# Realize your creative vision in fabric

# How to select and use an online fabric-printing service

by Kris Sazaki and Deb Cashatt

he sheer variety of artwork created using digitally printed fabric attests to the appeal of custom-designed fabric to help artists execute their vision. Digital printing technology has advanced so much in the last several years, artists have been incorporating their own designs into fabric with more frequency and greater success.

Like some other artists, we print our own designs in small quantities in our studio. As the Pixeladies, we started printing on fabric with fiberreactive dye more than 12 years ago. While we enjoy the control we have over the printing process, equipment maintenance and the cost of fabric and ink/dyes do not always make this a viable alternative for many artists. Therefore, we always recommend people use an online fabric-printing service. There weren't any around when we started, but now there are several good companies, making online fabric-printing services more cost effective and convenient to use.

For this article we initially set out to review online fabric-printing services with the goal of recommending the "best" company. We expected to find a clear-cut winner or process type, but there wasn't one. There are too many variables that influence the final product, including the image you have printed and the fabric you choose.

Instead, we want to guide you through the process of ordering custom fabric online so you can achieve the best possible print for your project. We are highlighting six companies in this article. The following businesses provided us with a sample fabric print. We will use the following acronyms in the remainder of the article when referring to these companies:

**DP** Decor Print

(www.decor-print.com)

**DYF** Design Your Fabric

(www.designyourfabric.com)

**DPI** Dpi (www.dpi-sf.com)

**FOD** Fabric on Demand

(www.fabricondemand.com)

MY Modern Yardage

(www.modernyardage.com)

**RDE** Red Dog Enterprises (www.red-dogenterprises.com)

(Spoonflower did not respond to our request for a sample. Ed)

## **File Requirements**

File requirements differed slightly among the businesses we profiled. Make sure your file complies with their specifications.

**Color Process:** Do they want the file in RGB, CMYK, or LAB color mode? We submitted all of our images in RGB, but other businesses may have other requirements. It is good to confirm this with the printing firm.

**File Type:** Most companies accept various file types, but .tiff is the most popular. It retains the highest image quality. Our sample image was a .jpg image.

**Resolution:** While the minimum/ maximum resolution varies between 72-600 ppi among our profiled businesses, you can play it safe by saving your images at 300 ppi. We have tested resolution extensively using our reactive-dye process and have not noticed a difference in quality using resolutions higher than 200 ppi. We submitted our 18" x 20" sample with a resolution of 200 ppi.

PPI versus DPI: Technically, your digital images are made of pixels, and resolution is specified in pixels per inch (ppi). Pixels are square. Printers print round dots, and the quality is determined by dots per inch, or dpi. Unfortunately, many people, even the printing companies, tend to use these terms interchangeably. We use the terminology pixels per inch when referring to the resolution of the digital file.

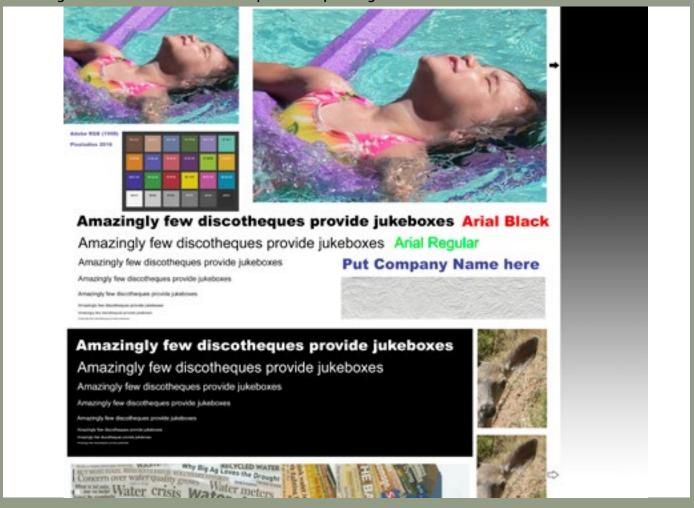
### **Printing Process**

Different printing processes yield different results. While these differences can sometimes be quite striking, they may just be what you need for a particular project. The printing process can also affect washability. Check each company's website for information if you intend to wash the fabric. Synthetic fibers require a different printing process (dye sublimation or pigment) but may produce results more suitable for your particular project. Each company's printing process is detailed in a separate chart. If it has two checks, it offers both processes.

### Fabric

Fabric selection is an important variable in the finished product. The

This image was submitted to all six companies for printing.



Printed samples show variety of results.



most decisive factor is the amount of fabric fuzziness. In general, fabric is fuzzier than paper, especially photographic paper. The ink dots tend to spread, and the resulting print is less defined. One way of overcoming this occurrence is to sharpen your image. We were able to improve the definition in the photo of the deer by sharpening the image in photoediting software. Over-sharpening the image of the deer created better contrast, making the details more defined.

Fuzz from the fabric can also block the ink from reaching the fabric, creating white "spots" on the fabric. This is especially noticeable when printing dark pieces on highly textured fabrics such as flannel or a nubby dupioni. We were unable to get the sample printed on the exact same fabric from all the companies, but tried to get a lightweight cotton. All the fabrics were of good quality. Some companies offer an inexpensive sample print, which is a good way to test fabrics for your particular needs. MY will also print a swatch, charging by the inch instead of yard.

## Black

Achieving a deep, rich black is critical when your image contains a lot of black or dark colors. If the black is not black enough, your image has less contrast and tends to look muddy. The term for this is metamerism. It is a perceived matching of colors that do not actually match. Viewed

individually, almost all the blacks were good, meaning we could believe that all of the darkest colors in each print were black. It's only when compared to each other, or a true black elsewhere in your finished artwork, that you will notice the difference. DP produced an amazingly rich, luscious black. While DYF's black is not as dark as some of the others, the grayscale is nice and smooth. The only company whose black was too light for us was RDE. There are ways to influence the appearance of the black. You can improve the contrast of a particular printed image by adding black post-printing: paint, fabric, thread. Remember, black increases contrast, which makes color pop.

<b>Fabrics</b>			
Company	Custom Swatch?	Available Fabrics	
DP	No	Cotton: twill, canvas, broadcloth, sateen, lawn/voile, corduroy, flannel, knit Silk: charmeuse, dupioni Polyester: microfiber, charmeuse, satin, micro velvet, twill, linen, upholstery Misc: Heavy Linen/Cotton	
DYF	8" x 8"	Cotton: light and heavy canvas, EZ twill, French twill, gauze, lawn, poplin, sateen, sheet, voile, quilting Silk: crepe de chine, charmeuse, charmeuse/spandex blend, georgette, twill Misc: hemp, linen/cotton, linen, modal (rayon), organic muslin, upholstery cotton, viscose/spandex blend	
DPI	No	Cotton: sheeting, kona, duck, twill, sateen, voile, lawn Silk: chiffon, charmeuse (12mm, 19mm), habotai, crepe de chine, twill, silk/wool blend Polyester: poplin, duck, chiffon, sateen, polyester/cotton blend, performance fabric Linen: Belgian, bleached, flax, cotton/linen blend Misc: spandex, rayon/spandex knit	
FOD	8" x 8"	Cotton: 4 oz., 6 oz., duck Polyester: fleece, microsuede, poplin, jersey knit, satin, pongee, diamond knit, polyester/spandex jerseknit, lining, duck Misc.: Spandex	
MY	Yes	Cotton: 4 and 10 oz., voile	
RDE	1⁄4 yd.	Cotton: broadcloth, sateen, 10 oz. artist canvas Silk: 12mm habotai	

## **Color Balance**

Using different dyes, inks, fabric, processes, or printer settings will result in different colors. This is exactly what we experienced with our samples. For one, you are creating your image on your particular monitor, and monitors do not display colors in the same way. (Just go to your local big box store and take a look at all the televisions on display!) Once you send your image off, your final print may go through yet another finishing process after printing. We included specific elements in our sample image to see how various colors were printed.

Quilt Detail: Our SAQA friend, Jenny Lyon, sent us an image of one of her white-on-white quilts. The detail we printed exposed very interesting differences in each sample's undertones. DP's, DPI's, and DYF's samples looked the most neutral, while FOD had a pink undertone, MY a green, and RDE a blue undertone. This difference in itself doesn't necessarily make one service preferable over another, rather it requires you to decide if your image looks better in warm or cool tones. For the white-on-white sample, we really liked DP.

Skin Tones: Realistic skin tones are very difficult to recreate. For one, they range from a very light peach to almost ebony and everything in between. They are also nuanced by light and shadow. The girl in the pool came out differently in all the samples. What differentiated the samples was the general undertone described above. Compared with one another, MY's appeared too green, DPI's sample too red (see photo), but once we examined them in isolation, they all looked good.

It is helpful here to remember the important role context plays. In Josef Albers' groundbreaking color blocks, he demonstrated how color is almost never seen as it really is, and that its relation to the other colors around it changed our perception of it. Yet another example of metamerism in action! Depending on what surrounds the skin tones, you might choose a service that tends toward warm or cool undertones. We think DYF's and FOD's skin tones were the best. For the intensity of the skin color, DYF's sample showed the most subtle changes in the shadows. By increasing or decreasing the saturation or

adjusting the hue of your image using photo editing software, you can influence the outcome of your image.

**Color Grid:** We had no expectations that our color grid would have any accuracy. Since the color grid was divided by black, the samples with a good black made the color chips seem brighter. The samples had striking differences in the color grid, especially the teal. However, instead of relying on a standard color grid, we recommend you make a test image that samples the colors you will be using.

Newsprint: Newsprint has very subtle color changes, and since we print so much newsprint, we wanted to see how the different companies performed. Of course, the basic undertones discussed above bore out in similar ways here. In contrast to the quilt detail, DYF's and MY's samples were head and shoulders above the others. They captured the newsprint amazingly well. The others performed well, too, except for RDE; it was too dark.

#### Text

We print a lot of text, so this is an important element for us. We were quite pleased with the sharpness in all the samples except for those from DP, which showed too much ghosting. We included text in various sizes

File specs								
Company	Color mode	File type accepted	File specs					
DP	RGB	.tiff preferred	150-300 ppi					
DYF	RGB	.ai, .eps, .gif, .jpg, .png, .svg, .tiff	min 150 ppi 300-600 ppi recommended					
DPI	RGB	.indd, .jpg, .tiff, .psd, .qxd, .ai, .eps, .pdf	not specified, higher resolution recommended					
FOD	RGB	.jpg, .tiff, .png, .psd, .ai, .eps, .pdf	min 72 (actual print size) 300 ppi (for enlargements)					
MY	RGB	.tiff	200 ppi					
<b>RDE</b> RGB .jpg, .tiff		.jpg, .tiff	300 ppi (10 mb limit)					

Process							
Company	Reactive dye	Dye sublimation	Pigment				
DP		Х	Х				
DYF	Х						
DPI			Х				
FOD	Х	Χ					
MY			Х				
RDE			Х				

(Arial typeface in 6-36 point font sizes), both in black on white and white on black. Most impressive was DPI's text. Even the itsy bitsy 6-point type size was quite legible.

In general, it helps to print very small text on flat fabric, like the lightweight cottons we tried, but these companies did such a good job with text that we would experiment with other fabrics, as well.

## **Final Thoughts**

Depending on the individual project, you should be successful in ordering fabric from any of these companies. Ordering a custom sample will provide you with better information at low cost to ensure an even better print.

Kudos go to FOD for having the most informative and user-friendly

website. FOD even has a chat line, which we tried out to great success. DYF's image-uploading process was very easy. DYF is located in Canada, so this might be the best choice for Canadian residents.

We were impressed with the personal attention we got from all the companies. Sanjay at DPI and April at MY were the most accessible, and it was easy to get our questions answered by them. DeeDee of DP went out of her way to send us several samples in a variety of fabrics. With these companies, there really is no reason not to have your creative vision realized in fabric. V

Kris Sazaki and Deb Cashatt are the Pixeladies. They have been printing fabric in their studio for more than 12 years and teach Photoshop Elements courses online.

# **Addendum**

These are additional companies providing custom fabric-printing services that we did not include in our survey along with the reasons why. You can use our considerations as a guide to help determine their suitability.

#### www.fingerprintfabric.com

Currently not accepting new clients. This company is based in the United Kingdom, so UK/European members should contact them for availability.

## www.moodfabrics.com

High yardage minimums

# www.myfabricdesigns.com

Specializes in pattern repeats

#### www.spoonflower.com

Did not respond to request for sample

#### www.weaveup.com

Specializes in pattern repeats

# Nominations open

## 2017 Yvonne Porcella Volunteer of the Year Awards

Nominations are open for the second annual Yvonne Porcella Volunteer of the Year Awards. SAQA relies on the generous gifts of time and talent from our volunteers to carry out its mission. Two winners will be selected for this program, named in honor of our founder and first president.

Winners will be announced at the 2017 annual conference in Lincoln, Nebraska, April 27-30. Winners will be named in two categories: Outstanding Rep (or Co-Reps) and Outstanding Non-Rep, open to those serving in all other capacities. Nominees will be put forward by SAQA members, who are asked to consider qualities such as:

- Exceeds expectations
- · Contributes countless hours

- Represents SAQA in an exceptional manner
- Demonstrates exemplary performance in achieving responsibilities
- Has provided a "save the day" moment
- Significantly impacts the organization
- · Has volunteered for many years

The SAQA Board of Directors and staff will select the award winners. The winners will receive a recognition certificate and a \$100 gift certificate for the SAQA Store.

Please fill out the ballot found on the SAQA website at www.saqa.com/award You have until Sept. 30 to nominate your favorite volunteer.

# 2016 Winners



Sue Bleiweiss Outstanding Rep (For work as Massachusetts/ Rhode Island rep)



Deb Cashatt Outstanding Non-Rep (Special Events Chair)