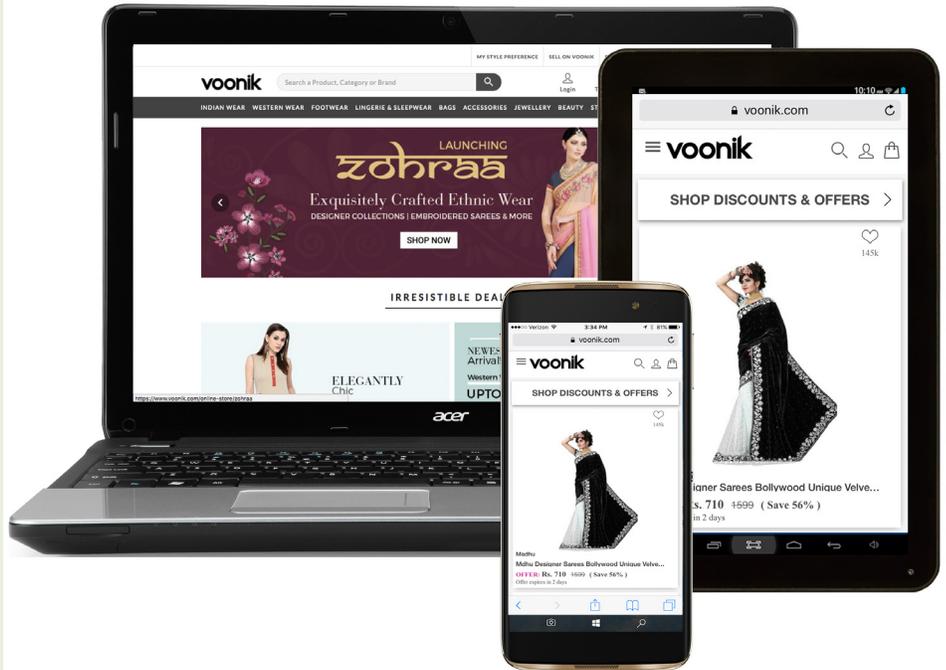


“90% of our users browse through mobile devices. They want to see high-quality product images that load fast and easy, before they make a purchase decision. We needed an enterprise-grade image-resizing CDN to improve customer experience. After evaluating leading CDNs, we found ImageEngine by ScientiaMobile on the nuu:bit edge platform to be the best choice. It has already improved customer browsing experience, reduced our image payload by more than 60%, and has created other efficiencies.”

NAVANEETHA KRISHNAN,  
CTO and Co-Founder of Voonik



## VOONIK Accelerating Images for Improved Mobile E-Commerce

Voonik is a fashion marketplace for women, with a focus on personalization. Voonik believes every woman can be fashionable everyday. Voonik strives to provide everything that women require—a vast collection of fashionable products from Indian and international manufacturers at low prices to suit every budget and reliable delivery. Their robust e-commerce platform provides a wide selection with complete purchase protection for every transaction.

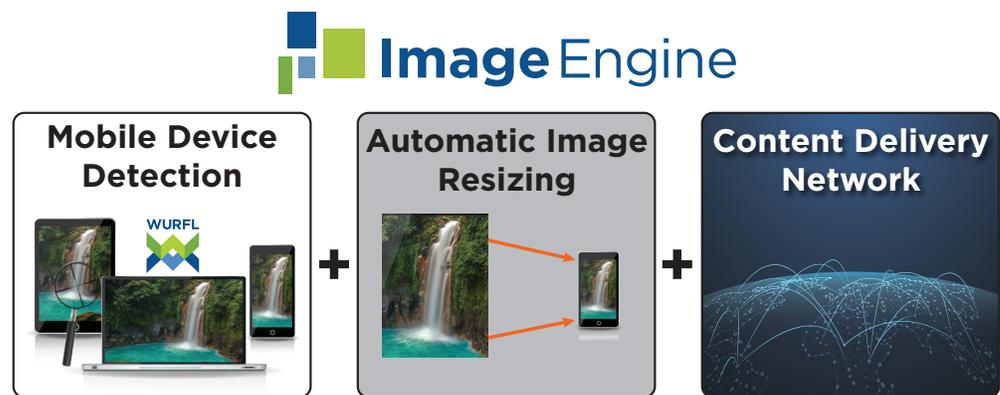
This wide product selection posed a problem for Voonik. How can an image-intensive e-commerce platform speed up its user experience for its predominantly mobile-based customers? The solution that Voonik evaluated and chose was [ImageEngine](#) by ScientiaMobile. Voonik extensively tested ImageEngine to ensure that it tailors images to each mobile device and delivers quickly via its content delivery network (CDN).

Here’s what they found...

## The Problem

For Voonik, mobile e-commerce represents 90% of their business. How fast a site loads on a mobile device is a particularly important factor for attracting visitors and converting them. Voonik had already implemented a traditional CDN, but it only slightly improved performance. In addition, the increasing number of customers visits were rapidly driving CDN costs higher. Voonik 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 Voonik's image payload without sacrificing image quality. A mobile shopper buying Voonik's clothing typically downloaded a 1.2 MB page, of which 60% were images. On mobile devices, these images were heavier than they needed to be. Higher resolution and file size did not yield perceptible differences in user experience. If Voonik could reduce their image payload, then mobile pages would load faster.



## The ImageEngine Solution

Voonik tested ImageEngine's resizing CDN service to address their image acceleration challenges. ImageEngine is unique in the way it seamlessly combines three services.

First, ImageEngine leverages ScientiaMobile's WURFL device detection to identify the devices coming to Voonik'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.

Next, ImageEngine leverages this device information to automatically resize 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.

Finally, ImageEngine uses nuu:bit's CDN for global distribution on open-edge servers. This means that ImageEngine's logic is pushed to the edge of its global network with more than 40 POPs. Images are cached as close to customers as possible, resulting in 60% improvement in speeds.

## What ImageEngine Delivers

**Faster Page Loading, Higher Conversions:** Accelerate website and decrease payload by more than 60%.

**CDN Savings:** Pay only for optimized, resized image bandwidth.

**Proactive Device Detection:** Accurately identify mobile devices without using slow, inaccurate javascript.

**Automatic Image Resizing:** Automatically resize and cache your images at the edge, reducing traffic to origin for faster delivery and additional cost savings.

**Simple Deployment:** Easy integration with leading e-commerce platforms.

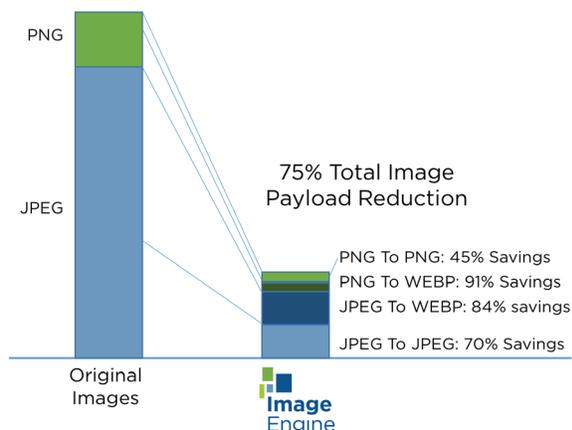
**Workflow Streamlining:** Use a single master image that is automatically right-sized and cached for multiple devices, web pages, and apps.

## The Deployment

Voonik started their roll-out of ImageEngine by performing A/B tests on specific pages. ImageEngine can serve individual images by prefixing the image URL. After testing individual pages, Voonik used CNAME to redirect its entire site through ImageEngine. Immediately, ImageEngine's compression began to yield speed improvements versus Voonik's legacy CDN approach.

Eventually, Voonik extended use of ImageEngine to its

### Image Compression, Conversion, Resizing



**BENEFITS**

- Saves 95% of development time for image-intensive sites.
- 60% faster web page download time - usually saving 2-3 seconds.
- More than 60% reduction in image payload.
- Images automatically optimized for each mobile device.

entire site, plus three more Voonik-owned domains (vilara.com, picksilk.com, mrvoonik.com). ImageEngine’s simplicity and ScientiaMobile’s 24/7 support made this roll-out quick and streamlined.

In addition to their websites, Voonik applied ImageEngine to their native mobile app for mrvoonik.com. Many apps dynamically pull images from servers via an app webview request. Using this method, ImageEngine can pull from the same set of full-sized original images used for the website, optimally resize them for devices running the app, and deliver the images through the nuu:bit CDN.

**The Results**

After running ImageEngine for several months, Voonik achieved 75% savings on their image payload. On a monthly basis, Voonik’s CDN payload was reduced by almost 100 TBs, resulting in major CDN cost savings.

Internally, the simplification of the image workflow across multiple sites enabled Voonik’s IT and devops staff to focus on more strategic e-commerce issues.

Key Performance Indicator	Before	After
Average page weight	1.1 MB	0.64 MB
Monthly CDN Payload	146 TB	48 TB
Image compression rate	Not used	75%
Image requests from cache	Not applicable	98%

