

Voortrekker Road Corridor Improvement District

INNOVATION

The Voortrekker Road Corridor Improvement District (VRCID) provides top-up urban management, social upliftment and public safety services for business owners and commuters in a busy urban area, around 20 kilometres north of Cape Town, South Africa. The VRCID is funded by top-up levies paid by commercial property owners. The levies are based on the value of the property. This restricts the organisation's budget and ability to deliver.

From its beginnings, the VRCID deployed boots on the ground – public safety officers and cleaning operatives. However, managing teams who are on the street 24/7/365, in all weather, was becoming a considerable challenge. In particular, reporting processes were flawed and response processes were ineffective.

The VRCID has limited financial resources, like any other improvement district, but it still needed to seek creative and innovative ways to deliver its mandate. The original system was failing, causing high staff turnover, increasing numbers of complaints and a lack of trust between service providers and partners.

In addition, with such a manual process, it was difficult for the person on the street to be able to report incidents directly, knowing that they would receive a response.

In seeking better outcomes, the VRCID identified an opportunity to use predictive technology to augment the work of on-the-ground officers.

The VRCID is one of few improvement districts in South Africa to host its own surveillance control room and manage its entire public safety and urban management operation using data and communication from a central point.

OUTCOME

Ironically, crime statistics went up by approximately 100% after the CCTV control room was built and the system implemented, from around 19 000 incidents a month to 36 000. This was attributed to real-time reporting. Previously, those reports were provided in a very analogue way and this was unreliable. Human error was a very real factor, with reports lost, incomplete or not followed through.

However, the control centre enables the VRCID teams to see what is really taking place on the ground. The corollary of more crime being reported, and better monitoring is that the arrest rate also increased significantly.

All operational staff report into the control room, from the public safety officers to precinct managers and even cleaning staff. The reports are fed into a centralised database which records every crime reported, every urban cleaning requirement and also monitors the social needs of the vulnerable and homeless.

Cameras are located at known "choke points," which enables monitoring staff to track movement through the area more accurately. Data drawn from reports is analysed on a weekly basis to identify trends and crime hotspots. This information is then handed over to the South African Police Services and Cape Town Metropolitan Police Services in support of their crime fighting strategies.

Drawing on the data analytics, the teams are better able to predict where issues might recur and to be more focused on deploying scarce resources. They are also able to respond more comprehensively and more efficiently.

EXECUTION

The urban management and public safety contract between the VRCID and its service provider is renewed every five years as is the requirement from the City of Cape Town. With relationships breaking down, a year before the contract renewal came up, Securitas SA began to work more closely with the VRCID to find a way to improve the reporting and monitoring system. There was a need to support the VRCID on three levels: in managing public space, providing a direct reporting mechanism for property owners, and to provide a direct link between ordinary members of the public and the CCTV control centre.

During these discussions, Securitas SA presented international and local precedents that encompassed the smart city principles. The resulting system design provided a means to digitise the people on the ground and to implement a higher-level, more proactive response capability.

The next step was to educate levy payers and the public. Communication became very important, to reinforce the message that while there were fewer officers on the streets, the surveillance and response mechanisms would be vastly improved. The control room was constructed and the system came online during 2018.

REPRESENTATION

The data-driven urban management and public safety project was explicitly designed to be a joint approach, integrating a solution across various groups responsible for public safety, social development and urban management within Bellville and Parow town centres, both of which fall within the boundary of the VRCID. This area is commonly known as the “2nd” CBD of Cape Town.

The system is linked to the City of Cape Town’s municipal fault reporting system, ensuring that teams there are aware of important infrastructure maintenance needs.

Securitas SA were the main drivers of the concept and, after extensive persuasion and consultation, the VRCID board approved the proposal and contract.

The VRCID also works in partnership with the Greater Tygerberg Partnership and other private, public and civil society organisations who are driving urban renewal and attracting investment to the area.

Ultimately, however the VRCID is mandated by the levy payers who are property owners in the area. With better urban management in place, and seeing the improvements the system has begun to deliver, those owners will see the value of their assets rise over time – a sure sign of a more successful urban environment.

REPLICATION

The design and configuration of the data-driven urban management system has been in place for two years. The system can be replicated elsewhere. It comprises:

- A centralised control room, fitted with monitors and radio connectivity
- Trained shift managers and surveillance staff
- Advanced data capturing and reporting database
- 24/7 emergency phone number and WhatsApp reporting
- Officers trained to a higher level, with more permissions than previously designated
- Visible, fast and highly equipped rapid response vehicles

An important component in the system set up was the need to understand how monitoring staff would and should interact with the screens they were watching. The system was designed for each monitor to watch the scenes from around 20 cameras each, displayed on three desktop screens and a bank of screens on a video wall. They are able to zoom in to street level and zoom out to view the area from about three kilometers in some cases.

With the right investment and will to succeed, the system could be easily replicated in other areas. After all, technology is there to enhance, not substitute the effectiveness of human beings.

COMPLEXITY/SIMPLICITY

The greatest point of resistance was fear of change. Stakeholders were concerned about using fewer public safety officers on the ground, believing that this would not provide sufficient coverage.

The VRCID and its partner, Securitas SA, conducted extensive research into global precedent to set minds at rest and to demonstrate that the answer was strategic placement of such cameras.

Another concern was the effect of less visible policing. Commentators suggested that if officers were not visible, criminality would accelerate. We were able to show the enabling power of technology in deploying public safety officers more efficiently.

The VRCID public safety teams are mandated to protect public spaces only. This requires more collaboration between neighbourhood watch groups and better internal and external communication.

Changing mindsets was a primary focus of the consultation. This required education to remind people that change was essential to producing better results. The new system has improved consistency between teams, reduced staff turnover and improved relationships between the teams.

A final challenge is that South Africa is in a crisis of secure electricity supply, characterised by rolling blackouts. To counteract this, the VRCID is investing in back-up power to keep the CCTV system on at all times.