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# Power Outsourcing of Prepress

Just because you've brought imagesetting capabilities in house doesn't mean you should abandon your relationship with an outside prepress service bureau. Learn how partnering with an external prepress provider can back up your in-house film-output capabilities, reduce costs, and enhance the quality of your printed products.



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**In**-house imagesetting has become a necessity for today's large-format P-O-P screen printer. But with the move to in-house prepress, some printers have also recognized the power of expanding and supplementing their internal capabilities by enlisting the aid of outside prepress service bureaus.

Developing a working relationship with an outside prepress service provider can give an in-house film-output department extra energy and resources when they are needed the most. It puts additional equipment and personnel quickly at a screen shop's disposal and gives the company options that otherwise would not be available when workload or quality demands overflow its capabilities. Additionally, outsourcing can empower an in-house prepress department with technical support that is not available when a company wings it on its own.

Although more and more screen shops have moved to bring imagesetting functions in house, customer-focused service bureaus continue to play a valuable role in prepress for screen printing. Some prepress-specialty companies actually have helped their clients establish their own internal prepress departments and become more self-reliant. In most cases, the result is increased loyalty among screen shops to the service bureau as both a technical resource and back-up film provider. In the new relationship they've developed with screen printers,

many service bureaus have positioned themselves as sources for critical services at critical times. Understanding the capabilities and roles of these prepress providers can be valuable for your business.

## What is power outsourcing?

Maintaining quality and profitability are the main reasons for outsourcing prepress. If you give me a microphone and move me to Memphis, I still ain't Elvis. On the same note, if you give a screenprinting company prepress equipment, there are going to be some critical weaknesses and quality drop-offs when they attempt to tackle imagesetting alone in house. Quality is not an accident; it must be engineered into the process. Profits are not automatic; they are engineered into the process. However, in my journeys across this land, I've found only a handful of screen shops that truly understand what "power outsourcing" can do for their prepress capabilities.

Power outsourcing of prepress is best described as leveraging your assets. It is the understanding of what you can do well and what your normal labor force can produce, and then outsourcing overflow prepress services or products that exceed internal capabilities and maintaining a back-up service when equipment fails. It is having an extra capacity partner ready at the touch of a speed dial number. It is an overtime saver when your workload becomes overwhelming.

## Why don't all shops do it?

There are probably many reasons why more screen shops don't take advantage of power outsourcing of prepress, but the biggest and most common reason for not doing it is just not understanding the concept or the value. The boss has instructed the in-house prepress employees to "do it all in house because it costs less." He even is willing to pay overtime and put up with poor-quality work to avoid outsourcing. He thinks it costs less. Well, maybe and maybe not.

On paper and without taking into consideration workload variables, overtime, and times when full in-house prepress capacity is not utilized, it looks like in house may be less costly. If the prepress service is charging \$10 per square foot for film and the boss knows he can buy the raw film for \$1.60, his calculator tells him he will save \$8.40 per square foot—quite a bit more than his wife saved clipping coupons from the Sunday paper last week. But the reality is that companies that use the outsource options in conjunction with in-house production have figured out that they are truly leveraging their resources. To understand how they've come to this determination, let's consider a couple of hypothetical examples.

## Company A

Let's say Company A was buying \$200,000 per year in outsourced film. It decided to

bring prepress in house, bought a \$30,000 imagesetting device, and spent another \$30,000 in support equipment and services, such as digital proofing devices, computers, software, and training. The company then hired a full-time prepress expert at \$45,000 per year plus benefits that amount to about 33% of his annual salary. Company A soon found out the imaging device could not meet demand on one shift. Also, the imaging device did well on only about 75% of its jobs, while on the remaining 25% it caused a drop in quality. The sales staff and the client were now complaining. There was a threat looming of losing some of the higher-quality clients.

The shop had three options:

1. add one additional prepress employee
2. outsource the high line counts
3. outsource the overflow during peak times

The decision made by Company A was not to hire an additional person, but rather to implement options 2 and 3—outsource overflow work and jobs with higher quality requirements. The cost breakdown of this decision is depicted in *Figure 1*.

### Company B

This screen shop faced exactly the same challenges and decisions as Company A. It also was buying \$200,000 per year in outsourced film. It bought the same \$30,000 output device and spent another \$30,000 in support equipment. It also hired a full-time prepress expert at \$45,000 per year plus benefits. And it also had the same overflow problems and quality issues. As a result, Company B's options were the same:

1. add one additional prepress genius
2. outsource the high-line counts
3. outsource the over-flow during peak times

The decision Company B made was to follow option 1—hire an additional person for the in-house prepress department and start a second shift. The goal was to attempt to avoid outsourcing anything. The costs associated with this decision are shown in *Figure 2*.

### Analyzing the numbers

Company A elected to run with a light work force and outsource 25% of its prepress needs. Its total annual prepress costs amounted to \$149,336. Company B hired only one additional prepress employee to handle its prepress overflow. Its costs at the end of one year were \$152,300.

You can see there is no savings for Company B. In fact, it cost Company B \$2964 more than Company A, which chose to run lean and mean and use "power outsourcing" during the peak times and for output beyond their capabilities.

### The seven benefits of power outsourcing of prepress

Screen printers who opt to keep their prepress departments thin on in-house personnel, but linked to a reliable backup, enjoy seven key benefits:

**1. Overtime savings** Power outsourcing planned properly and used correctly can almost eliminate overtime. Overtime is very common in the graphic arts trade. In an area of a company where salaries are extremely high (like prepress), it makes a lot less sense to burn the candle at both ends. Overtime is not just salary; it raises the costs of everything from Workers' Comp premiums to FICA taxes. At the same time, it degrades the quality of employees' personal lives, which creates a human cost in morale and job attitude.

**2. Less financial risk** By using power outsourcing, a screen-printing

company can function and compete with much larger and higher priced equipment without the financial burden of paying for it when it is not running. A much lower cost device can be purchased and only the high-end prepress work could be outsourced. This would result in a much lower financial risk.

**3. Increased capacity without pain** Over-capacity is a profit killer. All of us have bet on the big steady customer that never showed up. Setting up a good power outsourcing option can hedge against those times when additional capacity is needed.

**4. Ability to produce a wider range of products both in size and quality without the investment of more expensive equipment** Screen-printing companies survive by being flexible and versatile. We may print 45-line/in. halftones on banners most of the month, and then have an opportunity to produce one 85-line/in. P-O-P project about once a week. The "power outsourcing" option would be to buy an inexpensive device for most of the work and outsource the once-a-week project.

**FIGURE 1 COST STUDY FOR COMPANY A**

Printer A Prepress Outsource Justification						
<b>Cost information</b>						
Monthly lease payment (24 months)	Based on a \$30,000 prepress equip. Purchase (\$1400/mo.)					\$16,800
Lease payment for \$30,000 in computers/RIP, Software and digital proofing device (\$1400/mo.)						\$16,800
Maintenance contract	\$400 per month or \$2400 per year					\$2,400
<b>Annual total system cost</b>						<b>\$36,000</b>
<b>In-house production</b>				Based on an average large format four-color-process job at an average size of 4 x 5 ft, printer A is producing 75% of his 260 jobs in house		
Number of sheets per project	4					
Avg. square feet per sheet	20					
Number of projects per year	188					
Consumable cost for in house prepress @ \$1.60 per sq ft	# of projects per year	Consumables per project	Wasted consumables 25%			Total annual consumables
	188	\$128	\$6,016			\$24,064
Floor-space costs for in house prepress	Cost per sq ft per month	# of sq ft	Number of months	Number of units	Monthly rent	Total annual floor space
	\$0.50	100	1	1	\$50	\$600
						\$0
<b>Total annual cost of floor space</b>						<b>\$600</b>
In-house labor costs	# employees	Annual labor cost per employee	0.33% annual benefit cost			Total annual cost of labor
	1	\$45,000	\$14,850			\$74,700
Outsource costs for outsourcing 75% of the projects at \$0.07 per sq in.	# employees	Annual labor cost per employee	0.33% annual benefit cost	62 jobs @ \$806	Total annual outsource cost	
	0	\$0	\$0	\$49,972	\$49,972	
<b>TOTAL ANNUAL COSTS</b>						<b>\$149,336</b>

**FIGURE 2 COST STUDY FOR COMPANY B**

Printer B Prepress Outsource Justification						
<b>Cost information</b>						
Monthly lease payment (24 months)	Based on a \$30,000 prepress equip. Purchase (\$1400/mo.)				\$16,800	
Lease payment for \$30,000 in computers/RIP, Software and digital proofing device (\$1400/mo.)					\$16,800	
Maintenance contract	\$400 per month or \$2400 per year				\$2,400	
Annual total system cost					\$38,000	
<b>In-house production</b>						
Number of sheets per project	4	Based on an average large format four-color-process job at an average size of 4 x 5 ft, printer B is producing 100% of his 250 jobs in house				
Avg. square feet per sheet	20					
Number of projects per year	250					
<b>Consumable cost</b>						
for in house prepress @ \$1.60 per sq ft	# of projects per year	Consumables per project	Wasted consumables	Total annual consumables		
	250	\$128	25%	\$32,000		
			\$8,000			
<b>Floor-space costs</b>						
for in house prepress	Cost per sq ft per month	# of sq ft	Number of months	Number of units	Monthly rent	Total annual floor space
	\$0.50	100	1	1	\$50	\$600
						\$0
						\$0
Total annual cost of floor space						\$600
<b>In-house labor costs</b>						
	# employees	Annual labor cost per employee	0.33% annual benefit cost	Total annual cost of labor		
	2	\$45,000	\$14,850	\$119,700		
<b>Outsource costs for outsourcing 75% of the projects at \$0.07 per sq in.</b>						
	# employees	Annual labor cost per employee	0.33% annual benefit cost	0 jobs @ \$806	Total annual outsource cost	
	0	\$0	\$0	\$0	\$0	
<b>TOTAL ANNUAL COSTS</b>					\$152,300	

Buy a piece of printing or finishing equipment with the savings. It will result in returns many times greater than over buying equipment for prepress.

**5. Better turnaround times** If your prepress department utilizes the power outsource concept properly, it can be released from everything except the most important projects with the shortest timelines. The results will be better turnaround times and fewer mistakes.

**6. Better quality from employees who are not overworked and burnt out** Tired and burnt out employees are not happy employees. You know they need help, but you also know there are a few days of the month that they are not busy. Power outsourcing helps to manage the stress of overworked and burnt out employees. Power outsourcing is about not working your in-house people so much that they refuse to come in for the eighteenth Saturday in a row. It is about not turning out an inferior product because of stressed out and burnt out employees.

**7. Technical support from industry experts** Power outsourcing of prepress comes with some very valuable

resources other than just help in production. Problems with software programs, equipment, and files are all part of the service you'll get when you maintain a relationship with your power outsource partner.

**Five things to consider in picking a prepress outsource partner**

When selecting an outside service bureau to handle your filmmaking needs, keep the following five factors in mind:

**1. Equipment availability** Your power outsource partner must have better equipment than you. If they don't, you lose most of the benefits I've discussed here. You need to find a provider that can support larger sizes and higher resolution proofing and film output than you can support in house.

**2. Capacity** The last thing you need to hear when you need help is "sorry, we're booked." While this may happen to even the best and highest capacity prepress companies, such occurrences are rare. Understand the capacity of your power outsourcing partner. A provider with multiple locations in multiple time zones also is a definite plus.

**3. Availability** What are the hours you can call? What happens on the weekend when you need help? Is there a contact during off hours? These are things to work out before the need arises. Remember, it wasn't raining when Noah built the Ark.

**4. Pricing** Working out pricing in advance is the best way to get a great deal. Plywood goes up in price during the threat of a hurricane. Negotiations with a power outsource partner can be worked out when the prepress company is hungry for business and you are not desperate.

**5. Ease of doing business** Placing an order with some companies is like pulling teeth from a chicken. These companies are not worth doing business with in the best of circumstances. You don't need this pain in your day. Choose a company that is proactive and can remember your name. Choose a company whose employees seem to care when you call, even if you only call once a month. Your power outsource partner must be a company you enjoy working with. It must be a company that does its best to help you output film with your own equipment in your facility as well as support you with outsourced film and file work from its own facility.

**Cash in with power outsourcing**

It costs less to run lean and mean and power outsource your prepress than it does to keep a staff that works overtime one week and has nothing to do the next. Having a ready and available power outsource supplier pays dividends, saves time, improves morale, and positions great companies for growth.

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