3 Ways Modernized Passenger Information Systems Benefit Commuters

By Steve Arel | Contributing writer, Digital Signage Today

DEVELOPED AND PUBLISHED BY:

DIGITAL SIGNAGE TODAY

KIOSK marketplace

SPONSORED BY:

LITEMAX®

intel IoT Solutions Alliance

3 Ways Modernized Passenger Information Systems Benefit Commuters

By Steve Arel | Contributing writer, Digital Signage Today

SPONSORED BY: LITEMAX® intel IoT Solutions Alliance

Information is power. It enables planning and strategizing, adapting and adjusting.

Consider someone's daily route to work that requires traveling from one side of the city to the other. Their path by bus involves switching buses midway through. But one day, the initial leg extends 15 minutes out of the way and includes multiple stops because his typical switching station is closed due to a sudden power outage that happened as he boarded the first bus.

The rider didn't know this until he got to the stop to board another bus and saw a printed sign taped to a wall – at that point, there was nothing he could do. By the time he reached his office, he was late.

Sure, there was a printed paper posted at the traveler's eventual switching spot. Had he known of the route change sooner, though, he could've gotten off at an earlier stop in an attempt to speed up his journey. Or he might not have even taken the bus that morning, opting for alternative transportation.

Passenger information systems have become critical tools in the world of public transportation, providing value and enhancing the customer experience.

Passenger information systems have evolved considerably over time, from paper signage boards, to commercial light boxes, to the LED panels and LCD displays that are prevalent today. Systems convey information to passengers quickly, enabling them to take action as needed or making them aware of goings-on that will impact their travel.

Passenger information systems can be used in a multitude of venues -- on highways, buses, cabs and subways – offering a host of benefits for travelers relying on public transportation.

Provide information to passengers in real time

Passengers want to know immediately of any change that can alter or delay their route. Real-time information can be delivered accurately to all stops across a network, even in the most remote locations, allowing travelers to make decisions and react based on reliable information, according to Litemax, a leading manufacturer of digital solutions.

Travelers often are critical of the public transportation system – and even give up on it – because they aren't aware of what drives delays and other impactful problems. Researchers at the University of California Berkeley studying travelers in San Francisco found that what triggers passenger ire the most are:

- Delays due to transit vehicles backed up or problems on the transit route downstream.
- Long waits at a transfer stop.
- Missed departures due to wrong real-time information.
- Inability to board or denials of boarding due to crowding.

Promote business and location-specific information

Information systems can generate additional revenue for transit systems and local businesses.

Transit systems can sell space on the displays to news services and local businesses, which in turn can produce messaging and ads to attract commuters. Commercials can promote businesses along the transit route or make special offers to travelers who hold and show their ride tickets at a particular establishment in the community.

Nearly 70 percent of customers say digital display messages sway their purchasing decisions, according to studies by Nielson Media Research. However, winning over consumers through board advertisements involves more than simply throwing up images of appetizing products or flashing calls to purchase specific items. Effective use of the digital technology entails developing and using the right content at the right times.

Videos offer operators a means to promote items where it can combine words with motion and true-to-life imagery that quickly catch a customer's eye. Done right, the collective additional revenue generated through the sale of extra items or more expensive products can quickly pay for a digital system.

Reduce operating costs and build efficiency

Because changes can be made to passenger information systems in real time and as frequently as operators wish, there is no longer a need for printing – nor the time spent to make periodic updates – a move that can save tens of thousands of dollars a year. Besides, paper logs and printed displays can become outdated quickly.

For transit systems with multiple locations, digital displays can connect all the boards hanging in various facilities, allowing operators, if desired, to control the appearance of those displays with a single computer.

A report by the World Bank Group suggests that real-time transit tools also bring in new passengers. Citing studies in Chicago and New York, transit officials in those cities attributed rider increases of 2% each to the use of passenger information systems. In New York specifically, that boost equated to more than $5 million a year in additional fare revenue.

Improve passenger satisfaction

An informed traveler, generally speaking, is a satisfied traveler. Just as they have constant access today via their smartphones to virtually anything that might impact their lives, they expect that same type of informational stream whenever and wherever they're out.

Those using public transit want more than just simple data, though. The University of California Berkeley research found that passengers care more about the types of delays they endure and when in the trip they occur than just simply when a bus or train arrives.

The information display's versatility positions it as a key solution in how business is conducted effectively and efficiently. At high-traffic times, the displays can be used to allow customers to visually follow transit vehicles or watch informational videos, helping pass the time and creating the perception of a shorter wait time.

Passengers in the know tend to see public transit as more reliable and even log fewer complaints.

Reliable and durable displays

Passenger information displays not only need to broadcast the right messaging to travelers, they need to do it consistently. That means deploying equipment and software that can process varied forms of content and withstand fluctuating environmental challenges, as many units are outdoors.

Displays produced by companies like Litemax enable transportation agencies to overcome most any potential challenge. Working in tandem with other manufacturers, Litemax is able to customize units with screens that are still visible in direct sunlight and can be sized to fit into non-standard spaces such as those above a subway train's doors. They also design displays that with shock absorbency to continue functioning throughout a rough route or if they get bumped by crowds inadvertently coming into contact with it.

"Custom resized LCD technology combined with the single board computer as a smart display module system is fully tested, deliverable and ready for the deployers application software," said Jim Kennedy, president of Litemax partner Spectrum Displays. "These systems include the most modern, sophisticated processing power, ethernet connectivity, solid-state memory and fan- less enclosures. The complete smart display module displays can be manufactured to meet high-shock, vibration and environmental standards needed for the application.

"Delivering a fully tested display system with a high-resolution, wide color gamut gives deployers a canvas to create virtually any image with their application software. The high-resolution displays are capable of showing any language fonts and/or graphics. … These displays provide companies an outlet to make ad impressions, getting to people while on a train or bus."

Litemax's Passenger Information System Solution

Litemax, a leader in enabling intelligent vertical market platforms for industrial displays and computing for transportation sector, is launching a series of stretched panel PC offers great flexibility for versatile usage in public transportation. ITRP series 28" & 38" Panel PC could perfectly provide no matter if it is vertical or horizontal installation.

ITRP series is a fanless Passenger Information System, EN 50155 compliant, serving as a reliable platform to provide passenger information on wide versatility of vehicles, such as trains and trams. It features a 28 and 38 inch stretched LCD panel.

Powered by Intel® 6th Generation processor, and designed from the ground up to be robustness with IP (Ingress protection) level 54. It supports EN 50155 T1 level, for smoothly implementation in a wide working temperature ranging from -25°C to 55°C, to make sure its best operation in harsh environment and deliver the real-time information to passengers.

ITRP-3805 37.6" Railway Full IP54 Fanless Panel PC

37.6" EN50155 Railway Full IP54 Fanless Panel PC

- Intel® 6th Skylake mobile processor support
- 37.6" LCD, 1920 x 540, 1000 nits
- Compliant with EN 50155
- Full IP54 and fanless design
- Support 24/36/48/72/96/110 VDC input with M12 connector
- Anti-Shock and vibration

About the sponsor:

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.

LITEMAX®

intel IOT Solutions Alliance