

# The Changing Landscape of eCommerce Optimization

A planning guide for eCommerce professionals

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## **Executive Summary**

A consistent aspect of online commerce is the ability of a website to improve profitability through the optimization of front-facing user experience elements.

By executing plans that factor in elements of optimization: site performance and usability, an eCommerce business can continue to progress forward in the goal of maximizing market share.

This report discusses these two elements and provides examples into how these areas can be improved. The obvious goal of these exercises is to increase your site conversion rate. One key aspect to practice as you implement these type of changes to your site is to measure conversion rate across variety of visitor segments, to truly understand how these efforts impact your user base.

## **eCommerce Optimization Focus #1: Site Performance**

A catch 22 is currently taking place within the Internet landscape as it relates to site speed and performance.

As we all know, the proliferation of internet connectivity speeds is exponential, as it is always increasing with the advent of new delivery technologies and investments in infrastructure.

So with this continuous growth of speed, we would think that average speeds within middle market eCommerce businesses would grow. This is not the case however. As web technology has progressed, sites have become riddled with complex code and numerous http: calls that add milliseconds to the download time of a web page. Frequently, eCommerce businesses may have 10+ JavaScript (JS) tracking codes on all one page, and the site code literally gets held in a traffic jam as subsequent content can not render in a browser until that call gets completed.

Think about all of the JS technologies that may be on your site today. Likely your site analytics is driven from JS and so is your product review system. Are you running a feedback mechanism such as Kampyle? What about a cross or up-sell module?

Maybe you are an advanced eCommerce business and your are executing behavioral targeting. What about any social media integrations such as a Facebook like button? These are likely JS snippets as well.

By having numerous JS snippets within HTML, your site can be delayed substantially. Look to consolidate these site elements when possible and limit rendering within the HEAD portion of a HTML document unless it is absolutely critical.

Any script that can be loaded asynchronously should be. If the basic loading of the HTML document is not reliant on a script, then any script should be loaded asynchronously to not impact the speed of the page.

## Managing your asset

Also within site performance lies the issue of asset management and the delivery of these assets to your users within a web browser. When we reference assets, what we are really talking about is the images and videos that populate within the HTML framework that you have crafted for your eCommerce platform.

These images need to be optimized, especially on category and sub-category pages in which 15-60 thumbnails are present. Advanced caching capabilities need to be standard within the eCommerce software that you are using in order to ensure quick loading assets that render on all pages within your template.

You may want to consider a content delivery network or some type of cloud computing delivery model to ensure that your images render as fast as possible. These solutions host external to your web server and are constructed with performance in mind - allowing your server to just serve the HTML while the cloud delivers the assets.

The first step to improving your performance is to test the site. Use some of the free tools that are available on the web today to help diagnose your site issues and which assets and scripts are dragging your site down.

Firefox plug ins such as YSlow and other free web applications can help identify code opportunities and help your development team in constructing the best possible attack plan in optimizing your eCommerce site performance.

## eCommerce Optimization Focus #2: Usability

After working on site performance, the next logical step would be to analyze and improve your site usability. When considering your current usability of your site, you need to ask yourself one simple question: "How easy is it for someone to find what they are looking for and buy".

Asking that question and going through the transactional funnel will help derive potential areas of improvement. Help define the answers to the following questions:

Are our categories logically constructed?

Does our site search functionality help users or frustrate them?

Does the category and sub-category navigation allow users to refine product selection by the attributes that matter to them?

Does the product page render information in a manner that is easily digested?  
Do calls to action within key transition elements clearly stand out?

Does the cart and checkout funnel present answers to consumer questions while limiting distractions and making the process easy?

These questions should help in identifying which priorities take place within the development function. When outlining your priorities, in conjunction with reviewing your web analytics data to compare page progression ratios across varied segments, your team will be able to progress to the stage of improvement - **creating prototypes**.

Prototypes for your new designs and enhancements should be initially designed in wireframe format and delivered in HTML over the web. This method is an effective way to get buy-in from multiple stakeholders and facilitate the refinement process. At this stage, plans can often get delayed in enterprises, especially with paper-based wireframes that some designers still utilize. Web based wireframes will speed up your communications, as well allow for the viewing of a prototype in a web browser.

These alternative designs should be tested within a multivariate testing system. Numerous solutions exist on the market, including free solutions, but we recommend that you leverage a one script implementation for testing that provides the power of testing in the marketers hands, by not having to communicate with IT for tests and script implementation.

Upon the execution of your tests you will now have concrete data that supports new design implementations as hopefully your new customer focused designs outperformed older versions. Be sure to give at least the recommended time for the test to run to ensure the statistical validity of the experiment.

## Getting in the Kaizen mindset

As an internet marketer, you have power. You have the power to impact online performance by being better and more customer centric.

Better in providing an easier to use website that answers questions effectively, while concurrently persuading people to buy or interact online.

Kaizen is a Japanese word that means “**never ending improvement**”. It is a widely embraced business philosophy in Japan, especially within their auto industry.

Kaizen should be the goal of any internet or eCommerce business. A sense of consistent improvement across key metrics and processes. As 2011 approaches, take a deep look in your website and what it does well and what it can improve upon.

Evaluate its speed and usability and look to execute projects that are focused on improving your conversion rate. Take the time and do it. Its well worth it.

If you have any questions about eCommerce optimization and how to maximize your online opportunity please contact us at [info@trinityinsight.com](mailto:info@trinityinsight.com).



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