Omni-Channel Technology Gives Retail Marketers a New Edge

Shoppers get the unified experience they seek, while marketers gain a wealth of customer data for greater promotional effectiveness.

Introduction

New technologies supporting the omni-channel offer retail marketers powerful solutions for developing more effective, highly targeted, and measurable promotions for improved sales. At the same time, omni-channel technology can improve marketers’ ability to collect customer data and to measure results, two things that are vital to determining return on investment (ROI) and strengthening the retailer’s bottom line.

On the consumer’s side, digitally empowered shoppers typically access multiple channels—online or in-store, with a smartphone, computer or in person—preferring to view all of a retailer’s channels as a single shopping experience from a single brand. In response, the omni-channel consolidates channels and internal operations to achieve that unified, cross-channel shopping experience customers want.

Just as the omni-channel promises customers a single view of the retailer, it offers marketers the most comprehensive view ever of customer activity. With this improved knowledge, marketing can deliver a highly personalized, immersive shopping experience that employs a number of powerful new retail devices for both displaying content and obtaining customer data.

To make all of this happen, Intel® technology enables an effective deployment of the retail omni-channel. Intel provides the processing power, compatibility standards, and security to make the omni-channel a reality, while significantly reducing system-management costs. In the retail environment, Intel offers powerful technologies in an array of digital devices to convey key promotional and brand messages as well as for collecting insights into customer behavior.

With Intel solutions, retail marketers become capable of reaching more customers, more cost-effectively, with the full power and flexibility that digital technology affords.

What Shoppers Want

Consumers expect shopping to be a unified and immersive experience as they move from channel to channel. And they expect retailers to know what they want and how they like to make their purchases.

Shopper expectations identified in an recent IBM survey showed 59 percent of shoppers want retailers to demonstrate that they “understand” them, 64 percent expect retailers to know what products they like, 61 percent want retailers to know the types of offers they prefer, and 59 percent want retailers to tell them when frequently purchased items are going on sale.1

Recent advances in retail technology provide more insights into customer behavior. For marketers, the results can boost sales, reinforce branding, improve ROI, and strengthen a retailer’s bottom line.
Further, 54 percent said they expect retailers to know if they are new or returning customers, and 53 percent want retailers to maintain a cross-channel history of all purchases so they can receive personalized offers.\(^2\)

Obtaining this amount of customer-history data can help retail marketers improve their understanding of their customers’ path-to-purchase, as well as to use the data to launch more-personalized promotions and highly targeted campaigns, coordinated across channels, just as their customers expect.

To help retail marketers gain these advantages, Intel provides the technology underlying this type of targeted promotional effort to gather extensive customer data across a spectrum of digital devices.

**Gaining Marketing Intelligence**

The omni-channel and its streamlining of the retail enterprise can provide marketers with considerably more usable data on customers than has been previously available. Plus, new technology from Intel empowers digital devices capable of capturing both demographic and individual-shopper information.

The Intel® Audience Impression Metric Suite (Intel® AIM Suite) is a key example. It transforms digital displays into intelligent, situation-aware content systems. Its technology works in conjunction with digital signage—whether traditional signs, interactive video walls or even vending systems—to determine viewer responsiveness, gender, and age group.

To help marketers further refine their branding and promotional messaging, the Intel AIM Suite can also measure the duration of a person’s gaze, helping marketers track consumer behavior, adapt resonant messages, and measure ROI.

At the heart of this customer-intelligence system is Anonymous Viewer Analytics (AVA). This technology uses small optical sensors connected to a digital sign to relay a video stream to Intel® processors. AVA data gives retailers a powerful tool for evaluating the effectiveness of their branding and promotional activities. This type of analytics helps retail marketers gauge interest level, compare messages to sales increases, and dynamically revise messaging depending on the audience.

**Innovative Digital Devices**

Powerful Intel processors are embedded throughout the retail enterprise to drive an array of sophisticated new digital devices. Together, these advances in technology energize the brick-and-mortar environment, helping create the immersive shopping experience customers seek, while providing the customer data that retail marketers need. Here are some examples:

**Signs.** Digital signage in its many forms is a powerful means of directing branding and product messages to customers. Rich multimedia content can be displayed on walls, kiosks, point-of-sale (POS) terminals and end-cap displays, as examples. This Intel®-based signage can interact intelligently with consumers on large video walls and innovative vending systems, using HD and 3D video as well as touch-enabled displays. The result is visually powerful signage that conveys messages and often enables shoppers to select products for purchase.

**Kiosks.** New technology is transforming kiosks from limited, self-service directories into full-service shopping assistants that provide online access, identify shopper behavior, and make it easy for customers to pay for items. Today’s networked retail kiosks can display marketing content and then switch to shopping-assistant mode to help customers locate items. They can also identify return consumers through their loyalty cards or cell phones by utilizing near-field communications technology.

**Vending.** New technology for vending machines transforms them into intelligent, stand-alone systems with a multitude of new features—HD digital signs, interactive touch screen controls, even cashless payment mechanisms—for an engaging shopping experience. Multimedia displays invite customers to browse through...
products and make informed selections. Many intelligent vending systems now accommodate contactless payment options and near-field communication-enabled mobile devices so customers without cash can safely and conveniently pay for items.

**Technology to Save Costs**

Retailers who deploy Intel-based technology in their omni-channel and supporting systems will recognize the benefits of remote manageability and reduced system expenses.

Intel® Active Management Technology (Intel® AMT) gives retailers the power to diagnose, repair, manage inventory, and power up or down their systems—all from remote locations. Using integrated platform capabilities and popular third-party management and security applications, Intel AMT allows retailers’ IT to better discover, repair, and protect their networked computing assets. Popular in the retail IT infrastructure, Intel AMT is a feature of 3rd generation Intel® Core™ processors with Intel® vPro™ technology and platforms based on the Intel® Xeon® processor product family.

The Intel® Intelligent Systems Framework (Intel® ISF) can serve as the backbone that enables and empowers the omni-channel. It offers interoperable solutions to address connecting, managing, and securing devices in a consistent and scalable manner that enable systems such as a retail omni-channel to function.

Too often, the multi-channel systems inside retail organizations are not just isolated in software, but are disparate networks that do not communicate well with one another. Retail systems are often hampered by fixed-function technology that offers fragmented views of customers and can’t effectively consolidate multiple channels. For this reason, Intel is concentrating on systems that can integrate within the omni-channel.

The Intel ISF establishes standards, a consistent framework for connectivity, security, and manageability of intelligent systems in the multitude of locations where they’re deployed throughout the retail environment—everywhere from cash registers and interactive digital signage to the warehouse. The seamless consolidation of channels, internal processes, and intelligent systems will help determine the overall effectiveness of a retailer’s omni-channel.

Intel processors supported in the Intel ISF include Intel Xeon processors, 2nd and 3rd generation Intel Core processors with Intel vPro technology, and Intel® Atom™ processors.

**Conclusion**

With the omni-channel, retail marketers gain new abilities and resources for innovative promotions, program cost-effectiveness, and meeting the expectations of digitally empowered customers. Plus, these powerful cross-channel capabilities give marketers their best chance ever to proactively manage relationships with customers and to build valuable brand loyalty.

Omni-channel retailing provides marketers with shopper purchase patterns, while sophisticated in-store digital devices collect key demographic information. Together, these provide marketing with the data and systems to deliver highly targeted branding and product messages, including using rich multimedia and interactive formats proven to be highly effective in the retail environment.

Intel is leading these advances in retail technology for omni-channel connectivity, manageability, and security, as well as providing the processing power to create a truly immersive shopping experience.