ART OF LOGIC

R&D Specialists in Computer Vision

THE **CITY+** SOLUTION

Our Bayside Story

The City+ Solution aims to provides the ability to create integrated smart cities. We know that a community is made up of more than its parts. Every element of a community is integrated and changes to one component impact others.

City+ has been developed to create and ingest data points from a range of factors that make up a city, understand their relationships and give outcomes that are tangible.

CASE STUDY

Story **Highlights**

Bayside Council

Bayside Council was established in 2016 through the amalgamation of the former City of Botany Bay and Rockdale City Councils. Located in southern Sydney, the Bayside local government area spans the Botany Bay foreshore from Dolls Point through to Mascot and Hillsdale. With a population of over 170,000 people, the coastline provides for a popular destination in the warmer months, leading to significant increases in population.

Automating processes for staff and police

Enabling operating hours to be extended through technology

Providing exceptional customer service

The **Challenge**

With its direct access to the Botany Bay foreshore, Bayside had long been working to deter dangerous and illegal driving as well as occurrences of anti-social behaviour along its idyllic waterfront.

After spending years advocating for their community to the state government for a range of measures to try to stem the problem, Bayside was faced with continuing acts of dangerous driving.

With legacy programs not achieving the results Council and the community had hoped, Bayside was left to investigate alternative options. This led to the realisation that a transformative change of approach was required.

The **Solution**

Bayside Council came to realise the most effective way to reduce illegal driving and anti-social behavioural incidents could be through technology.

Working with the team at Bayside Council, we developed a solution that would meet the overarching requirements of:

- The ability to infringe illegally parked vehicles after hours where it was unsafe for Council offers to attend, or outside of operating hours
- Real-time alerts for illegally parked vehicles to enable action
- Better quality security surveillance
- Ability for NSW Police to have controlled access to the Bayside CCTV network

Image 1: Sanoni Avenue Carpark 26/04/2023 @ 10:02AM (BEFORE)

Image 2: Sanoni Avenue Carpark 26/04/2023 @ 13:12PM (AFTER)

Using our AI and Machine Learning solution, Bayside deployed the technology to a long-term hotspot along the foreshore. This location had seen increasing amount of hooning, anti-social behaviour, and illegal activity.

Our solution is natively integrated into the Nx Witness video management system allowing Council to easily review footage of events, without the painstaking manual tasks of reviewing hours of footage.

Using high-definition optics and computer vision on edge-based servers to do object detection, Art of Logic Engineers then apply in-house analytics to identify different elements including, vehicle, make, model, colour, and licence plate number.

Using the Nx Cloud solution, we have also been able to work with both Bayside and NSW Police to provide controlled access to the Bayside CCTV network. This has reduced the manual task of reviewing hours of footage – streamlining investigations.

The **Outcome**

The easy-to-use solution sees Council officers reacting to alerts of illegal parking, and processing these as part of their standard operating hours. It has removed the need for officers to be on-site in the early hours of the morning, in potentially unsafe situations.

Bayside now receives alerts for illegally parked vehicles overnight, with actioning officers undertaking the final checks and validation process each morning. Council has told us that the solution has made this work easier for staff and provides exceptional customer service to their community.

> **We have seen a 75-80% drop in repeat offenders parking illegally or undertaking acts of dangerous driving. Our community has told us that they have seen up to a 90% decrease in hooning and illegal driving**

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What's more – Bayside are now able to provide improved reporting through the development of business intelligence dashboards. Using this data, Bayside has started to proactively identify hotspots and seek to enable behavioural change before the problem increases.
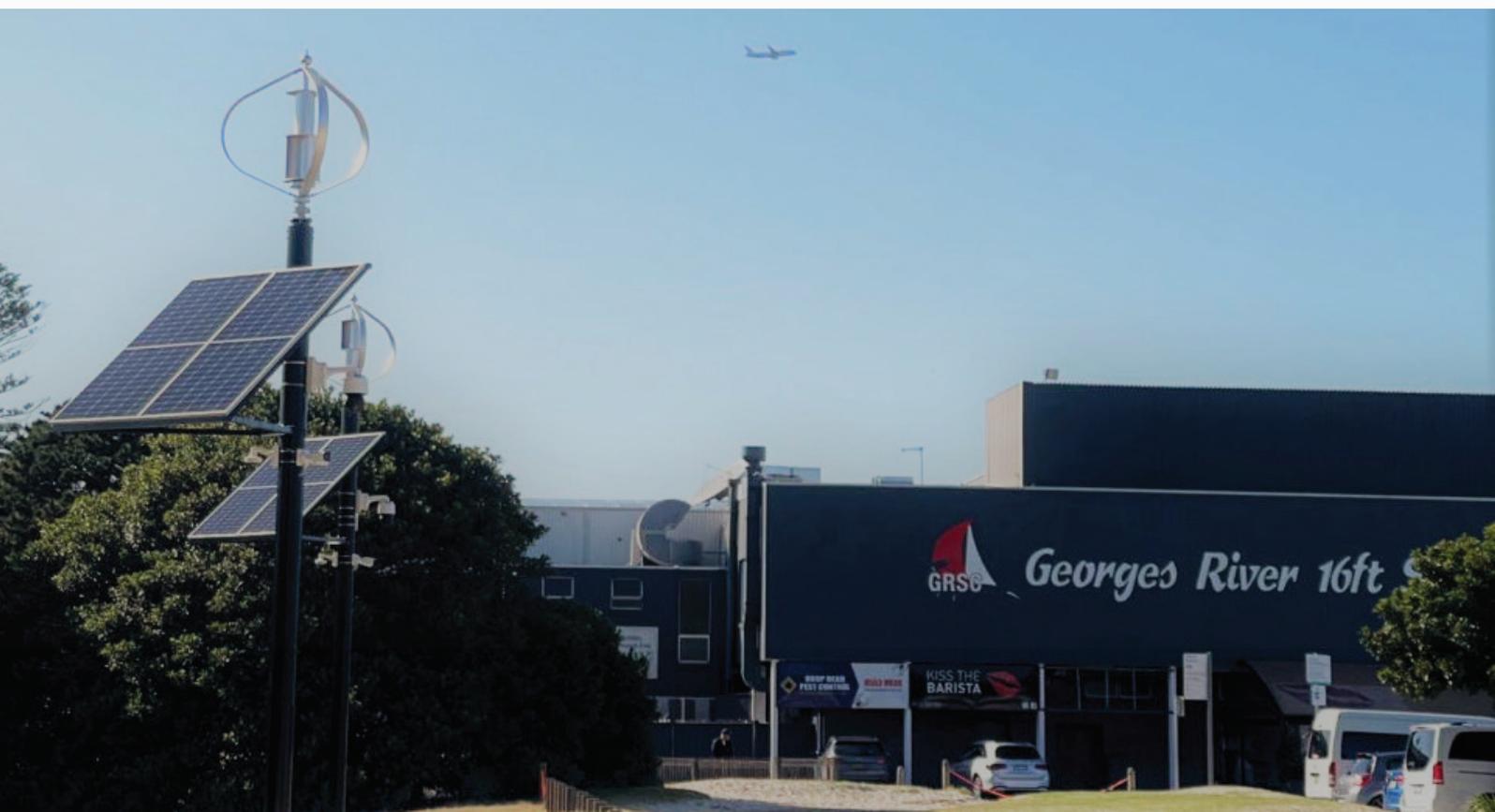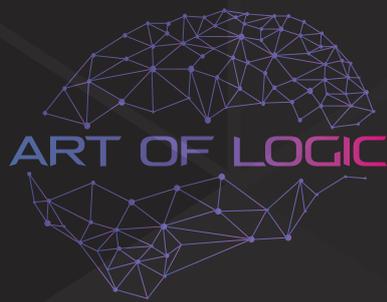
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Our team is here to help. Contact us for more information, product demos and advice.

www.artoflogic.ai

The City+ Solution

Creating Integrated Smart Cities

Let us tell you more about the amazing things we do.

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