Preparing Your Images for Print – Image Optimization Tips & Tricks

Before printing images, it's vital to make sure they are optimised for their particular use. Whether you are printing your images as part of a photo book or selling print versions of your best graphics, the following image optimisation tips and tricks will show you how to prepare images for printing, so that they look great every time the ink hits the paper.

Use the right format

The right image format is the one that produces the highest quality images. Formats like JPEG, that are commonplace on websites, are not appropriate for printing.

Ideally, you want to prepare and print your images in either TIFF or PSD format. Both deliver exceptional image quality, although TIFF in particular is the gold standard for prints of high-quality graphics. Both TIFF and PSD files are quite large, but the additional storage space you use is a worthy compromise if you want to get the most out of your prints. PNG is another possibility as it also produces excellent print quality for images.

Choose the CMYK colour mode

Anyone accustomed to optimizing images for display on computer monitors and mobile devices might make the mistake of assuming that it's ok to use the traditional RGB colour mode for print images, too. However, the results are often unsatisfactory. Dark images are a particular problem.

CMYK colour mode uses a combination of cyan, magenta, yellow and key (black) to display images. The four colours are used by many colour printers, particularly home printers. It's a good idea, therefore, to convert your images to CMYK mode before sending them to print.

Understand print resolution

The print resolution for a given image is a measure of the amount of detail it contains. When displaying images on the web, the typical resolution metric is pixels per inch (PPI). When preparing and optimizing for print, it's a good idea to use the dots per image (DPI) metric. This is the number of dots of ink on one inch of a printed image.

Popular photo editing software typically measure image resolution in PPI. However, the main thing you need to know is that the higher the DPI and PPI numbers of an image, the better the detail. If you are using photo-editing software to optimize images for print, aim to only print images with 300 PPI or more, to ensure enough detail and quality in the prints.

Tip 1: Make sure you specify bleeds

The bleed of a printed image is an area of print which extends beyond the edge of where the sheet you print on will be trimmed. It is important to specify a bleed because it is extremely difficult to get a printer accurate enough to print exactly to the edge of the sheet.

Without specifying a bleed before printing, there's a chance your printed images will contain unsightly borders of different colours than the image (typically white). Choose a border of roughly 3 mm or one-eighth of an inch to be safe.

Tip 2: Slightly over-sharpen images

When you are preparing and optimising images for printing it's often a good idea to over-sharpen them. The reason is that many printers use a process called half-toning, which tends to have a softening effect on images. Half-toning is necessary because most printers cannot print continuous tones. This means photographs need to be converted to a series of dots for effective printing.

Conclusion

Paying attention to image optimization techniques can dramatically improve your printed work. A few small adjustments can make a big difference to your portfolio or photo book.