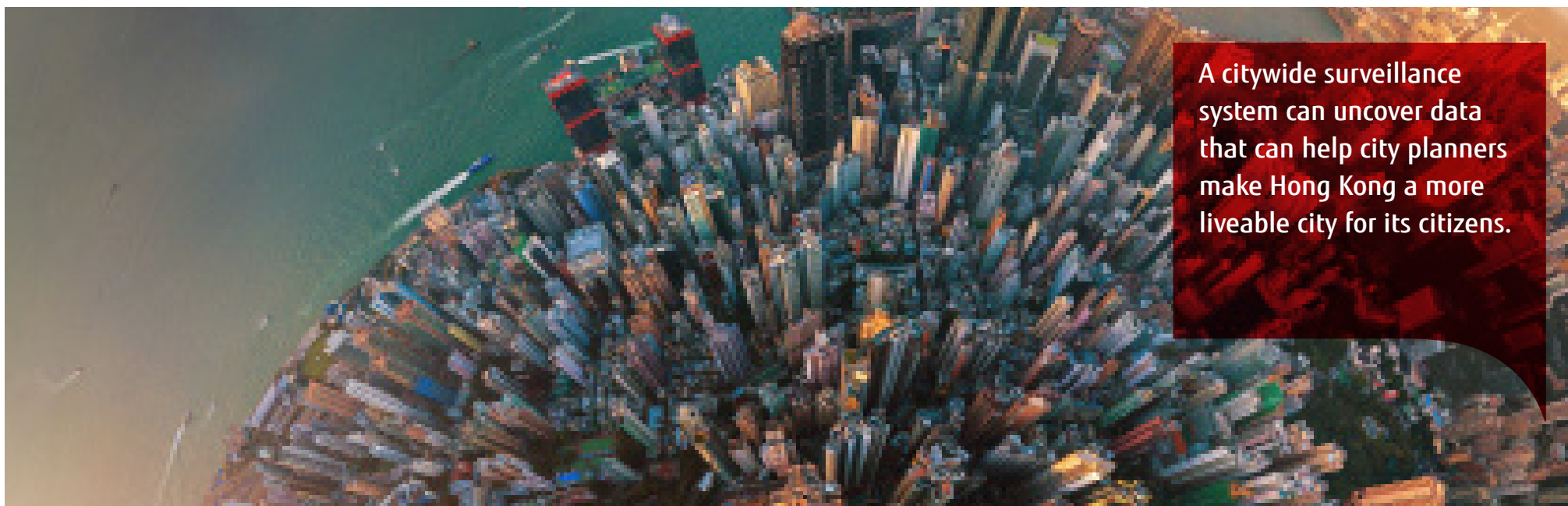




Using
artificial
intelligence
to make
Hong Kong
smarter
and safer



Becoming a smarter, safer city is key to Hong Kong's future strategy to attract business investment and improve quality of life for citizens and visitors.

Hong Kong has relatively low crime rates, particularly given how densely populated it is. Small scams and petty theft occur in tourist areas and highly-congested areas. The threat of terrorist-related activity is also minimal.¹ To some extent, this could be attributed to Hong Kong's modern police force, which actively monitors and prevents crime. Consequently, the crime rate in Hong Kong continues to drop with 2018 crime statistics the lowest since 1970.²

In a densely-populated urban environment such as Hong Kong, however, the opportunities for crime and terrorism are always present and the police force and other public-sector organisations must do what they can to stay a step ahead of would-be criminals. But, with just 29,268 police officers³ for more than 7.4 million people⁴, this can prove challenging.

Artificial intelligence (AI) can help security forces maximise their resources without increasing headcount. By implementing a citywide surveillance system, police and other public-sector organisations can improve safety for Hong Kong citizens.

Furthermore, a citywide surveillance system can uncover data that can help city planners make Hong Kong a more liveable city for its citizens.


There are three key ways AI can help make Hong Kong smarter and safer.

¹ <https://www.osac.gov/Pages/ContentReportDetails.aspx?cid=25775>

² https://www.police.gov.hk/ppp_en/01_about_us/cp_ye.html

³ https://www.police.gov.hk/ppp_en/11_useful_info/facts.html

⁴ <https://www.worldometers.info/world-population/china-hong-kong-sar-population/>



Using AI makes it easy to identify whether an object has been left unattended and for how long. This lets security personnel investigate and, potentially, avert a disaster.

1 Monitoring crowds

Crowded places provide opportunities for petty crime such as pickpocketing or other scams. Being able to predict where crowds may gather, as well as their flow and direction, and where their attention is focused, can help police forces identify high-risk areas. They can then deploy more personnel to those areas as required, as well as continue monitoring events remotely via cameras.

This will be particularly important during big events that draw significant crowds, such as Rugby Sevens tournaments in Causeway Bay. Furthermore, if a security event happens, crowd monitoring can help police and other emergency services pinpoint the source of the disturbance and deploy resources faster and more accurately.

Facial recognition powered by AI can help law enforcement departments identify wanted people or blacklisted travellers, even if they've disguised their appearance or are wearing a hat, for example. Video surveillance technology can also be used to track down a suspect based on the clothes they're wearing via a sophisticated search function. This makes it faster to find a person suspected of committing a crime. The same functionality can also be used to find lost children or elderly people more quickly, returning them to their loved ones.

Crowd monitoring can also help governments make smarter decisions around infrastructure. By collecting data and analysing patterns and trends, government departments can identify improvements to transport systems and security enforcement systems.

2 Monitoring vehicles

AI solutions can detect and identify cars and other vehicles based on their make and model. Using deep learning, the AI solution can even identify the colour of the vehicle. This is valuable when searching for a stolen vehicle or one that has been used in a crime.

Even more valuable, perhaps, is the capability of this technology to provide smarter parking solutions. With parking at a premium in congested Hong Kong, carpark operators need to maximise the utilisation of available spaces. The AI solution can detect all available parking spaces, how many cars are currently in spaces, how long they've been there, and whether they are parked illegally. Video analytic technology makes it very simple for carpark operators to see this information and act accordingly.

The same technology can also be used to help drivers by leading them to vacant spots. This prevents situations where drivers circle the carpark many times, growing more frustrated as they search for a parking space. Using a mobile app, drivers can head directly to a vacant space, saving time. By providing these services, carpark operators can potentially charge a premium.

3 Monitoring objects

One of the biggest potential threats to a city's security in the age of widespread terrorism is unattended objects. Using AI makes it easy to identify whether an object has been left unattended and for how long. This lets security personnel investigate and, potentially, avert a disaster. In the best-case scenario, it can help reunite people with their lost belongings.

Becoming a smarter city

Compared with its Asian neighbours, Hong Kong currently lags behind in terms of using innovative technology to improve liveability for citizens. The Hong Kong Smart City Blueprint sets out a series of measures for Hong Kong to catch up to other smart cities, including embracing innovation and technology.

Cities in Japan and Europe have already begun adopting AI-powered solutions such as licence-plate recognition for access control for vehicles entering restricted areas. At some fuel stations in Europe, AI solutions are used to detect car types and manufacturers as well as people entering the fuel station and retail shops.

In East Kowloon, smart lampposts have been erected for trial. The lampposts will use Internet of Things (IoT) sensors to collect data including weather, air quality, people and vehicle flow, and more.

A solution using existing infrastructure to enhance security and provide data

Using existing surveillance cameras, Fujitsu's GREENAGES Citywide Surveillance system provides in-depth analytics based on AI to help cities become smarter. With a comprehensive yet easy-to-use interface, GREENAGES is ideal for use cases ranging from data gathering for infrastructure improvements to security enhancements. Detecting patterns and behaviours, GREENAGES can help Hong Kong become a safer and smarter city using existing assets.

Fujitsu has offered advanced video technology for more than 30 years. It has extensive experience with large-scale video surveillance systems in countries including Japan.

Fujitsu's GREENAGES Citywide Surveillance can help Hong Kong leapfrog other Asian cities in becoming smarter and safer, attracting more business to the city and improving quality of life.

To find out how, contact Fujitsu today.



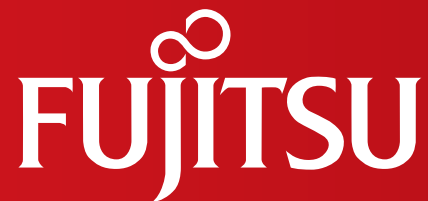
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