

**Store Name:** [REDACTED]

**Date:** March 8th, 2019

**Service:** Entrepreneur Package

**New Theme:** [SB 3-7-2019] Hoolah-Integration

**URL's used for benchmarks**

- [https://\[REDACTED\]](https://[REDACTED])
- [https://\[REDACTED\]](https://[REDACTED])
- [https://\[REDACTED\]](https://[REDACTED])
- [https://\[REDACTED\]](https://[REDACTED])

## OVERVIEW

I'm excited to say that overall this was a huge success! We focused our efforts on image optimizations, minified styles and scripts, enhanced image lazy loading, a thorough app analysis, comprehensive error analysis, and finally a detailed blog analysis we were able to lower page weight, reduce server requests, and improve the speed of pages across your site.

In the attached packet are the before/after benchmark stats from webpagetest.org for your 4 core pages - home, product, collection, blog.

We test using LTE mobile speed as the benchmark. Load time will vary depending on connection device and can vary on each test run, but the key metrics are page weight and resources loaded.

You'll also find Graphic reports of your 3 key templates, plus your most recent blog entry.

Studies show that improved speed increases SEO rankings, conversion rate, traffic, and revenue over time. This is especially helpful on mobile where connection speeds can be slower.

	Home		Collection		Product		Blog	
	<i>Document Complete</i>	<i>Fully Loaded</i>						
<b>Speed</b>	41% faster	37% faster	41% faster	71% faster	43% faster	35% faster	46% faster	29% faster
<b>Weight</b>	88% lighter	71% lighter	85% lighter	70% lighter	65% lighter	54% lighter	50% lighter	32% lighter
<b>Requests</b>	75% fewer	56% fewer	62% fewer	53% fewer	38% fewer	22% fewer	42% fewer	31% fewer

# OPTIMIZATIONS PERFORMED

## IMAGE OPTIMIZATIONS

Image optimization on your site looks good (we love Crush Pics!) but still has a little room for improvement - I was able to reduce image size using compression on average by 30~60%. I noticed that you have [Crush Pics](#) set to an 85% compression level however I was able to make a substantial savings by moving that compression level to 65%.

I included the homepage banners, collections image thumbnails, and product images as an example for a visual inspection, as well as backups which are attached to the email for each image which was replaced. Most users are unable to notice any difference in quality between these compression levels!



Another thing we did with images was adjust the formatting. PNG format is good for graphics, but for photographic images, or graphics with lots of different colors, it can typically be 2x - 10x larger file size than JPG for the same visual image.

There were several product images in this format, as well as other images on the homepage that I converted to JPG for a whopping 67% reduction in size.

In the future just remember to keep photographs in JPG format for more awesome savings! I recommend using a converter like [ezgif](#) for some of those images if you are able to make changes to them manually since the app overwrites changes made to the stored theme files (I added some info below on contacting the app developer to request if not).

### MINIFIED JAVASCRIPTS & CSS

Various assets served on your theme were already minified but I did notice a few additional styles and scripts which were not minified so these were minified leaving license headers in tact:

- jquery.fancybox.css
- vendors.js

### 3RD PARTY APP JS (above 10kb)

There are some 3rd party apps loading unminified javascripts:

- [Rewards and Referrals by Swell](#)
- [Boost Sales - Upsell & Cross sell](#)
- [Quick Facebook Chat](#)
- [Mobile Converter - Sticky Add to Cart bar & Mobile Gallery](#)
- [Facebook](#)
- [Facebook Marketing](#)
- [Wheelio - World First Interactive Exit Intent Pop-up](#)

These files are pretty small already, but if you want to request them to be minified, you can contact the app developer and copy paste this:

=====

Hi,

I checked my Google PageSpeed Insights and it looks like there's an unminified file being served from your app.

Any chance you can minify that?

Thanks

=====

Sometimes they'll do it, a lot of times they don't for various reasons. These are small though so nothing to worry about either way.

### 3RD PARTY APP CSS (above 10kb)

- [Boost Sales - Upsell & Cross sell](#)
- [Judge.me Product Reviews](#)
- [Facebook](#)
- [Facebook Marketing](#)

This is similar to the 3rd party javascripts. You can try to contact the app developers and request they minify them if you'd like.

### **3RD PARTY APP ENABLE COMPRESSION (above 10kb)**

- Optimonster
- Hoolah

These are 3rd party app files that aren't compressed (different than minified).

Use the same procedure for contacting the app devs, except replace "minify" with "compress"

### **LAZY LOADING**

Lazy loading delays the loading of images until they come into the user's view. This improves speed by removing the burden to load all images on the initial page load.

This was already included on many images, however some were also loading additional thumbnails and those loaded through scripts were not lazy loaded. Changing this to remove those unnecessary thumbnails and include all images across your site was one way I improved speed there.

All images in your theme that can be lazy loaded (product images, slideshows, thumbnails) are now lazy loaded by default, so there's no need to add anything later on when you make design changes or add new products.

I did have to manually add the class to images embedded within both your product descriptions and blog posts and have included instructions below on how you can do this any time you add a new blog or product.

### **To manually add lazy loading to an images and videos**

Change "src" to "data-src" and add the "lazyload" class:

Before: ``

After: ``

You can also do this in places like:

- Product descriptions (in the Shopify admin area)
- Pages (in the Shopify Pages area)
- Embedded images in articles

You can also lazy load the videos by updating the `<iframe>` element like this:

- 1) Change "src" to "data-src"
- 2) Add class="lazyload" (or if there is already a class="some other classes", then just include "lazyload" in the list of classes.

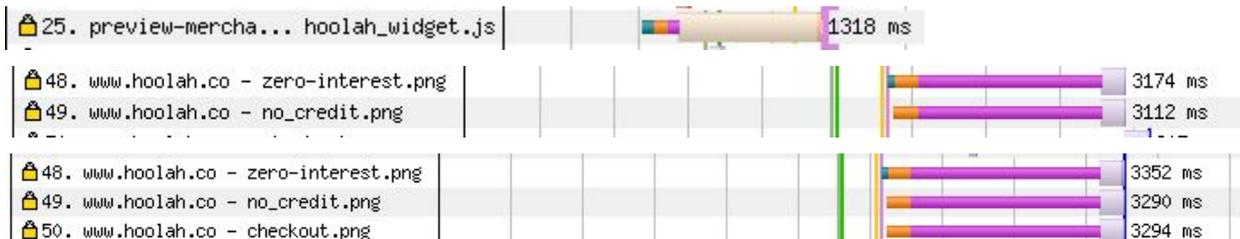
If you add new embedded images to your product pages or within blog posts, you'll have to add the lazy load code above to the <img> tag in that section. This will especially help improve the speed on future blog posts.

## APP ANALYSIS

When we began we mentioned that a lot of extra app content was running on the page and several of those apps were removed.

Some apps included additional jquery libraries so I removed the additional libraries (same versions were used it was just loaded up multiple times). This is a common issue with apps but this issue will no longer occur.

Additionally, I noticed that the Hoolah assets consistently slow down every page on your site and block other resources from rendering:



Since this is a vital new feature on your site, I recommend contacting the app developer immediately to see if they can resolve this issue themselves or if you'd be able to host the files yourself since off-site resources are known to cause these and other issues.

## SERVER ERROR ANALYSIS

I only noticed one error message coming through on the console, which was related to the product swatches showing:

Failed to load resource: the server responded with a status of 404 () indigo\_50x.png:1

When I have seen this in the past, it is often due to dynamically loaded swatches and missing swatch colors within each individual product. This has been fixed due to our other implementations with the slider and no longer shows or affects your page speed.

## BLOG ANALYSIS

I noticed that you have a blog going but haven't made any posts recently. Making regular blog posts can improve customer interaction with your site. Usually posting once a month is best to keep your customers engaged, talk about store contests, or post about relevant topics.

I've noticed big SEO and traffic benefits from regular content marketing (both on the Speed Boostr blog and on client sites I've worked with).

I've also seen studies that show customer interaction through blogs and social media can really drive sales and help grow your brand. Blog posts also help generate traffic and improve site visibility in search engines (we actually have some [tips about that on our blog](#)).

Consider dedicating a regular practice to this. Ideally you publish once per week. I know that can be difficult, so at minimum 1-2x per month is a good goal to start.

- There are great content writers available for hire on [Upwork](#) if you're having trouble generating blog ideas during some months.
- You can track your ROI on articles by using Google Analytics to see how much traffic and sales they're generating. Keep in mind, it often can take 2-6 months to start seeing significant SEO benefits on content.

A strategy I like to employ is to create posts that answer customer questions, then use that as the title, for example "How to find locally made furniture". So that's your title, and you build content around the topic, and Google ranks you for the query.

## **OTHER OPTIMIZATIONS / EDITS**

We performed some a/b testing on your theme centered around the DNS prefetch, page capture, and single vs. multiple banners on the homepage. Ultimately, we implemented the following changes to these areas:

- The current DNS prefetch and page capture implementations consistently increase the speed by ~1s
- Multiple static banners over the banner slideshow improve performance by ~2s
- Performance is not affected in a noticeable way between having one or multiple static image banners
- Due to performance and your current page size, we think it's okay to keep 2~3 of these

We also moved some resources served off-site, such as jquery styles, into your assets folder to keep off-site references to a minimum.

When we spoke about changes to the additional images on the home page and sliders, I'd also mentioned that the slider served an unusual number of assets - I was able to count 204 images loaded on the homepage when the other assets included 5 banner images, 3 collections thumbnails, 8 instagram photos, and 12 other images such as logos.

 S138S21-PINK_A_New_400x.jpg?v=1545282073	2
 S138S21-WHI_Gear_Pro_One_Piece_Front_400x.jpg?v=154...	2
 S138S21-BLU_Gear_Pro_One_Piece_Front_400x.jpg?v=154...	2
 S18LBS02V18-NV4_Performnce_Short_Sleeve_Wet_Suit_Fr...	2
 S18LBS02V18-BLK_Performnce_Short_Sleeve_Wet_Suit_Fro...	2
 S18LBS02V18-DB1_Performnce_Short_Sleeve_Wet_Suit_Fr...	2
 Colourblock_Zip-front_rash_guard_Navy_Orange_1_400xj...	2
 Colourblock_Zip-front_rash_guard_Forest_Mono_1_400xjp...	2
 Colourblock_Zip-front_rash_guard_Black_Mono_1_400xjp...	2
 Colourblock_Zip-front_rash_guard_Red_floral_1_400x.jpg?v...	2
 upf50_zip_front_rashguard_magenta_1_46018c33-76d7-48...	2
 upf50_zip_front_rashguard_indigo_1-2_b886a78c-036a-42...	2
 Top6_A_85b9fbbd-7745-48b0-bd93-2cb2c1292e1f_400xj...	2
 Top3_A_cfd2218d-d523-403c-aabb-7cce68cce477_400xjp...	2
 0301_Site_BannerBig_1600x.jpg?v=1551319398	2
 0226_Site_Banner_NewBig_1600x.jpg?v=1551082978	2
 0304_Site_Banner_HoolahBig_1600x.jpg?v=1551673904	2
 0304_Site_Banner_GWPPBig_1600x.jpg?v=1551664539	2
204 / 323 requests   5.8 MB / 8.3 MB transferred   Finish: 37.92 s	

Fun fact - mobile browsing accommodates for half of all web traffic and they have very specific needs when it comes to speed and performance. Since the secondary images weighed down the page so much, together we were able to make some aesthetic changes to the page:

- We hid the secondary product images and swatches on the homepage
- We limited products that load simultaneously on collections pages to 24
- Pages on your website are now an optimal size for mobile web users

## ADDITIONAL RECOMMENDATIONS

I also have a few other recommendations that I think will help improve your store.

### Google AMP

This technology developed by Google sets guidelines for mobile pages, then caches and preloads them in search results to load instantly.

To enable this you need to create a set of mobile pages that fit the AMP Guidelines. The easiest way to do this is use the Shopify app [AMP by Shop Sheriff](#)

It has an editor to customize your pages, then handles all the technical details and communicates with Google to get your pages published and linked to your original pages.

If you'd like more details, check out our [Shopify AMP Guide](#).

### **Automated Marketing**

We're all about speed and automation. If you want some automated marketing ideas check out our [Shopify Best Apps](#). Our founder Joe curates this list based on his marketing experiments.

## **THANK YOU!**

We appreciate your business and hope this optimization helps your site's success into the future.

If you need any additional help or service just let me know what you'd like done and I can provide a quote.

If you have any feedback please let us know how we did or how we could improve.

Thanks,  
Paul and the Speed Boostr team