Print-On-Demand Resources

Philip Zimmermann

PROVIDERS:

Lulu – Lulu was one of the first to do large-scale commercialization of digital print-on-demand. It was founded in 2002 using technology developed at RIT in Rochester, NY. They are based in Morrisville, North Carolina. They use a Xerox iGen print engine. Some of their size formats have been retired over the years, causing some books to be orphaned.. Here is the link to their size formats: <http://www.lulu.com/create/books> Their paper choices are very limited and there is no uncoated option for photobooks. Their '*Standard Paperback*' option is printed on uncoated paper, similar to No. 1 Newsprint, but Lulu does not recommend photographs be printed on that paper. In general they are less expensive than Blurb or the more custom competitors. They do offer quantity discounts but the discounts are not large. Some people feel that the iGen print engine is not quite as good as the HP Indigo print engine that Blurb, MagCloud and many other POD printers use. In response to Blurb and other POD competitors, they now offer image-wrap hard cover books and dust jackets. Perfect binding and multiple other binding options are available. Like many other POD companies, digital on-demand print and e-book distribution is available. <https://www.lulu.com/>

MagCloud – MagCloud was started by Hewlett-Packard as a promotion for (and test) of their HP Indigo print engine. The early rather crude Indigo system was bought by HP in the early 2000's from an Israeli company, Indigo Digital Press, and renamed HP Indigo. HP formed MagCloud in 2008. Blurb later bought the company from HP in 2014 and has allowed it to continue its existence rather than be absorbed. The color print quality is very high. MagCloud used to have a very good volume discount, 25% off for any run over 20, but Blurb reduced that after they purchased it, and now one has to print over 100 copies to get the 25% discount. There are rarely company-wide discounts the way that Blurb often has. Originally HP thought that it could use the company to promote the Indigo system as a press proofer for magazines, short-run niche magazines, and as a print system for independent 'Zines. Early on there was only saddle-stitch binding and only one kind of slick, thin, coated paper, similar to magazine paper, with a lot of show-through. That expanded over the years to more paper options and also wire-o and side-stitched binding with hard covers. Though Blurb does not promote MagCloud –and it may eventually atrophy and die because of that– they have a hard-core following and they continue to expand their formats and options. MagCloud sizes and specs are here: <http://www.magcloud.com/products/print>. Color images are best left as RGB: let them do the conversion to the correct CMYK separation profile for best color. MagCloud's "digest" soft-cover format is an attractive vertical or horizontal option, but the number of pages determines the weight of the paper, from 100# text if you keep the book to 16 pages, to 60# and 80# text weight paper the more pages that you print. Like Blurb and Lulu, they will act as a store for your (un-altered) product and will sell the book and send you a royalty. This will not work for you of course if you are using hacking tricks to change the standard book. They are located in San Francisco. Their main website is at: <http://www.magcloud.com/>

Blurb – Blurb is the twenty-ton gorilla in the room, the largest print-on-demand company in the world. <http://www.blurb.com/> The company is based in San Francisco, CA. They use HP Indigo exclusively and their printing has excellent quality with faithful color reproduction. They are expensive but constantly offer deep discounts through their emailings (be sure to sign up for their email offers). Commonly, those sales offer 35% to 40% discounted from their normal rates. Their standard papers have a wider range than most of the competition, from thin coated text-weight papers to a premium version, to 'proline' coated and uncoated papers like Mohawk Superfine. As with many of the others they offer a free layout tool, but it is always a better option to use a PDF generated from an InDesign document. They offer plug-ins and templates for InDesign, Photoshop, and other software. Color images are best left as RGB:

let them do the conversion to the correct CMYK separation profile for best color. One very irritating thing that Blurb does is require you to pay them to remove their logo off the back pages, which is a form of extortion. Free ISBN numbers are offered, as they are with Lulu. Sizes vary for the three types of books they promote: Photo Books, Trade Books, and Magazines. They run from 5x7, 7x7, all the way to 12x12 and 13x11. < http://www.blurb.com/getting-started?tab=tab-photo-books>

Newspaper Club – Located in the United Kingdom, Newspaper Club provides short run digital printing in traditional newspaper formats—tabloid, broadsheet (!), and a mini-size. This print-on-demand service offers offset short run printing (minimum 300 copies) on 55 gsm stock—and a range of other newsprint stocks— as well as print on demand newsprint (one copy and up). We suspect that the output engine is a high-speed inkjet.
https://www.newspaperclub.com

Bookmobile – Their motto is "Craft Digital". A very high quality digital print-on-demand company based in Minneapolis, MN that goes the extra length to customize print and binding production to your needs. <https://www.bookmobile.com/> They have a large client list that includes literary presses, university presses, trade houses, museums and galleries. They offer all of the standard book sizes, but they, unlike most short-run digital printers, can produce non-standard trim sizes. Unlike Blurb and Lulu and others, Bookmobile gives you a detailed and itemized estimate, and will work with you to get the books you want at the best unit price. They are a bit more expensive though, at least at short runs. They also offer 18 interior paper stocks. They also offer options like color inserts, French flaps, foil stamping, debossing, and more. They can even fulfill backer rewards for a Kickstarter campaign, as well as orders from your website and from bookstores. They use various print engine outputs.

Conveyor Arts – Very similar to Bookmobile, Conveyor, located in Jersey City, NJ, gives carefully detailed estimates and offers many more choices than MagCloud, Blurb or Lulu. The folks who run it are second generation commercial printers. <https://www.conveyoreditions.com/> They will talk you through projects and make creative suggestions. Again, not cheap not perhaps worth it, especially if you have money but not that much experience. They will do gatefolds, foldouts and accordion fold sections. Conveyor is also an independent publisher, and publish their own artists' books under their name. If you are in the New York Metropolitan area, they will even do print consultations; 45 minutes for $75.

Edition One – Another custom print-on-demand printer more than willing to do custom sizes and covers. <http://www.editiononebooks.com/> They state that they specialize in work for professionals, designers, photographers, artists and other creative types. One of their specialties is uncoated cover stock with foil-stamping. Karen Z. used them for her book "**52**" about Smithson's Spiral Jetty and her spiral life. They will do lamination or foil-stamping on any cover plus gatefolds, softcover flaps, screenprinting and even vellum inserts. Again, a bit more expensive than Blurb, MagCloud and Lulu, but worth it if you want to have unusual customization. They will make books as small as 4"x4", the smallest size that could be found for any POD printer. Their client list is impressive: <http://www.editiononebooks.com/our-clients/> Edition One is based in Berkeley, CA.

Miller – Miller's Professional Imaging <https://www.millerslab.com/home> specializes in services to professional photographers. They claim their archival products are 'handmade' and most of the products are things like wedding photo albums. They are very high quality but also very expensive. They started out as a conventional silver photographic printer for photo pros but now most of their sales use digital printing. Exotic materials can be used for the covers like foil-stamping, faux and real leather and linen bookcloth, <https://www.millerslab.com/albums-books/millerssignaturebooks/overview> and <https://www.millerslab.com/press/hardcoverbooks>. Like Blurb, they also offer 'lay-flat' books with no gutter, using Mohawk Superfine digital paper. Sizes range from 5x5 to 12x12, like many other POD print services. They are located in two plants, one in Columbia, MO, the other in Pittsburg, KS. Very expensive!

[Local printers] – Many local commercial printers have added digital printing capabilities to their standard offset lithographic options for short-run work. Most use HP Indigo print machines. It is generally not cheap but ordering flat sheets can allow you a degree of flexibility that other POD companies do not offer through their automated already-folded-and-bound books. Phil has done several books that way using Mohawk Superfine. Another advantage: you can use any digital uncoated paper and do not have to use the normal crappy matte-coated digital paper that they offer.

Others less commonly used:

CreateSpace – Amazon-owned, South Carolina-based POD printer. <https://www.createspace.com/> They used to be called Book-Surge. Since they are now owned by Amazon, listing the book on Amazon is free and there are no extra charges, which is CreateSpace's main attraction since otherwise it isn't very different than most of the other POD printers. The website is poor. Soft-cover only; no hard-cover options.

IngramSpark – Print-On-Demand, advanced high-speed inkjet printing technology, self-publishing and distributing printer. <https://www.ingramspark.com/about> tied into Ingram Content Group, the world's largest distributor of print and electronic books. They are more focused on text and graphic novel books rather than photographic or image books. There is a huge selection of softcover and hardcover trim sizes. <http://tinyurl.com/yavwynyv> They offer a lot of advice on-line on how to use certain distribution tricks to get highest visibility. < https://www.ingramspark.com/blog/7-facts-about-book-metadata>

Shutterfly – Shutterfly, Inc. <https://www.shutterfly.com/index.jsp> is an on-line company based in Redwood City, CA, specializing in image-publishing POD service. Shutterfly's flagship product is its photobook line. The company was founded in 1999. <https://www.shutterfly.com/photo-books> You must use their proprietary layout software which could be a deal-killer. They also have a professional design service. This printer is really for the non-professional and not recommended.

Snapfish – Once owned by Hewlett-Packard, Snapfish caters mostly to the snap-shot crowd. Snapfish is a web-based photo sharing and photobook printing service owned now by District Photo. Café Press is one of their subsidiaries. Snapfish is based in San Francisco, California. Members can upload files for free, and are given unlimited photo storage but this is another print service that is aimed for amateurs and not professionals. <https://www.snapfish.com/photo-gift/home>

OUTPUT PRINT ENGINES AND OTHER TECHNOLOGIES:

HP Indigo – A liquid electrostatic ink technology, called 'Elektroink'. It is similar to toner electrostatics but instead of using powdered color toner uses liquid, charged, color ink. Although it is primarily a CMYK color model, white ink is available on newer Indigo printing machine models. Although it can use plain uncoated paper, it generates the best color contrast and image fidelity when a specially coated digital paper is used. Many print professionals think that HP Indigo has the highest quality image reproduction of POD technologies. Blurb, MagCloud and many other companies use HP Indigo. The original HP Indigo used paper that was a maximum of 13 inch by 19 inches. The latest HP Indigo machines like the 12000 HD can take larger paper sizes, up to 20"x29". <http://tinyurl.com/y7xffpjg>

Electrostatic Toner – In a simplified explanation, powdered color toner is electrostatic charged, as is an imaged drum, and the charged toner on the image drum is transferred to paper. The transferred toner on the paper is then melted using a heated fuser drum. It uses a CMYK color model. Lulu uses Xerox iGen, a toner technology. Type and image content can be changed on the fly. Most toner-based print engines print maximum 12"x18" paper so that a full bleed tabloid (11"x17") sheet can be printed and trimmed out of a sheet. Bookmobile uses the Xerox 800, 1000, and Versant printers at 2400 x 2400 DPI with a 200-line screen. Bookmobile also uses the Konica Minolta PRO C5501 for larger sheet sizes. <http://tinyurl.com/y98cgp8j>

Inkjet – Inkjet is a method for depositing liquid ink droplets on a substrate via a piezographic (vibrating quartz) nozzle. It was originally developed for the publishing industry. Dye-based inks should be avoided and more permanent pigment-based inks should be used. One drawback is that inkjet is often slow compared to other digital printing methods. Although the color model is CMYK, due to lack of gamut of inkjet inks, each process color has additional light and dark versions so that the gamut is extended. At one time inkjet colors were vulnerable to moisture, but most no longer are. IngramSpark uses high-speed inkjet on-demand. <http://tinyurl.com/ybxounds>

Risograph – A hybrid technology that uses a stencil and screenprint system similar to old mimeograph technology. In terms of process, a Risograph printer works a bit like a screen printing press and a bit like a photocopier. A thermographic master screen will be created for each color of your artwork, which is then wrapped around the drum. As each leaf of paper passes through, ink is fed through the screen onto the paper. One drawback is that there are no normal process (CMYK) colors. Another is that the ink almost never dries completely and can rub. Halftone images are restricted to a rather coarse half-tone screen, usually about 50-85lpi, though screens as fine as 100lpi can be used. This technology is not used commercially but is used by individual artists due to it's accessibility and ease of use as compared to offset. It is relatively cheap as a production spot-color process. Metallic and day-glo (flourescent) colors are popular. <http://us.riso.com/>

Digital Offset – not usually thought of as a print-on-demand printing process, some press manufacturers like Heidelberg make digital versions of their offset lithographic presses. Offset printing technology uses plates, usually made from aluminum, which are used to transfer an image onto a rubber "blanket", and then rolling that image onto a sheet of paper. It's called offset because the ink is not transferred directly onto the paper. The digital part of this process takes place where the image is placed onto the aluminum litho plate on the press itself by way of a laser, eliminating the off-press imposition, plate-exposure and processing. Like all offset lithography, it is still mostly too expensive for the unit-cost, unless the run is over 500. This is due to set-up and clean-up on the press. Generally most off-shore printers will not even bid on a print project unless the run is, at the evry least, 500 copies. <http://tinyurl.com/y7qklvtr>

Espresso Book Machine – is usually considered a failed automated print-on-demand printing process that uses a conventional 600ppi photocopier electrostatic engine, but includes not only a printer, but also a folder, perfect binder, and 3-knife trimmer, all in one machine, and produces a completed paperback book in minutes. Images are relatively low in quality and have a course half-tone screen. It is best for text. It is inexpensive, but unsatisfying. The reason for it's existence is to print on-demand text or literary books in minutes from a public domain or licensed pdf file. The University of Arizona bought one in 2009 for $150,000 and placed it in the Campus Bookstore, but abandoned it two years later. These machines are no longer manufactured but can be purchased used.

Spoonflower – Spoonflower offers digital printing on cotton fabric, mostly through dye-sublimation. The cotton fabric is too thin and unsized to glue directly to book board and should be lined with thin Japanese paper with dry-mount tissue using a dry-mount press, then glued to the boards. You might be interested in buying their large trade book called "*The Spoonflower Handbook*" for crafty DIYers; it is hardly necessary, and does not cover working with the fabric as a book material. Go to: <https://www.spoonflower.com/>

Laser cutting, post digital printing, can also add value when called for.