

How do I decide which inkjet canvas to use for my business?

As inkjet canvas continues to gain popularity in the fine art and photographic digital printing industry, the multitude of available brands and varieties will persist and eventually flood the market in an attempt to take advantage of this increasingly desirable consumable. Current market research shows that inkjet canvas is selling three times more than inkjet paper, which historically, has never been the case. This swing in market trends suggests that art consumers are impressed by the aesthetic appeal and novelty of digitally printed inkjet canvas as it is a relatively new, yet logical medium for fine art reproduction. As an entrepreneur running a printmaking business, selecting an inkjet canvas that will be the foundation for your reputation and long-term success amid the array of possibilities, can be a daunting if not impossible undertaking. Nevertheless, it is the responsibility of the printmaker to understand and test inkjet canvas to source the highest quality to ensure sustainable-revenue and the integrity for their business. Therefore the purpose of this article is to provide printmakers with the proper tools to evaluate inkjet canvas based upon empirical data and measurable attributes; in an attempt to produce higher-quality, more-archival, and ultimately more sellable fine art inkjet canvas prints.

In order to properly evaluate inkjet canvas for your printmaking business, several criteria must be evaluated and considered. This criterion can be broken down into four primary categories: aesthetic appeal, longevity, production/business practicality, and brand association. Testing multiple brands and types of inkjet canvas is the best thing you can do for your business, your customers, and the fine art industry as a whole. That being said, the first thing you will need to do to get started is purchase sample material from several leading inkjet canvas manufacturers. Let this article be the guide or checklist to walk you through the important evaluation process.

Aesthetic Appeal

This category has been listed above all others because it is the single most important factor for evaluating your primary, house inkjet canvas. The fact is that this is the fine art industry and whether you are the artist, a gallery owner, a publisher, or a printmaker, the ultimate universal goal is to sell art. Art is predominantly sold as a result of its aesthetic appeal and the emotional derivative of the image presentation. In other words, the better your prints look, the more your artists will sell, which will naturally result in more printing business. If the artists that you print for are confident that you are reproducing their work in the most visually appealing manner and this is reflected in their print sales, you can be sure they will continue to employ your services. On the other hand, if the artist decides to shop around or happens to come in contact with an alternative printmaker who is obviously producing superior inkjet canvas prints, the artist will be gone in an instant. The only way to be certain that you are producing the most visually appealing inkjet canvas prints, is to test several different inkjet canvases for colour gamut, Dmax (optical density), resolution, texture, and weight. Let us carefully consider each of these attributes individually.

Colour Gamut - In this increasingly competitive industry simply offering great colour reproduction is not enough. You need to offer the best colour reproduction. Although precise colour gamut measurement tools, such as a Colourimeter or spectrophotometer can and should be used if available, the naked eye is usually enough to distinguish a superior inkjet canvas. Print a colour target, which consists of several individual colour patches, on each inkjet canvas that you are evaluating. Use these targets to compare each individual colour to determine which inkjet canvas produces the best colour

gamut. It is also recommended to print the same, colourful image on each inkjet canvas and see which produces the most vibrant colours.

Dmax - Dmax is a measure of maximum density of an image's colour but more specifically its black density. Again, the most precise measurements can be taken with a densitometer, but the naked eye will suffice if this equipment is not available to you. When discussing paper and inks, Dmax is commonly defined as the blackest black possible. Black density is arguably the most discernible characteristic in evaluating the quality of ink, paper, inkjet canvas, and even printmakers themselves. Therefore achieving the blackest black possible should be the most critical concern for every fine art printmaker. In this increasingly competitive industry, as with colour gamut, offering great blacks is simply not enough. You need to offer the blackest blacks possible.

Resolution - This refers to the smallest discernible dots or pixels, commonly measured as dpi or dots per inch. In relation to fine art reproduction, it is a measurement of the fineness of detail in a printed image. Resolution is a crucially important attribute because without fineness and detail, image quality is compromised. No matter how accurate your colours are or how dense your black may be if the image appears blurry up close instead of clean and crisp, you will have significantly decreased your chances of selling that print as it will negatively affect its overall perceived value. This will inhibit the artist from obtaining true market-value for his/her work, which will cause you the printmaker to lose business to a competitor who uses an inkjet canvas with superior resolution. It should be noted that inkjet canvases with excessive texture can also compromise resolution and should be avoided. The drastic peaks and valleys in the inkjet canvas texture can cause ink to bleed, or run, which will blur minute aspects of a printed image.

Texture The optimal texture of inkjet canvas is one that will exude a natural inkjet canvas look, without compromising resolution or reducing the amount of viewable angles in which the art can be appreciated. The latter is caused by any type of glossy finish on a highly textured inkjet canvas. The result is a sparkling affect caused by light reflecting off of the glossy peaks and valleys of the textured inkjet canvas. Sparkling inkjet canvas prints no longer take on the qualities of an original painting which causes art consumers to perceive them as cheap reproductions. In an industry driven by quality and aesthetic appeal, cheap reproductions won't sell and will be detrimental to a printmaker's reputation.

All in all, even if an inkjet canvas is a clear leader in colour gamut, dmax, and resolution, it may have excessive texture which alone can compromise quality. Therefore, printmakers should test for excessive texture. This can be accomplished in two ways. First, print images with extreme detail and look for a lack of image cleanliness and crispness up close. Second, use a semi-glossy or glossy post-print protective coating and look for sparkling when light reflects off the coated surface. It is important to keep in mind that texture is primarily a subjective attribute of which everyone will have a differing opinion. As a printmaker, it is wise to advise your clients to make a texture decision based upon objective information that will improve the sale-ability of their prints rather than attempt to source unique inkjet canvas textures to appeal to every artist's personal preference.

Thickness & Weight - These are completely subjective attributes that do not contribute to the visual appeal or the sale-ability of any inkjet canvas print. For their own reasons, usually related to their artist/customers, some printmakers have a tendency to place value on how an inkjet canvas feels. To the artist or printmaker (not the art consumer) perceived value can be associated with a heavier weight and thicker inkjet canvas. The fact is that it costs more to manufacture an inkjet canvas with a heavier

weight and thickness, but neither weight nor thickness has any contribution to the visual appeal or longevity of a inkjet canvas print. The higher cost is simply not justified.

Once stretched, framed, and hanging on the wall in an art gallery nobody is touching or feeling the finished inkjet canvas print. These consumers have absolutely no way of determining the initial weight, thickness, or feel of the inkjet canvas. Therefore, these attributes are totally worthless unless of course they somehow affect your production process. For example, an excessively thin inkjet canvas might tear when stretching over frames. An excessively thick inkjet canvas might not feed through your printer. An excessively heavy inkjet canvas might senselessly raise your costs, lower your profit margins and in turn decrease your market competitiveness as a printmaker. Therefore, using a inkjet canvas because you like how it feels or how heavy it is, is just a disorganization of business priorities. Unless your customer requires a specific inkjet canvas weight or thickness, these two attributes should be considered your lowest priority. Generally it is a plus to have a heavier, thicker inkjet canvas but should not influence your inkjet canvas evaluation.

Longevity

Longevity refers to how long a inkjet canvas print will last before it begins to noticeably deteriorate. This is an absolutely critical element in determining which inkjet canvas to use for your business. In order to appropriately label yourself a fine art printmaker, you must produce fine art prints. By definition, fine art prints are expected to maintain their constitution for several decades. Fine art prints that deteriorate in the short-term maintain almost no value and were in fact, never fine art prints to begin with. Thus, longevity must be taken into consideration in every printmaker's long-term business strategy as selling deteriorating prints will no doubt contribute to the inevitable demise of your future business in the fine art industry.

Unfortunately, unbiased, objective longevity testing information about each inkjet canvas is not readily available. Therefore, the only real way to be confident that this longevity component is fulfilled is by choosing a reputable manufacturer with a worldwide recognized brand. These manufacturers have proven their ability to deliver and support fine art quality products to the masses. They also guarantee their products. Rest assured that if any problem does arise, most of them will be right there to fix the problem and/or reimburse you. A reputable printmaking business must have this guarantee where the manufacturer holds the risk. Printmakers should use these worldwide brands to their advantage by communicating their stability benefits to their own customer base. Nevertheless, it is important to understand exactly what characteristics affect the longevity of your inkjet canvas prints.

Acidity - One primary determinant of longevity is the acidic content within a inkjet canvas. The introduction of acid to a inkjet canvas print will cause it to quickly yellow and deteriorate. Finding a inkjet canvas that is completely acid-free and ph-neutral is extremely important in preserving the longevity of your prints. Most inkjet canvas suppliers will boast an acid-free product but in actuality they are referring only to the raw inkjet canvas material, conveniently leaving out the acidic content of the inkjet receptive coating applied on top, which completely negate the initial claim. In order to maximize and ensure longevity, printmakers should therefore make sure that a inkjet canvas has both an acid-free raw inkjet canvas base and an acid-free inkjet receptive coating.

Optical Brightener Additives (OBAs) - These are artificial brightening agents commonly used in many inkjet substrates to make them appear brighter or whiter than they actually are. According to the

most recognized inkjet print permanence testing organization, the Wilhelm Research Institute, OBAs should be avoided because they compromise the longevity of fine art prints by causing yellowing, and by causing the colours of a print appear different under differing lighting conditions.

Colour management guru David Coons of Artscans explains the difficulties in using OBA's:

Our main problems with OBAs are with reproducing original art with bright or pastel yellows. Since typical OBA coated media doesn't reflect warmer wavelengths as strongly as conventional natural white watercolour papers, it's often impossible to accurately reproduce many warm pastel colours such as light yellow.

Optical brighteners create an appearance of 'brightness' by inducing blue fluorescence in the presence of UV-rich light sources such as sunlight, metal halide, and fluorescent lamps. Papers coated with these brighteners tend to fight yellow inks in particular because of their bluish cast. Colour management systems can help preserve relative colour differences, but will never be able to overcome these physical limitations.

In June 2005 worldwide inkjet canvas manufacturer Breathing Colour, Inc. out of Orange, California (www.breathingcolour.com) released the first ever optical-brightener free inkjet canvas and since, the product segment has grown in popularity at a very fast pace within the USA and is spreading to other regions of the world. Printmakers using this product are taking advantage of the credibility and competitive positioning it offers.

Water-Resistance - History has proven that inkjet canvases without sufficient water-resistance are fragile and increasingly susceptible to damage by humans and the environment (humidity). Although they can be protected and enhanced with solvent-based coatings, generally it is best to avoid them simply because they are more of a liability and increase longevity risk. Solvent-based coatings, which are mandatory with non-water-resistant inkjet canvases, also have a tendency to chip, crack, and flake over time and/or during the stretching process. Some manufacturers who have not yet been able to develop a truly water-resistant inkjet canvas have resorted to marketing semi-water-resistant inkjet canvases as water-resistant. Beware of these.

Although there is no documented industry standard for water-resistance, printmakers can easily test this on their own. Run a print and allow it 24 hours to dry. Once the ink has completely dried simply pour a glass of water over the print. If a inkjet canvas is not water-resistant, the ink will run and smear immediately. Some highly water-resistant inkjet canvases can withstand this test even immediately after printing. Printmakers using truly water-resistant inkjet canvases also enjoy the added benefit of the ability to use a water-based post-print coating, which in most cases is much more durable than the solvent-based alternatives.

Post-Print Protective Coatings - Commonly sold in gloss, semi-gloss, and matte options, these post-print protective coatings are most commonly used to preserve and protect inkjet canvas prints from abrasion and harmful ultraviolet light. They are also used to enhance colour and increase the visual appeal of a inkjet canvas print.

Printmakers should evaluate a coating for the following: First, it must sufficiently protect a inkjet canvas print from abrasion. This means that if anyone were to accidentally touch, scuff, hit, or spill anything onto the printed surface "nothing will happen. The integrity and value of the print is

essentially preserved. Second, a giclee coating must protect a inkjet canvas from harmful ultraviolet light. Although it should always be avoided, this means that the inkjet canvas should not fade or yellow if it were to be in direct or indirect sunlight for extended periods of time. Third, a coating should be able to enhance colour in order to increase the visual appeal of the inkjet canvas print. Fourth, a coating should not provide any sort of yellow cast over the image. This is a negative side effect that compromises the integrity and value of a inkjet canvas print. This yellow casting issue can be tested by simply comparing a coated and uncoated piece of unprinted inkjet canvas. If the coated portion appears yellow, then this coating is working against the quality of your reproductions and should be substituted with a more reputable product from a fine art manufacturer. Finally, the coating should not crack when stretching over frames. If the giclee coating cracks you are unnecessarily decreasing the quality of your inkjet canvas reproduction. All reputable inkjet canvas manufacturers have information on coatings that is compatible with their products. Selling prints that crack when stretched is unacceptable in this industry where public information about coating compatibility is readily available for all printmakers.

Only use fine art giclee coatings from reputable manufacturers that produce products specifically for the fine art market -- not to be confused with coatings made to protect signage or other surfaces and are erroneously marketed by many suppliers as fine art coating substitutes. Beware of these untested products with no history or track record.

Production

Now that we have discussed the most critical aspects of selecting an inkjet canvas in aesthetic appeal and longevity, let's shift our focus production, more specifically, how does this inkjet canvas work with your operational flow? Production can and should be shaped around a high-quality, archival inkjet canvas, rather than finding a inkjet canvas that works with your current production flow. I say this because many printmakers are forced to make this decision when they encounter a problem with a inkjet canvas or supplier. Do I select a new inkjet canvas that works well with my current system and flow or do I select the best inkjet canvas I can find and adjust my production flow around it? Though the latter may be more difficult in the beginning, this decision will no doubt pay off in the long term. Nevertheless, there are some inkjet canvas characteristics that are more suitable for every printmaker's production flow and should be sought after. Consistency - Roll to roll consistency is a vitally important issue for every printmaker, especially for high production environments. A lack of consistency can cost your business a lot of time and money in defective prints and material waste. It can even cost you customers.

Any inkjet canvas manufacturer can tell you that inkjet canvas manufacturing is by far the most difficult inkjet product to consistently produce. No inkjet canvas is perfect, and at some point in time every printmaker will receive faulty inkjet canvas that they must return. For the most part, some inkjet canvases tend to be more consistent than others and these are the ones you need to find. If you choose a inkjet canvas that is very consistent your business and customers will enjoy smooth production without hassles. This is where the actual make-up of a inkjet canvas becomes relevant.

The two most common fine art inkjet canvas options are 100% cotton inkjet canvases and poly/cotton blend inkjet canvases. 100% cotton inkjet canvases used to be the first choice amongst the majority of fine art printmakers because of its perceived higher quality and natural look and feel. These days, after years of manufacturing inconsistencies, 100% cotton inkjet canvas is avoided by the majority of the market and hardly any manufacturers produce them anymore. The inconsistencies include

shrinking (when coated or when subject to a high humidity environment), expanding (long after being stretched and framed, causing the print to sag and appear off balance on one side), and the presence of visible, black cotton seeds. These black cotton seeds end up in the middle of prints and can make them look dirty or defective. They also have a tendency to fall off, leaving white voids in your print. Collectively, it is for all these reasons that 100% cotton inkjet canvases are not widely used by fine art printmakers any longer.

Instead, consistent and high quality polyester-cotton blend inkjet canvases (or polycotton inkjet canvases) have become by far the most widely used inkjet canvas base in the fine art industry. Poly/cotton inkjet canvases are of not inferior in print or longevity quality, but do lack the natural look or feel of the 100% cotton inkjet canvases. However, polycotton inkjet canvases are typically free of cotton seeds and do not shrink or sag after long periods of time. Ultimately, the crucial importance of roll-to-roll consistency has fueled the demand for polycotton inkjet canvases over the years. Until consistent 100% cotton inkjet canvases are introduced, these poly/cottons will continue to drive the market.

It is important to understand that roll-to-roll consistency of polycotton inkjet canvases also vary from manufacturer to manufacturer. Roll-to-roll consistency really comes down to a given manufacturer's quality control. Larger companies always have better quality control because of how costly this process is. There are always defects in inkjet canvas productions and the primary role of quality control is to isolate the defects so that they do not reach the marketplace. Some manufacturers do this better than others. As a general rule, it is better to stick with a larger manufacturer, provided of course that they have the best product with regard to aesthetic appeal and longevity.

Stretch-Ability - As stated earlier, a finished, coated inkjet canvas print that cracks or tears when stretching over frames significantly loses value and also appears cheap in the eyes of consumers. To avoid this, printmakers can test a inkjet canvas by coating piece of it, allowing it 24 hours to dry, folding it backwards, completely in half, and then firmly pressing the fold to make a crease. If the inkjet canvas does not crack in the creased area, it will most likely not crack or tear when stretched. Nonetheless, the only way to be sure is by sending a print to your framer (unless you frame yourself) who can provide reliable feedback.

Cost - This is the final determinant of a printmakers market competitiveness. Specifically, what level of quality does he/she deliver relative to the asking price. In order to be the most competitive, a printmaker must use the highest quality product available at the lowest price, but not if price compromises quality. In this industry, price does not always determine quality. This is because the distribution methods of manufacturers are the primary determinant of the end user price. Most manufacturers use regional distributors who in turn mark up the cost of the product and sell it to end users. This is the traditional distribution method of this industry. Contrastingly, a few select worldwide manufacturers sell direct to the market, eliminate the regional distributor, and are therefore able to offer fiercely competitive pricing directly to the end-users. By researching manufacturers and their pricing structures, printmakers can gain a good understanding of what each has to offer. The goal is to maximize quality and minimize cost.

It is also important to consider buying inkjet canvas or other substrates in bulk. Many manufacturers and distributors will offer volume discounts on inkjet canvas. Therefore, businesses can drastically lower their overhead, simply by buying in bulk and stocking their best selling products. Buying in bulk will also lower overall shipping costs by ordering once every 3 months for example as opposed

to once per week. Bulk-buying will also ensure that you have sufficient inventory to promptly begin and deliver urgent print jobs.

Brand Association

As if it hasn't already been stressed enough, printmakers need to know as much as possible about the manufacturer before they start printing on their inkjet canvas. First, printmakers need to distinguish between a true manufacturer and a private-labeler.

Private-labelers are companies who conceal the original manufacturer by applying their own names to a product. Due to the exponential growth of this industry there is an overwhelming abundance of private-labelers. Every single regional inkjet supplier who brands their own inkjet canvas is private labeling. If they tell you otherwise, they are not being honest with you. It costs millions upon millions of dollars, not to mention rare expertise, to produce and support even one high quality fine art inkjet canvas, which is why very few manufacturers really exist.

Many re-branded inkjet canvases on the market over the past few years have been produced at a very low cost from unreliable inkjet canvas mills in countries where labor costs are low (i.e. China). The problem with these manufacturers is that they lack the financial wherewithal to support a fine art inkjet canvas and will turn their back on the first sign of a problem. They have no brand, they are not interested in building a brand and they have nothing to lose. A manufacturer without extreme care of a brand in the delicate fine art industry is a very bad sign and should be avoided at all costs.

The less-informed, poor inkjet canvas choices made by regional inkjet suppliers and their printmaking customers have plagued the local markets at times. A recent issue involved a particular inkjet canvas that was being marketed and sold within Australia as a fine art inkjet canvas of the highest quality. To the dismay of its users, this inkjet canvas began to turn yellow on the walls of its buyers only eight months after it was printed and even coated. This resulted in massive returns, lawsuits, bankruptcies, and ruined the credibility of many of the businesses involved. Normally a bad inkjet canvas choice will simply result in a loss of competitive positioning, but the point of this example is to stress how bad it can get.

The only way to be certain is to choose a inkjet canvas that comes from a widely recognized worldwide brand with a public reputation. You can confirm this by visiting the manufacturer's web site and reading about their company. Read about their products, their values, and their mission. Read their press releases and see if and how long they have been covered by the media. If posted, read their customer testimonials and do further research on the reputation and history of these customers. Then, contact the company directly and speak to a representative who should be interested in starting a relationship with you. Make a small purchase of a sample kit or anything else that will allow you to evaluate how the Company delivers. Take note of the marketing materials they provide, the look of their packaging, etc. Gather some influential industry publications and look at the company's advertisements. There are far less than ten worldwide inkjet canvas manufacturers and through this research they will be easily distinguishable.

Reputable printmakers simply do not even waste their time even trying inkjet canvases that do not come from long-standing worldwide brands who have been in the industry for years. By conducting some research one can conclude that the more reputable the printmaker, the more likely it is that they

strictly use long-standing worldwide brands. Chances are, they have learned the hard way at some point in time.

Conclusion

In this rapidly expanding industry, printmakers lose or capture business daily as a direct result of customers demanding individual inkjet canvas attributes. The higher volume the customer is, the more sophisticated and knowledgeable they will be, and the more significance each inkjet canvas attribute will have to them. Higher volume customers learn faster and earlier than the rest of the market, but eventually, the rest of the market catches up. Therefore, the only long-term strategy is to master knowledge of these attributes and offer the best inkjet canvas that the industry has to offer. The best inkjet canvas, in and of itself, will always be a subjective analysis but by prioritizing these attributes one can interject a certain level of objectivity into it that customers will understand and trust.

Teddy Blah of MFA Talon Graphics (www.mfatalon.com) of El Segundo, CA says MFA Talon Graphics has been a one of the largest worldwide fine art printmakers for nearly 20 years now, and to uphold our leading reputation, our substrate decision making process from inkjet canvases to papers is extremely intricate and involves many people. The ultimate decision comes from an accumulation of years and years of learning experiences, coupled with constant tests and evaluations of new products, to discover what will continue our reputation and propel MFA Talon Graphics to increasing levels of quality. We know where to find the best materials, we know how to test and evaluate them, and we only use what is logically determined by us to be the absolute best that we can offer our customers. It is a never ending process and by treating it this way we improve our quality every single day.

Finding the best inkjet canvas for your business will result from an accumulation of inkjet canvas knowledge as brought forth by this article along with your continual research and pursuit of maximum quality. We hope that printmakers all over the world save this article and use the information presented within it, to better their businesses and to better the fine art printmaking industry as a whole.