

At a time when businesses need to review their costs, while shifting towards a more digitally enhanced workplace, it makes sense to look to technology for an intelligent remote-monitoring system that is cost effective, increases efficiency and mitigates risk.

As experts in integrated Facilities Solutions, Tsebo has launched a state-of-the-art national command and control centre (NCC) to transform its operations by offering customers real-time access to performance dashboards allowing them to make quick decisions about their critical assets.

By centralising operations from our national control centres in Midrand and Cape Town, Tsebo's Integrated Facilities Management Solution can provide your business with an on- and off-site artificial intelligence (AI) monitoring platform to automate 24/7 remote surveillance of your premises, as well as alarm monitoring, IoT monitoring, fleet management, fire and leak detection and more.

# THE BENEFITS

This smart solution can be tailored to fit the needs of your business environment without comprising on quality. It provides the following benefits:

- Remote monitoring solutions that are integrated with existing health and safety technology, as well as physical protection that maximises security
- Increased business intelligence through advanced data analyses and reporting
- Increased productivity concentrate on your core business knowing that your assets are safe
- Reduced operational expenditure avoid unplanned and expensive downtime as a result of unexpected breakdowns
- Increase the lifespan of your equipment plan for preventative maintenance
- Remotely control operations in the field
- Manage energy and utility consumption
- Manage COVID-19 compliance



**ENTRUST YOUR** NON-CORE BUSINESS TO THE LEADING **FACILITIES SOLUTIONS PROVIDER** 



## THE SOLUTIONS

Tsebo's NCC embraces the best of the Fourth Industrial Revolution to ensure that your integrated facilities management is backed by cutting-edge technology through intelligent remote monitoring, control and command.

By keeping a constant eye on your business, smart surveillance can add an extra layer of protection and help to overcome common business challenges such as:

- The difficulty of monitoring remote or unmanned and unsupervised sites
- Rising costs
- Internal theft and shrinkage
- Integrated facilities management

Let Tsebo take care of your business and assets 24/7, through our smarter, faster and more cost-effective solutions that can be tailored to include, among others:

- Video surveillance and alarm monitoring
- Intruder detection
- Tailored fire systems
- Smart devices monitoring
- Water/leak detection
- HVAC (heating, ventilation, air-conditioning etc) monitoring
- Fridge alarms (VRF/VRV-variable refrigerant flow or volume)
- Access control

- Control of back-up power (generators, UPSs etc)
- Remote shutdown management
- Fuel stock monitoring and control
- Lighting control
- Lift-control systems
- Pumping, water tanks and irrigation systems
- Energy monitoring

Our fit-for-purpose solutions are customised to provide an end-to-end response to suit the needs of our strategic network partners by offering intelligence gathering, cost savings, 24/7/365 remote audio, video and command capabilities and segregation of duties between on-site and off-site environments.

#### **APPLICATIONS:**

- Commercial
- Industrial
- Educational
- Mining
- Healthcare
- Corporate buildings
- Estates
- Financial institutions
- Agriculture
- Retail
- Manufacturing
- Distribution centres

# 1. Business intelligence model

OUTPUTS FOR PROTECTION INPUTS AND PROCESS CLIENT INPUTS AND INFORMATION **Automated reporting** Managing by exception COLLATION | EVALUATION | INTERPRETATION Site visit inputs Investigations **Incident reports** RISK PREDICTION AND MITIGATION Mitigating risk Investigations ELECTRONIC SECURITY Alarm activations Reporting to SLA **CCTV** footage **Business intelligence**  Third-party system integration Assets Analysing data Third-party incident reports Tsebo NCC Dashboards 24/7/365 NOC Risk assessments Client perception Access data Intelligence TSEBO INPUTS CONTINUOUS OPERATIONAL INPUTS

#### **Cyber Integrated Intelligence Management System (CiiMS)**

- Proactive identification of risks and threats
- Accurate measurement of the implemented controls (management information)
- Effective response to incidents, and exceptions with predefined escalation processes
- Electronic occurrence capturing, allowing reporting and incident data and analysis
- Investigative and analysis tool and support (linking incidents and building stronger evidence support)

## 2. Exception based monitoring solutions

Based on deep learning algorithms, Tsebo's behaviour analysis server supports the detection of behaviour events in indoor areas, streets, perimeters and places where crowd trend analysis is needed. It triggers alarms timeously, which can effectively improve the security of various places.

#### **INDOOR**

# OUTDOOR

#### **PERIMETER**

# TREND EVENT BASED MONITORING ANALYSIS

- POS monitoring
- Heat mapping
- Facial recognition
- Remote shutdown management
- Measure and control temperature settings
- Perform stop/start operations where appropriate
- Fraud detection and case management
- Human density (social distancing)
- Human behaviour analysis
- Intelligent human tracking
- People counting
- Temperature analysis
- Route analysis
- Queue analysis
- Loitering detection
- HVAC monitoring

- Number plate recognition
- Time and attendance (access control)
- Object tracking
- People gathering detection
- Falling down detection
- Physical conflict detection
- PPE detection
- Speed transgression monitoring
- Fuel stock level monitoring
- Lighting control system
- Monitors water tank levels and detect leaks
- Pumping and irrigation system monitoring

- Access control
- Intrusion detection
- Region entrance detection
- Region exiting detection
- Loitering detection
- Parking detection
- Unattended baggage detection
- Object removal detection
- Radar detection
- Fence line detection
- CCTV and Security Control

- People density analysis
- Real-time people counting
- Fridge monitoringAlarm monitoring
- Fire monitoring
- Maintenance alerts
- Fleet monitoring
- Risk analysis monitoring
- Monitoring and control of backup power such as generators or UPSs
- Electrical-metre monitoring
   Variable frequency drive (VFD)
   monitoring
- Monitors variable refrigerator flow or volume (VRF/VRV)

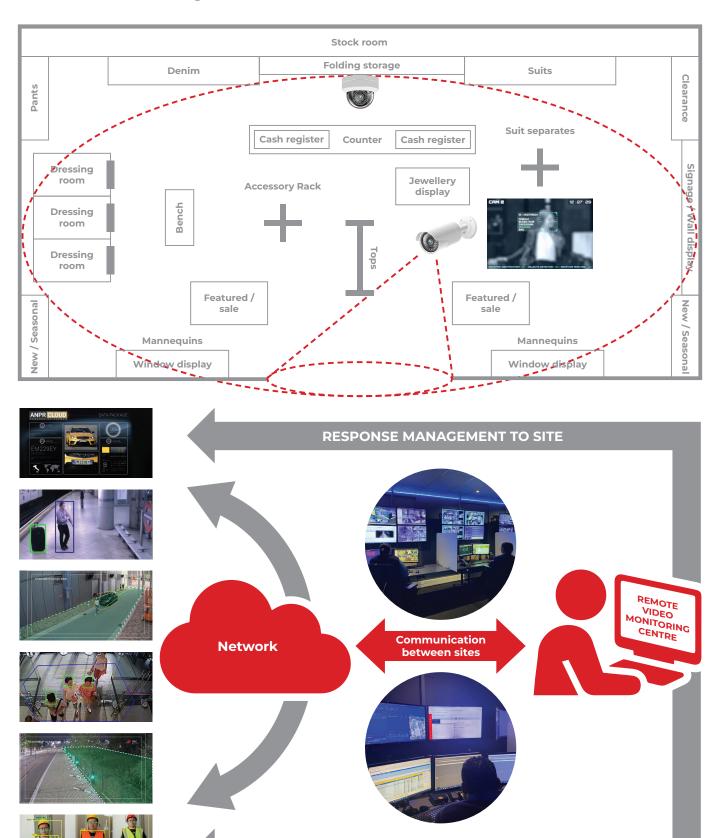
# Onsite/offsite remote monitoring centre





#### Other integrated solutions

- Dedicated business console
- Risk mapping reports
- On-site remote management CCTV, access control and logisitics
- Exceptional reports and business intelligence information
- Facilities monitoring and management, integrated monitoring assets
- Time and attendance integration



**RESPONSE MANAGEMENT TO SITE**