



WHITE PAPER

Guided Selling: Enabling the Next Generation of Online Commerce with Rich Internet Applications

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Executive Summary

A superior customer experience is essential at any customer touch point. Whether the channel to the customer is online or offline, each customer interaction affects the relationship that you strive to maintain and grow. This white paper explores how to create great customer experiences for the online channel. It defines the Guided Selling Lifecycle—from initial product inquiry to purchase—and explores how leading companies have implemented such solutions using Rich Internet Application technology. Specifically, we address how implementing Rich Internet Applications with Macromedia technologies can increase the productivity and profitability of your online commerce channel by increasing conversions, enhancing lift, and reducing abandonment.

The State of Online Commerce:

Online Spending Stalled by Ineffective User Experiences

Reports from Forrester Research and Shop.org project that online spending will reach \$149 billion by 2005. Although online purchasing has indeed increased, only 3% of all commerce transactions occur online. In fact, despite the 10-year history of online commerce, average customer conversion rates are just 2.4%. Some attribute this lack in conversion rates and online spending to ineffective technology and a poor user experience.

There are ways to improve the online shopping user experience, but first we must take a closer look at today's online experiences and the challenges they face.

Challenge 1: Search and Comparisons

Many shoppers know exactly what they are looking for online. Others want to analyze and compare similar offerings. Today, searching for products can be a tedious, complex task. Full-text search is powerful, but more complex product searches on multiple criteria—such as price and brand—can quickly cause frustration. For example, digital camera sites enable customers to select a price range and brand, but then inflict customers with a slow, painstaking page refresh, often only to return zero results and force them to start the search again.

The same frustration occurs when comparing products online. Let's look at the digital camera example again. Suppose you want to compare three or four different brands of cameras. Today you can select those products, click the compare button, and view a poorly formatted page that displays a large table of options. What if you wanted to drill down even further? Shoppers are often required to start over with their searches, which only allow them to use a few search criteria. Taken a step further, what if you wanted to search on price, brand, and—keeping with the digital camera example—number of megapixels? That level of search is rare to find on today's commerce sites.

Ineffective search-and-compare functionality could cause companies with online stores to lose sales because shoppers who know what they want (surgical shoppers) are deterred from completing their transactions. Therefore, it's incumbent upon commerce sites to connect those buyers to the products quickly, load the products in the cart, and advance them to checkout—or risk losing a sure sale.

Needless to say, when it comes to search, select, and product comparison online today, there is significant room for improvement.

Later, this white paper will provide some solutions that retailers can apply to enhance their site's search-and-compare capabilities dramatically.

Challenge 2: Personalization and Customization

Personalizing products is becoming one of the biggest trends in online commerce. Whether that involves laser-etching names on MP3 players or monogramming shirts with initials in a preferred font, or even configuring shoes or cars built to order, consumers expect to personalize their purchases. However, most online commerce sites today do not allow shoppers to view personalized products before purchase, which can lead to high return rates. Why don't sites offer this functionality? Because the enabling technology has been too complex to implement, and it delivered disappointing results.

Some products, however, take more time to purchase because they are more complex and have multiple parts and multiple options. Take buying a laptop, for example. There are many features to configure. You need to determine screen size, hard-drive memory, RAM, video, and audio—not to mention software. There are many options available to purchasers today, but typically the process is tedious and sends the shopper down a hopeless linear path, forcing them to retreat through the process until they are back at the starting point.

While this may work for some shoppers, more often than not they become frustrated and abandon the process altogether. Instead—if they haven't chosen to visit a competitor's site—they call the company directly, which increases the seller's operational and transactional costs and defeats the purpose of implementing an online configuration.

Later, this white paper will provide solutions for resellers interested in offering highly visual interfaces to personalization and customization—approaches that can yield larger order sizes, increase online transaction completion, and reduce returns.

Challenge 3: Lift and Abandonment

Retailers strive to increase lift—the size of the shopping cart. By offering customers additional, related, or more appropriate products, you give them an in-store, satisfied experience while helping you yield higher conversion rates and increased lift.

Today, however, cross-selling and up-selling online has been severely limited because customers have not been able to visualize the add-on items that the retailer wants to promote. For example, imagine selling a customer a sweater. A pair of pants may complement that sweater, but today most online shopping sites don't capture the power of the in-store experience by helping the customer view the sweater and pants together.

Another significant area of concern for organizations with online stores is shopping cart abandonment. Forrester Research has written reports on this phenomenon and analyzed contributing factors, such as purchasers using carts to subtotal purchases and compare the cost of convenience versus pickup. They also found that a significant percentage of abandonment can be attributed to purchasers becoming frustrated with the checkout process.

Later, this white paper will provide solutions for retailers to increase lift and reduce abandonment by improving the visualization of cross-selling and up-selling offers and ensuring an intuitive checkout process.

Summary of Today's Online Challenges

Clearly, while online commerce continues to grow and improve, there are countless opportunities for improvement.

The challenges that retailers face online today boil down to one core concept: user experience. When it comes to user experience, consumers have varying tolerance levels in completing the purchase process. All customer-facing organizations want to provide their customers with the best possible experience. After all, a great customer experience is mutually beneficial—the customer has a positive experience that will likely be repeated, which is also financially rewarding for the business.

Whether it's the online shopper or the marketing manager, there are ways to improve the online experience dramatically and address the challenges described in the above sections—by implementing Rich Internet Applications.

Rich Internet Applications can help retailers with the following:

- Reducing search time
- Increasing conversion rates
- Increasing average order size or lift
- Reducing shopping cart abandonment

Rich Internet Applications: An Introduction

In response to delivering improved user experiences, a new category of Internet applications is emerging: Rich Internet Applications. These applications combine the responsiveness and interactivity of desktop applications with the broad reach and ease of distribution of web applications. Rich Internet Applications drive increased return on investment by simplifying and improving the user interaction of web applications.

The remainder of this white paper explores each step of the Guided Selling Lifecycle, and how Rich Internet Applications can improve online commerce.

The Seven Stages of the Guided Selling Lifecycle

Let's look at the lifecycle of the purchasing process—which we call the Guided Selling Lifecycle—and how it relates to the online world. The lifecycle addresses everything from initial product awareness to inquiry through post-sales support and all customer touch points along the way (see Figure 1). At some points customers expect, and even anticipate, certain capabilities such as adding an item to the cart or selecting item quantity. While these capabilities may cover the core necessities for a commerce site, others are more focused on a way to engage better with your customers and grow the business over time. Forrester Research recently noted that for commerce sites generating more than \$10 million annually, 49% of marketing dollars are spent on customer retention as opposed to acquisition. This shows that commerce sites need to engage better with customers and provide a better experience than their competitors. As we explain the Guided Selling Lifecycle, we will deconstruct how commerce sites can differentiate.

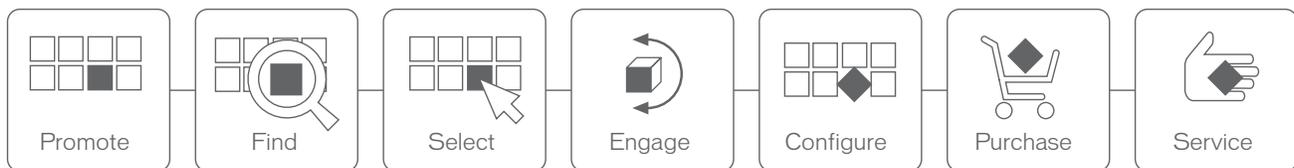


Figure 1: The seven stages of the Guided Selling Lifecycle.

Stage 1: Promote



The first phase in the lifecycle is called Promote—the ability to communicate or market a product or service actively to your current or prospective customer base. Typically, methods of promotion for an online channel are in the form of e-mail; direct mail of circular, catalog, or other promotional material; or web promotions that appear on your site or a partner’s site. Advertising is an effective form of promoting product or brand awareness because of its wide reach to millions of potential buyers.

For promotions to be effective, they must be relevant to your customer. Most commerce sites use customer data to identify customers and their buying patterns. They use this data to conduct fairly targeted campaigns to key markets. Targeting and personalizing your campaigns to each individual customer or prospect is the ultimate marketing goal.

There are two issues with this, however. The first is cost. What are the costs associated with these targeted campaigns? Producing these items in mass quantities helps curb production costs, but producing individual pieces can quickly burn your budget given the creative component needed. The second issue is return. Even if you can justify the costs, how do you know that personalized promotion is yielding your desired return?

Because customers are inundated with so much e-mail, they must read beyond the discount even to consider your promotion. Instead of relying on the power of a broad price break, you need to speak directly to the customer. Personalized promotions directly address this.

The Print-on-Demand Institute recently reported that text personalization yields more than a 135% jump in conversion rates. When companies personalize images with the text, the conversion rates jump to 500% and grow to 1,000% when coupled with a special offer.

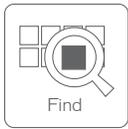
To drive increased email response rates, dynamic personalization is used to showcase items customized with the monogram of the email recipient.

In this demo, QVC, the leading televised shopping service, uses dynamic personalization to draw attention to popular personalized products in a dramatically unique way—by running an email promotion to its customers featuring dynamically personalized items available from QVC.com.



Figure 2:
QVC's personalization email campaign

Stage 2: Find



The next phase of the Guided Selling Lifecycle is Find or Search. This phase focuses on enabling your customers to locate their products quickly. Many users who know what they want still struggle to find the desired product. Typically, they perform an Internet search and then follow the link to the main product page, only to begin the search over in the commerce site's search engine. Entering keywords return a set of HTML links that often lead users astray.

One way that commerce sites can improve this process is by providing a more visual search that displays search results with thumbnails of actual products. A second improvement is by adding parameter-based searching capabilities with the parameters visually available and the results dynamically updated on the same screen without disruptive page refreshes (see Figure 3).



Figure 3:

Vodafone's visual product selection allows German customers to find easily the mobile phone they want based on a number of criteria.

Yet another method of helping customers find their products is by maintaining common search metaphors across channels. Online catalogs, for example, help users find their products based on familiar patterns. Many retailers and manufacturers have invested millions of dollars into their catalog businesses with lackluster results, however. Rich Internet Applications provide the measurable results needed to justify the investment.

Restoration Hardware Increases Conversion Rates 2X

Restoration Hardware, Inc., a specialty retailer of classic and American style home furnishings and decorative hardware, is utilizing Scene7's eCatalog solution to enhance its customers' multi-channel shopping experience. Restoration Hardware added a "Shop by Catalog" feature to its site-allowing customers to view the company's print catalogs online and then buy directly from it. Restoration Hardware found customers browsing via the eCatalog viewer have a higher conversion rate by 2x.

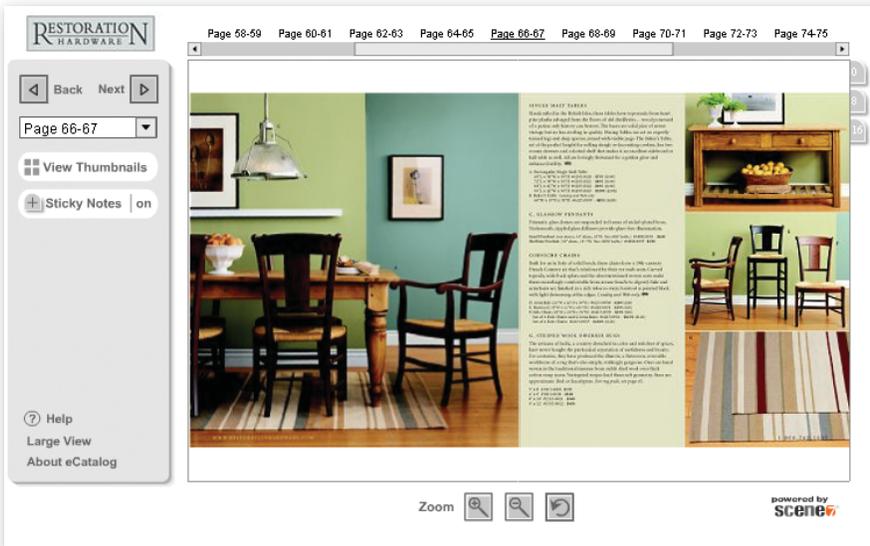
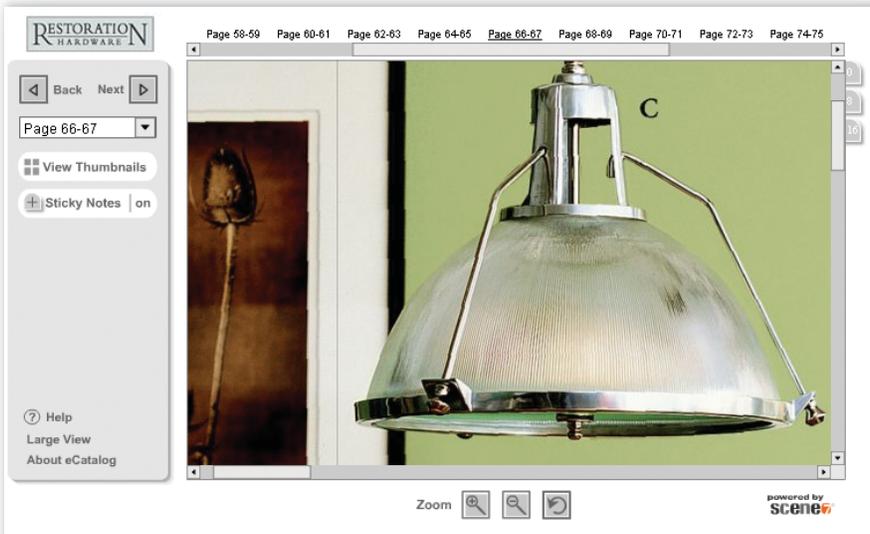
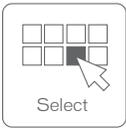


Figure 4:

Restoration Hardware provides their users with a convenient e-catalog that offers a numbers of views for helping with purchasing decisions.



Stage 3: Select



Tightly coupled with Find is Select. Based on the parameters of the search, users want to select their desired products. Some commerce sites have microsites that enable users to drill into any product line. Others focus on unique experiences (especially during the holiday season) such as a Gift Selector. This type of rich application functionality helps users engage at a much deeper level to allow for a compelling user experience that directly translates into increased conversion rates. Another important metric is reduced search time. If users can find what they need quickly, they will be more inclined to purchase.

Dai Nippon Printing Reduces Search Time by 24%

Using Macromedia Rich Internet Application technology, Dai Nippon Printing (DNP) implemented a printer cartridge selector that enabled users to select industrial print cartridges based on parameters such as printer type, application use, or even a competitor's ribbon. They reduced search time by 24%. Their RibbonRunner application (see Figure 5) is an effective example of how Rich Internet Applications can help businesses achieve better results by providing a better customer experience. In addition to satisfying their customers' needs, DNP cut file utilization by 88% and the size of accessed files by 37%.

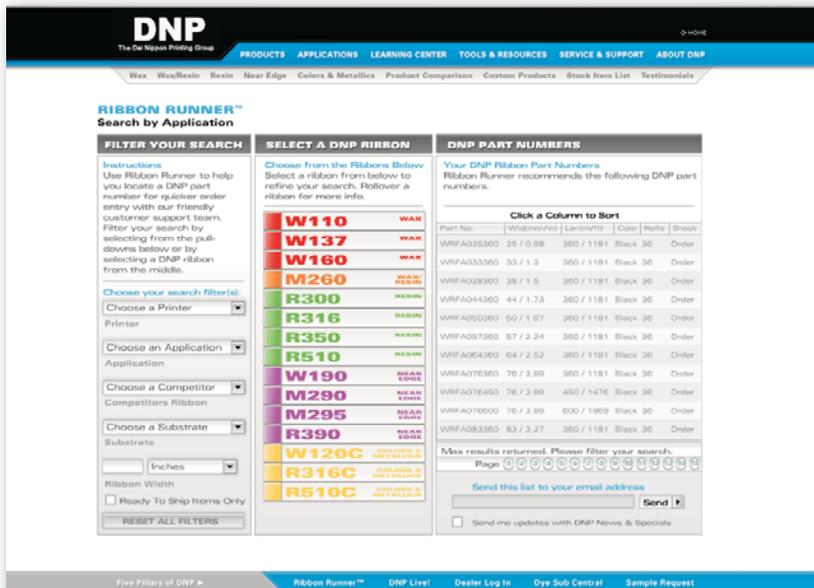
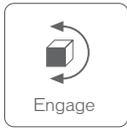


Figure 5:

Dai Nippon Printing's RibbonRunner printer cartridge selector makes it easy for users to select the appropriate product for their needs, resulting in dramatic reductions in search time and returns.

Stage 4: Engage



Engage

The next stage is Engage, which often addresses the following question: Once users find their products, how do commerce sites engage their customers or prospects? One of the biggest challenges in selling goods online is providing an optimal customer experience. Naturally, in the online channel, customers can't touch or feel the product. So how can commerce sites overcome this challenge to educate and help them visualize the product?

Anthropologie Reduces Web Content Production Time and Costs by 3X

Anthropologie Inc., innovative retailer and wholesaler, implemented Scene7's Dynamic Imaging Solution for image zoom/pan and dynamic sizing to offer online customers multiple product views and enable them to zoom in on details from the front or back, similar to the way they would inspect merchandise in retail stores. Scene7's Dynamic Imaging capabilities allow Anthropologie to automatically generate any number of variations from single master images and image commands, greatly reducing the associated Web production time and costs by up to 3X.

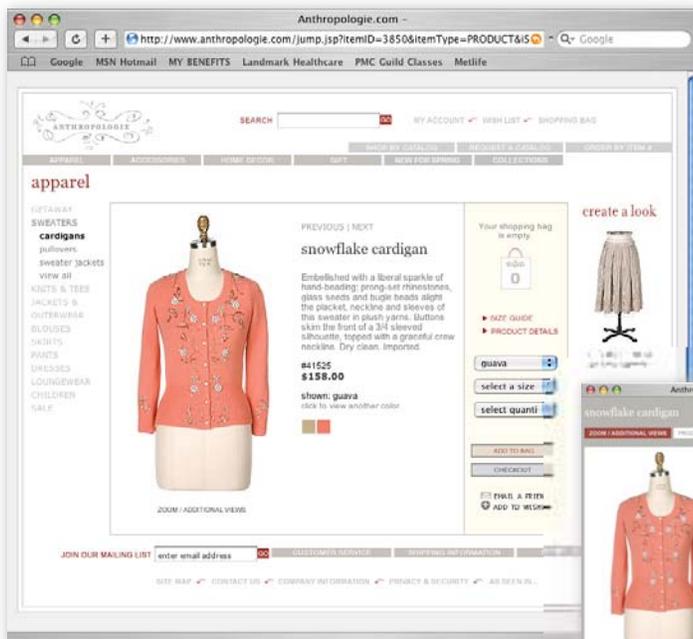
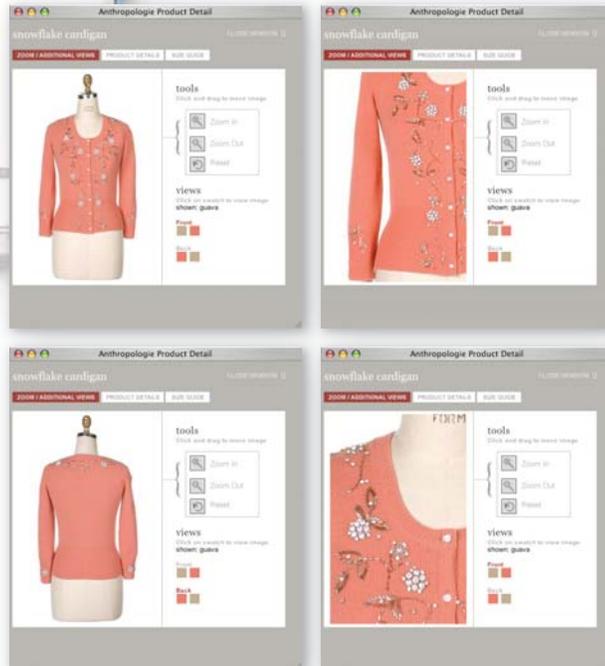


Figure 6 :

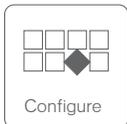
Scene7's Dynamic Imaging capabilities allow Anthropologie to automatically generate any number of variations from single master images and image commands.



Rich Internet Application technology and rich visualization minimizes this challenge. By zooming in on a fabric or changing a sweatshirt pattern, users are engaged to explore items. By providing multiple views and even video clips of items, users can also “feel” that in-store experience and evaluate and understand the product more fully. This helps the business to improve conversion rates, increase customer loyalty, and reduce returns.

Capabilities such as zoom, color change, pattern change, rotation, and even video are critical to rich merchandizing. While many commerce sites don’t implement all of these capabilities, some are prevalent. Also, most consumers are attracted to information-filled sites. The more information that consumers obtain from a site, the more inclined they are to purchase from that site.

Stage 5: Configure



The next stage in the Guided Selling Lifecycle is Configure, which helps customers purchase when visualization is simply not enough and multiple product options are available. At a simple level, these options may be size or color. At a more complex level, these options may be service plans or multiple options with dependencies. A more complex product requires a simpler way for users to follow and complete that process. Rich Internet Applications address these challenges by enabling users to configure these complex elements within one screen—without any page refreshes.

We’ll discuss two examples of product configurators. The first is the Mini USA automotive site. Powered by Macromedia Rich Internet Application technology, this guided selling application focuses on branding and generating awareness and interest for the Mini brand (see Figure 7).

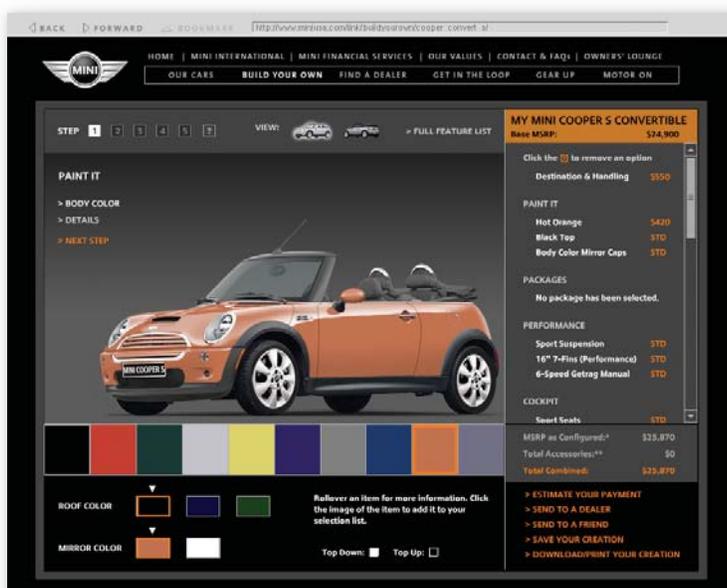


Figure 7:

The Mini configurator lets users choose color, accessories, and much more, resulting in the primary source of leads for Mini USA.

Mini USA and Nike Develop Product Configurators that Deliver Measurable Results

The Mini USA site provides users with a completely interactive, immersive experience and enables them to assemble any car in any configuration. While at first a novelty, the site is enabling users to self-merchandise. The site captures more than 60 qualified leads per month per dealer (79% of all leads generated), proving it to be an effective demand-generation tool. Some sites go a step further and link their product configurators to the purchasing process. At the NikeiD site, users configure and personalize their running shoes before purchasing them online (see Figure 8). A few weeks later, their custom-manufactured shoes are delivered to their doorsteps.

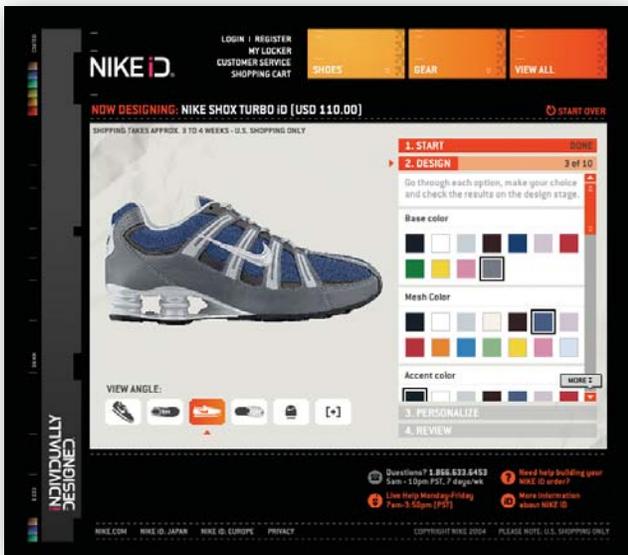


Figure 8:

At nikeid.com, users completely customize and visualize their shoes, even adding their own text (or ID) to be printed on their shoe.

Another example of a product configurator is from the fashion industry. One of the most interesting trends in online fashion commerce is around the Make-an-Outfit application. This Rich Internet Application enables the commerce site to present outfits to customers and gives them the opportunity to switch tops, pants, shoes, and more (see Figure 9). This gives users the “feel” of trying on different outfits and merchandizing. By pairing tops with bottoms, customers can better understand the options and usability of items. Also, by providing customers with the option to add the entire outfit to their shopping cart, the commerce sites instantly empower lift on sales. This scenario is very typical to what is offered in the brick-and-mortar world—only without the additional costs of a sales associate.



Figure 9:

Customers can explore entire outfits and visualize which options, such as which color and pattern look best on them using Scene7’s Dynamic Imaging solution.

Stage 6: Purchase



Now that your customer has found and configured the product, the next step is for them to add it to their shopping cart. This leads us to the Purchase stage. There are a few nuances about the shopping cart that are important to understand. The first is cart confirmation. How do you let users know which item has been added to their cart? Do you take them to the cart? Do you keep them on the product page? Do you introduce a pop-up menu that alerts them when an item has been added? Different sites treat this issue in different ways, but everyone agrees that users need to be notified when items have been added to their cart. Failure to notify users results in multiple added items. Bringing users to their cart prematurely means potential lost sales.

Best practices suggest that users need confirmation when items are added to carts. They also suggest that users are encouraged when additional information is provided. Confirming items added to the cart and estimating tax and shipping costs helps to create more informed, loyal customers. Below is an example of a cart confirmation. This data-aware application enables customers to interact with the application and offers choices. They can go straight to the full cart or they can continue shopping. It's important to note that if users choose to continue shopping, they no longer have to find where they were because they are already on the product page.

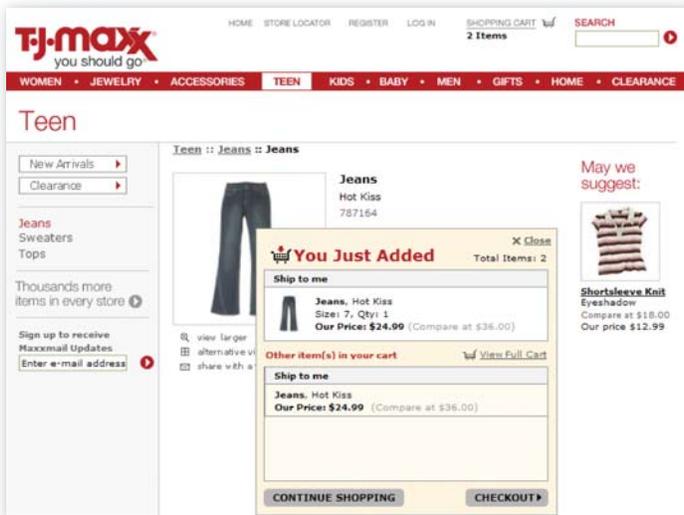


Figure 10:

A TJ Maxx add-to-cart confirmation screen keeps users updated on their cart items.

TJ Maxx

The TJ Maxx site has implemented add-to-cart confirmation (see Figure 10), in-cart editing, and single-screen checkout (see Figure 11) to help improve their conversion rates and reduce shopping cart abandonment. By keeping the customer engaged and within the single screen, the user has a more fluid experience getting through the purchase process.

If users decide to view the full cart, they are brought to the full cart and can either continue shopping or proceed to checkout. The full cart also enables users to subtotal their items.

The checkout process, while intended to be frictionless, is a key stumbling block for commerce site users. To direct users through the checkout process, commerce sites need to create a coherent process flow and implementation. The key issue is lack of visibility into where users are in the process. Users typically don't know that they have made a mistake until they try to move on to the next page. Sometimes, when they go back, all of the data they inputted is lost and they must start the potential transaction process again. This adversely affects the customer experience and discourages customers from purchasing.

A Rich Internet Application-based shopping cart and checkout process enable users to follow the checkout process easily. Providing capabilities such as immediate field validation enable users to obtain immediate feedback and confirm that they have entered information incorrectly. Also, a rich checkout process helps users eliminate page refreshes and keeps users within one screen. The effects that transition the user between different areas of the checkout also lend to the checkout's overall usability. The ultimate result is a dramatic reduction in cart abandonment.

The screenshot shows a checkout form titled "Checkout" with a sub-header "Shipping Information". The form is for "1 of 1 Recipients" and prompts the user to "Please enter shipping info". The form fields are as follows:

- First Name:** * Jane
- Last Name:** * Smith
- Address:** * 1500 Main Street
- City:** * Anytown
- State/Territory:** * Maine - ME
- Zip:** *
- Phone Number:** *
- Shipping Method:** Select shipping method
- Gift Message:**

There is a "View Shipping Information for options, rates, and destinations" link. A note states: "Note: Be sure to include 'from' in your message, up to 250 characters". A checkbox option is present: "Use this address for my Billing Information". A "CONTINUE" button is located at the bottom right. A progress bar at the bottom shows the current step as "Shipping Information" (1 of 4) and the next steps as "Billing Information", "Payment Information", and "Review Order".

Figure 11:

The TJ Maxx checkout process enables users to proceed quickly to checkout or verify billing, payment, or order information.

Stage 7: Service



The last stage of the Guided Selling Lifecycle occurs after Purchase. Focused on ensuring customer satisfaction and loyalty, Service is the final stage. Providing users with the best experience after they have purchased makes them more likely to become repeat buyers. Services such as shipping notification, product help, and even product-use demonstrations enable customers to succeed with using your product (see Figure 12).

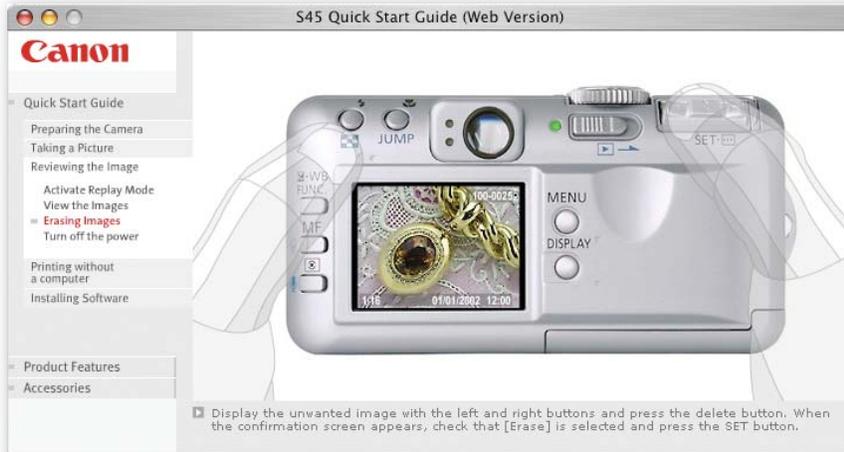


Figure 12:

Canon Quick Start Guide helps educate customers on product usage.

Exemplum Reduces Help Desk and Product Support Calls

Exemplum, a Macromedia partner, provides product demonstrations to service their customers' needs for post-sale follow-up. Enabling end users to locate additional information on the manufacturer's website in a rich and visually engaging way reduces calls to the help desk and product support.

Enabling Technology for Rich Internet Applications

The technologies that enable Rich Internet Application can empower your organization to deliver the next-generation shopping experiences that we detailed in this white paper. The two enabling technologies for building and delivering these innovative, differentiating experiences are Macromedia Flash Player and Macromedia Flex.

Macromedia Flash Player

Flash Player is on 98% of computers connected to the Internet. That's more than 500 million computers. A lightweight, cross-platform, highly secure client, Flash Player runs in your web browser to help deliver rich, interactive online shopping experiences. All the examples shown in this paper take advantage of features that Flash Player delivers. Because 98% of all computers on the Internet already have it installed, you can build these applications knowing that your customers can immediately take advantage of the best possible online experience.

Macromedia Flex

Macromedia Flex is a presentation server and application framework that empowers your development team to build solutions in a way that's highly productive and easy to maintain. Flex works with your existing systems and leverages your IT team's current development workflow, so you can start developing immediately. Flex does for running applications on your server what Flash Player does for running applications on the client.

Use Flex and Flash together to customize your applications so they can run offline. This helps customers browse your interactive product catalog whenever they want, not just when they are connected to the Internet.

These same technologies also enable you to deliver an improved generation of dashboards that can help you monitor key metrics from disparate systems in a highly visual, intuitive and customizable manner.

To make Rich Internet Applications work for your online business, pick a project and build a prototype. Select one of the stages in the Guided Selling Lifecycle, assemble your team, and start delivering Rich Internet Applications that can dramatically improve your bottom line.

Macromedia has a number of partnerships with leading systems integrators and technology providers to help you achieve your goals. With partners such as Scene 7, IBM Global Services, Avenue A Razorsfish, Whittman Hart, Molecular and others, Macromedia can help you build the solution you need with Rich Internet Application technology.

Summary

This white paper explored many ways to provide your customers with a more engaging user experience while improving your business. Whether your goals are increasing your conversion rates for a particular promotion or reducing shopping cart abandonment, Rich Internet Applications can help your business. To find out more about Rich Internet Applications, guided selling, and Macromedia Flex, and to see more customer examples, visit www.macromedia/go/flexgs

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