"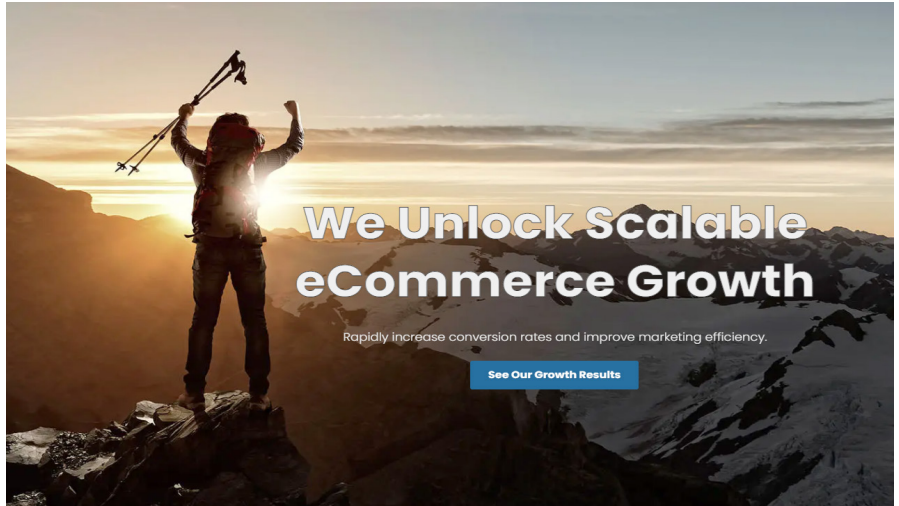We considered Cloudinary, ImageKit.io, Fastly, Imgix, and Cloudflare. ImageEngine by ScientiaMobile returned the smallest image sizes compared to other CDNs without reducing visual experience at an affordable price. I use it for all of my clients' websites and have seen up to a 3x increase in conversion rate."

JAMES FREDLEY,
Founder, Triumph Interactive, Inc.

TRIUMPH INTERACTIVE

eCommerce Consulting Services

Triumph Interactive was founded in 2008 by James Fredley based on his extensive background in eCommerce, software engineering, and digital marketing. Today, with more than 20 years of broad and deep eCommerce expertise gained by managing over a billion dollars in sales, he is able to perform comprehensive consulting services that deliver results. Triumph Interactive leverages the consultant model with experts directly working with clients as part of a team delivering measurable, timely results.

As a company that is highly reliant on improving website load time and conversions optimization, Triumph Interactive was acutely aware of the slow-loading image problem that they had seen with many of their clients' websites, especially on mobile eCommerce. How can their eCommerce clients speed up the UX for mobile-based customers? Triumph Interactive evaluated many content delivery networks (CDNs) and chose ImageEngine by ScientiaMobile. Triumph Interactive's extensive tests showed that ImageEngine effectively tailors images to each mobile device and delivers them quickly through its edge servers.

Here's what they found...

The Problem

For Triumph Interactive's clients, images needed to scale for different variations in mobile, tablet, and desktop screen sizes. Triumph Interactive needed a solution to accelerate their website, improve conversions, and control future CDN operating costs.

A major opportunity for improving website speed was to reduce their client's image payload without sacrificing image quality. Higher resolution and file size did not yield perceptible differences in user experience. If Triumph Interactive could reduce their client's image payload, then pages would load faster.

The ImageEngine Solution

Triumph Interactive tested ImageEngine's resizing CDN service to address their client's image acceleration challenges. ImageEngine is unique because it seamlessly combines three services.
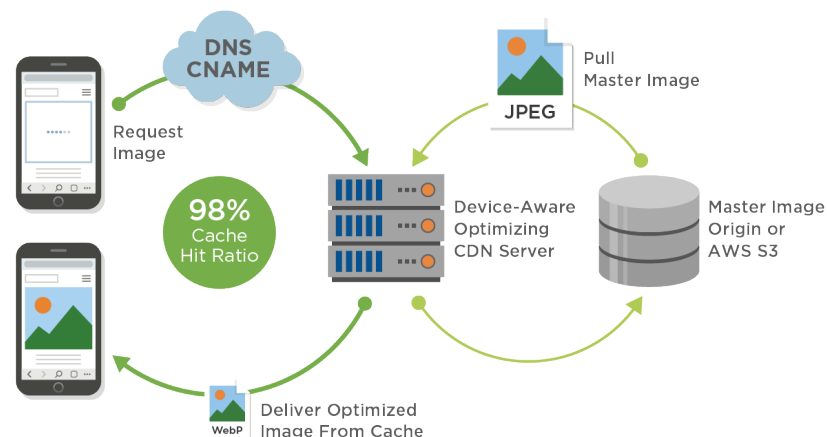
First, ImageEngine leverages ScientiaMobile's WURFL device detection to identify the devices coming to the client's website. Once detected, ImageEngine uses intelligence about the device to drive image resizing and compression. For example, the ImageEngine detects screen and viewport dimensions, screen resolution (PPI ratio), operating system, and image file types supported. It proactively detects device information without using slow, cumbersome javascript.

Second, ImageEngine leverages this device information to automatically resize, convert, and compress images in real-time. It resizes only when images are requested. ImageEngine also caches images, so there is no need to resize them for subsequent requests from identical devices.

Third, ImageEngine uses its global image CDN with device-aware edge servers. This means that ImageEngine's logic is pushed to the edge of its global network. Images are cached as close to customers as possible, resulting in a 66% faster page load time, or over 6 seconds saved.

The Deployment

Triumph Interactive operates its clients' websites on various eCommerce and CMS platforms. ImageEngine provides a simple integration process to start processing the images served by the ImageEngine CDN. Triumph Interactive started their roll-out of ImageEngine by performing tests on specific mobile devices.

Immediately, Triumph Interactive saw a speed improvement when measuring using independent third-party tools like Google Lighthouse and Rigor. They tested on different devices and operating systems and were able to see excellent image quality across all the devices they tested.

Very little additional development time was needed to implement ImageEngine because Triumph Interactives' client applications were already designed to use a CDN. The switch from their old CDN to Triumph Interactive's new CDN with ImageEngine was seamless.

Triumph Interactive reduced their total image payload, which improved perfor-mance and lowered CDN costs. Total image payload was reduced 50-90% on the average client eCommerce site.
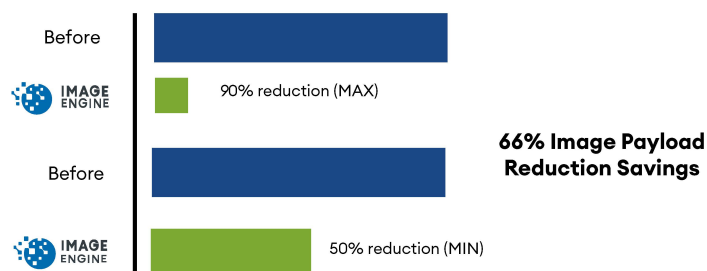
BENEFITS

- **Faster Page Loading:** Accelerate your website and decrease image payload by more than 60%

- **Generate Higher Conversions:** Lower bounce rate for more revenue

- **Streamline Image Management:** Simplify process by 90%

- **Smart Bytes = CDN Savings:** Pay only for optimized image bandwidth and reduce operating costs

- **Adaptive Image CDN:** Automatically detect mobile devices, adapt images, and cache them for faster performance

- **Simple Deployment:** Easy integration with eCommerce platforms

Before

IMAGE ENGINE   90% reduction (MAX)

66% Image Payload Reduction Savings

Before

IMAGE ENGINE   50% reduction (MIN)

ImageEngine's simplicity and 24/7 support made this roll-out quick and easy. ImageEngine's support team not only helped ensure a smooth transition during implementation, but they also helped Triumph Interactive later on as they started to

focus on optimizing more for mobile.
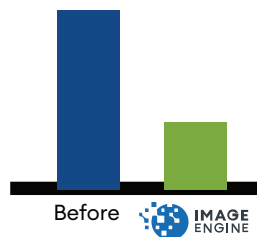
The Results

After running ImageEngine, Triumph Interactive achieved a 3X conversion rate by cutting page load time 66%–or a full 6 seconds–tripling conversion from 1.30% to 4.27%. Not only were their clients thrilled to see the improvement, but Triumph Interactive could take pride in this home run!

ImageEngine's simplicity and 24/7 support made this roll-out quick and easy. ImageEngine's support team not only helped ensure a smooth transition during implementation, but they also helped Triumph Interactive later on as they started to focus on optimizing more for mobile.
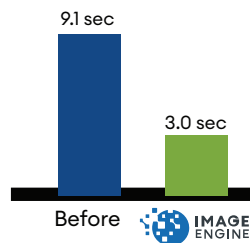
Internally, the simplification of the image workflow for the Triumph Interactive's clients team enabled their staff to focus on more strategic eCommerce issues. It was extremely labor intensive to manually resize images for all of their client's eCommerce sites and this labor savings went a long way in improving their bottom line.

**66% Image Payload
Reduction Savings**

Before   IMAGE ENGINE

**6 Seconds Faster
Page Loading**

9.1 sec

3.0 sec

Before   IMAGE ENGINE

3X More Conversions

1.3%

4.2%

Before   IMAGE ENGINE