

Digital Printing - A Technical Perspective

Digital printing is a process in which all graphic content is in digital form from creation to output. They are printed directly from your computer to printer. Digital printing is essential when contents are dynamic and only a part needs to be printed with faster turnaround. Most of the short run digital printers and copiers use toner and not the ink. That affects the printing quality and durability. Ink binds with paper while toner remains on the surface. Hence, ink based printing looks smooth, uniform, rich and natural in colors.

There are plenty of factors in making an impressive reusable piece of art. Each of them is equally important. But you can leave them all to us. Just bring in a few of your best illustrations of the work and let us do the rest. Design either from a rough draft or work from an existing artwork. We will transfer them into a great looking presentation and save it in the digital format to use it again and again without losing any quality. If you want us to print from your own creation, make sure they are created and saved in a certain way.

There are some common myths about digital printing. Many think digital printing is cheaper. Actually, on demand printing is cost effective only below 1000 copies. Offset becomes cost effective as quantity goes on increasing; whether single color or the full color. There is also a misconception that digital printing has a better quality than offset. Sure from a Dot-Per-Inch perspective digital has an advantage. But still, ink is far superior to toner for the graphics. On top of it, toner if left in a hot environment melts and sticks on to the back of other paper. Digital requires a special paper. There are thousands of digital papers available today. So make sure to use the correct one. In short, use digital printing for the samples but settle on the offset for the finished product.

Before you start making your own artwork, determine your audience to craft your message. Find out what is the purpose of your article, what is the main point you want to deliver and what is your budget. Listen to your customers, employees and sales people to find what draws people to your business and distinguish you from your competition. Organize your brochure the way the reader reads it. Years of testing have shown that we see the elements in following order: pictures or illustrations, headlines, charts or graphs, captions and last the text body. Make sure your first two elements tell the most of the story clearly and plainly without using any buzzwords. Use photos to show your customers your products, services, completed projects or your own face to make that personal connection. Colors boost the visibility by 40 percent over the pure black and white text. Choose colors compelling to your business style; deep, rich and dark for conservative and traditional industries or light, vibrant and modern to emphasize friendly and a personal touch. Limit the number of colors to two or three and choose complementary colors that go with the hue and lightness of your art. Use enough white spaces to balance out elements and create contrast. Remember to proof read after you are done.

While using a graphical image in an artwork, pay special attention to the resolution and saved file format. A typical web page uses 72 dpi JPEG files while a glossy brochure may use a 600 dpi TIFF image. Digital camera refers its resolution in mega pixels while a scanner or a printer expresses it in dots per inch (dpi). Comparing dpi to pixels, a typical 4x6 inch photo at 300 dpi is equivalent to $(4 \times 300) \times (6 \times 300) = 2.16$ mega-pixels. We recommend using either a

TIFF or an EPS image file with minimum 300 dpi resolution (Logos must be 600 dpi). Do not use JPEG or GIF images. These formats are for internet only and not for offset printing. If you have to scan a photo, use minimum 36 bits and 1200 dpi.

Artwork that needs to be printed from edge to edge needs to be created with a bleed. Make sure that artwork is 1/8 inch bigger than actual printing size on the side that has a bleed. File formats like PageMaker and Publisher must accompany fonts being used. File formats like, Illustrator, InDesign and CorelDraw must be converted into outlines. Files saved in other formats may change their layout when transferred from one computer to another. All colors in the document must be converted into CMYK. Those left in RGB or spot may not print at all. Since computer monitor uses RGB, final printed product may not match to that on the screen. Do not use any font less than 12 point unless you really meant it to be. It becomes difficult to read. Make a significant contrast between the typed text color and the background color. A text typed in white is not a white print-over image but a knockout in it. So expect to see the color of a paper there. If you want to achieve a rich black text, use C=63%, M=53%, Y=51% and K=100% combination instead of a 100% Black.

Paper is the next important item in a good printed material. It can significantly influence the look and feel of your final piece. Look for high quality paper that is thick like a greeting card but allows colors and pictures to shine. A 70# text paper is typically used for letterhead printing while an 80# gloss text is used for magazine cover, color brochures, flyers and posters printing. An 80# gloss cover is used for the postcard and the product sheet while 100# gloss cover can be a good candidate for the business card. Aqueous or UV coating helps protect your printing from dirt & fingerprints and gives it a high gloss to the surface. Extend the physical life of your brochure by storing them in a dark and dry place where the temperature will not fluctuate too much.

People have a short attention span for marketing messages and sales pitches. Make the most out of their attention span. The biggest hurdle in advertisement is being noticed. Newsletters are an excellent low-cost way to get your messages out to them. Make it photo-rich with stories, customer testimonials and press clippings about your business. Keep your brochures current and change them as often as needed. Since your digital artwork can easily be modified, print only what you need and when you need it. It is more effective using a brochure with the latest information than using one from your old, outdated, dusty stack. Send them to the right-targeted audience. Keep this audience list current. Keep in touch with them frequently. Have these brochures available at places and times when they are more responsive to your service. Track the results to gauge your success.

Last but certainly not the least, PrintOGraphics will always be there to help you with any of your business printing needs from Designing to Delivery. We print all business related items from single spot to full offset colors and from small business cards all the way to big signs and banners. In addition, we print other items such as personalized CDs, DVDs, Social invitations and thousands of Promotional gift items. We will help you stand out from your competition. Our customers have trusted us last 20 years for their critical business projects. We offer Free spot colors, Free local pickup/delivery & Free quotes. We will meet or beat any genuine offer from our competitor including coupons. Give us a call for your next printing project.