

IoT and Digital Signage Come Together to Improve Logistics

By Richard Ventura



Bain and Company predicts that by 2020, annual revenues for IoT vendors selling hardware, software and complete solutions will exceed \$470 B. This massive tech expansion will push deeply into the logistics field, where IoT-enabled devices – utilizing communication protocols such as Bluetooth, RFID, Zigby, and Zwave, to name a few – will help companies monitor, control and wane valuable data which should lay a new foundations that most companies will be forced to deal with soon.

By pairing IoT devices with digital signage, manufacturers, shippers, and other enterprises will be able to quickly economize their logistics by communicating on-the-fly changes to their employees and customers simultaneously. On factory, warehouse, and loading dock floors, delivering the right information to right people at the right time is vital to productivity. IoT devices distributing data to digital displays are the optimal means to present information to employees, freeing them from the burdens of using a computer, laptop, or mobile device to acquire the information they need. Hands-free, at-a-glance access to key data will enable employees to take timely action to keep production and fulfillment processes humming along.

IoT plays well with digital displays

An IoT sensor attached to a product, machine, storage bin, or other item detects changes in the physical status of things. For example, a sensor in a smartphone product line bin can detect when the supply of a circuit board is running low. The sensor sends the data to the cloud, and software communicates with a central dashboard and instantaneously updates images on digital displays to provide up-to-the-second data, alerting employees that the circuit board bin will need to be refilled soon.

With digital displays, managers and employees can remain aware of production issues without being close to the production line. Data can be displayed with graphs, charts and other simple graphics to make information quick and easy to absorb. Information sets can then be rotated on a timed or on-demand basis.

Real-time information boosts productivity

The fusion of IoT and digital displays offers a wide range of applications in manufacturing. For example, a manufacturer can install digital signage throughout its factory to deliver a variety of information to employees, including real-time updates on production line status. For example, by displaying the output of two different production lines, managers can encourage friendly competition between the two lines to motivate employees and increase productivity.

Sensors can also identify manufacturing processes that are lagging. By monitoring a digital display, employees will immediately know when to refresh dwindling inputs of raw materials, and managers can quickly pinpoint the cause of a slow-down and resolve production issues. Displays can even post immediate warnings about unsafe conditions, such as a contaminant leak, and direct employees toward the best evacuation routes.

No-lag inventory at a glance

IoT and digital displays offer a better solution to managing inventory. As products with sensors are removed from inventory, software keeps track of remaining stock in real-time and sends the information to display. Pickers and front-end employees can tell at a glance when there's low or no inventory, and the software can send an alert to the production line or the purchasing department to inform them that inventory is running low and needs to be replenished.

Inventory information is always up to date, with no lags like in the old days of periodic inventory counts, and employees don't have to take inventory physically. IoT and displays can even provide information on warehouse conditions, providing alerts when temperature, humidity or other conditions approach or exceed established boundaries.

Tracking orders and delivery status

IoT sensors help enterprises track orders and delivery status. A display showing the statuses of critical shipments from suppliers or between facilities helps manufacturers plan production and respond to changing conditions. Applications in transportation logistics include real-time tracking of shipments, warehouse-capacity optimization, predictive asset maintenance, route optimization, and improved last-mile delivery.

IoT tracking also improves the customer experience, keeping them up-to-date on order status. For example, shipping giant Maersk installed IoT sensors in its shipping containers to enable its customers to track the location, temperature status, and other information about their shipments.



Improving your workflow

The manufacturing sector is lagging behind other industries in terms of making a digital transformation. Organizations building for a successful future will need to adopt IoT and digital signage to improve information flow and productivity, achieve digital operational excellence, and remain competitive in an ever-changing marketplace. Quick, easy access to reliable data is essential to productivity, and advances in LED and LCD technologies have made digital displays indispensable tools for delivering actionable, real-time information to employees and customers.

Quotes: "By pairing IoT devices with digital signage, manufacturers, shippers, and other enterprises will be able to quickly economize their logistics"

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