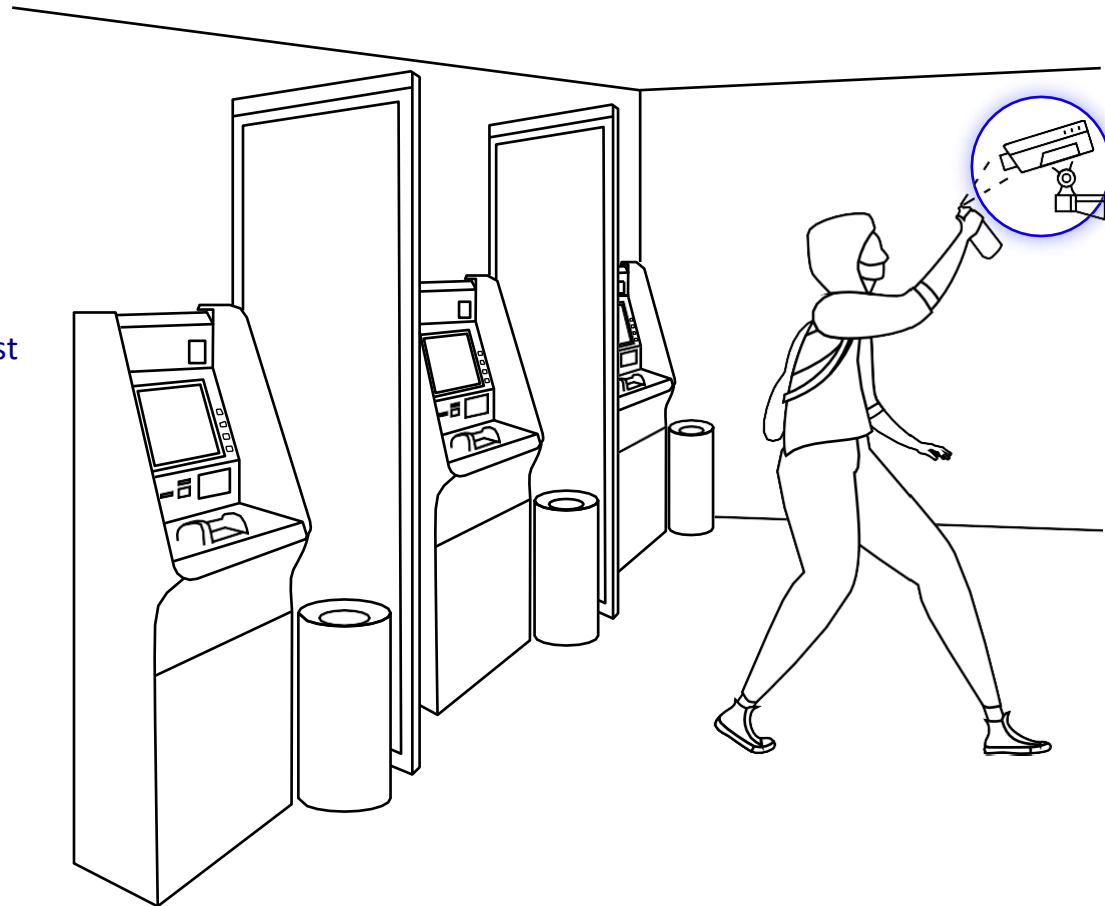
The task we solve

- Detection of changes in the camera's view

How do we do it?

- Automatic detection of cases of a camera focus shift, changed field of view, obscured or exposed camera lens, detected broken communication, and lost signal
- The detector offers adjustment of reaction to an incident, for example, attraction of an operator's attention by a sound signal and/or a message, alarm actuation, control of dry contacts, etc.

Sabotage Detector is a sabotage detection module

The module provides monitoring of the camera video signal quality and simultaneous notification of an operator about image problems

Alarm! Obscured camera!

✓ The task we solve

- Notification in case indoor fire or smoke is detected
- Accelerated verification of fire by a security service as compared to conventional smoke detectors

✓ How do we do it?

- The detector detects open fire or smoke within a camera view, including outdoor, that an indoor fire detector cannot do.

Fire & Smoke Detector is a smoke or fire detection module

The module detects smoke or fire faster than fire detectors (alarms) basing on image analysis

⌄ The task we solve

- Notification of security officers about people lying on the floor next to an ATM. Detection of the homeless
- Notification about unusual behavior of employees or visitors in case of robbery and other emergencies

⌄ How do we do it?

- The neural detector detects and classifies variable human postures to trace unusual behavior: an unusual posture - a person laying or sitting at an ATM, people falling inside a branch or hands raised during an attack, etc.

Pose Detector is a human posture analysis module

It is a neural analytical smart module that detects human posture basing on motions and behavior algorithms
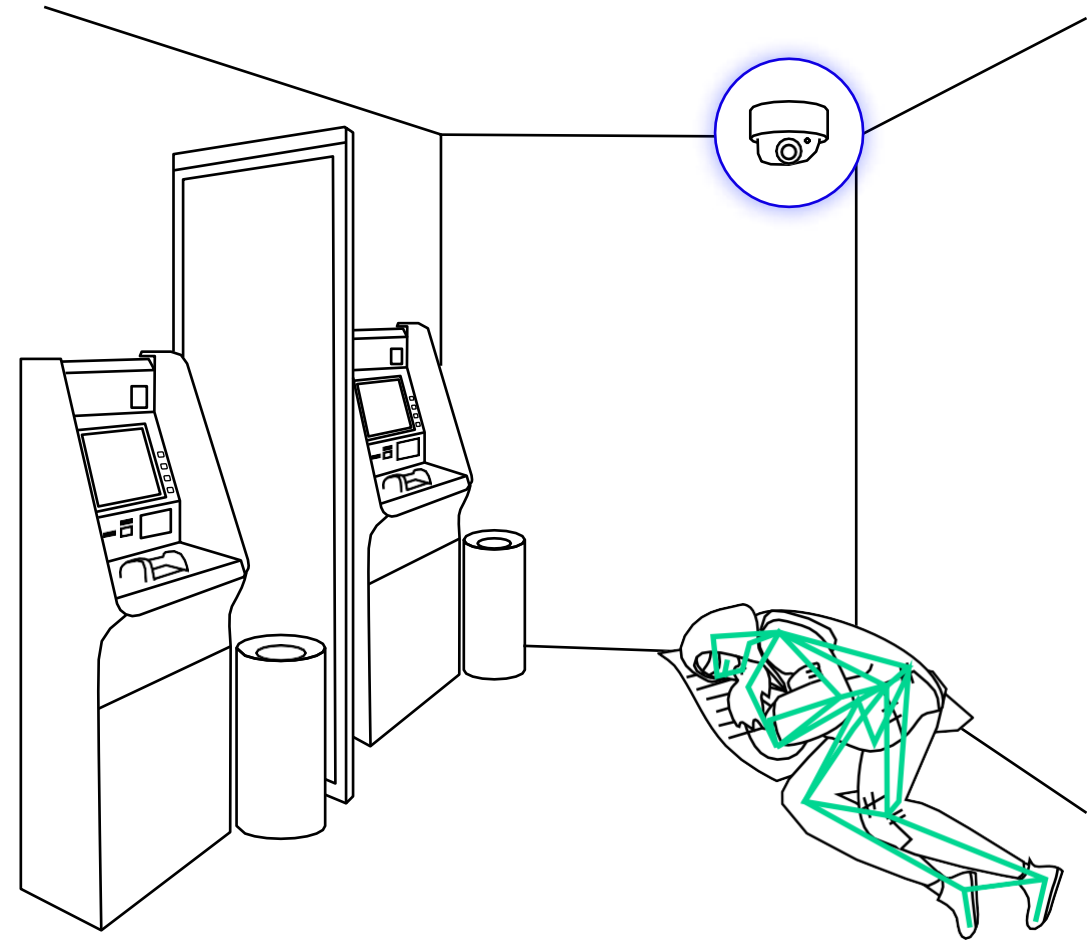
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✉ welcome@trassir.com