# **Image Performance Matters**

Wait for it

to load

2

### According to companies like Google & YAHOO!

1

Click on

a link

**Page load time** is an important performance indicator for a web page.

# Page Load Times Beacchards Great (<2 seconds)</td> Acceptable (<5 seconds)</td>

### Load Time affects the Bottom Line

### **b** Bing

Think about the way people browse the web.

3

And doing that on a mobile phone – smaller screen – comes with high expectations for a site to load quickly.

> A page that is 2 seconds slower can result in a **4.3% drop** in revenue per user.

If the page takes

too long to load



Try another

website

4

### Google

A 400 millisecond delay can cause a **0.59% drop** in searches per user.



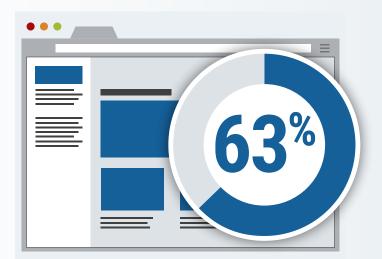
### YAHOO!

A 400 millisecond slowdown can result in a **5-9% drop** in full-page traffic.



# Images account for 63% of downloaded bytes on a web page.

Optimizing images can often yield crucial byte savings and performance improvements.



### Image Optimization is both an art and science:

Pick the right image format

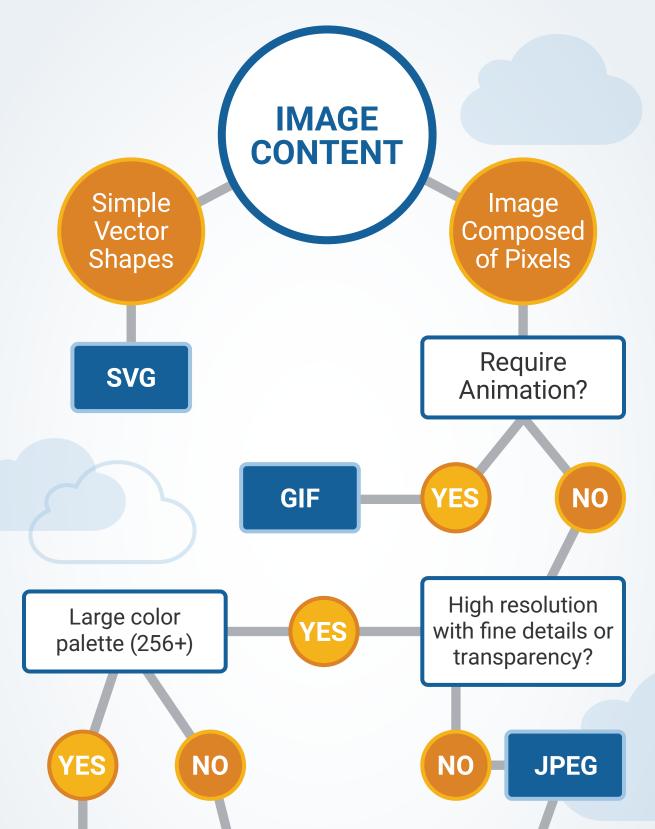
Experiment with optimal quality settings

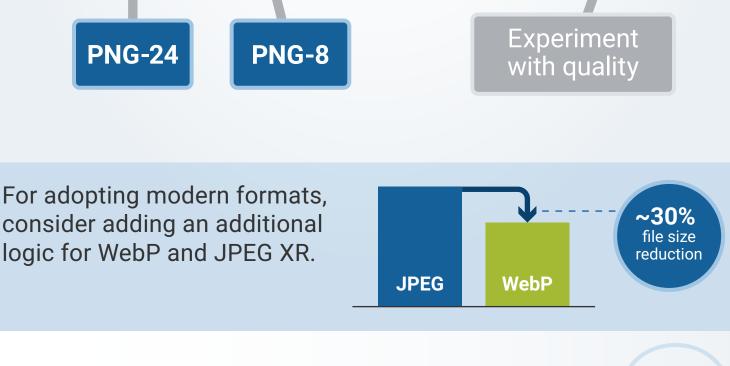
Serve scaled images

Automate!

## **Image Format Conundrum:**

The "right format" for an image depends on the desired visual results and functional requirements.



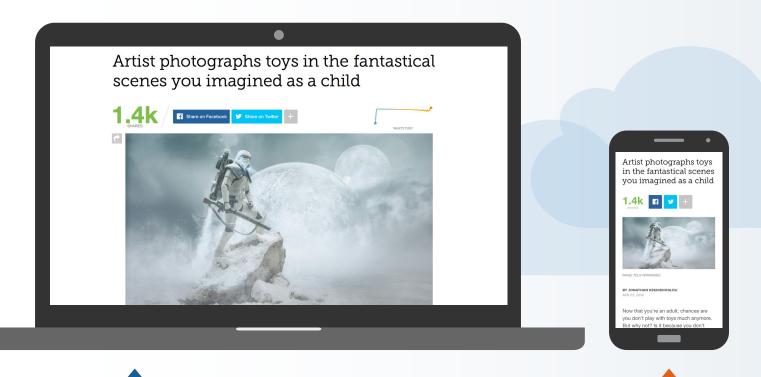


### **Select the Optimal Quality Setting**



### **The Overhead of Delivering Unnecessary Pixels**

The following example of browser-side resizing on Mashable leads to significant bandwidth wastage.



Original Dimensions: **950 x 534px** 

File size using browser-side resizing: 93KB
 File size using server-side resizing: 13KB

### **Automate Image Optimization**

Automatically detect a user's browser and then deliver the file in the best format for that browser.





Automatically create art-directed Responsive Images.





Deliver the correct resolution image based on the Device Pixel Ratio (DPR).



Control the compression level of images with the quality parameter.



Use lossy compression when delivering animated GIF files.





#### Source:

https://community.dynatrace.com/community/display/PUB/Best+Practices+on+Web+Site+Performance+Optimization http://www.stevesouders.com/blog/2010/05/07/wpo-web-performance-optimization/ http://httparchive.org/

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