



E-Commerce:

How to accelerate my product images for better conversion?

Scaleflex, October 2019

About Scaleflex

Scaleflex, founded in 2013 between Paris, Munich and Sofia crafts SaaS services to help developers, marketers and product managers accelerating their web and mobile applications. [Cloudimage](#), launched in 2015 powers the web applications of more than 400 customers worldwide, including leading e-commerce platforms like [Zentrada](#) (retail), [White Stuff](#) (fashion) or [Yestersen](#) (vintage furniture). [Filerobot](#), launched in August 2019, extends Cloudimage to Digital Asset Management with media upload, storage, management, optimisation and finally acceleration. Businesses going through digitalisation understand that it is no longer enough to compete on products and services – customers expect an end-to-end experience that delivers value as quickly and seamlessly as possible.

51% of an ecommerce website traffic comes from organic search engine results, (source: BrightEdge).

40% of revenue comes from organic traffic.

(source [Statista](#))

The e-commerce industry is growing at the speed of light with no signs of stopping down. In order to become irreplaceable in the industry and get a significant revenue share, website speed and media asset management are becoming topics of the highest relevance.

The need for speed, now more than ever, is becoming a necessity in the online e-commerce business. Based on data from [Alexa](#), pages on fast-loading sites rank significantly higher in SEO. Faster loading websites rank better on SERP, proven by Google itself. Better ranking increases the chances of being visited by users with the specific search intent. Conversions too!

Speed is thus a way to reach 2 in 1: more people on your website and higher conversion rates.

However, online conversion is also directly linked to the user experience, and as people say, a picture is worth 1.000 words. When it comes to online stores, quality product visuals are key to keep visitors entertained, but also to reduce return rates.

So now: do you prefer having a fast website with poor images, or creating fancy animations that take minutes to loads?

Regarding user conversion, that is an impossible choice. Instead of opposing speed and beauty, what if it was POSSIBLE to have BOTH?

This white paper explores current challenges facing web developers and e-commerce managers to speed up page loading time through image optimisation, all while keeping the content marketing and design on its 100%.

1. Speed as a factor for e-commerce business growth
2. What is the future of content in e-commerce?
3. How to speed up a website by optimising its visual assets?
4. Introducing Cloudimage - the easiest way to optimise and accelerate images on the web

1. Speed as a factor for e-commerce business growth SERP Rankings

In July 2018, Google announced that page speed has become an official ranking factor in both desktop and mobile searches.

Websites that show up on the first page of Google search results typically have an average loading time of less than 2.3 seconds and claim up to 95% of all click-through traffic.

Even within the top ten results, there is a direct correlation between page speed and search ranking. In turn, pages with higher click-through rates are identified as valuable

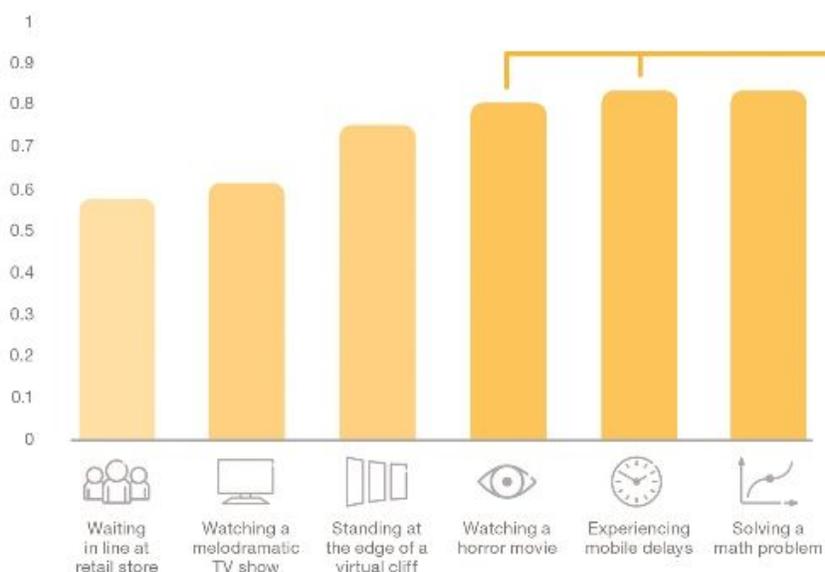
and are pushed further towards the top, thus reinforcing the importance of optimisation.

Top-ranking pages on Google have an average loading time of less than 2.3 seconds and haul in 95% of all search traffic.

Facts:

- Fast sites are easier to crawl
- Fast loading sites have higher conversion rates
- It reduces bounce rates
- It improves general user experience (less stress!)

Cognitive load associated with stressful situations



Higher Revenue

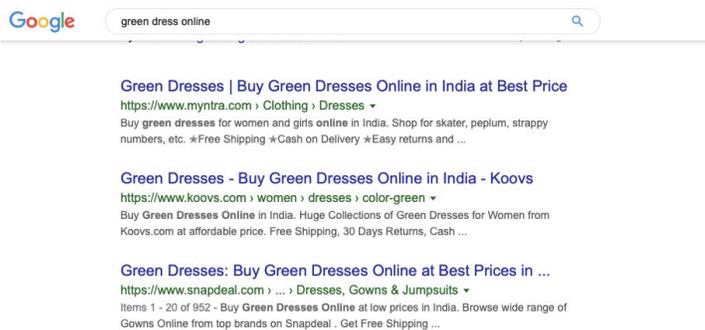
The above benefits translate directly into a greater revenue: according to an often-quoted statistic, every 100ms improvement in loading time results in a 1% improvement in revenue.

This means that if an e-commerce site was making \$100,000 a day, a one-second page delay would result in \$2.5M of lost sales per year.

While this figure might not hold across the board for websites experiencing different volumes of traffic, page speed still correlates strongly with revenue across various case studies.

Top Players

We tested the previous statement, and went with the intent of finding a green dress to buy online.



Top 3 Organic Results showed the following mobile loading speed (we choose mobile because most of the e-commerce purchases happen through these devices):

myntra.com FCP: 1.2s Speed Index: 2.9

koovs.com FCP: 1.3s Speed Index: 6.7

snapdeal.com FCP: 3.5s Speed Index: 7.8

*FCP stands for First Contentful Paint, and it shows us the time needed from the moment we click on a certain page to the moment when the browser renders the first bit of content from the server.

Note to add here is that Desktop wise all of these websites had Speed index below 1.5. *myntra.com*, which ranks first on Google for this search intent, has 2 times better speed loading time from the second placed Koovs.

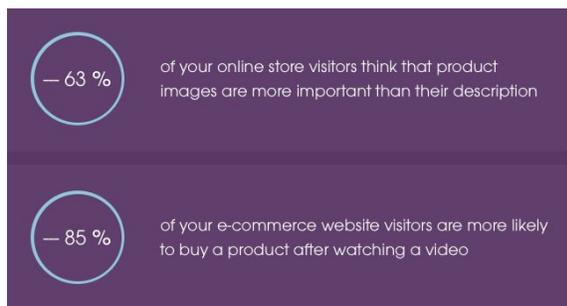
Speed Matters!

2. What is the future of content in e-commerce?

In life as on the web, you only get one shot to make a good First Impression.

63% of your online visitors think that product images are more important than their description.

85% of your e-commerce website visitors are more likely to buy a product after watching a video.



(Source [Meero](#))

The First impression you make on the newcomer can turn them into a lifelong customers or make them leave your page immediately.

In 2020, 360° experience, animated GIFs or videos will be the norm.

A practical example: remember the feeling when you walk into a boutique and you see a nice plain white hoodie. The first thing you think of is “I would look so cool in this. But!

Do I really want to spend that much money on it?”

“Maybe I can find it cheaper somewhere. Not sure I even have time to try it on.”

And then you touch it.

A small piece of heaven just creates itself in your head because this is the fluffiest, softest, most wonderful piece of hoodie you’ve ever seen. Everything you said before just fell apart. You are buying it, for sure!

Interacting with the clothes material creates high sensory value within the customer emotion centers in the brain. Once you have that feeling, you put all rational arguments aside and create a way to make it happen. Videos, color variations, 360° views are the types of content that are making customers believe they have all the **necessary information** to make the right purchase.

Visuals are not only a useful and efficient asset for conversion, but can also have a positive impact on costs after the purchase. Indeed, online shops generate much more visits than physical shops, but they also have compounded return rates (33%). On average, 22% of returns are because the product doesn’t look like the online image.

The e-commerce challenge regarding product images is thus to show more and better.

The Future is VISUAL!

3. How to speed up by optimising visual assets?

In order to succeed in e-commerce, one has to balance two aspects of the customer experience, that seem to be mutually exclusive: **speed** and **visual appeal**.

According to Hubspot:

“If your content includes visuals, your audience can retain information for three days.”

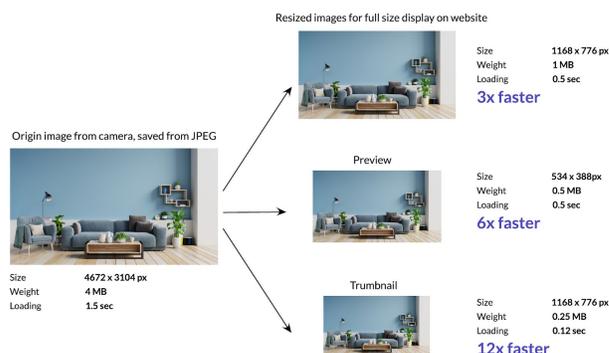
Unsurprisingly, the average image weight per web page has more than tripled between 2011 and 2018, increasing from approximately 260KB to 880KB, making up more than half of the average web page’s total size.

However, big visuals also mean heavy image and video files that slow down the page loading time. If customers leave the page before it fully loads, design components would become meaningless.

Here are some things you can do in order to overcome this challenge.

1. Generate all images server-side and deliver the right image size at the right moment of customers’ journey

There is no point in serving a large original image on the client’s web browser or mobile application if it’s only to create a small thumbnail. Instead, all image sizes (thumbnail, preview, and full size) should be generated server-side and then delivered to the client side accordingly.



The above example shows an original image weighing 4 MB that has been resized for different types of display on the web. For the average broadband connection, server-side image handling accelerates the loading time by up to 1200%.

For the average broadband connection, server-image upload accelerates loading time by up to 1200%.

2. Leverage JPEG compression to reduce image size

The JPEG image file is the most commonly used format for images on the Web and can be compressed without visible quality loss. While JPEG does downgrade the quality of images in the interest of file weight (in MB), it is often able to reduce the image weight by three or four times without a visible reduction in image quality.



3. Deliver WebP to compatible browsers, and JPG/PNG to non-compatible browsers

Developed by Google, WebP is a modern image format that delivers superior lossless and lossy compression for images on the Web. Compared to PNGs of similar SSIM index quality, WebP lossless images are 26% smaller in size. Compared to JPEGs of equivalent quality, WebP lossy images are 25 – 34% smaller. If this sounds too good to be true, there is one caveat: WebP is only supported by a handful of browsers: Google Chrome 23+, Firefox 65+, Google Chrome for Android 50+, Opera 12.1+, and native Android browser 4.2+.

The below example shows an image that has been reduced by four times without any visible loss in quality.

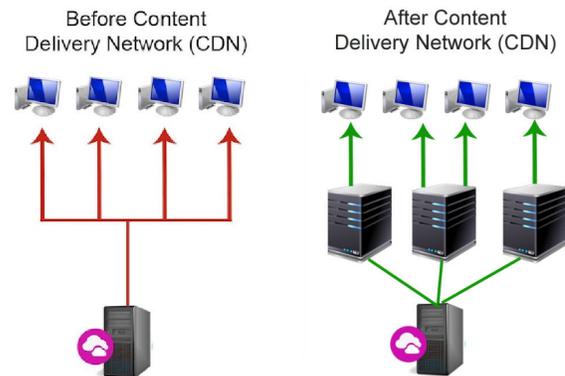


JPEG weight: **19.2 KB**

WebPweight: **5.6 KB**

4. Deliver images via CDNs

After generating server-side images and compressing them using JPEG or WebP, the last piece of the puzzle is to deliver the images to the end users via rocket fast content delivery networks (CDNs). A CDN refers to a network of geographically distributed servers which cache a website's static content near the location of visitors.



(Source: [shimonsandler](#))

CDNs offer three main benefits:

1. Users located far from the data center where the e-commerce application is hosted will experience lower latency and faster loading time.
2. CDNs absorb high load during traffic peaks and save money on hosting infrastructures.
3. CDNs keep websites safe by absorbing Denial-of-Service-like attacks.

5. Leverage the HTML5 <picture> element to make images responsive to different screen sizes

Responsive images allow for optimal page loading times on any user's device type, window size, orientation, or resolution. A responsive image does not rely on the default browser resizing to display images on various devices: it would be a huge waste of bandwidth to deliver an image prepared for a 15-inch laptop screen on a

low-resolution four-inch smartphone screen. Instead, responsive images are prepared in various resolutions to serve all form factors in an optimal way.

Cloudimage – the easiest way to optimise and accelerate images for e-commerce

Save time and efforts

Find the right balance between creative media and fast loading time by using a third party solution. The Scaleflex team helps out hundreds of high traffic e-commerce websites to accelerate their media, no matter how creative they are!

Cloudimage combines all five recommendations for faster and better images into a single, easy-to-use Cloud SaaS.

- Replaces the need for an in-house image management solution.
- URL-based transformations require no learning curve. Users can set up and start implementing Cloudimage within an hour.
- 360° pictures automatised and optimised with a plugin.

Reduce costs

- Offers the most competitive pricing in the market thanks to a traffic-based pricing structure and low internal costs.
- Unlimited origin images and transformations.
- Reduce costs for image storage and resizing hosting infrastructure.

Recognising the need for a cost-effective and easy-to-use tool for cloud-based image management, a team of European developers founded Cloudimage in 2015. Since then, Cloudimage has optimised and delivered more than 10 billion origin images on some of the largest sites and mobile apps in the world.

Not sure about your website's performance? Register for a free audit with our images optimisation experts by emailing sales@cloudimage.io.

[Get a free Cloudimage account to try it out.](#)

Learn more <https://www.cloudimage.io> or by contacting sales@cloudimage.io.