

How Digital Paper Tablet Devices Are Changing Retail



Retail has always been an evolving and ever-changing industry. In a market economy, retail spaces need to constantly compete with those of other businesses, bringing in customers and offering them the best possible experience.

Of course, technology is at the forefront of this change and evolution. And digital paper is one of the most important technologies driving the next phase of retail development.

But what kind of role will digital paper play over the coming years, and how is this shaping the retail environment? Read on to learn more.

Capturing Customer Inputs

Digital technology is already changing the way in which customers interact with retail stores when they shop. Once upon a time, mechanical cash registers and physical card inputs dominated the experience at the till, but now digital POS systems and contact-free payments are the norm.

But customers still need to make inputs. They may need to sign for certain payment methods, for example. If a signature is delivered on physical paper, this needs to be stored and filed appropriately. There is also the risk that the signature goes missing, even within the most rigorous of systems.

A digital paper solution is the answer. Devices like the HannsNote2 with Quad Core CPU RK3566 ARM A55 64-bit processor can capture a signature and immediately upload it to a secure system, reducing waste and potential for loss. This technology can also be used to capture other inputs, like the answers to customer surveys or store card registration data.

Providing Real-Time Updates

The retail environment is no stranger to digital displays. LED and LCD screens have been used for many years already, providing pricing information, restaurant menus, and other details to shoppers on the premises. However, digital paper is updating this for the smart-tech age.

Digital signage solutions draw upon this technology to make displays easier for customers to see and read. This makes information delivery far more efficient and more accessible — elderly shoppers or those with less than perfect eyesight can view the information with no trouble.

These displays are also superior to other types of screens thanks to their power consumption. Products like the [EPD-4200 ePaper monitor](#) require significantly less operating power than their LED or LCD counterparts. This means the digital paper solution can remain switched on throughout opening hours without negatively impacting the store's budget or carbon footprint.

Making Displays Interactive

The modern shopper expects an interactive experience. People have become used to the convenience and ease of their smartphones and iPads, so they want to see the same functionality in the stores they visit. Digital graph paper and similar technologies not only make this possible — they also make it relatively easy to achieve.

Take the [EPD-42T public display solution](#), for example. This hardware features a touch interface and an ILI2325 touch controller. Customers are able to interact with the information they view, rather than simply receiving it passively.

So the customer is able to enlarge images, scroll through different menu options, request further assistance, or complete all manner of other actions. As a result, the display board becomes a more sophisticated part of the consumer journey. Customers who may have simply taken a glance at a certain product and moved on become more engaged with the items for sale, making a purchase more likely.

Expanding the Scope of the Retail Space

Not all retail spaces are indoors. Garden supply stores often include outdoor retail areas, as do pop-up stores, marketplaces, bars and cafes, and many other types of business. When shoppers enter these environments, they need the same swift, clear, and convenient experience they would receive if they were shopping indoors.

A solution like the [EPD-4200-B1 ePaper outdoor open frame monitor](#) provides the answer here. This 42-inch monitor offers the same functionality as digital paper signage deployed indoors but is designed for use in less predictable and less easily controlled environments.

The outdoor monitor has an ingress protection (IP) rating of IP65 at the front and IP64 at the rear. In an IP rating, the first digit refers to intrusion from solid particles. As 6 is the highest rating here, both the front and back of the unit have been rated as completely dust- and particle-proof.

The second digit refers to protection from moisture. A 4 means the unit can be sprayed with an oscillating hose for at least 10 minutes without admitting water, while a 5 means the device is proofed against low-pressured hoses or jets from any angle. The unit has also undergone drop, shock, and vibration testing to ensure it is robust enough to be deployed outdoors.

Enabling Effective Stock Take and Monitoring

Retail businesses need to be able to assess and monitor their stock levels accurately and efficiently. Hand-held stock take devices — typically fitted with barcode scanners — have been in use for decades, but there is certainly some room for improvement. Some of the common problems associated with these devices include:

- Low battery life that necessitates regular charging
- Difficult inputs, leading to inaccuracies in data
- Eye strain and general discomfort for personnel

Digital paper tablets neatly sidestep each of these issues. The ENT-13T1 eNote tablet, for instance, is capable of an entire month's worth of operation on a single charge. Its digital paper screen mimics the look and feel of actual paper, making it easy to input information without error. This also makes the experience much more pleasant for the operator, even over longer shifts.

As the tablet integrates with inventory management solutions, systems and stock levels are updated in real time, further boosting the efficiency of the operation.

Find the Ideal Digital Paper Solution for Your Retail Business

At Avalue, we are proud to help modern retail organizations stay ahead of the curve. To make sure you are offering the best possible experience to your customers and your team, check out our digital paper product range of [E-Paper Displays](#) and [E-Paper Panel PCs](#).

Related Products



[Avalue EPD-4200](#)

- 42" ePaper Outdoor Open Frame Monitor
- Outdoor ePaper Display Kit
- 1 USB / 1 12V DC-in as an Extended USB Display
- Front IP65, back IP64, designed for outdoor.



[Avalue EPD-42T](#)

- 42" E Ink Monochrome ePaper Display
- Built-in Touch Screen
- High Performance i.MX 7Dual Processor
- Ultra-Low Power Consumption
- Ultra-Wide Viewing Angle
- No Power Needed to Maintain Display Image
- Sunlight Readable and Doesn't Require a Backlight



[Avalue EPD-4200-B1](#)

- 42" ePaper Outdoor Open Frame Monitor
- Outdoor ePaper Display Kit
- 1 USB / 1 12V DC-in as an Extended USB Display
- Front IP65, back IP64, designed for outdoor.