Putting Web 2.0 Technology to Work in E-Commerce

Sterling Commerce
An IBM Company

Having experienced the interactivity of Web 2.0 on YouTube.com and Secondlife.com, consumers are clamoring for the same innovation in their online shopping experience. As with any new generation of technology, however, retailers must first understand the benefits to their business and how it works, before it can be properly deployed.

Executive Summary

The decade-long string of more than 20% year-over-year growth in e-retailing sales is indisputable evidence of consumers' wholehearted embrace of online shopping. However, this enthusiasm generates greater consumer expectations from online shopping, which are only heightened by the influence of Web 2.0 technology. Thanks to Web sites that utilize Web 2.0 technology, it is no longer enough for retailers to employ a Web site that is essentially an electronic catalog and checkout counter. Today's online shoppers expect a richer, more interactive buying experience. To achieve this, retailers are turning to cutting-edge Web 2.0 technologies such as Ajax applications, Flash, video, and social networking capabilities. These and other technologies allow the implementation of features such as personalized 'Wish Lists', easy customization of complex products and services, and customer-submitted product reviews that can be shared with others.

These features create a more intuitive, interactive shopping experience that delivers the collaborative and communication characteristics online shoppers' desire, much like those experienced in the store. This blurring of the lines of demarcation between the Web and the store is driving yet another customer expectation…the ability to navigate seamlessly across channels. Today, consumers want to be able to buy in one channel, add or change the order through another channel, and return it in yet another without experiencing any inconveniences along the way. As consumer preferences for this type of shopping experience grow, they expect retailers to embrace it.

The challenge for e-retailers is marrying their per-channel marketing, merchandising, and selling with their technical infrastructure to create wholly integrated cross-channel selling platforms that enable consumers to move seamlessly between sales channels. For retailers that means implementing Web 2.0 technologies that can (1) deliver the interactive shopping experience consumers want, (2) meet their business objectives, and (3) grow in sophistication as their business and customers' expectations evolve.

Some of the key Web 2.0 technologies retailers ought to be considering are:
- Ajax (Asynchronous JavaScript and XML) which creates interactive applications that allow shoppers to examine product details, such as color swatches, without having to leave the product page.
- Interactive video that delivers the same level of information shoppers can get from an in-store sales representative, thereby reducing the number of pages they must navigate to obtain the same information on a retailer's Web site.
- Customer reviews and ratings that add value by providing shoppers with the type of content they equate to an opinion from a friend or family member.
- Guided shopping applications that ask shoppers questions about the type of products and services they are seeking, how they intend to use them, brand preference, price range, and so on, just like an in-store sales representative. With each answer the number of SKUs per category is whittled down before the customer's eyes, making it easier for them to zero in on the right product.

- Personalized offers and product recommendations that help users find what they want—and the things they didn't yet know they wanted.
- Product personalization that allows shoppers to select from a list of features to configure a product to their individual preferences. This kind of tailored buying requires real-time access to the status of on-hand and available-to-promise inventory.
- Social networking capabilities that enable shoppers to create and share Wish Lists, Gift Registries, and customer reviews.

With so many options available, retailers must guard against implementing Web 2.0 applications simply for the sake of doing so. Indeed, the e-commerce shakeout earlier in the decade proved that technology—no matter how advanced—is not a silver bullet that will automatically generate site traffic, conversions, and happy customers. Retailers will not grasp the appropriate uses of Web 2.0 technology until they understand how shoppers interact with them and the ways in which those interactions deepen the shopper's connection to the retailer.

I. What shoppers want in the online shopping experience

As consumers grow increasingly accustomed to shopping online whenever they want, from wherever they want, retailers can no longer afford to view the e-commerce Web site, catalog, call center, and the bricks-and-mortar store as independent sales channels. Instead, they must offer a seamless, integrated shopping and buying experience across each sales channel that allows shoppers to order online and pick up in-store, track and change orders, and return an item through any sales channel, while delivering high-touch customer service.

A primary driver behind changing consumer expectations is Web 2.0 applications that create a richer, more interactive shopping experience in which shoppers can have full visibility into the selling and fulfillment lifecycle across all channels while removing the intimidation factor for moving back and forth between the channels. This environment not only creates a more convenient shopping experience, but one that resonates so deeply with consumers that it engenders a greater sense of loyalty to the retailer.

But before retailers can effectively implement Web 2.0 applications, they must first understand consumer expectations of the multi-channel shopping experience. A recent survey of 5,000 shoppers conducted on behalf of Sterling Commerce revealed the following about the shopping experience:

- 81% of those surveyed rate detailed product information as very important to their shopping experience.
- 66% of respondents want to shop across all sales channels while enjoying a consistent brand experience.
- 65% expect to be able to cancel or modify an order via a store, the store's Web site, or a call center regardless of which channel was used to place the order.
- 42% say that product reviews on a Web site would increase trust.
- 41% rate product reviews as very important.
- 40% say product ratings are very important.

- Shoppers no longer want to shuffle through multiple pages to look at sizes or other product attributes. Instead, they want a site that is more responsive.
- Shoppers prefer interactive features that deliver product information in one stop— thereby eliminating the need to wade through multiple pages on the retailer's site to obtain the same information.

Additional research from a separate survey of 1,005 adults conducted on behalf of Sterling Commerce in January 2008 revealed that:

- One out of six consumers (18%) has checked an online gift registry for an item as part of the purchase process.
- 56% of consumers feel it is important for gift registry information to be available in the store, online, and over the telephone.
- Eight in 10 consumers feel it is important to be able to return merchandise to a store even if it was purchased via telephone or online.
- Among those with incomes of $75,000 or more, 77% have done research online in advance of an in-store purchase, 32% used a coupon or rebate found online, and 25% checked an online gift registry within the past three months.

II. How Web 2.0 technology helps retailers meet shopper expectations

Ajax and Flash: The building blocks of Web 2.0

When planning to integrate Web 2.0 technology into their Web site, retailers must first understand that the addition of any new application be intended to improve the customer shopping experience, not hinder it. That does not mean that retailers must shy away from the applications that provide the latest bells and whistles. Rather, they must avoid applications that do not enhance the shopping experience, regardless of any media buzz or rumor from the software development community that may surround the application.

The entry into the world of Web 2.0 technology begins with Ajax, a Web development technique for creating interactive applications. Ajax makes site navigation more intuitive and is a huge benefit to shoppers as it enables them, for example, to examine product details, such as color swatches, without having to leave the product page. Ajax works by exchanging small amounts of data with the server so the entire Web page does not have to be reloaded with each click, thereby increasing the interactivity, speed, functionality, and usability of the page.

Ajax can also be integrated to the marketing database or dynamic imaging server where each item in the catalog has assigned additional views/images that can be called up, making it possible to drill down to more detailed views of the product without having to leave the product page. Ajax can also be used to incorporate other information, such as store inventory, without requiring the consumer to go to another page or refresh the page. Because the entire Web page does not have to be reloaded with each click, interactivity, speed, functionality, and usability of the page increases. Hence, Ajax is an application that can not only deliver the "Wow" factor that can

differentiate a retailer's Web site, but improve the functionality of the Web site and deliver a richer shopping experience.

Qualities like these are making Ajax a top Web 2.0 application to consider, because shoppers no longer want—or necessarily have the patience—to sort through multiple pages to look at product attributes. Instead, they want a site that they can navigate quickly.

Ajax, however, is but one Web 2.0 building block. Shoppers are more visually oriented than ever, which is creating a strong affinity for video on the Web. Flash is a Web 2.0 application that can satisfy shopper's appetites for interactive visuals that deliver product information, make the shopping experience more convenient, and entertain.

The primary advantage of Flash is that it provides lightning-fast video downloads that create a more interactive shopping experience, especially when seeking product information. Already, early adopters of the technology in the retail sector are successfully using Flash for video product demonstrations, instructional pieces, and commercials on their Web site. These video types deliver a more thorough view of the product that can be attained in one stop, as opposed to clicking onto multiple pages and scanning reams of text and photos of the product. Demonstration videos grab and maintain the shopper's interest, thereby reducing the risk of shopping cart abandonment.

Recreating the in-store experience

While Ajax and Flash provide the bells and whistles that can differentiate a retailer's Web site from the competition, shoppers still have a burning need to discuss with a sales associate what they want in a product or service. Showing shoppers choices within their stated criteria is at the heart of what retailing is all about, yet transferring this level of service to the Web site is not an easy task.

Guided shopping applications recreate what the in-store shopping experience is all about by giving shoppers a chance to express product requirements—just as they would to a sales associate—and see search results that meet those criteria. Guided shopping applications replicate the in-store interaction with a sales associate by asking shoppers questions about the type of products they are seeking, how they intend to use them, brand preference, price range, and so on, just as with an in-store sales representative.

Paired with customer intelligence and personalization, guided shopping becomes the ultimate personal shopper by tailoring recommendations based on what the customer wants now, combined with information about the customer's behavior and preferences gathered over time across channels. With each answer the number of SKUs per category is whittled down before the customer's eyes, making it easier to zero in on the right product. Guided shopping applications take the intimidation factor out of the broad product assortments of the endless aisle, by allowing consumers to quickly and easily find products and services they need (plus things they didn't even know they

needed). The same guided shopping applications enhance the store and call center experience, by making personalized recommendations accessible via kiosk, store associate systems, and call center applications.

Product personalization is another form of interactivity that retailers should consider as part of their Web 2.0 strategy. What makes product personalization appealing to e-retailers is that it provides a cost-effective way to offer customizable products that consumers seek.

Product personalization allows shoppers to designate product features and access support information essential to the buying decision, such as price, product availability, and where the item can be purchased. For example, computer retailers can create databases that enable shoppers to select the type of processor to run their system (such as an Intel Core or AMD Turion), the operating system, (such as Windows Vista or Windows XP), the size of the monitor, and the color of the unit. The features of the customized unit are then fed into an algorithm to produce a description of product specifications, a price, availability, and more.

As any retailer knows, there are times when no available product matches a shopper's customized criteria, either due to issues with inventory or because the desired product is out of the shopper's price range. In these instances, product personalization applications can be programmed to recommend alternative configurations to meet the shopper's needs.

Benefits of social networking to retailers
Web 2.0 is about more than just the next generation of applications: it is a new way for consumers to interact with each other and with retailers, via the Internet. An outgrowth of this trend is social networking. Most commonly associated with Web sites that nurture online communities such as MySpace.com and Facebook.com, social networking is more than a trend. It is a way for a retailer to interact with consumers on a personal level by using their own sites—and even communal sites such as MySpace.com—to facilitate the exchange of ideas and provide information about its business. In essence, social networking enables consumers to tie together values, ideas, and opinions with those of others, and create a stronger bond in the process. This interactivity fosters the same sense of community that defines social networking and is a highly effective vehicle for viral marketing.

Gift Registries, another Web 2.0 capability, can be created by retailers across multiple sales channels, thereby unifying the shopping experience for registrants, gifters, and sales associates. This feature allows shoppers to create, manage, and purchase items from registries through call centers, in stores, kiosks, and the Web. Key benefits include bringing shoppers back to your Web site, increasing revenues, and raising customer satisfaction. Registries that can be e-mailed to family and friends for feedback bring the collaborative actions that take place in store to a microlevel on the Internet.

Gifters can move seamlessly between sales channels to see what items have been purchased and make arrangements to pick-up their purchase at a store, or have it shipped to the gifter, the registrant, or the co-registrant. Gifters can also access the retailer's full catalog to purchase items as additional purchases for themselves—often converting first-time shoppers into repeat customers. In addition, in-store sales associates and call center agents can leverage rich customer profile information to create registries for the customer and help them modify registries created through another channel.

While the popularity of social networking has retailers scrambling to capitalize on it for merchandising strategies, they are learning that credibility is essential to acceptance in the social networking community. In other words, they have to keep their marketing efforts in this area "real." For retailers, "keeping it real" means a genuine effort to be a source of useful product information, by providing customer-generated product reviews that can aid in the purchasing decision. If retailers fail to keep their marketing efforts "real," members of social networking communities will perceive them as not being "straight-up players," or making an honest effort. Retailers must keep in mind that consumers respond to the power of a networked community that summon them to action.

In e-retailing, this concept is carried forward in customer reviews, written by peers, that deliver relevant information about products and services. Not only are shoppers more apt to trust peer-generated reviews, they are increasingly looking for them to aid in the purchasing decision. Retailers that provide this depth of information, even if it's negative, are apt to be perceived as athought leaders and "straight up" members of the community.

A recent study by Deloitte found that 98% of people who read product reviews consider them credible. After the 2007 holiday shopping season, about 88% of those surveyed for the study linked product reviews to action. While product reviews are a simple addition to a retailer's Web site, they are an often overlooked Web 2.0 capability, because many retailers focus on adding technology for technology's sake to differentiate themselves, even if that technology does not enhance the shopping experience.

III. IBM Sterling Multi-Channel Selling
IBM® Sterling Multi-Channel Selling supports Web 2.0 applications, such as Ajax and Flash, that enable retailers to break down technical barriers to creating a more interactive shopping experience. In addition, it supports such social networking features as gift registries, guided shopping, product personalization, and customer reviews. These tools are backed by consulting services that help retailers address the internal personnel and policy issues to ensure a seamless integration of Web 2.0 technology as well as the creation of a true interactive, personalized cross-channel shopping experience.

From its inception, Sterling Multi-Channel Selling solution was designed to foster a collaborative commerce process that unites buyers and sellers and delivers the interactive shopping environment consumers demand. Market makers can create an online, multi-seller marketplace that allows the customer access to multiple sales channels via a single touchpoint. Manufacturers that sell online can ship directly to the customer or allow customer pickup at a local retail partner. Retailers can allow shoppers to place orders for items not in stock, and have the item shipped directly from the supplier or picked up at the local store.

IV. Conclusion

Although Web 2.0 remains a mysterious concept to many retailers, the key to demystifying its intricacies is to remember its premise of delivering a richer, more interactive shopping experience that builds on the collaborative atmosphere found in the store. By keeping this in mind, retailers can select the appropriate Web 2.0 capabilities to enhance their business and deliver a more interactive shopping experience that increases sales and engenders deeper customer loyalty through interactions such as social networking.

About Sterling Commerce

Sterling Commerce, an IBM® Company, helps organizations worldwide increase business agility in their dynamic business network through innovative solutions for selling and fulfillment and for seamless and secure integration with customers, partners and suppliers. More information can be found at **www.sterlingcommerce.com.**

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