

Out With The Old, In With The New. Or Should We?

By Jason Wallace

I am the son and nephew of printers. You would be right if you were to assume that I plan to follow in their footsteps. After working in the family printing business for about half of my young life, I will be taking over the reins of the firm in a couple of years. It will be my responsibility to keep our twenty-one year old business around so that I can pass it on to my son or daughter.

Between the time that our business opened and the year that I take control, the printing business will have changed a great deal. In particular, the technology used to produce printing has changed drastically since my father started the business. He upgraded our equipment several times during those years. Now, I must decide whether I should bring the business up to present-day technology or leave it as it is. In order for me to make this decision, I have been doing some research—both in my classes at UH and by talking with vendors and other printers. Here's what I have found.

What is technology? According to the American Heritage Dictionary, technology is defined as: a) The application of science, especially to industrial or commercial objectives; or b) The scientific methods and materials used to achieve a commercial or industrial objective. In the printing business, technology is the applied science we use to make money. I am particularly concerned about the technology that can be applied to three areas of our business: prepress, press, and the managerial side of the company.

Prepress

We currently have a conventional prepress area that consists of an Argyle horizontal process camera, a NuArc Flip-Top plate burner, and facilities for two strippers. Our

process camera, stripping tables, and plate burner are essentially the same as those that have been in use for decades. People like those who operate our traditional prepress equipment—strippers, camera operators, and platemakers—are still around, but not in the same numbers that they were ten years ago. I am not saying that conventional prepress people and equipment are no longer necessary. However, their use is becoming very limited as compared to just a few years ago. What technology has come along to take the place of traditional prepress? In a word, digital! The functions previously performed on the process camera and stripping table are now accomplished using a computer. Page layout and imposition software are taking the place of strippers, while the desktop scanner and imagesetter are taking the place of the process camera. These new technologies produce work faster and at a higher level of accuracy than traditional prepress techniques. Therefore, it is my judgment that our business must begin to phase-out our traditional labor-intensive prepress functions and perform those tasks with new digital technologies. After all, why should we pay for labor that we do not need?

How is technology affecting platemaking? New computer-to plate-technology is beginning to catch on. As a result, the plate burner is beginning to see its demise. Platesetters now on the market can expose a wide variety of plates, ranging from 12 X 18 paper plates for duplicators to metal plates for full-sized presses. There are even direct-to-screen devices for use in the screen printing industry. In some applications, platesetters are already obsolete. For example, there is no need for either a plate burner or a platesetter when using a Heidelberg DI or Quickmaster press. Instead, the plates are exposed on-press as the press is being made ready. Plates themselves will soon be a thing of the past. Digital presses, such as the Xerox Docutech and Docucolor, and the Indigo E-Print, do not use plates at all.

It is important to note that the revolution in platesetting is already rendering some new digital prepress equipment obsolete. For instance, consider the imagesetter. While the

purchase of an imagesetter would be a technological *advance* for our company, a new imagesetter might be considered a *retreat* in technology for some high-tech printers. After all, if you can make plates directly from the computer, why bother imaging film that must subsequently be exposed onto a plate?

Considering what I have learned, I will make some minimal changes to our prepress area in the coming years. We will buy a Macintosh and an imagesetter. However, we will not do graphic design, typesetting, or page layout—at least for a while—because I do not want the responsibility of creating digital files that may cause entire jobs to go bad. Instead, I will use the computer to strictly output negatives from files provided by our clients. If we use the new imposition software that is available on the market, the time devoted to stripping procedures will be decreased or eliminated. At least one of the strippers currently in our employ will be used in other areas of prepress. We will not eliminate the process camera because we still get most of our jobs camera-ready rather than in digital form. I know that eventually the need for the process camera will decrease as more of our customers opt to prepare their documents digitally. However, I cannot ignore the needs of those clients who still wish to prepare mechanicals the traditional way.

Press

The oldest press we have is an ABDick 360. Back when it was first purchased, it cost about \$6500.00. Now, you can buy them in the newspaper for about \$2,500.00. We have six ABDicks (two with T-Heads), a Ryobi 2-color press, and an Omni 2-color press. When we purchased our ABDicks in the late 70's, they were the hottest presses on the market. Now, they are passé. Today, Heidelberg's seem to be the presses of choice—big six color presses as long as 40 feet, or their newest four-color, direct image Quickmaster.

Our customers are requesting more two-color work than in the past. Therefore, image registration is becoming more of an issue that it used to be. I have noticed that the

Ryobi is capable of better registration than the ABDicks with the T-heads. For this reason, I want to buy another press similar to the Ryobi and get rid of at least one of the T-heads. We are also beginning to do more four-color process jobs than we did in the past. Therefore, I would like to investigate and maybe purchase a four-color press to handle those jobs.

The Managerial Side

We still use the “You’re looking for what P.O. number? Let me get your phone number, I will go look for it, and call you when I find it,” method of management. This method is very time consuming, can be highly inaccurate, and costs us a lot of money. Using this system, we have a hard time accounting for all the time and material spent on each job, especially if the job has had change orders applied. Instead, we could be using a bar-code system tied into a printing estimating and management program to estimate and track work from start to finish. If we had such a system, we would be able to tell our customers the exact status of their jobs during production. One of the first things I will accomplish when I assume control of our firm is to purchase, install, and use a first-class printing estimating and management program. In terms of securing our future success, this may be the most important improvement I make.

Another problem our firm faces is our reliance on UPS and other shipping services to receive and send artwork and other components of a printed job. Not only do these shipping services cost a lot of money, but they also slow down the production process while we wait for quotes, artboards, film, or proofs to be delivered. What can we do instead? Achinta Mitra, owner of Tiecas Inc., a prepress house here in Houston, thinks the future will be “electronic distribution” (personal conversation, November 11, 1997). By way of illustration, a printing company might have printing plants in San Antonio, Houston, and New York. A client from Houston could call and say his company in New

York needs 1,000 printed four-color brochures by the next day. The client could then send a finished file via the Internet to the printing company's factory in New York. The plant in New York would then be able to print and ship the job, at local delivery rates, by the next day.

Conclusion

As a printing company, what are we to do? Stay with the traditional system we have now, or change over to the newer technology? If we stay with traditional technology until we are no longer profitable, we will not be able to afford to upgrade. Then, we will fail for sure. If we are truly in the business of making money, we must purchase the technology that will make us money.

About the Author

Jason Wallace is a senior in the University of Houston College of Technology. Jason is specializing in graphic communications technology and plans to graduate in the Spring of 1999.