Building lift and loyalty with personalized product recommendations

Engaging customers with personalized recommendations across multiple marketing touchpoints

Contents

Executive summary

Done right, personalized product recommendations can deliver a double-digit revenue lift, increase average order value and generate loyalty among satisfied customers.

Done wrong, product recommendations can alienate consumers with irrelevant content. They can drive your bounce rates up. With an abundance of choices, discriminating customers may never return.

The stakes are high. In our age of non-stop social media conversations, personalized recommendations technology is essential to providing shoppers with the relevant, engaging experience they have come to expect. The lines are blurring between shopping and socializing. Personalization is now on a par with price as a competitive differentiator.

This white paper explores how online merchants can put recommendations technology to work to deliver a personalized experience on their website, and extend it across multiple channels—the website, marketing emails, call centers and more.

This paper outlines key characteristics that merchants need from a recommendations engine, and offers practical tips on key strategies and capabilities needed to realize not just an initial spike in sales, but revenue lift and customer satisfaction that can be sustained over months and years to come.

Making online shopping personal

Think of your best shopping experiences in your favorite stores. You're greeted upon entry and can easily find your way to the products you're looking for. Maybe a staff member directs you. Or you spot a prominent sign. Either way, within minutes you're in front of a selection of nice shiny mountain bikes.

A sporting goods salesperson approaches and offers assistance. If you decline, the salesperson politely steps away. If you accept, the staffer is helpful, knowledgeable and points out the pros and cons of each bike and shares his insight into what other customers like. The salesperson shows interest in you—your price range, your intended usage, your experience with mountain bikes. As he learns more about you, he's better able to guide you towards the product that best meets your needs.

It's a personal engagement. It's a two-way conversation. You're offered helpful prompts, but never pushed. And once you select a bike, the salesperson may have suggestions for riding gloves, shoes and other accessories. Those and other complementary items are attractively arranged nearby, helping round out your shopping experience. Your exchange with the salesperson might even end in a handshake—and the intent to return.

The best online retailers excel because they've figured out how to translate that rewarding in-store shopping experience to the digital medium. They've mastered the art of delivering a personalized, relevant online exchange.

The best retailers know that personalization doesn't end at the website. They're leveraging what they learn about customers from web activity to reach out and build loyalty with personalized emails, targeted display ads, social media communities and multichannel marketing.

The use of a product recommendations engine is a critical element of their success.

Recommendations technology comes of age

Technology to serve up personalized product recommendations isn't new, but nor has it been universally and effectively deployed. Early-generation recommendation engines suffered from performance issues. Suboptimal implementation could generate irrelevant content. Attempts to manually custom-code recommendations usually ended in failure.

Now, many companies with a recommendations solution in place blindly assume that it is doing its job and helping to drive a few more sales. In fact, functional limitations in older technology and a lack of monitoring and optimization can cost sales if the system is delivering off-target or low-quality recommendations. "Set it and forget it" is a sure way to miss out on the quantifiable dividends of personalized recommendations.

Today's best personalized recommendation engines offer software-as-a-service (SaaS) implementation that does not require an investment of IT resources. Shrinking barriers to entry have made recommendation engines viable not just for large retailers, but for small to medium-sized companies doing business over the web.

But not all recommendation engines are created equal. Online businesses need to choose their recommendations technology carefully, because even small weaknesses or functional limitations can become magnified on the bright stage of your website, under the critical eye of discerning customers. The best engines offer:

- **Algorithms covering multiple scenarios.** From first-time visitors to high-value registered customers, sophisticated algorithms accommodate multiple scenarios covering both visitors and products, for instance, serving content to an unknown visitor based on a search term that the visitor used.

- **Real-time recommendations.** The engine dynamically delivers recommendations as users click through your site, combining in-session, historical profile and wisdom of the crowds information, as appropriate, to deliver the best content.
- **Seamless integration with a customer database.** The engine interoperates in real time with a data-rich customer database that has tracked a user's online activity both in-session and over time.
- **Easy customization by non-technical users.** The engine features an intuitive interface that lets non-technical users modify business rules governing recommendations, providing flexibility and full control over a range of scenarios.
- **Flexible A/B testing platform.** The solution gives marketers a platform to devise and test multiple recommendation sets and select the most effective products, brands, customer segments, terminology and recommendations placement on a page.
- **Analytics and competitive benchmarking.** The solution is complemented by robust analytics and ad hoc reporting to continuously measure and improve performance, and a benchmarking service for comparisons against competitors and within industries.
- **Integration with email marketing.** The solution links to a complementary email marketing solution to deepen personalized customer engagements and easily retarget abandoners.

Why personalized recommendations work

Personalized product recommendations work for a simple reason—a majority of people like them. Study after study has confirmed the value of personalized product recommendations, as well as personalized email, in increasing sales and average order value. Given the proven payback, many online merchants have recommendations technology prominently on their radar screens.

An essential online marketing technology

Personalized recommendations technology has gone from an optional capability to an essential element of online marketing. One reason is the increasing sophistication of online consumers and the rich interactivity of social media. Consumers expect a personalized, community-oriented shopping experience, not unlike their interactions on social media sites. If web content isn't relevant, it's easier to click away to another site where it is. Personalization is now on a par with price as a competitive differentiator.

In many ways, the lines are blurring between socializing and shopping. Socializing shoppers expect their favorite brands to have engaging Facebook fan pages and tweet on Twitter. They expect online retailers to offer product reviews where they can read reports from others and contribute their own feedback. They expect to be wooed, courted and catered to every step of the way, right from the start.

And where do many shoppers start? With a search engine.

Using search terms for personalized recommendations

First impressions matter. Consider a hypothetical scenario. A visitor searches the web for "backpacks" and clicks on your paid search ad. The visitor reaches a landing page that features an array of luggage, but no backpacks. That's a sales opportunity lost and a notch against your credibility as on online merchandiser.

Unfortunately, the scenario is common. Paid search managers rarely control the landing pages their ads link to, and merchandisers may revise those landing pages, adding or deleting products. With paid search managers dealing with thousands of keywords and companies selling thousands of products, maintaining alignment between paid search and landing pages can be a virtual impossibility.

The same problem exists with natural search. A user may enter a search term, click on a link to your site to find a page with no mention of the item in question.

Users of Google, Yahoo!, Bing and other search engines are important to the bottom line. About 36 percent of visitors to online retail sites come from search queries, according to data from IBM Digital Analytics Benchmark, the free service that enables IBM clients to benchmark their performance against aggregated, anonymized data of their competitors and within their industry. Benchmark data shows:

- Fifteen percent of visitors arrive via paid search
- Twenty-one percent of visitors arrive via natural search

Ensuring relevance in on-site search

The quality of on-site search is also critical in the conversion process. IBM Digital Analytics Benchmark data shows that about 19 percent of all visitors use on-site search. Roughly half of all transactions involved at least one on-site search session.

But on-site search can be problematic. It can return multiple pages littered with irrelevant results. The text-matching technology of on-site search may deliver results by top-selling products, but lower-selling items more specific to the user's query may be low on the list, if they appear at all. Once in a while, users receive the dreaded "No Results Found" page, even though those products exist.

To address gaps in relevance in external and on-site search results, the latest version of the IBM Product Recommendations engine features an advanced real-time algorithm to automatically recommend the best products based on paid, natural or on-site search.
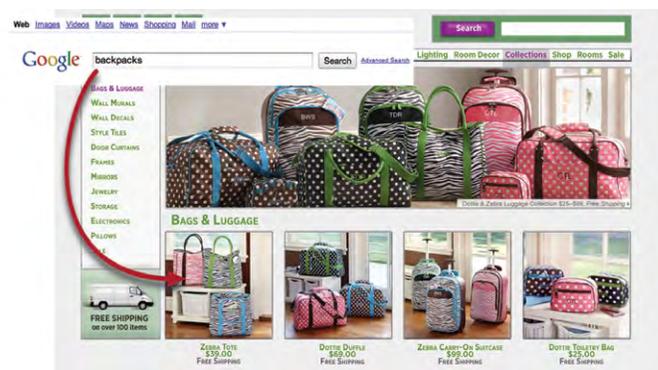
Figure 1: Because landing page content changed, the page does not feature the backpacks shown in a Google search.
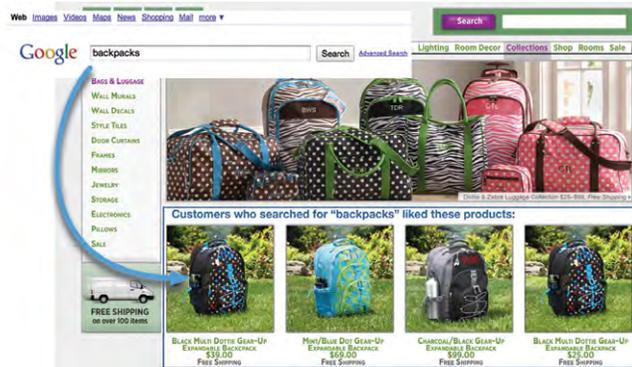
Figure 2: IBM Product Recommendations adds backpacks to a landing page as an "Other Customers Liked" recommendation.

Figure 1 depicts a landing page reached by a customer searching Google for "backpacks." In this case, the landing page content had changed and backpacks were no longer featured on the landing page. As shown in Figure 2, IBM Product Recommendations serves up a recommendation zone with backpacks that appears adjacent to the default landing page content using the header, "Customers who searched for backpacks liked these products."

Figure 3: IBM Product Recommendations enables you to deliver relevant product recommendations across every customer touchpoint.

Putting recommendations technology to work

IBM Product Recommendations is engineered to help you deliver relevant recommendations to every customer on every online shopping touchpoint. It features an intuitive interface to enable non-technical users to adjust recommendations algorithms, and a flexible A/B testing platform to optimize your recommendations.

The sophisticated algorithms of IBM Product Recommendations leverage in-session and historical data stored in IBM Digital Analytics Lifetime Individual Visitor Experience (LIVE) Profiles, which tracks user web activity over time and can include data from offline channel transactions. Figure 3 depicts key customer touchpoints for personalized recommendations.

The recommendations payback by pages

Which pages are best for personalized recommendations? The short answer is all of your shopping-related pages. Obviously, you don't want to display product recommendations on a privacy statement, but main ecommerce pages are fair game. A large recommendations footprint increases your chances of a cross sell or up sell, and does not detract from the customer experience.

With IBM Digital Analytics Benchmark, IBM has calculated the average percentage of total website sales driven by product recommendations based on their placement on specific web pages across IBM retail clients. (With the free IBM Digital Analytics Benchmark service, IBM clients can conduct their own analyses of recommendations lift against anonymized competitors and within their industries).

By a wide margin, product list and product-specific pages are most effective in driving sales through personalized recommendations. Within our sample, 9 percent of site sales were driven by visitors who clicked a recommendation from a product list page.

Overall, the IBM Digital Analytics Benchmark data showed 23 percent revenue lift across the eight pages examined. The question becomes how much of that is true lift, and how many items customers would have bought if they hadn't seen a recommendation. Answering that question requires A/B testing with two audiences—one that receives recommendations and one that does not.

Results vary by company, but IBM has found that 40 percent to 60 percent is true lift based on A/B testing analysis. In other words, IBM clients can expect sales lift of more than 10 percent with IBM Product Recommendations. The raw lift figures by web pages appear in the following section.

Product list page
Site sales from recommendations 9.0 percent
Driving 9 percent of total site sales, a product list page is the prime point for product recommendations. These pages often list all products in a category and can extend for several pages. Users may be confused and not know where to start. A "Customer Favorites" recommendation zone atop the page can help shoppers find what they're looking for.

Product page
Site sales from recommendations 6.5 percent
Recommendations on a product details page can show customers what others bought and spotlight related or complementary products. These recommendations might be called "Other Customers Viewed" or "You Might Also Like."

Search results page
Site sales from recommendations 2.3 percent
Like a products list page, search results may feature dozens or hundreds of products over several pages. It helps customers locate specific product recommendations, driven by an algorithm that accounts for the search term the user entered.

Pre-cart page

Site sales from recommendations 1.6 percent

Not all websites use this feature, but a pre-cart page can serve as a transition point to give the customer the choice to keep shopping or proceed to checkout. Cross sell and up sell recommendations are ideal here to keep the customer shopping.

Shopping cart page

Site sales from recommendations 1.5 percent

Like a pre-cart page, shopping carts are another great point for cross sell and up sell based on the customer's activity and history, or to pitch a discount not presented earlier.

Category page

Site sales from recommendations 1.3 percent

Category page recommendations may show top-selling items by category and by user activity and history.

The algorithms are precise; if the user had previously searched for brown leather pocketbooks, it presents top-selling brown leather pocketbooks—not white fabric ones.

Home page

Site sales from recommendations 0.5 percent

Recommendations can be made based on combinations of profile data, in-session activity and wisdom of the crowds.

Order confirmation page

Site sales from recommendations 0.3 percent

Here is your last opportunity to make a pitch before most customers end their buying session. By now most shoppers have seen your previous recommendations, so consider tuning your recommendations engine to show something they haven't seen, if possible.

Key strategies and capabilities for recommendations success

Automation is one characteristic of recommendations technology that makes it so effective. Attempting to manually implement and manage a recommendations engine (as some companies have done) is an exercise in futility given the vast and fast-changing scope of customers and products.

Online marketers should have a structured program in place that coordinates personnel, processes and technology to make the most of a recommendations system. Your objective should not be to merely trigger an immediate sales boost, but to sustain that growth over months and years.

Some key strategies and capabilities for success are:

- Test scenarios aggressively
- Go multichannel with personalized recommendations
- Monitor, measure and benchmark recommendations performance

Test scenarios aggressively

A/B testing is an essential discipline to make the most of a recommendations program. Marketers and merchandisers collaborate to test and tune recommendations in various scenarios, by various dimensions. Ideally, common tests cover A/B testing is an essential discipline to make the most of a recommendations program. Marketers and merchandisers collaborate to test and tune recommendations in various scenarios, by various dimensions. Ideally, common tests cover

affinity weighting schemes, number of recommendations to display, page placement of a recommendation zone (such as top, side or bottom of page), size of and background color of zone footprint, and recommendations text (for example, "Other Customers Liked" versus "Other Customers Bought.")

These details may seem tedious; however, experience has shown that seemingly small differences can profoundly influence the effectiveness of recommendations. You can realize the best A/B testing results when you take nothing for granted, question conventional assumptions and prepare to be surprised.

Go multichannel with recommendations

Personalized recommendations can and should extend across all your customer touchpoints. Link your recommendations engine to companion solutions for email and display ad marketing and deliver your personalized recommendations via those channels as well. A goal is to cost-effectively retarget unconverted browsers and shopping cart abandoners with emails and display ads on affiliate and social media sites. Emails can be a great way to let customers know about newly available products related to past browsing or purchase, and about in-store sales or special events based their geographic location. If you send purchase confirmation emails, take the opportunity to recommend once more.

Think offline, too. Explore your options for importing data on customer transactions in stores and via call centers and direct mail into your online customer database. An omni-channel view gives you greater flexibility and precision to, for example, deliver personalized recommendations for a comforter via online channels to a customer who bought a bed in a store. Look at your call center. Linking your recommendations technology to call center systems gives agents actionable insights for cross sell and up sell.

Monitor, measure and benchmark performance

Just like customer relationships, a personalized recommendations program needs maintenance and nurturing. An underlying analytics and reporting platform lets you continuously monitor and optimize the performance of your solution. It features a metrics-driven dashboard to display how recommendations are driving sales and conversion. Look to pinpoint the reasons why one recommendations plan excels and apply its differentiators to other plans. Scrutinize for low-end outliers and drill down into the root causes of problems before they cost you sales.

To see how your recommendations are performing versus the competition, use a service such as IBM Digital Analytics Benchmark to compare and contrast results against data aggregated from anonymized companies in your industry.

The IBM approach to personalized recommendations

IBM Product Recommendations is part of the IBM Digital Marketing Optimization Suite, an online marketing suite engineered to enable marketers to extend personalized engagements across every customer touchpoint. The platform is fueled by IBM Digital Analytics LIVE Profiles, the industry's most robust customer database, which tracks each customer's activity over time and across sessions. This rich, historical data enables marketers to deliver personalized, relevant recommend- ations and continuously measure performance. IBM Product Recommendations is augmented by these solutions:

IBM LIVEmail

IBM LIVEmail gives marketers the flexibility to automatically deliver emails to customers based on specified scenarios. For instance, IBM LIVEmail may be configured to generate personalized emails to individuals who abandoned a shopping cart, or to send follow-up offers for related products or accessories after a purchase. IBM LIVEmail augments IBM Product Recommendations with powerful and precise targeting that extends personalized recommendations across channels.

IBM Digital Analytics and IBM Digital Analytics Explore

IBM gives marketers and merchandisers hands-on tools to monitor, analyze and improve personalization effectiveness with IBM Digital Analytics and the IBM Digital Analytics Explore ad hoc reporting tool. Featuring metrics-driven dashboards and visualization and segmentation capabilities, these solutions enable users to drill down into real-time and historical factors driving personalized recommendations success or failure.

IBM AdTarget

IBM AdTarget leverages granular visitor activities captured by IBM to enable delivery of highly relevant display ads and increase visitor reacquisition rates. IBM AdTarget clients increase reach by placing relevant ads before larger, better-segmented audiences, faster. They minimize marketing costs by leveraging lower cost channels to reacquire registered visitors. Partner integrations eliminate typical site tagging obstacles and IBM provides powerful attribution capabilities to track how well ads drive website conversions.

IBM Coremetrics Benchmark

IBM Coremetrics Benchmark enables online retailers to measure their online marketing results—including e-commerce data—against that of their peers. Benchmark is the only peer-level benchmarking solution that delivers aggregated and anonymous competitive data for industry-specific key performance indicators (KPIs), showing how a site performs competitively and historically compared to its respective industry overall, as well as to peers and direct competitors.

Conclusion

Today's online merchants have a wealth of information at their fingertips left by customers browsing and shopping on their websites. With the right tools, they can put that rich data to work to serve up product recommendations personalized to the visitor's interest. They can extend those on-site personalization efforts across every customer touchpoint on all channels.

About IBM Marketing Solutions

IBM Marketing Solutions make it easier to design and analyze meaningful customer experiences across applications, devices and time. From omnichannel marketing to real-time personalization to lead management, IBM's offerings provide a range of solutions that help marketing organizations develop timely, relevant and responsive communications and collaborate more efficiently. The solutions can address a broad range of customer requirements, from simpler single channel campaigns to the most complex environments needing advanced segmentation capabilities, and include multiple deployment options.

For more information

To learn more about IBM Product Recommendations visit **ibm.com**/software/products/personalized-product-recommendations or contact your IBM representative or IBM Business Partner.

To learn more about IBM Marketing Solutions visit **ibm.com**/marketing.