Simplifying Travel with Smart Digital Signage

Litemax's ISDM-4805 plug-and-play integrated solution offer transportation hubs a new way to communicate with passengers and improve the travel experience.

By **Richard Slawsky** | Contributing writer, Digital Signage Today

SPONSORED BY: **LITEMAX**   (intel) | IoT Solutions Alliance

DigitalSignage TODAY

© 2021 Networld Media Group

SIMPLIFYING TRAVEL WITH SMART DIGITAL SIGNAGE

Transportation hubs face many challenges when attempting to move travelers quickly and efficiently. They must communicate with large numbers of people at once to direct them to the queue where they need to stand to purchase tickets, inform them what time their transport departs, point the way to the correct departure gate and let them know if there are changes or delays to schedules. Customer service counters need to be able to share resources, providing an outstanding customer experience while making the best use of labor to match passenger volume.

Not only does that communication method need to be able to attract the attention of travelers, it also needs to incorporate the ability to be updated instantly to reflect any changes or provide emergency messaging. It also needs to be able to show advertising and entertainment content, which can help decrease perceived wait time for passengers, while at the same time providing a revenue stream that can help offset the cost of deployment. And with COVID-19 cases falling in many areas of the world and travel on the upswing, it needs to be able to expand and adapt to changing business conditions, while at the same time include future-proofing features that provide the best value for the investment.

Often, though, that communication method falls short.

Consider, for example, the digital signage networks deployed behind customers service counters by many public transportation companies around the world. They often use a basic queuing & calling system managed over a local network, and the end-points at locations typically involve a display screen, connected by cables to a PC and peripheral devices. Content management is accomplished via special playback software loaded on the PC, and displays are comprised of wall-mounted LED panels.

The end result is that those systems are inconvenient to use, difficult to maintain and nearly impossible to upgrade. Not only are such displays dull and unattractive, they cannot play advertisements or instant messages. The reliance on unsightly cable connectivity limits the deployer's ability

"...with COVID-19 cases falling in many areas of the world and travel on the upswing, [digital signage] needs to be able to expand and adapt to changing business conditions, while at the same time include future-proofing features that provide the best value for the investment."

to rearrange signage placement while at the same time presenting a potential hazard to employees forced to step over cables in the course of doing their jobs. And with so many components, the failure of one can bring down the entire system.

> **"...some transportation facilities are seeking to upgrade their digital signage networks. Features they seek include an integrated solution with LCD display and computer in a single package to provide more efficient tools for their frontline employees."**

Old System Architecture
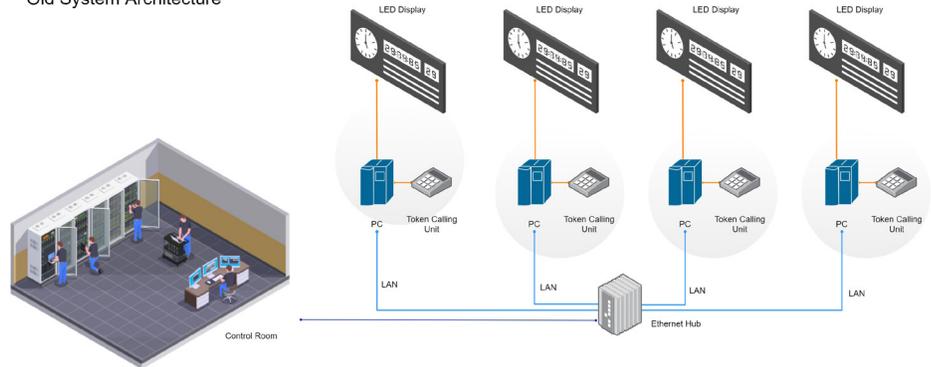
Seeking a better path

Because of the limitations of their existing systems, some transportation facilities are seeking to upgrade their digital signage networks. Features they seek include an integrated solution with LCD display and computer in a single package to provide more efficient tools for their frontline employees. That solution needs to be able to be updated wirelessly, providing a variety of travel-related information to passengers while at the same time incorporating the ability to show entertainment, advertising and emergency messaging.

New System Architecture

CASE STUDY

One Asian transportation hub was facing these challenges when it approached technology provider Litemax for a solution. Facility managers wanted to replace the LED displays mounted behind ticketing counters with ones that were more versatile and easier to maintain.

The solution Litemax provided was built on its ISDM-4805 48-inch plug-and-play display integrated solution. The all-in-one digital signage incorporate the Intel® Smart Display Module (Intel® SDM) specification, a scalable, future-proofed plug-and-play solution. Intel® SDM delivers the same level of interoperability as the Open Pluggable Specification, but in a smaller form factor that eliminates the housing and allows for thinner integrated displays.

The ISDM-4805 supports Litemax's ASDM-APL5 (Intel® SDM-L) and APL6 (Intel® SDM-S) Smart Display Modules.   The ASDM-APL5 and APL6 can be connected to an SDM-ready display via a high-speed PCIe edge connector which supports 4K resolution displays and video capture and has built-in USB 3.0, HDMI 1.4, DisplayPort 1.2, Serial TX/RX and I2C signals.

The ISDM-4805 also has built-in speakers and one M.2 Key E 2230 slot for Wi-Fi.

A versatile transportation solution

The integration of displays and plug-in computing capabilities delivers feature-rich functions while being easy to repair and upgrade. The 48" all-in-one digital signage offers the ability to display messages to commuters in a more attractive, engaging manner than an LED display.

In addition to providing queuing services, ISDM-4805 displays can deliver advertising, entertainment content and important messaging, turning the ticketing center into a multi-functional service center.

> "The integration of displays and plug-in computing capabilities delivers feature-rich functions while being easy to repair and upgrade."

"As passenger flow changes throughout the day, signage can be adapted to allow service counter staff to perform multiple services and effectively divide labor, directing passengers to open counters and avoiding an uneven distribution of work."

Along with Litemax's client, transportation facilities where the ISDM-4805 would be a suitable solution include:

- **Airports** – To provide information on departure check-in counters, baggage check-in counters, departures/arrivals, and baggage claim.
- **Bus terminals** – To deliver real-time information, displaying arrivals/departures schedule for passengers and boosting sales of nearby shops and restaurants via advertising.
- **Train and subway stations** – To deliver up-to-the-minute information at check-in counters, display wayfinding information, show route maps and more.

But for Litemax's client, deployment of the ISDM-4805 has offered the ability to display more information than its previous communication method in a more visually pleasing and modern manner.

As passenger flow changes throughout the day, signage can be adapted to allow service counter staff to perform multiple services and effectively divide labor, directing passengers to open counters and avoiding an uneven distribution of work. Travel information is clearly displayed across all waiting areas, with the option to display other educational information, announcements or entertainment content as desired. The result is the delivery of quality services and an improvement in passenger satisfaction.

The Litemax ISDM-4805 plug-and-play integrated solution

Main Features:

- Screen Size   48" TFT LCD

- Brightness   1000 cd/m^2

- Resolution   3840 x 720

- Contrast Ratio   1200:1

- Viewing Angle   178°(H),178°(V)

- Processor   Intel® Pentium® N4200 1.1GHz/Celeron® N3350 1.1GHz

- Memory   One DDR3L SO-DIMM, up to 8GB

- Graphics   Intel® HD Gen. 9-LP graphics

- Ethernet   One Intel® Gigabit Ethernet port

- Audio   Line-out/MIC-in

- Expansion Slot   1 x M.2 E-key 2230 (WiFi/BT)
  1 x M.2. M-key 2242 (SSD)

- Power   AC 100~240V

- Mounting   VESA 400x100

Source: Litemax

ABOUT THE SPONSORS:

Litemax has grown from pioneering sunlight-readable, high-brightness industrial displays to become one of the global leaders in intelligent solutions for transportation, kiosk and digital signage markets. LiteMax specializes in powering the devices and machines you depend on with one ultimate goal: Engineering excellence in everything we do.

Litemax is a member of the Intel® IoT Solutions Alliance. A global ecosystem of more than 800 industry leaders, the Alliance offers its members unique access to Intel® technology, expertise, and go-to-market support—accelerating deployment of best-in-class solutions.