Making the Case for Mobile Printing in Retail

A SATO White Paper

Retail operations across the supply chain have undergone a radical transformation as the industry has adjusted to the logistics requirements and competitive pressures of e-commerce. Customers are looking for an in-store experience that is as convenient and predictable as their online shopping experience.

To compete with the ease of online shopping, retailers have to ensure maximum efficiency and productivity in the store. Customers expect to find the goods they need on the shelf – and often use online inventory visibility tools to ensure the items are available. Inventory visibility tools are vital to providing the individual an option to buy online and pick up at the store. Stores must have accurate inventory information on a real-time basis. Store associates should be able to complete inventory and administrative tasks as quickly as possible so they can spend more time providing value-added services to customers on the sales floor and at the checkout counter.

Mobile computers have evolved from being inventory devices to multi-purpose devices that help associates do item and price lookups, mobile POS, and ship to home functions which often require the need for a mobile printer. Printing labels or receipts at the point of activity increases productivity and reduces the amount of time walking to a printer in the back or front of the store.

Interest in mobile printers has grown significantly in the last few years. Recent data from Allied Market Research reports the global portable printer market accounted for $844 million in 2016 and is expected to reach $1.64 billion by 2023, registering a CAGR of 10.2% from 2017 to 2023. This growth is driven by retailers needing to reduce costs

and increase the productivity of associates for in-store activities and the growth of e-commerce.

As demand increases for mobile printers, manufacturers have responded with lighter-weight devices that support a wider variety of label media, wireless and wired communications, and integration with a more significant number of mobile computer platforms and enterprise software systems.

The principal advantage of mobile printers is that they allow store associates to print labels at the point of use or point of activity – whether that is while receiving goods in the stock room or re-pricing items on the sales floor.

Alternatives – such as relying on batch-printed labels or manual processes – can result in lower productivity and increased labeling errors. In today's retail space, errors in labeling can have a detrimental impact on customer service. Customers typically arrive at the store now armed with a significant amount of competitive price information and even inventory data. If there was an error during labeling, it could lead to a lost sale or even the permanent loss of that customer.

Growth in Mobile Printer Interest
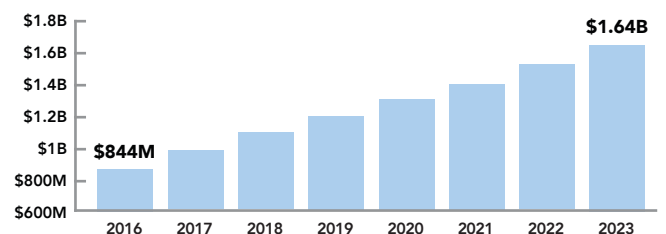
Omnichannel ecommerce applications are benefitting from the use of mobile label printers. It is becoming more and more common for retailers to allow customers to order goods online and pick them up at a brick and mortar location, essentially turning the store into a fulfillment center. According to a consumer survey conducted by Blue Yonder, formerly JDA Software, nearly 67% of shoppers in the US have used Buy Online Pick Up In-Store (BOPIS) in the past six months, and 10% of all sales will be fulfilled by Click and Collect by 2025. Moreover, half of those customers made additional purchases during the pick-up, representing a valuable revenue stream.

The Benefits of Mobile Printing

While many retail goods arrive pre-marked with a UPC barcode on the packaging, there is still a significant amount of labeling – both item- and shelf-level – that needs to be conducted at most stores. Mobile printing can generate a return on investment for retailers by saving store associates time and reducing costs.

- Mobile printing increases staff productivity by decentralizing stationary label printers and eliminating the time spent retrieving labels from them. Multiple employees can simultaneously label goods at the same time they are performing other tasks (such as receiving, inventory, or shelf straightening).

- Workers walking to and from fixed printer stations can reduce productivity by as much as 50% in some organizations. They can essentially double their productivity when extra steps are eliminated by mobility printing the label on demand.

- Mobility also increases accuracy. By using a mobile computer or barcode scanner in conjunction with a mobile printer, employees can confirm in real-time that they have printed the correct label and applied it to the right item or shelf location. Improved accuracy can reduce frustrating customer conflicts later when goods do not ring up at the advertised price.

- Stores can use mobile technology to eliminate hand-written markdowns, which can be illegible and easily forged. Manual markdown processes are time-consuming, and large retail chains can change prices thousands of times per month.

- The on-demand nature of mobile printing reduces the need for pre-printed and batch-printed labels. These labels have to be ordered in advance and quickly become obsolete – leading to unnecessary costs and material waste.

- Conventional supply chain activities that occur at the store, such as shipping/receiving, put away, picking, and sorting is made more effective with mobile printing. Employees do not have to travel back and forth to retrieve labels at a central location, which both saves time and increases accuracy.

- Many retail stores have expanded their mobile printing deployments to include receipt printers for mobile point of sale for line-busting applications during peak sales times (i.e., during the holiday shopping season). Mobile label printers can be used to print return labels and other documentation for a faster and more effective point of sale process.

- Employees can quickly pick, pack, and label goods as they are pulled from inventory and consolidated for customer pick-up. The process can help save time and streamline an increasingly complex in-store inventory management process. If a store offers return services for goods purchased online, mobile printers can be used to simplify returns labeling as well.

How to Shop for a Mobile Printer

Mobile printers for retail applications have evolved over the past several years as technological advancements have been implemented, and new manufacturers have entered the market.

When looking for a mobile printer that will deliver the benefits described above, a few critical selection criteria should be kept in mind.

Communication: The need for multiple wireless communication options in a mobile device has only gotten more complicated. Companies have deployed a wide variety of mobile computers in retail stores from consumer devices with iOS to more ruggedized durable devices with Android OS. All of which contain a wide variation in the ever-evolving wireless standards for Wi-Fi and Bluetooth.

A printer that supports the latest Wi-Fi/802.11, Bluetooth and Near Field Communication (NFC) standards will often support earlier versions that ensure compatibility to your existing infrastructure and ensure the longevity of your investment, even if other parts of your mobile environment change. Having the latest standards also eases the integration and provides the latest wireless security options providing the latest wireless security.

NFC also provides a simple way for users to pair their printers to mobile devices or in the case of bi-directional NFC it can be used to transmit small amounts of data often used for configuration/setup or service information.

Security: Printers are no longer "dumb" nodes on the network. Mobile printers include much more onboard intelligence, and (like mobile computers) can create vulnerabilities on the corporate network if they are not sufficiently secured. Select a mobile printer that supports the latest Wi-Fi security standards such as WPA2.

Durability: A retail store is a busy environment, and mobile printers are frequently bumped or dropped. Look for a printer with high durability ratings that can survive multiple drops to concrete, and that also offers shock resistance and durable operation keys. The savings you may realize from buying cheaper but less durable printers will eventually be eaten up by unit replacement costs.

Media Capacity: You will not see very high productivity improvements if your employees have to replace label rolls multiple times per shift. Look for a printer has a large media capacity or is capable of using linerless media. Large media capacity helps improve productivity by making it possible to have more labels per roll. More labels per roll means the number of media changes per shift can be minimized; in fact, linerless media can increase roll capacity by as much as 40%. Further, employees will not have to dispose of liner waste, which saves time and makes the labeling solution more environmentally friendly.

Battery Life: Likewise, having to recharge or switch out a battery mid-shift will also degrade productivity. To alleviate the cumbersome job having to recharge the battery continuously, the battery needs to last a full working shift (8 hours at a minimum). New smart batteries include onboard intelligence that helps maximize the capacity of the battery. Reducing the amount of time wasted changing batteries or retrieving charging equipment or cables.

Higher capacity and smarter batteries reduce the overall investment in batteries and spares and improve the total cost of ownership for the printer.

Software Support / Management: The mobile printer should offer drivers for conventional mobile devices, as well as support for commonly used barcodes and label design solutions.

For companies worried about managing additional mobile devices on the network, there are central management and configuration tools available that can make it easy for an IT department to deploy and support mobile printers.

Accessories: Having an appropriate holster or carrying case for the printer allows the device to be easily transported throughout the store by associates. Accessories should be comfortable for the user and integrate seamlessly into store praxes. The use of proper accessories will ensure that you can expand the use of mobile printers to as many positions/employees as possible.

Conclusion

E-commerce and omnichannel commerce strategies are fundamentally changing the way brick-and-mortar retail locations operate. Stores have to match the speed and performance of their online competitors, in addition to providing a physical link to a retailer's e-commerce supply chain for in-store pick-ups and returns.

Mobile printers help retailers face these challenges by ensuring faster and more accurate labeling. The reliability of inventory is greatly improved, and store associates are freed-up to focus on providing customer service on the sales floor.

By leveraging mobile printers, retail stores can save money, improve inventory performance, and help create the value-added services needed to compete in an e-commerce/omnichannel environment.

About the SATO PW2NX and PV3 Mobile Series of Printers

The SATO PW2NX, 2-inch, and the PV3, 3-inch, printers are direct thermal printers that fulfill the requirements for the mobile applications outlined in this paper. SATO mobile printers offer: optimal portability, large media capacity, quick and accurate printing at the point of use and designed to withstand 7-foot impact drops. To learn more about SATO's line of mobile printers, please visit our website at www.satoamerica.com.

PV3   PW2NX

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