

How can we innovate
to ease congestion
in **tomorrow's urban
cities?**

FUTURE READY
singapore



In the global spotlight

Choked roads and massive congestions are starting to become a common sight in urbanised cities. Incidents on the road such as vehicle breakdown, temporary road works and accidents only make matters worse. Is there a way for transport authorities to detect incidents early and respond quickly to maintain a smooth and safe traffic flow on the roads?



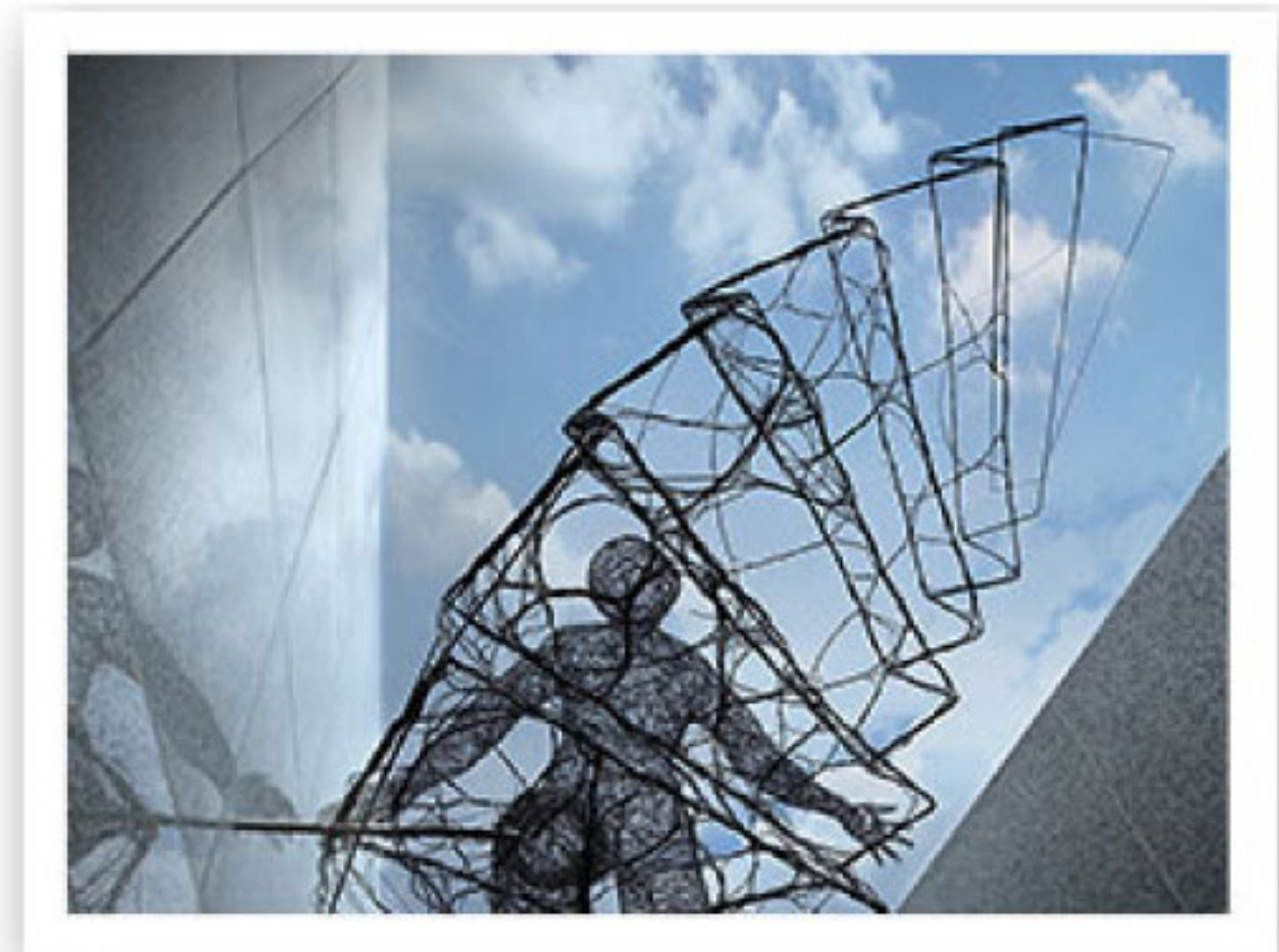
Tackling the issue

Information regarding traffic disruption needs to reach traffic operators quickly. A constantly updated overview of the traffic situation will enable them to react swiftly to restore normal flow. With that in mind, the Land Transport Authority of Singapore (LTA) saw the need for an intelligent transport solution that detects congestions and incidents in real-time. This brought about the collaboration between LTA and ST Electronics (Info-Comm Systems) to develop the Junction Electronic Eyes (J-Eyes).



What makes the solution innovative

J-Eyes is a sophisticated system that consists of surveillance cameras mounted on streetlights and traffic light posts at strategic road junctions to provide full traffic visibility. Using innovative image-processing techniques and artificial intelligence, J-Eyes is able to automatically alert an operator should a traffic accident or congestion occur. So that they can take remedial action such as regulating traffic light signals to improve traffic flow.





Singapore's role in development of solution

Transport authorities constantly look towards developing smarter traffic systems to manage population density effectively. In addition to J-Eyes, the LTA has worked with ST Electronics (InfoComm Systems) to build a wide range of Intelligent Transport Systems (ITS). They include the Expressway Monitoring and Advisory System (EMAS) which provides motorists with real-time road conditions, the Parking Guidance System which provides real-time information on parking availability, and many more.

Exploring new frontiers

Besides expanding J-Eyes coverage, LTA plans to integrate a traffic estimation and prediction tool to the ITS. As information is essential to road users, predicting the levels of congestion using historical traffic data and real-time feeds can help motorists make better decisions. Also, it is quicker to restore normal traffic flow when motorists avoid congested areas.



ST Electronics

A company of ST Engineering

Background on solution provider

ST Electronics (InfoComm Systems) Pte Ltd is a leading solutions company in the Asia Pacific region providing infocommunications, advanced electronics and intelligent transportation systems to a wide variety of industry sectors worldwide. Over the past two decades, ST Electronics (InfoComm Systems) built its expertise in developing Intelligent Transportation Management Systems and Integrated Security and Surveillance & Emergency Response Systems to provide tailored solutions to transport authorities in the region.



**Today's
business partner_
For tomorrow's
world_**

What is *Singapore: Future Ready*?

Singapore: Future Ready articulates Singapore's aspiration to be an ingenious partner for global businesses as they develop their ideas for tomorrow's solutions. We do so by recognising the value of long-term relationships, adopting a forward-looking approach, and taking on challenges with a can-do spirit. Against the backdrop of an ever-changing economic landscape, it also underlines Singapore's unique ability to help companies deliver solutions more quickly, with the right combination of talent, innovation, and strategic leadership.

To witness Singapore's future-ready partnership in action, visit www.singaporebusiness.com now.