Large and Grand Format: We Are What We Produce
By Mike Ruff

As we try to absorb what is happening now and what the future holds for wide- and grand-format inkjet technology, we first need to understand that our primary customers are the signage and display market, which is one of the most overlooked printing markets in the world. One of the reasons it is overlooked is dollar volume. Ten years ago, trade associations estimated that this market was only worth about $7 billion. Thanks to wide- and grand-format digital, we now estimate the value of the signage and display market to be about $35 billion. While other graphics markets shrink and consolidate, the signage and display market has embraced change and has done quite well.

UNDERSTANDING THE SIGNAGE AND GRAPHICS INDUSTRY
A common definition of wide-format inkjet printing is a printing width between 17 inches and 100 inches. Printers over the 100-inch width mark are called grand format. If the printer is printing on a roll-to-roll printer, the length can be many times the width. Wide- and grand-format inkjets can also print on rigid substrates from thin plastics to over 2-inch-thick display boards. Printers enhance their profits by printing on everything from metal to glass and from fabrics to toilet seats. Because of digital printing’s short run, large size and durable ink characteristics, wide- and grand-format inkjet is a perfect complement to the grand-format screen printer that was already serving this market. The screen printer has all the finishing, sewing, cutting, packaging and floor space required to complete large point-of-presence (PoP) programs quickly and accurately. SGIA’s Full Report on Technology Adoption confirms that because of short runs, large sizes and durable ink characteristics, digital wide and grand format have found a receptive market in signage and graphic displays. (See Figure #1, Product Size Chart)

This market has undergone amazing change since 1990. When the first production multi-color inline screen presses started hitting the market, large-format printing grabbed the attention of major retail print buyers. Large-size prints with durable inks and rigid substrates could be imaged at an acceptable production speed and could achieve satisfactory color. This made screen printing a viable choice in retail store PoP and permanent display signage. It was a great ride through the '90s for a few of the early adopters as fortunes were made and the industry benefited from the sudden growth opportunity. Then some very disruptive technology entered the market in the form of wide-format and grand format digital printing.

DISRUPTIVE TECHNOLOGY
“Disrupting the Future” by Joseph Webb, Ph.D., and Richard Romano helps us understand that change is constant and, more importantly, that change is driven by the markets we serve and not...
by the creation of technology alone. The principles of the book perfectly describe the recent history of the grand-format screen printing and grand-format inkjet market. Disruptive technology causes major changes in an industry because it adds better options for the buyers of products. Disrupting technology is natural, normal and, more than anything, inevitable.

The bad news is that printers have always been in a position to be negatively affected by disruptive technologies. Printers are very process-oriented. We refer to ourselves as screen printers, offset printers or flexography printers, and now even digital printers. When something “disrupts” the print process we have committed to or starts to compete with our print process, we try to sell the public on why our process is still the best choice. History has shown that is a futile effort. How a product is produced does not ensure that it is the best choice in the marketplace. Even though our print process results in better quality, the market dictates what it will use based on many factors other than head-to-head comparisons.

The International Print Standards Work Group TC/130 WG3, of which I am a member, is currently fighting this battle in the standards committees. Print standards have always been separated by how ink is put on a substrate. Modern prepress software, new presses, better color management, digital data and now digital printing have made all of these standards obsolete and there is no longer a need for “process-specific” print standards. I have no doubt that the world print standards committee will figure this out soon. When this moves forward, it will greatly influence printers to become producers of products rather than identify themselves with the equipment or process they use to produce the product. But for now, it is obvious that printers are process-oriented.

The recent changes in the grand-format signage and display industry constitute classic disruptive technology. Many of the producers in the grand-format signage and display market mistakenly thought of themselves as “screen printers,” as evidenced by the names they used for their companies, such as “Screen Print What- ever Inc.” and “Jerry and Mike’s Screen Printing LLC.” This identification with a process is a symptom of not understanding the principle that screen printing was just a way to produce what we sold rather than what we were. Many in our industry wisely changed their names and digital quickly became an alternative for those that understood this. Screen is still the best choice—sometimes. But sometimes digital inkjet is the best choice. We still produce the same product, but we now have a choice about how we produce it. We are not a process—“screen printers” or “digital printers”—we are manufacturers of grand-format graphic signage and displays and we are competing with any product or service that produces what we produce or makes what we produce obsolete through lower cost, more convenient or more desirable in any way. If we see new disruptive technology coming, we must produce or sell the new technology or we’ll go out of business.

Wide- and grand-format UV digital has changed the mindset in our industry so that we are accepting the fact that we are producers and not printers. Mike Robertson, president of SGIA, led our industry into the future at the end of 2003 by changing the name of our trade association from the “Screen Graphics and Imaging Association” to the “Specialty Graphics and Imaging Association.” Robertson took a lot of heat from the members, and the torch and pitchfork occupy screen print crowd stormed the headquarters in Fairfax, Va. (symbolically, of course). But because Robertson and
his team on the board of directors of SGIA held their ground, our industry is now miles ahead of other trade associations that still use print technologies in their name.

Grand-format digital UV has also opened more doors to opportunity than any technology in the history of signage and grand format. Since we can now make money printing one or two of something, the customer that needs only one or two is coming to our market. Whereas before we only printed process color images for those lucky few that could afford the expensive prepress and had run sizes that cover the per-piece cost, we now print full-color process images on almost everything.

WHAT ABOUT THE FUTURE?

Two things are driving the expansion of our industry: digital speeds are increasing and color accuracy is better. Speed needs no explanation; producing products faster makes more money. But many business people have missed the fact that color accuracy is even more important than press speed. Early adopters of wide- and grand-format inkjet technology treated color accuracy like a craft and would “visually” attempt to simulate an intended color target. This worked fairly well as we adopted the newfound way to create our products. But as our workload increased and the demand for better color accuracy became more acute, visual color had to be replaced with much more precise and repeatable numeric color control, and our accuracy became better than ever thanks to G7 and Image Optimization Software. We now have new customers that our old print methodologies didn’t really fit and our market is growing in volume and respect from the national print buyers.

Proof that our market is growing can be found in the SGIA report titled “Industry Technology Adoption Full Report, 2010.” According to SGIA’s “2010 Industry Technology Adoption Full Report,” the screen print and digital industry has grown to about a $35 billion industry. Where did the additional numbers come from? The answer is that the market has not only expanded due to digital but it is also now an umbrella for many different technologies. Screen printing is more alive than once thought, but our acceptance of new technologies and our understanding that we are manufacturers and not screen printers is evident. (See Figure 2, product by process)

The data referred to here is from a survey of the membership of SGIA. The market survey was produced in 2010. More than 600 printers responded to the survey. An interesting demographic was that only 5% of the responders were screen print only, 50% were multiple print technologies and 45% were digital only. This is an indication of how the SGIA membership has changed and expanded. The response seems to be a
good sampling of trends or at least the perception of trends in our industry. There were 11 product categories, along with an “other” category, which refers to other print technologies that printers had in-house, such as flexography and offset. Good things happen in an industry that kicks process identification out the door and becomes a producer, not a printer.

WHERE ARE WE TODAY?
Our short-run, large-size industry has rapidly adopted this new technology. In its executive summary of the 2010 report, SGIA said, “As it pertains to the mid-size and larger graphic producers, we are through the adoption phase of digital imaging. We’ve crested the top of the bell curve.” The numbers indicate that most of the digital imaging equipment sold to service our market replaces older digital equipment or adds capacity. (See Figure 3, New Digital Equipment Purchase Forecast) This shows how important it is to not fall in love with digital printing or any other printing technology. The technology will be around a long time and we will make a lot of money using it, but remember that technology is only a tool and not a definition of what we are. In the eyes of our customers, the technology we use is still just a choice, so we need to remain vigilant in understanding all competing technologies and figure out how to make money as choices evolve.

CONCLUSION
Will digital printers refer to themselves as “digital printers?” History says they will. But the visionaries of our industry won’t head down that path. Instead, we will call ourselves “signage and display producers.” I believe we will see five things happen in the future of grand format printing.

1. Wide- and grand-format inkjet technology will continue to grow very rapidly.
2. Printers will replace older, slower and less-productive equipment until the barrier of the cost of equipment and raw materials pass the ROI curve.
3. Competition for this market will continue to grow as small and midsize screen printers stop screen printing and move to digital printing only.
4. Larger-screen printing companies that keep multiple technologies will have a tremendous advantage over the digital-only printer.
5. You will see the consolidation and liquidation of those that do not pay attention.

I hope this short article has been beneficial to you, the reader. I highly recommend reading “Disrupting the Future.” For further research into the wide- and grand-format market, order a copy of SGIA’s “Industry Technology Adoption Full Report, 2010.” If we understand these concepts and pay attention to the competition in our market place, the future can be very exciting.