Replatforming Your E-commerce Site:

10 Best Practices

For Cross-Channel Retailers

User Experience
Conversions
Performance
Productivity





Rebuild it and they will come. This could be the mantra of both small and large retailers as they start to feel the growing pains of a first generation e-commerce site that no longer supports their needs. Lack of features, scalability challenges, weak business tools, the need for mobile and social commerce support, and a slew of other challenges have driven many online sellers to a tipping point. Simply put, their current online solutions will not cut it.

Early e-commerce sites were relatively static and shallow, without today's interactive features designed to satisfy site visitors by presenting personalized content. Today's best-in-class sites are extremely dynamic and content-rich, with guided navigation, faceted search capabilities, rich media, segmented and targeted merchandising, product recommendations, and live-help solutions.

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What is Replatforming?

Replatforming a website can mean many things to many people, but in general, the term applies to upgrading or re-jiggering a website to make it more scalable or usable. There are primarily four reasons companies replatform. They include the following.

To improve the user experience:

Is your site's bounce rate low and the time visitors spend on your site high? Is your site dynamic? Does it serve content targeted to individual visitors? If you answered no to any of these questions, consider how you can improve your users' experience with your replatforming project. Aside from adding new, fresh content and engaging design, replatforming takes into account who your visitors are and what they're looking for, and helps to serve them more intelligently via dynamic sites and applications that deliver targeted content—whether a promotion, a recommendation or product information. This kind of personalization filters out the noise for consumers, helping them avoid information overload.

To improve conversions:

Is your conversion rate better than the industry average of 3 percent? Are your shopping cart abandonment rates high (above 60 percent)? Is your current platform limiting your customers' ability to find what they need on your website? In these cases, you'll want to consider ways to improve conversions. One way replatforming can improve conversion rates is to make search an intelligent piece of functionality



or improve your shopping cart and checkout functionality. The new site could provide split testing and multivariate testing capabilities to measure the differences in clickthroughs and engagement when adopting different designs, allowing marketers to tweak the site in response to desirable customer actions.

To improve performance:

Is your site delivering pages with less than one second download times? Will it scale to meet seasonal peaks in traffic (with 99.95 percent uptime)? Are your site maintenance processes efficient or do you need a large staff in order to make frequent changes to your Web store? What are your hardware and software upgrade costs and can they be reduced? If you answered no to the first three questions or are experiencing increasing operational costs, a replatforming project with a focus on site performance would be a good idea. In this case, a good replatforming program can examine what web architecture you use, how you serve static content, such as images, CSS and JavaScript, review your programming decisions, and show you what is needed for a site that is faster and therefore more responsive to customer needs.

In the age of sizzle it may be fashionable to make incremental improvements to your e-commerce site that simply look good, but eventually, that lipstick will wear off, once again revealing the limitations that have always been there and are holding you back.

To improve productivity:

Are you able to upload your product catalog, inventory, and content quickly and efficiently? Is your back-end operation (shipping, fulfillment) a well-oiled machine? If not, then a replatforming program centered around increasing productivity is for you. Here, a replatforming program can either incorporate a new content management system (CMS) or examine how you are using your current CMS, and improve upon it so that these tasks are not as arduous and time-consuming for staff.

In the age of sizzle it may be fashionable to make incremental improvements to your e-commerce site that simply look good, but eventually that lipstick will wear off, once again revealing the limitations that have always been there and are holding you back. Remember: you can't sell if the site is down or your newly designed pages take 20 seconds to load.

If you decide a new platform is required, consider your overall business strategy and then decide how e-commerce plays a vital role in the big picture. Take a deep look into the ROI that can be generated with a new site including improved sales, faster time to market and lower total cost of ownership. Lastly, build a timetable to sell the replatforming project internally, select a platform vendor that has the expertise to help you grow, and set reasonable targets for launching your new online initiatives.



CASE STUDY: User Experience

[The Situation]

A nationally-known online media company with an online store that sells, among other things, graphic images to consumers, had an inadequate web presence, despite its high quality products.



Customers couldn't interact with the site's content, search through its more than one million images, or configure or review their orders. Completing an order required a lot of human interaction and customer satisfaction was on the wane. Moreover, the online store's data structure was unable to scale and adapt to the company's business needs.

[Solution]

The online media store contacted OmniTI, which created a program that aligned its business priorities with customer satisfaction needs and allowed its business needs to determine technology priorities. Then, OmniTI created a

new, user-friendly, fully functional e-commerce site, supported by a content management system (CMS) that was also implemented across the entire business. Finally, OmniTI reengineered the site's data architecture to accommodate future expansion as well as multiple data sources.

[Benefits]

The fully functional site is now scalable. New products can be easily added, orders can be processed automatically, and its database runs smoothly. The company's staff can now add, edit, and delete stock images on the site in a few minutes, and no staff time is required for order processing on the website.

There's also been an increase in customer satisfaction, because of an easy navigational structure and order process that allows users to browse, search, configure and preview their custom orders from just two pages. A state-of-the-art filtering system allows customers to filter results by category, colors, tags and even layout. Customers can now easily select images based upon image size, paper type, and matting and framing. They can also preview their orders as single images, or inside a room setting, where they can change wall colors and textures to preview how their orders will look in their homes or offices before the checkout process.

The immersive user experience keeps customers on the site longer, which is bolstering retention. Customers can also choose images from client libraries, or upload, configure and purchase their own or other customers' images via the company's social networking site.



10 Best Practices

The process of replatforming can seem daunting, but proper planning can offset apprehension. Below are 10 best practices to keep in mind during the research and planning, implementation, and after-the-launch phases of the process.

Research and Planning

- 1. Determine what your goals are and understand why they're important. Do you want to improve your users' experience, conversions, site performance or operational productivity? Do you hope to increase agility when it comes to modifying your site's marketing and merchandising campaigns? Do you want to reduce total cost of ownership and drive down IT, operations and development costs? Are there aspects of marketing and merchandising that should be automated? Take a holistic look at your business and its overarching objectives, then determine how a new or improved online store will fit into those objectives.
- 2. Create the scope. Before requirements can be extracted, you must first understand the entire scope of the project. Will it be broken into manageable phases? If so, what is the scope of each phase? This will allow the requirements phase to be more focused on the near-term scope rather than trying to "boil the ocean" to begin. Additionally, planning the scope and requirements will allow you to determine the overall plan for running the old and new systems. Will the legacy system be left alive for a period of time, structured so that it continues to handle certain functions as the new system phases are completed? It is important to address these types of questions early on—during the scoping phase—as they will drive the requirements phase. Having a firm scope in place early allows you to address change control more easily.
- 3. Define the business requirements. Even with a redesign, don't make the mistake of not putting requirements on paper. Often, people will assume that since they already have an application (or system), it will meet the requirements. You still must ensure that you document what you expect this redesigned system to include. The existing system can be used as a basis for establishing the critical path of requirements, but it should not be in lieu of documenting what must be done as part of the redesign. Based upon your output from the scoping phase, the Business Requirements Document can be structure according to phases with more emphasis focused on near-term requirements.

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CASE STUDY: Conversions

[The Situation]

A business-to-business shopping mall company that creates websites for its retail clients was noticing that its site conversions were flat. As a result, it needed to increase registered user and subscriber base to support its increased goals for sponsorship revenue.

Conversions were flat for several reasons. The company had a lengthy registration process on its site that required several actions on the part of potential subscribers. Its information architecture was also unclear and unintuitive. Navigation on the site and its layout was flat and didn't follow any logical semantic structure. This left holes in the user experience, creating usability issues that limited the potential for user convergence. This also had a negative effect on these sites overall search engine optimization (SEO) rankings.

Finally, the company's new front-end design did not take advantage of its current CMS, which would have resulted in additional work for staff in manually creating and integrating the content instead of leveraging the flexibility of the CMS already in place.



[Solution]

OmniTI reconfigured the site's processes to allow for quick registration and the ability for registrants to add more personal information to the site. It also moved the subscription process up in the information architecture, which made subscriptions a key component of the site globally.

OmniTI also worked with the company and its strategic partner to overhaul the proposed information architecture of the sites' redesign, putting more of a focus on SEO and site navigation than had been considered.

[Benefits]

As a result of the revamp, there's been an increase in registered users and subscribers to the company's site, which gave it immediate ROI for its sponsorship goals.

Customers can now register immediately, with little effort, and assign favorites to their profiles at numerous touch points throughout the site. Customers can also add store favorites with a single click, and have a intuitive way to access their profile and settings.

These retail sites are also easier to navigate and less frustrating to end users. Site content is more relevant and useful to end-users, which guarantees a higher rate of convergence and ultimately, brand loyalty.



ften, in order to meet the actual business goals, a new build solution would be more cost-effective in the long run, even though it may require some upfront investment.

- 4. Determine if you're going to build, buy or outsource. First generation e-commerce platforms were overpriced and light on functionality. Today's e-commerce platforms and outsourced solutions have matured by offering integration into other channels, as well as sophisticated capabilities such as personalization and automated, segmented and targeted merchandising. E-commerce platforms are affordable and designed around a multitude of delivery options, including licensed and on-demand. If you're looking to buy, create a document that outlines the strengths and weaknesses of each platform. List all your desired functionality and note how each platform performs in each category. One of the major factors that must be considered when making a decision between buying an off-the-shelf product or building one, is understanding the modifications needed in order for the purchased product to meet the business needs. Ask yourself: are you willing to change your business processes to fit the product selected? What is the upfront cost as well as recurring cost to support the product for maintenance as well as feature enhancements? Is the product roadmap in line with my business objectives? Often, in order to meet the actual business goals, a new build solution would be more cost-effective in the long run, even though it may require some upfront investment.
- 5. Before you sign with a provider, ask questions. Not knowing the breadth of what is included in a contract can result in a number of ancillary costs you weren't expecting to pay. Ask your chosen solution provider these questions to ensure you won't be paying out-of-pocket down the road:
 - What is included in the implementation bid and set-up fees?
 - What is included in monthly costs?
 - *Will* all my business requirements stated in the Business Requirement Document be met as part of the bid?
 - *What* is the performance projection for the new web site?
 - *What* is the contingency plan to scale the site in case of increased traffic?
 - What is the user flow of the new site?
 - *How* will I know if the site is successful?



CASE STUDY: Performance

[The Situation]

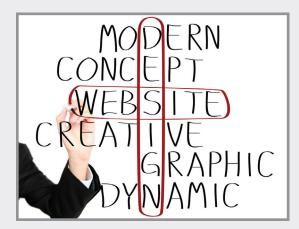
A scientific, educational and global conservation site and online store was lacking social networking features and brand standardization. The company wanted to gather leads and prospects through social networking sites as well as roll all of its brands into one, standardized online experience for users. Adherence to strict corporate branding guidelines was also required for this well-established company.

The site's information architecture was also obsolete and incapable of understanding all the new business connections resulting from the site's growth. With standard site traffic, the site required more manual labor, using more servers than necessary.

[Solution]

OmniTI redesigned the site's architecture, with ability to scale to meet the traffic demands, to minimize the hardware upfront and recurrent cost, and to allow for ease of deployment of new features. A universal log in was also implemented, giving users a single sign in for all properties, removing the need to remember multiple credentials to access different sites under the same brand umbrella.

OmniTI designed and deployed a new CMS with granular, two-level caching for both static and dynamic content, decreasing the page load times even during the traffic spikes.



[Benefits]

The relaunched site sustains a 500 percent increase in traffic, as well as spikes of more than 1,000 percent through traffic from MSN, Digg and social networking sites without requiring additional investment into hardware. The site also now has hundreds of thousands of active users for its millions of assets, extending its brand further without the need for additional marketing or staff input.

The new solution is also scalable and required fewer

servers and less staff involvement because it was built from the ground up to meet the specific business needs and process flows of the company.



- 6. Identify/appoint the key stakeholders/decision makers. This step is key to ensuring that you know who represents all areas—both functional and technical. You don't want any confusion there. At the very least, be sure to define the following:
 - Who represents each functional area?
 - Who has the ultimate sign-off?
 - Who represents each technical area: database administration, network, application development?
 - Are there any special integration areas or third party tools?

Implementation

7. Set phased milestones based upon scope and requirements, and set milestones and key checkpoints. It's important to be realistic about your time line. Don't underestimate the time required for design, integration, and other, smaller tasks—including your internal ones. By properly planning your implementation phase, your chosen solution provider will be better able to build an accurate timeline and development approach, and everyone will be well-aligned as you move forward to meet your major project milestones.

The key to meeting time lines is your readiness. Can you create the final requirements, or are you looking for your selected vendor to drive those? The latter may take more time. How easy will it be to integrate with your back-end systems or provide the data files the e-commerce solution needs? Do you need integration with your fulfillment vendors or internal CRM? Integration is usually the part of the project that is most often scoped incorrectly. Create your own project plan and be realistic.

8. Test, retest and then test again. One advantage of a redesign is that you have a system for comparison with the new application. Before actual implementation, it's important to get an initial idea of how you'll test the final application. If the legacy application can be run in parallel, then the output of the old system can be compared against the new. Depending upon the complexity of the system,

Integration is usually the part of the project that is most often scoped incorrectly.



- determine thresholds and acceptable explanations for any differences. And, identify and appoint the person who has ultimate sign-off for testing.
- 9. Have a cut-over plan in place. You'll need to have a plan in place outlining how the transfer of the new system will occur. What data has to be converted and what is the timing of converting this data? Will you continue to run the legacy system for a period of time? If so, you must have a have a solid, well-tested plan for quickly moving back to the legacy system if the implementation of the new system fails.

After the Relaunch

10. Manage your site responsively and proactively. The best e-commerce sites are ones that are fine-tuned over time and evolve with the landscape of the fast-paced e-commerce market. Use web analytics and trending tools to monitor what's working and what's not, and make the necessary changes.





CASE STUDY: Productivity

[The Situation]

A nationally known sports entertainment and retail company was using an off-the-shelf product for its content management system (CMS) that didn't accommodate its internal workflow, and was not scalable.

Interactive content from the site's producers and customers was taking up to three hours to upload and publish because of the inefficiencies of the canned solution, despite the fact that its first business priority was to allow customers at company hosted sporting events to post real-time content. In short, the excitement of the company's live events were flat and uninteresting to users.

[Solution]

Since the company wanted administrative control over how the site was rendered, OmniTl architected a more intelligent system that was tailored to its internal processes and common usage patterns of the staff.



[Benefits]

Since the solution aligned internal workflow priorities with customer satisfaction, real-time content publishing is now possible from live events, taking minutes to go live rather than hours. Since customers can follow events as they happen and interact with each other in real-time, there's been an increase in customer satisfaction. What's more, store items are contextually tied into published content for upselling.

OmniTI also tailored the company's CMS around its business process flow, removing the need for

temporary fixes and other limitations the system had. Because the site was created based upon the company's internal workforce, non-technical users can also now design custom pages using a tool box of pre-set widgets.

The solution is also scalable: Users can create and configure new verticals as they expand into new markets, as well as run promotional campaigns to grow their userbase.



ounded in 1997, OmniTI's think tank focuses on solving the world's most difficult technical challenges in managing and monetizing data associated with hundreds of millions of users in time-critical operations. A consultancy in practice and an incubator of new companies, OmniTI designs, builds and operates Internet-centric solutions from web site design through custom applications development, to the ongoing support and management of large-scale internet databases and operations for B2C companies looking for stable, scalable mission-critical infrastructures.

