



COMPREHENSIVE SOLUTION FOR A LOGISTICS CENTRE

Analyse, automate and optimise processes using
video surveillance data

TRASSIR TODAY

20 YEARS

OF EXPERIENCE IN CCTV
SURVEILLANCE

5000+

LOYAL CUSTOMERS
ALL OVER THE GLOBE

30%

COMPOUND ANNUAL
GROWTH RATE

35

COUNTRIES OF
TRASSIR
INSTALLATIONS

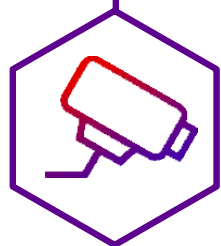
3 R&D
CENTERS



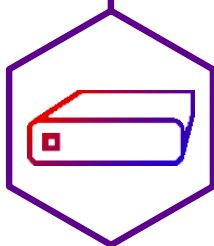


CCTV ECOSYSTEM

6in1



CCTV
CAMERAS



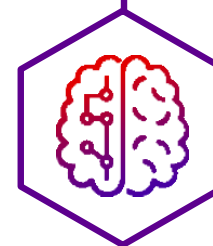
VIDEO
RECORDER



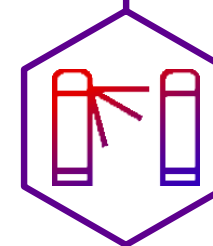
CLOUD
SERVICE



SOFTWARE



NEURAL
ANALYTICS



ACCESS
CONTROL
SYSTEM

Common challenges when managing a logistics park

- Difficult to track the status of each dock
- Shortage of human resources or high load for tracking docks
- Large number of docks managed
- Insufficient evidence base during disputes
- Higher requirements for process efficiency or budget optimisation

Tasks for a comprehensive solution

- Automate monitoring and accounting for cargo
- Automate vehicle accounting and monitoring systems
- Boost the efficiency of the warehouse complex

TRASSIR solution



- Video surveillance and quick archive search
- Visualisation of dock status on a map
- Detailed recording of loading and offloading
- Overview of operations on a dashboard

The result



- ✓ Objective information for decision-making and planning logistics processes
- ✓ Process optimisation
- ✓ Shorter downtime for transport waiting for clearance
- ✓ Faster handling of claims
- ✓ Recording and processing cargo acceptance and shipment
- ✓ Automation of data reconciliation

We Lower Risks and Improve Performance

Improves the safety of the facility overall and performance at all stages from the receipt and storage of goods to the formation of goods and their shipment

STAFF MONITORING

Maintain records of working hours, monitor compliance with safety rules

- * Quick passage of employees through turnstiles
- * Work time tracking
- * Locating workers in real time
- * Monitoring safety compliance

PERIMETER MONITORING

Respond faster to emergencies, reduce losses and damage

- * Tracking the movement of suspicious objects
- * Creating restricted areas without physical barriers
- * Rapid response to emergencies
- * Preventing unauthorised access by third parties

MANAGING OPERATIONS

Monitor the movement of goods in the warehouse, cut inventory losses

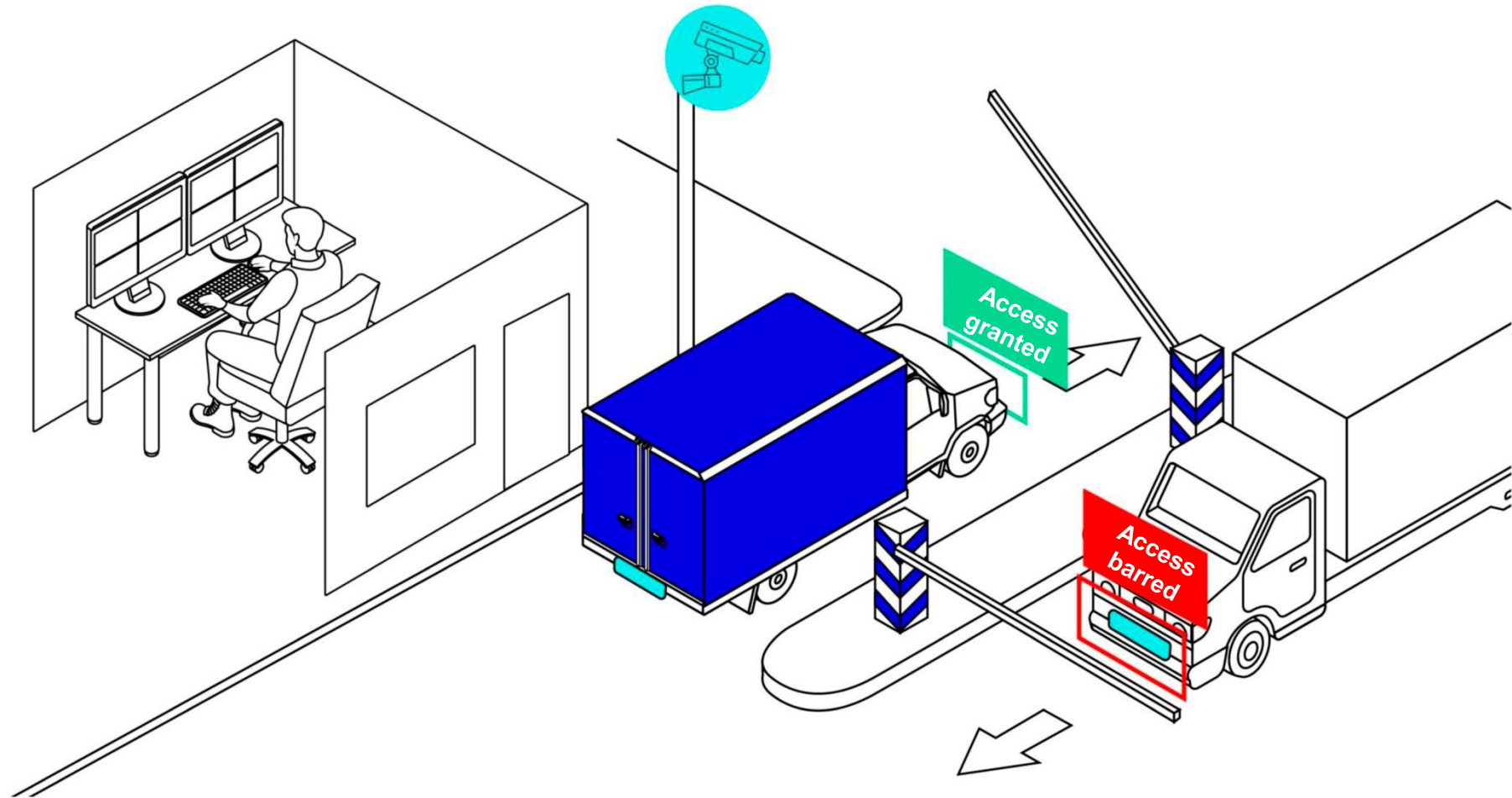
- * Monitoring the progress of the loading and offloading process
- * Monitoring the integrity and position of cargo
- * Monitoring the movement of people in hazardous areas and compliance with safety regulations
- * Monitoring presence and movements on the site

TRANSPORT MANAGEMENT

Improve the efficiency of cargo handling operations

- * Quick access to vehicles for loading and offloading
- * Automatic opening of the boom barrier during entrance and exit
- * Counting vehicles and monitoring movement on the site
- * Monitoring vehicle filling

Transport Management



Checkpoints

Tasks solved

- Entry/exit monitoring
- Monitoring the presence of vehicles on the site
- Monitoring and recording the traffic of vehicles on the site
- Report generation

How we do it

- Video surveillance
 - AutoTrassir licence plate recognition
 - Integration with ACS equipment (boom barriers, terminals)
- ✓ TRASSIR NeuroStation video recorders
 - ✓ AutoTRASSIR module with the required number of channels
 - ✓ Suitable cameras from the recommended list

Routing of Transport on the Site

Tasks solved

- Monitoring dock loading
- Counting vacant parking bays
- Organising traffic on the site
- Report generation

How we do it

- Video surveillance
 - Monitoring vacant parking bays
 - Integration with ACS equipment (boom barriers, terminals)
- ✓ TRASSIR NeuroStation video recorders
 - ✓ ActiveDock module with the required number of channels
 - ✓ ActiveParking module with the required number of channels
 - ✓ Suitable cameras from the recommended list

Advantages

- * High-quality recognition of 28 licence plate standards
- * Option to define additional business logic based on body type
- * Database creation
- * Search based on given parameters
- * Black/white and information list support
- * External and internal list support

Integration with weight checking

A supplier's truck enters the site using a pass. However, it can leave the site only after undergoing weight checking. This rule is introduced to combat theft: so that the supplier does not take out more goods from the warehouse than required in the documents.

Integration with accounting systems

- Option to edit information in the TRASSIR database
- Option to connect external lists (ODBC sources)

Monitoring Staff and Visitors



Checkpoints on the Site and in the Dock

Tasks solved

- Handling access for staff and visitors
- Monitoring and restricting access using 'who-where-when' templates, creating proprietary rules
- Monitoring workplace discipline using ACS and a face recognition system, unacceptable crowds in restricted areas, the wearing of masks and uniforms
- Contactless access for staff and visitors during the pandemic
- View reports to prevent future violations

How we do it

- Monitoring what happens to assets in real-time from anywhere in the world
 - Viewing video archives linked to ACS events using convenient search tools
 - Setting up multi-factor identification
Use of the photo and video confirmation of passes
 - Constructor of a convenient system of smart notifications
- ✓ TRASSIR NeuroStation video recorders
 - ✓ Access control systems
 - ✓ Suitable cameras from the recommended list
 - ✓ Integration with related equipment

Advantages

- * Staff and visitor management
- * Multi-factor authentication
- * Easy and quick setting of access levels
- * Flexible work and access schedules
- * Staff attendance and discipline reporting
- * Temperature-based access control
- * Setting up flexible response to system events
- * Close interaction with TRASSIR video analytics
- * Equipment setup and management
- * Photo/Video identification
- * Open API
- * Option to open the door using a mobile application

Work time tracking

Generating and uploading an attendance report to xls
Recording disciplinary violations (late arrivals, early departures, absenteeism) based on staff work schedules

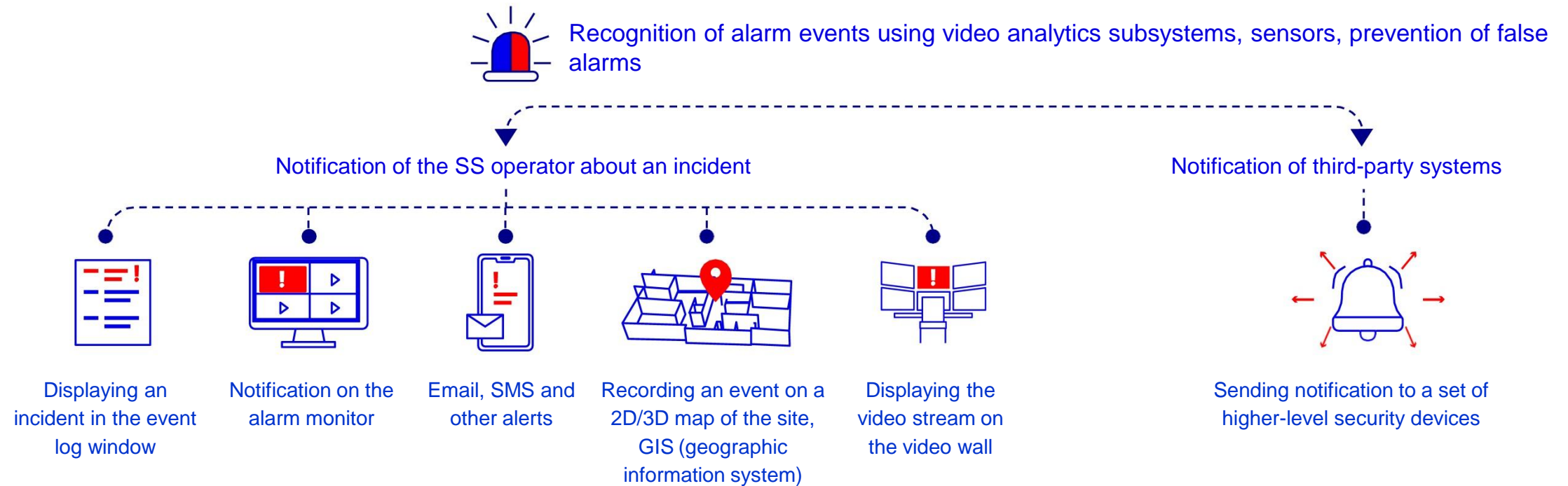
Working with floor plans

- Display ACS and CCTV devices and their states on the floor plan
- Viewing video from floor plan
- Manual control of ACS devices from the floor plan

TRASSIR CCTV System =

Smart and efficient interactive monitoring of the site and perimeter of a logistics park or warehouse

How events and incidents are handled:



Monitoring the Perimeter of the Site

Respond faster to emergencies, reduce losses and damage

security

Tasks solved

- Monitoring the movement of suspicious objects
- Organising restricted areas without physical barriers
- Rapid response to emergencies
- Preventing unauthorised access by outsiders

How we do it

- We integrate with sensors, security systems
- We support PTZ cameras
- We trigger alarm monitors and alerts in the event of an intrusion

- ✓ TRASSIR NeuroStation video recorders
- ✓ Active Stock module with the required number of channels
- ✓ Suitable cameras from the recommended list
- ✓ Package of situational analytics modules
- ✓ Package of service analytics modules

Monitoring the Perimeter of the Site

Minimising the impact of the human factor

Basic security package

- Video recorders
- Cameras

Situational analytics

- Crowding
- Left items
- Trespassing
- Line crossing
- Running person
- Object counter
- Loud sounds
- Smoking

Service analytics

- Loss of connection and signal from the camera
- Defocusing
- Light flare
- Obstruction of the field of view
- Change of the field of view
- Picture quality

Loading and Offloading Areas

Tasks solved

- Monitoring operation progress
- Remote monitoring of the integrity and position of cargo

How we do it

- Video surveillance
 - Situational analytics
- ✓ TRASSIR Neuro Station video recorders
 - ✓ Active Stock module with the required number of channels
 - ✓ Suitable cameras from the recommended list

Cargo Picking and Storage Areas

Tasks solved

- Entrance/exit monitoring
- Reducing errors and fraudulent schemes during assembly
- Differentiation of access rights to various areas
- Monitoring the right selection of goods from storage areas, the order picking process
- Monitoring staff movement
- Monitoring the movement of goods in the warehouse

How we do it

- Video surveillance
- Situational analytics
- ✓ TRASSIR Neuro Station video recorders
- ✓ Active Stock module with the required number of channels
- ✓ Suitable cameras from the recommended list
- ✓ Package of situational analytics modules

Managing Operations

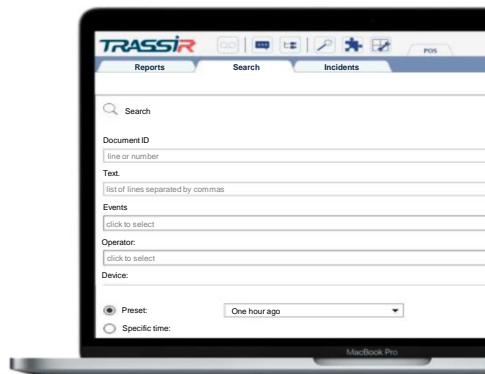
Quick problem detection with process tracking and visualisation

Video surveillance is a reliable way of linking data on all events and operations in the warehouse and the time they occur with their video recording. It provides prompt and efficient search for missing goods at the logistics complex

Identification of an order/goods

The product identification code is entered in the Search section in the Warehouse Operations Monitoring Module: pallet number, cell number, order number, product code or combination of codes

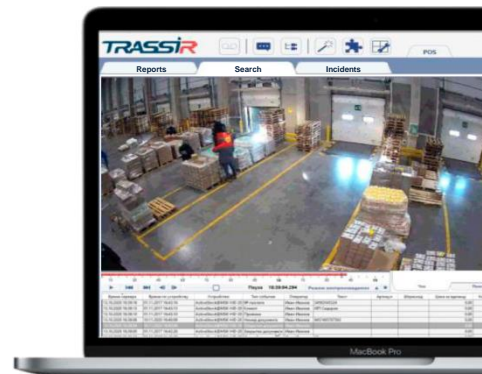
1



Video list with the missing goods

Quickly obtaining a list of video clips from all cameras showing operations with the lost goods

2



Video analysis to investigate lost goods

Selecting the required type of operations and quickly obtaining video to investigate the loss, which is also an evidence base

3



Monitoring Warehouse Operations

Tasks solved

- We reduce unidentified losses
- We reduce the time spent by the security department viewing the footage when investigating incidents
- We select and view video only from cameras that recorded operations with the goods
- We reduce warehouse/distribution centre losses by quickly finding the culprit
- We optimise the hours paid for warehouse/distribution centre staff (fewer operators are able to handle more incidents)

How we do it

- Video surveillance
 - Auto Trassir licence plate recognition
 - Integration with ACS, equipment (boom barriers)
- ✓ TRASSIR Neuro Station video recorders
 - ✓ Active Stock module with the required number of channels
 - ✓ ArUco Detector module
 - ✓ Suitable cameras from the recommended list

Advantages

- * Significantly faster incident investigation
- * More incidents investigated
- * Quick and easy search by events, product or employee
- * Video categorisation by warehouse activity scenarios
- * Online viewing and archive search
- * Single interface for handling video and warehouse operations from WMS
- * Easy integration with WMS via API
- * One or more cameras can be used for a facility or surveillance area





Adaptive process management

By using the TRASSIR solution, the logistics park gets access to the full range of security and operation management features available at TRASSIR as well as an advanced security, administration and data control package

Interconnectivity

Link logistics park tasks with the work on their implementation using analytics modules based on centralised video monitoring

Coordination of various departments

Improve interaction between various departments using unified work processes, software and hardware integration

Up-to-date analytics

Track the execution of tasks and guide departments towards success with multipurpose reporting

Full security

Thanks to our reliable infrastructure, all work processes will be secure and scalable

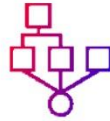


System Features

Get the powerful features, controls and customisation you need to manage your logistics park processes



Single system for monitoring the entire facility and each area



Option to use proprietary scripts



More than 10 analytics plugins



Automatic report generation and forwarding



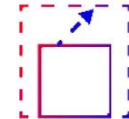
Classification of situation types and scenario launching



Facilitating access to the site for staff and transport



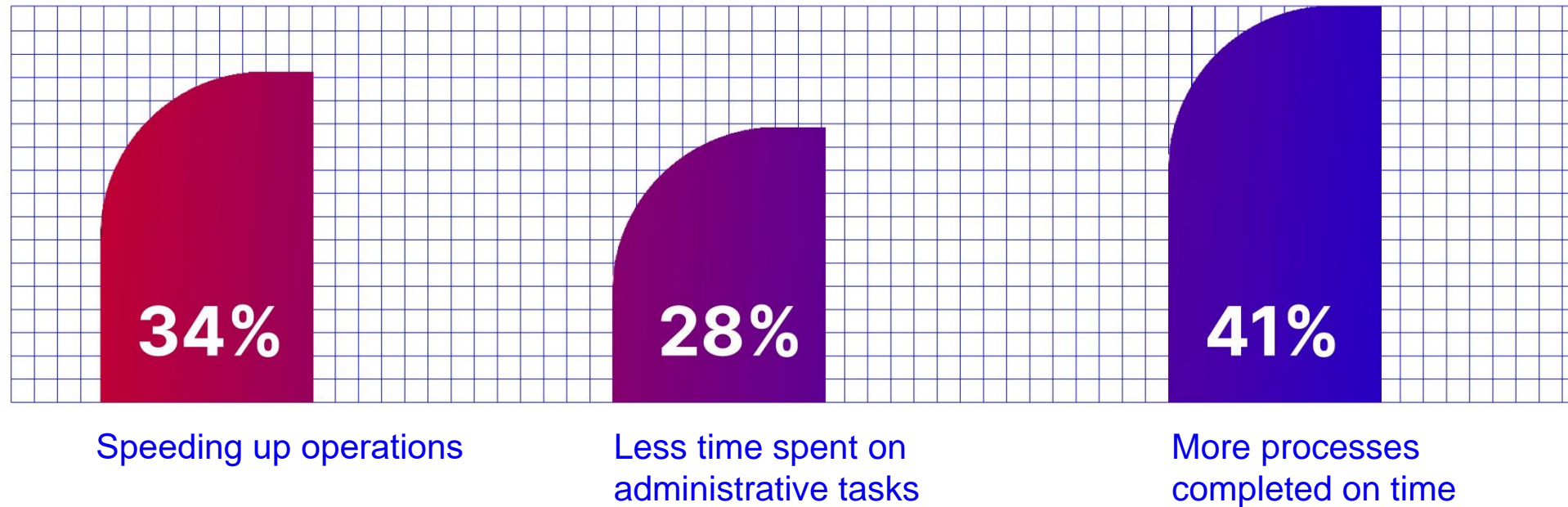
3 types of remote access



System scaling as needed

Commercial Value of TRASSIR

TRASSIR solutions have shown a positive impact on the efficiency of business processes and the satisfaction of partners with the implementation



Already Implemented



Comprehensive solution for a distribution centre

A CCTV system with TRASSIR CLOUD support has been implemented, which includes:

- **TRASSIR IP cameras**
- **TRASSIR video recorders**



Warehouse video surveillance

A CCTV system with TRASSIR CLOUD support has been implemented, which includes:

- **TRASSIR IP cameras**
- **TRASSIR video recorders**
- **AutoTRASSIR** – a licence plate automatic recognition module
- **TRASSIR Bolid** – integration with Bolid OPS software and Orion Pro workstation ACS
- **TRASSIR SIMT** – a multifunctional motion detector

Already Implemented



Comprehensive solution for a network of warehouses

Perfume, household chemical and consumer goods distributor. The CCTV system was set up using

- **A server with TRASSIR software installed**
- **An AutoTRASSIR module**

Security and monitoring of activities at warehouses with a total area of about 3,000 m²



Warehouse video surveillance

Large wholesale warehouse building

The CCTV system was set up using

- **TRASSIR IP cameras**
- **TRASSIR PVR video recorders**

The system ensured safety for staff and property as well as protection against theft and man-made incidents



trassir.com



welcome@trassir.com

**With TRASSIR,
your logistics complex
is secure and will perform better**

