

New Realities in the Wide-Format Graphics Market

WIDE-FORMAT



While 2009 was an economically difficult year, I want to examine some of the “good” things that happened. By “good,” I mean helpful, useful, necessary developments that will enable wide-format print service providers to compete more effectively in the future.

In today’s industry, we see improvements on five key levels: Quality, speed, integration, cost and sustainability (see Figure 1, page 26).

Quality

In 2009, some companies offered substantial enhancements to existing platforms. One of those improvements was from Inca Digital printers (distributed by Fujifilm Sericol). At the 2009 SGIA Expo, the company showed their ability to create different finishes using a new curing mode. This new mode allows users to produce matte, glossy and semi-gloss finishes on wide-format graphics without the application of a laminate.

Also in 2009, Gerber introduced a high-resolution version of its Ion printers. Although Gerber Ion printers cost less than Inca printers, the new Gerber IonZ units have much higher image quality delivered by smaller ink droplets (14 picoliters) than previous units. Another interesting new

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development is the metallic ink printing capability seen in the new Roland XC 540 MT printer, similar to changes in white ink printing. Like white ink printing, metallic-effect ink itself has been used in non-digital processes like screen printing for many years. But, its use in inkjet systems and the likely scalability of it for use in higher-speed systems could be another factor in the continued graphics print volume shift away from screen printing to wide-format digital printing systems.

Speed

In recent survey research with wide-format printing establishments, InfoTrends found that print service providers investing in a new printer are often looking for additional speed. Print speed and printer productivity are critical in helping them to meet their customers’ service requirements. This is true for small sign shops, dedicated wide-format digital graphics producers and large commercial printers. Wide-format

printing systems manufacturers recognize the increasing demand for faster cycle times throughout the graphics supply chain.

For example, at the 2009 SGIA Expo, Inca Digital announced an increase in the speed of the Inca Digital Onset to 7,500 square feet per hour. Similarly, Durst (Rho 1000 at 6,458 square feet/hour), EFI (GS5000r at 3,100 square feet/hour) and HP (Scitex FB7500 at 5,380 square feet/hour) all developed high-production models that mark dramatic speed improvements over previous top-end models. While these big leaps in speed are most often found in UV-curable printers, ink and curing methods are only part of the improvements. Important productivity enhancements have come from the automation of feeding and transport of media through the units. Océ has figured out how to make its market-leading Arizona wide-format,



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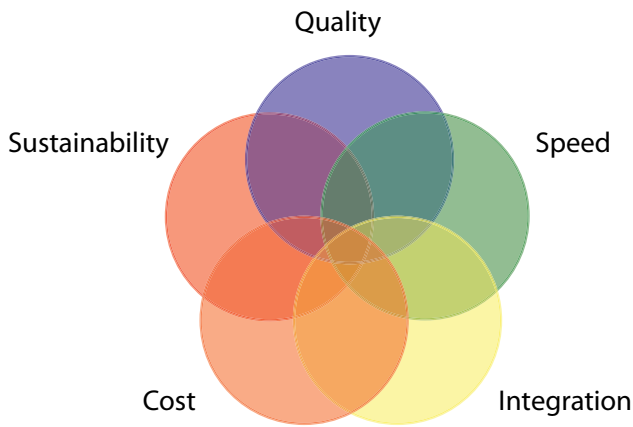


Figure 1: Five Levels of Wide-Format Product Enhancement

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UV-curable printers more productive through clever design. The addition of a large print bed allows users to have their printer printing on one board while another board is either being loaded or removed. When the printed board is done, the printer can move on to the other board.

These speed improvements are certainly not limited to UV-curable inkjet. Roland significantly improved the speed

of its wide-format printers and printer-cutters by as much as 50 percent through the wide deployment of its Roland Intelligent Pass Control Technology. Additionally, the JV33-260 solvent printer introduced in 2009 by Mimaki is 30 percent faster than its predecessor. Mutoh introduced a new dual-head 64-inch wide eco-solvent printer that prints up to 480 square feet per hour, while its existing single head unit has a rated speed of 183 square feet/hour. These specifications point to what most people already know about wide-format inkjet printers — they get faster every year. What is notable about 2009 is that we are talking about 30, 40 and 50 percent improvements in print speeds. (Note: Rated speeds are cited by the manufacturers.)

Integration

Within some of these key product characteristics, there are subsets. The term integration in this article includes the ease of acquisition, ease-of-use (how quickly a printer can get up and running) or the availability of tools that ease the integration of wide-format printing systems into bigger enterprise systems and manufacturing-type workflows.

Ease of acquisition starts with the price of the printer, and every year, the average selling price on most wide-format printing systems comes down. As new units were introduced in 2009, many suppliers dropped prices on their previous best solutions, sometimes dramatically, to reflect their lower position in the company's product line. While the availability of credit to acquire production equipment was constrained in 2009, the equipment itself became more affordable and some vendors had very aggressive marketing plans that included trade-ins

and financing programs to accelerate deals. At a presentation I attended this year by HP's financing arm, the company explained their ability to finance every element of a wide-format operation — not just the printer but the non-HP brand finishing equipment, required software and required improvements to facilities where the equipment would be situated.

Other integration issues were addressed creatively. Wide-format equipment manufacturers are offering a range of tools like video clips and training and installation guides to facilitate the installation and start-up of new equipment. We also are seeing an increasing focus on software tools built into some of the leading wide-format RIP software programs that ease integration into printing workflows and enterprise systems. It may be surprising to hear that 65 percent of wide-format printing establishments do not have a completely accurate picture of how profitable some parts (including prepress, production and finishing) of their printing operations are (see Figure 2).

One of the most interesting new products at the 2009 SGIA Expo was the Print Run Controller software from Inca Digital, sold by Fujifilm Sericol. This product allows print service providers to nest print jobs to complete sets most effectively. For example, if you are making a set of prints of different sizes for retail stores, using Print Run Controller, you can print "store kits" thus reducing changeover times, improving fulfillment time and reducing collation errors. I also want to draw your attention to the growing presence of new tools such as variable data modules. Most of the wide-format RIP industry leaders such as Wasatch, EFI, Caldera, Roland (Versaworks) and Onyx Graphics offer these tools. In most cases they are optional, but they are tools that ease integration in some digital printing operations.

Cost

Running cost is an important aspect of almost any wide-format printing operation. In a recent study, we found that while print service providers are looking specifically for lower-cost ink and media supplies as a tactic to reduce operating costs in response to the economic downturn, they are also looking for ways to reduce disposal and labor costs.

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At the 2009 SGIA Expo, Seiko I Infotech introduced a new ink set for its ColorPainter ecosolvent printers that promises to save users 15 percent off the cost of the company's existing ink line. For these new inks, however, there is a trade-off in terms of image permanence. The Mimaki JV33-260 (mentioned previously) can be configured with a bulk ink delivery system, which the company specifically sells as an opportunity for users to save on ink costs. I believe these examples may be the first of many efforts by manufacturers to provide lower cost ink options to wide-format graphics suppliers. Ink has been a revenue source that manufacturers were loathe to touch, while print service providers have been moving to lower-cost, third-party ink solutions. Manufacturers will do what they have to do in order to maintain these important relationships.

One of the features that we've been seeing in more and more of the workflow solutions is intelligent tiling and nesting of images to minimize the waste of printed substrates. This feature has been in many RIP solutions for years, but as we see more flatbed output onto sometimes expensive rigid media, waste cost has increased. The current economic climate has made smarter use of media and substrates even more important as a way to maximize the use of materials and minimize disposal costs.

Sustainability

In difficult economic times, some of the best-intentioned, wide-format printing establishments have been forced to shelve or limit sustainability initiatives in order to focus on short-term survival. Wide-format equipment and consumables manufacturers nevertheless have continued to develop and introduce products that meet the market's growing requirements for sustainable practices and products. The area where we have seen the most development of sustainable solutions during 2009 is on the media and substrate side. Companies like Xanita, ValuVinyls, Laminators Inc., LG and others have introduced products with easily-recyclable or sustainable characteristics.

As it relates to sustainability, consideration must be given to what a wide-format media product is made of, how it is made and how it is disposed. To that I would add how it is packaged, how it is shipped and how it is used. We have seen sustainability programs take significant steps forward during 2009 in all of these areas. One of the most advanced programs comes from HP, which launched a closed-loop print media reclaiming and

repurposing program to partner with the launch of its wide-format latex-based printers and some of its compatible print media.

Summing Up

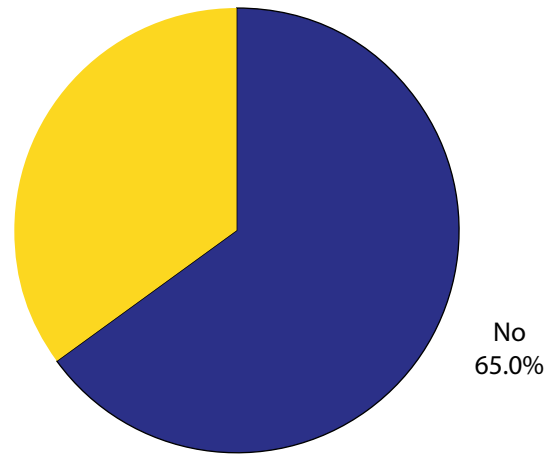
What does this mean for the wide-format digital printing market over the next few years? I believe that the development of the new products and technologies discussed in this article will provide the tools required to meet the demands of the new realities in the wide-format graphics market. Our data points to the greater demand for cost-effective versioned graphics, just-in-time manufacturing, shorter turnaround times and the greater integration of wide-format graphics with other (narrow format) marketing materials and cross-media campaigns. I believe the companies that stay tuned to the latest available technologies will be best positioned to meet the increasingly demanding market requirements.

I like to run long distance. My longest race was a marathon (26.2 miles), but I still run five mile and 10K road races 15-20 times a year. When people ask me why I run these long distances, I say I do it because it feels good to stop. To me, it also feels good to stop looking at 2009 as the "horrible year" and start thinking about what we need to do to make a stronger 2010. There is still more than \$11 billion in wide-format digital printing business out there, and hopefully, many of the print service providers used the leanness of 2009 to improve their operational and sales processes to capture their share of that market.

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Yes
35.0%



No
65.0%

N = 183 respondents who offer wide format services

Figure 2: Do you think you have 100 percent understanding of the total profitability of the wide-format aspect of your printing operation (including prepress, production, and finishing)?

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