

Papercast integral to Dubai RTA passenger information display system

هيئة الطرق والمواصلات
ROADS & TRANSPORT AUTHORITY



The [Roads and Transport Authority](#), commonly known as RTA, is the major independent government roads and transportation authority in Dubai, United Arab Emirates.

Energy International, a strategic partner of Papercast in the UAE, was selected to incorporate innovative real-time passenger information displays to provide timely and accurate service information to bus riders at various smart bus stations, bus shelters and bus stops.

Project consisted of more than 150 digital displays comprising of Papercast® solar powered 13" e-paper, 46" LCD displays and 75" LCD touchscreens, which are all managed through one system – Papercast's revolutionary Content Management System designed specifically for transit authorities.

E-paper displays prove their worth as a power efficient and flexible technology for public transportation – entirely solar powered they offer significant reductions in both the Capex and Opex for transport authorities. This project originally formed part of critical infrastructure to facilitate millions of visitors to Expo 2020.



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Chadi Farran, Business Development Manager at Energy International

Dubai is one of the fastest growing cities in today's world, making the provision of high-quality infrastructure facilities is absolutely imperative. With that in mind, as well as the high priority allocated by the government of Dubai to the supply of an advanced transport network for the people of Dubai, RTA endeavours to improve the public transport facilities and develop roads across the Emirate to make travel safer and smoother.

Background

As a system integrator specialising in SMART city-wide parking and transportation fare collection for public transportation authorities, a strategic partner of Papercast in the UAE, Energy International, has a long-standing relationship with RTA.

RTA is committed to enhancing the transportation infrastructure in Dubai to serve current demand while preparing it for predicted future growth. The RTAs vision is to create a truly multi-modal, multi-agency transportation network to serve the general population of Dubai, integral to the successful delivery of the Smart City Project, in particular "Smart Life" which aims at increasing the quality of life of the population of Dubai.

The aim of this project was to create visionary bus stations, bus shelters and bus stops fitted with smart technology to help meet these goals.

Solution

Energy International led the roll-out of an innovative real-time passenger information display system to provide timely and accurate service information to bus riders at select locations – transforming the current infrastructure into smart bus stations, bus shelters and bus stops.

The solution consists of more than 150 digital displays combining Papercast® solar powered 13" e-paper, 46" LCD displays and 75" LCD touchscreens. Hosted in a secure cloud environment, the Papercast Content Management System is used to operate, monitor, and manage all screens at locations across the Emirate of Dubai.

Chadi Farran, Business Development Manager at Energy International:

"This was one of the first projects to combine Papercast e-paper displays with third-party LCDs, all managed through Papercast's revolutionary Content Management System designed specifically for transit authorities. Different display technologies are often deployed to meet diverse content and media requirements across the transit network. Papercast gives our customers the ability to manage the entire estate through a centralised platform, regardless of the display technology or supplier."

Highlights

- Aim to create visionary, smart bus stations, bus shelters and bus stops
- Incorporating an innovative real-time passenger information display system
- Papercast solar powered e-paper, LCD displays and LCD touchscreens
- Entire estate managed through Papercast's Content Management System
- Solar powered e-paper drives significant reductions in both the Capex and Opex
- Increases the overall customer experience and multi-modal transit integration
- Part of critical infrastructure that facilitated millions of visitors to Expo 2020



Papercast e-paper displays are ruggedized IP rated energy efficient units that can be connected over the GSM Network (3G/4G). They offer a flexible technology for public transportation, easily readable under all lighting conditions and independent from electrical infrastructure at bus stops.

Furthermore, Papercast displays can withstand high operating temperatures in excess of 50°C and 95% humidity without the requirement for a cooling device, making it the optimal choice in the Middle Eastern environment.

Launched to coincide and support Expo 2020, the displays integrate with a range of data sources to provide valuable information to end users – estimated time of arrival, spider maps, route lines, service change notifications, journey planning, marketing content, event information (when relevant) – and continues to do so.

Outcomes

The provision of innovative smart services and real time passenger information has increased the overall customer experience and improved the integration of multi-modal public transportation services for the residents of Dubai.

The inclusion of e-paper displays offered a solid business case for locations without a mains power supply.

At the time of deployment, the displays formed part of the critical infrastructure required to facilitate millions of visitors to Expo 2020.

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