

Singapore – the world's first Smart City

In October 2012, Singapore announced they wished to position themselves as the world's first Smart City and they announced a program called SSIPO (Safety and Security Industry Program Office) under the leadership of Anselm Lopez.

However, at that time the definition of a "smart city" was fairly vague and iOmniscient published a book called IQ-Smart City to help all the players understand what was possible with the technology.

In 2013, SSIPO implemented a multimillion dollar test bed in 4 precincts where solutions from 4 different Systems Integrators were implemented. Two of the integrators (NEC for Orchard Road and Cassidian-Airbus/ NCS for Little India) decided to use iOmniscient's technology for their solutions.

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What was implemented by iOmniscient

In both precincts iOmniscient implement its AI based Multisensory Analytics System which included Video, Sound and Smell analytics.

Three new capabilities were pioneered as part of the Singapore SSIPO program. These were:

Automated Response:

This involved the system:

- understanding the incident,
- determining the type of responder required
- automatically locating the nearest appropriate responder and
- telling them where to go and what to do.

This capability has been internationally patented by iOmniscient.

Combined Analytics Use Cases:

To truly understand a situation, the system needed to combine multiple analytics simultaneously or in a sequence. For example:

- if a person falls down, a responder can be sent to assist them. But if a gunshot is heard at the same time, responders can be told to hold back in view of the danger.
- If a person is found to intrude in an area, the system will attempt to recognize him first and raise an alarm only after confirming that he/ she is not part of the security team

Video Utility:

There were seven different government agencies involved in the program, each with their own CCTV network. In many areas the cameras and the network were duplicated and this was felt to be necessary as each agency needed to keep their information confidential. However, it resulted in the government as a whole spending many times more than was necessary.

The concept of a Video Utility was evolved where a common CCTV network was established where each agency would only receive the information that they were authorized to receive. As such the National Environmental Agency would receive information on Garbage bins overflowing, while the traffic department would receive alarms if there was congestion building up on the roads.

This capability has also been internationally patented.

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Major event in Little India proves the technology



On 8th December 2013 an incident occurred that demonstrated the real value of iOmniscient's technology. A bus accidentally ran over and killed an Indian labourer in the Little India Precinct. His friends were upset and set fire to the bus and a riot ensued.

The incident was captured by iOmniscient's Automated Response System at 9:23pm.

By 9:25pm the nearest Police vehicles were on their way (2 minutes)

By 9:31pm the first Ambulance had arrived (8 minutes)

By 9:37pm the Fire Brigade had arrived (14 minutes)

At 9:56pm the situation was still not in control and the mob set alight a police vehicle

By 10:44pm the crowd had been dispersed (1 hour and 21 minutes)

On 10th December 24 people were charged

The very quick response by the various responding agencies was facilitated by iOmniscient's Automated Response system that had recently been implemented in the area. Average response times were improved by 80% using the technology and a response that would normally have taken 25 minutes or more now required under 5 minutes.

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