

# sales & marketing

## Product Review: Paper Label Printing Is Digital Printing Right for You?

Improved speed makes digital right for more small wineries, but traditional methods still best for large ones.

Bill Pregler

**S**INCE *WBM* LAST VISITED digital wine labels in July of 2007, the technology has continued to improve. Today it is enjoying double-digit growth.

Recently I talked to printers and designers and asked why digital printing is impacting the wine label industry. Collectively, their response was "because it speeds up the entire process."

This product review revisits digital printing and compares and contrasts it to traditional forms of printing, such as flexo and offset. While these will always play a major role in all forms of labeling, the digital advantages for the wine industry are now so widespread it is hard for small wineries to justify using the alternatives.

Savings are everywhere, from materials to time and labor. Finally, with the possibility of immediate design changes, digital is a winery's marketing dream.

### ECONOMY OF DIGITAL PRINTING

The latest *WBM* proprietary data from January 1, 2009 tells us that 73 percent of all wineries in North America, Canada and Mexico combined produce under 5,000 cases per year. If the category is expanded to include wineries that produce 50,000 cases or less, the total number is 95 percent.

For most of these wineries, print speed is not important. On the other hand, production costs are critical.



The HP Indigo Press is computer operated so any color changes to final proof takes just minutes.

### Cross-Over Printing Costs

The print industry talks in terms of "cross-over" or "breakpoints" when comparing different print technologies. This is when the comparable cost of a production run between, say, digital and offset becomes the same.

Digital has all the advantages on the front-end as setup is essentially free—but then the price per label slowly rises with production. It is still too slow for large runs.

Offset starts out as expensive with non-flexible and laborious set-up, but

then as numbers increase, the unit cost per label drops. Flexo and offset presses run considerably faster than digital and are all about large label runs. Printers talk in terms of feet of paper per minute. Digital production on a **Hewlett-Packard** WS-4500 at best is 50-feet per minute. Offset can print hundreds of feet per minute in a blur.

There is a point of "equal" exchange or "cross-over" where very briefly the costs equate. For the WS-4500 this translates into around a 5,000-case labeling run, the size of most wineries.

Thereafter, offset starts to be cheaper. HP's new WS-6000 digital printer for 2009 could raise the cross-over point to nearly 10,000 cases.

### ATTRIBUTES TO CONSIDER

#### Setup Time

"Compression of time" is the key to understanding the digital advantage. A good comparison can be made with film.

Old-time graphics people remember the camera business when they shot rolls of 35 mm film and then spent

## Comparison of Digital to Offset/Flexo

	Plate Making	Set-up Time	Design Change	Proofs	Color Change	Sequential	Variable Data	Small Runs*	Large Runs**	Piggy Back	Paper Waste	Foil Waste
Digital	None	Short	No-cost	Immediate	Free	Yes	Yes	Affordable	Expensive	Yes	Minimal	None
OffSet/Flexo	Yes	Long	Expensive	Lengthy	Expensive	No	No	Expensive	Affordable	No	Sizeable	Sizeable

\*Small Runs = 5,000 cases \*\*Large Runs = 10,000 cases or more

endless hours in the dark room. Now they use a digital camera, edit, enhance, create files and transmit information in minutes.

Instead of a 50- or 100-foot-long offset or flexography printing press with many-multiple print stations and laborious setup time, digital printing has a Printing Imaging Plate (PIP). The labels are printed within a condensed 11½" x 17" space. All inks are electronically collected, layered and printed. The plate is then immediately erased and readied for the next cycle.

or offset press must stop and actually re-mix colors. If a winery decides to add another color to a label design, it again requires additional plates and extended set-up.

### Design Changes

Digital printing is the immediate transference of infinitely adjustable art.

It has the limitless ability to change images and print data while "on the fly." The data is "relation based," meaning graphic files can be easily manipulated to create any design you can imagine.

number of different labels sequentially, it makes sense that wineries could take advantage of this by partnering. Such was the case for **Art Finkelstein**, wine-maker and owner of **Judd's Hill** in Napa, who is also the winemaker at their custom crush facility, Judd's Hill MicroCrush. "With roughly 100 customers, it is possible to have many wineries, if using a similar shape label stock, share in a single production run," said Finkelstein. "Participation is by choice; but if there are 30 different brands of 10 cases each, everyone can all save money," he said. Once again, the artwork, colors, winery name and data can all change because the printer does not care.

### Costs to the Environment

There are two distinct areas of waste in traditional label printing: foils and paper.

The traditional stamping foils may result in a nice, fine line enhancement to the border of a label or a medallion, but the remaining 85 to 90 percent of the foil not stamped from the roll is simply discarded. Constant registration (overlapping colors on one single image) is also a problem as are the additional costs of producing cutting dies to apply the material.

With digital, foil enhancement begins with the entire label stock coated with silver, and then translucent inks are applied where necessary. The result is no waste. In addition, the technology has the ability to produce any color foil. The silver is simply to provide the metallic look.

As an added plus, due to digital's perfect registration, graduations and

vignette (shading) are possible, resulting in a look whereby colors on foil gradually fade away to zero.

Paper waste is another issue. Printers talk in terms of feet of paper. Thanks to perfect registration with digital, with all colors and foil appearances on a single plate, the setup and production run of 500 feet of labels may possibly waste just 10 feet of paper.

Offset and flexo, with a plate station for every color and enhancement (foil), can waste up to 500 feet of paper for a 500-foot run of comparable labels. Many printers suggest that each color wastes between 100 to 150 feet of label stock per color. And if there are any changes to the design, the process starts all over. All this adds cost to the winery.

I recently participated in a "dot-gain" exercise with the operator of the WS-4500 computer, who digitally increased the size of the print dots on a label, thereby increasing the amount of ink transferred, which affected the overall tone of the label's color. It was like increasing the volume on your stereo.

The experimental print and proof, with three gradual color changes, consumed a total of four feet of paper. The complete test run was over in five minutes and saved to a file that could be reproduced instantly. The production manager said the similar effort on an offset press would have consumed thousands of feet of experimental setup paper and many hours of plating changes and setup time.

### Training

A final note on that exercise involved the skill level of the operator. Hewlett-Packard's school will comfortably train

There is a point of "equal"  
exchange or "cross-over"  
where very briefly the costs  
[between digital and offset] equate.  
That point is getting higher.

Digital solves many of the challenges that plague traditional printing. This includes image setting, film proofs and plate making. Even the slightest design change with offset requires new plates, re-mixing of inks, additional setup costs and huge amounts of paper loss to realign the registration. All this costs the winery.

The PIP is an electronic process that suspends inks in oils. Once the image is transferred to label stock, the carrier (oil) evaporates, and the PIP is now clean and free to accept the next layers of ink of the same or different image.

Adding another color with digital is free. The inks are simply the four process colors (cyan, magenta, yellow, black) and can be easily and immediately manipulated via the computer to create any color. The operator of a flexo

This also gives rise to the references often made about "snowflakes" in that no two labels in sequence will be alike.

From one to a million, each label might have its own individual number or image. One printer told me of a marketing promotion whereby "customers could check the company website for winning numbers found on their individual bottle."

With minimal setup and the ability for designers to make immediate changes and proofs, the entire process is so efficient it affords economy to everyone. Minimal cost commitment and instant results free the artist.

### Partnering with Other Wineries

"Ganging" of production jobs is another term you hear in digital. Since it is possible to create an infinite

**EDITOR'S NOTE:** Another digital printing option is to purchase your own digital labeling equipment. See *Wine Business Monthly's* "Product Review: Benchtop Labels for Small Wineries" and "Unified Wine & Grape Symposium Highlights: Our 10 Favorite Products," both of which appear in the March 2007 issue, as well as "What's Cool" in the April 2008 issue. These articles can be found on the Web by searching [www.winebusiness.com](http://www.winebusiness.com).

## Paper Wine Label Printing Companies

Company	City/State	Phone	Website	Digital	Offset	Flexo	Design	Print
AC Label	Fremont, CA	510-490-1800	www.aclabel.com	Yes	No	Yes	Yes	Yes
Baldwin Press	Napa, CA	707-927-1315	www.baldwinpress.net	Yes	Yes	No	No	Yes
Ben Franklin Press & Label Co.	Napa, CA	707-253-8250	www.benfranklinpress.com	No	Yes	No	No	Yes
Collotype	Napa, CA	707-603-2500	www.collotype.com	Yes	Yes	Yes	No	Yes
Cameo Crafts, a YORK Label Company	Sonoma, CA	707-931-7400	www.cameocrafts.com	Yes	Yes	Yes	Yes	Yes
Creative Labels of Vermont, Inc.	S. Burlington, VT	800-639-7092	www.clov.com	Yes	No	Yes	Yes	Yes
Elite Label	San Jose, CA	408-761-2142	www.elitelabel.com	Yes	Yes	Yes	Yes	Yes
Fernqvist Label	Mountain View, CA	800-426-8215	www.fernqvist.com	Yes	No	Yes	No	Yes
G-3 Enterprises	Modesto, CA	800-321-8747	www.g3enterprises.com	No	Yes	Yes	No	Yes
Hemlock Printers, Inc.	Walnut Creek, CA	877-826-5677	www.hemlock.com	Yes	Yes	No	No	Yes
Herdell Printing & Lithographers, Inc.	St. Helena, CA	707-963-3634	www.herdellprinting.com	No	Yes	No	Yes	Yes
Innovative Labeling Solutions	Hamilton, OH	888-860-2457	www.ilslabels.com	Yes	No	Yes	Yes	Yes
LabelOne Connect, Inc.	Beaverton, OR	503-646-7933	www.labeloneconnect.com	Yes	Yes	No	No	Yes
Label Solutions	Paramus, NJ	201-599-0909	www.labelsolutions.net	Yes	Yes	Yes	No	Yes
Labeltronix, Inc.	Orange, CA	800-429-4321	www.labeltronix.com	Yes	Yes	Yes	No	Yes
Labels West, Inc.	Woodinville, WA	800-540-3009	www.labelswest.com	Yes	No	Yes	Yes	Yes
Landmark Label Manufacturing, Inc.	Fremont, CA	408-262-6111	www.landmarklabel.com	Yes	No	Yes	No	Yes
Lightning Labels LLC	Denver, CO	888-685-2235	www.lightninglabels.com	Yes	No	No	Yes	No
McDowell Label	Plano, TX	800-275-6061	www.mcdowelllabel.com	Yes	No	Yes	Yes	Yes
Metro Label Group, Inc.	Napa, CA	707-226-2806	www.metrolabelgroup.com	Yes	Yes	Yes	No	Yes
MPSDigital	Petaluma, CA	800-327-5997	www.mps4digital.com	Yes	Yes	Yes	No	Yes
Natural Source Printing, Inc.	Orange, CA	866-551-4677	www.naturalsourceprinting.com	Yes	Yes	Yes	No	No
Packaging Arts, Inc.	Mare Island, CA	707-562-2787	www.packagingarts.com	Yes	Yes	Yes	Yes	Yes
Paragon Label	Petaluma, CA	707-773-4363	www.paragonlabel.com	Yes	No	Yes	Yes	Yes
Prestige Graphics Wine Labeling	San Diego, CA	800-383-9361	www.pgiwine.com	No	Yes	Yes	Yes	Yes
Pyramid Label Co. LLC	Napa, CA	707-256-1800	www.pyramidlabel.com	No	No	Yes	Yes	Yes
Tapp Technologies	Napa, CA	707-252-8300	www.tapptech.com	Yes	Yes	Yes	Yes	Yes
Vintage 99 Label	Livermore, CA	925-294-5270	www.vintage99.com	Yes	Yes	Yes	No	Yes
WS Packaging Group, Inc.	Algoma, WI	800-236-3424	www.wspackaging.com	Yes	Yes	Yes	Yes	Yes
Wright of Thomasville	Thomasville, NC	800-678-9019	www.wrightlabels.com	Yes	No	Yes	Yes	Yes

an operator of a WS-4500 in two weeks. All that is required is some computer savvy. It takes many years for an offset or flexo pressman to master his skill.

### USAGE SCENARIOS

#### Small Wineries Using Digital

For labeling runs under 10,000 cases, digital is the answer. Since printer setup and last minute changes are cheaper with digital, a winery should only buy what it needs for an immediate marketing strategy. If another 100 cases of labels are needed later, it is not a concern. As a result, digital cuts back on unnecessary inventory, reduces the risk of label obsolescence, does not tie up cash reserves and affords a winery the ability to make immediate changes based on demand.

**Stephanie Roberts**, graphic designer for **Stone Brook Winery** (4,000 cases) in Camp Springs, Kentucky, faced a problem because the winery was growing and needed new label designs. “After a trip to a wine trade show and discovering digital, I was finally free to try different label shapes, papers, foils and graphics. Not only do I (now) have the ability to experiment but after I send off my PDF files, I receive a final proof in a day,” she said.

“With digital, we do not have to pay for setup costs, for additional plates, for print men, excess paper, and the total turnaround time from concept to final product is a matter of weeks,” Roberts said.

In digital printing, the customer can immediately have an actual proof of a label printed on the same machine that will do the final run. Offset requires setting up the press, incurring costs, materials and time. And as one wine label printer said, “With digital, there is no uncertainty. What you see is what you will get.”

**John Garlich**, owner of **Bookcliff Vineyards** in Boulder, Colorado, uses the digital process because he produces labels that will be a part of corporate programs. “At the end of the year, we may have 40 cases left of a particular vintage. I can piggyback only the labels I need onto another label run and not incur any excessive cost. For odd lots of wine, offset and flexo would be prohibitive.”

#### Large Wineries Using Offset or Flexo

Offset and flexo printing make sense for large wineries. Digital is not a “stand-alone technology.” While print speed has improved, it still is not suffi-

cient when it comes to very large production runs. Big wineries like **Kendall-Jackson** and **E&J Gallo Winery** will rely on offset or flexo printing for this reason.

At the same time, however, these wine industry giants will rely on digital for their test marketing and “reserve” bottling. In this case, digital is complementary. For all wineries, it is always about economy of scale.

#### Wineries Experimenting with Design

Digital blows the doors wide open for experimentation. Again, it is all about the compression of time. By nature, the technology allows a designer to move quickly from a concept to experimental label design, test market and finally production. In the words of a major label designer, “If you can think it, the printer can create it instantly.”

Because of the immediacy of the digital process, test marketing is available to wineries of any size. They may have a large portfolio of varieties or possibly want to promote multiple vineyard designations. Let the designers try different colors, images or verbiage and have them all print at the same time, in small lots, all in a row. The printer does not care.

With the limitless flexibility of the digital process, wineries can easily segment their marketing strategy by targeting focus groups, “grow” labels for company brands (tasting room olive oil or local mustards) or sports, seasonal and event promotion.

Digital also allows for unlimited artistic and heritage designs. The recently published book *Napa—Behind the Bottle* by author **Bill Tucker** celebrates some of the more famous characters behind the Valley’s history. One leader was the late **Norman de Louze** of **ZD Wines**. According to ZD Wines president **Brett de Leuze**, “The family wanted to reproduce the original photograph from the book for the Founders Reserve Pinot, a limited 750-case production of our father’s favorite varietal. It also coincided with the winery’s 40th anniversary.”

I personally saw this label at the 2009 **Unified Wine & Grape Symposium** in Sacramento, and the resolution of the reproduction of the original photo is absolutely stunning.

**Chateau Chantell** of Traverse City, Michigan has been commissioned to produce a limited edition of wine and labels. “The community art center has an annual exhibit which chooses one



Pictured is the new WS 6000 digital printer from Hewlett Packard.

artist who will be featured on the label,” said Chateau Chantell operations manager **Liz Berger**. “Each year we produce a limited edition of 500 bottles, which are signed and then sold, with the proceeds going to help fund the center. Not only is it critical to get absolute perfect reproduction of the art piece but the labels must be affordable in a very limited production run. Digital is the answer.”

### ENHANCING THE CONSUMER EXPERIENCE

In the words of **Dan Briley**, industrial category manager for Hewlett-Packard

North America, “The wine industry is unique in that it is not a commodity product but a batch process which can be identified, and the essence of the label is to individualize the product and help make it desirable.”

“The winery has two moments of truth: one is when the customer first buys your product, and the second is when they buy it a second time,” Briley added.

For most winemakers, their product is their art, and anything a winery can do to individualize and promote the buyer’s experience is critical. Digital is the only form of printing with variable

information technology, whereby the labels can reflect the winery’s “specialty” to the customer, one bottle at a time.

Serialization of each bottle, variable micro-texting, exclusivity of region or vineyard and personalized bottling numbering all add to the consumer’s experience. Individual stories, food recipes with certain varietals and demographic target marketing are just a few other examples.

### CAPSULES

Digital is also capable of printing on anything that is web-based (in a roll), including wood veneer. It also prints on capsules, creating innovative, colorful, sharp images with intricate designs. In addition to making one-of-a-kind capsules, the digital process gives wineries the flexibility to produce and sample various designs. Capsule designs can also be coordinated with label designs for enhanced shelf presence.

Having been to the **Pack Expo International** trade show in Chicago last November, I can assure you the 2,000-plus packaging exhibitors are very busy designing the next waves of print and packaging—slip sleeve labeling to alternative containment. And at the forefront of this is digital printing.

### GROWING TREND

The trend toward digital paper wine labels will continue to grow because it is so adaptable to modern marketing. With setup cost no longer an issue, the

graphic artists and marketing professionals enjoy the freedom to test whatever waters they like.

Speed is the key. Same-day design changes, maybe a wild idea, all the way to quick production proofing are now a given. Setup costs evaporate so limited runs of anything you create are available for experimentation.

All of this, of course, is predicated by an existing winery’s desire to test new markets or expand label portfolios or a new winery that’s just getting started. Again, an older winery with well-branded products may not feel the need, so offset and flexo reprints will suffice.

Large wineries with substantial case production will also enjoy cost savings with traditional print forms as digital is still comparably slow and suited for smaller runs. The technology will only get better and faster.

Most printers will continue to offer multiple forms of print technology to suit the specific needs of their customer base. As the president of a major printing house in Ohio said, “In the future, there will be companies who adapted to digital printing, and those who wish they had.” **wbm**

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### Eco-Friendly Paper

Wineries that are embracing eco-friendly practices will find digital printing to be “friendlier” than offset or flexo for several reasons. Product waste (paper and foil) is virtually eliminated. There is no need for chemicals (VOCs) to create printing plates and dies, and subsequent cleanup issues in the pressroom are non-existent.

At the same time, for wineries that wish to further pursue environmental issues, the paper industry is rapidly embracing the concept of the eco-friendly wine label. Wineries can specify papers with certification from groups such as the **Forest Stewardship Council (FSC)**, the **Rainforest Alliance** and the **Sustainable Forestry Initiative (SFI)**, all of whom will allow for logos and identification to be incorporated into the label design and marketing materials. **wbm**



High resolution reproduction of original photo of Norman de Louze.  
Courtesy ZD Wines, Paragon Printers.