The Twenty-Five Percent

By James E. Harvey, Executive Director of CIP4

Sometimes it seems to me that the printing industry is suffering from a multiple personality disorder; a Doctor Jekyll and Mr. Hyde problem that surfaces anytime a new technology is introduced. I'm not just thinking of JDF — PDF, CTP, digital printing, digital proofing, soft proofing and so on — every new technology starts with a barrage of hype, and some new technologies stick and some don't; but even after a new technology is well accepted and a key technology for the industry, some printers dive in while others persist in pooh-poohing any change.

My good friend Bill Lamparter of PrintCom Consulting is a proponent of CTP and JDF, but he's also a realist. He's pointed out to me (frequently) that only about 40% of printers are using CTP, (even today in 2007), and half of that group is using ink presetting, and half of that group again are using ink presetting on all of their presses. For most of the printers that I run into, usually at industry conferences and events, it seems CTP and ink presetting is a given. I can only scratch my head and wonder where are all these Luddite printers hidden?

Today the "to be or not to be" question about JDF seems settled. We all understand that it isn't the plug-n-play magical cure-all that early hype proclaimed it to be, but we also have seen that printers who have implemented JDF have experienced impressive increases in productivity, decreased costs and great returns on their investment. JDF isn't going to happen to you, you need to be smart and go about implementing process automation with well thought out intent and objectives. Implementing process automation is work, but it is work that pays off.

"If you have CTP and you're not doing ink key presets", said Lamparter, "you are missing the opportunity to save money and improve quality, and you are not ready to move down the path towards automation."

In July of 2005, the white paper "The Global Impact of JDF on The Graphic Communications Industry," researchers at the Electronic Document Systems Foundation, UCLA and Wuhan University predicted that JDF would be implemented by about 30% of US printers (with Europe having a much higher adoption rate.) CIP4's own research seems to indicate current adoption of about 26%. While those printers that have implemented JDF-enabled process automation in some aspect of their operations plan on expanding their use of process automation, entirely new adoption by printers that have done nothing as of yet seems to be flattening out. Here we go again, what's the problem?

At the 2003 Vue/Point Conference I was asked who would implement JDF early on. I expressed my opinion that it probably would start with the largest of printers and work its way down as case-studies and lessons-learned started to circulate. Immediately a couple of printers in the audience jumped up and stated that they were small printers and they were already tackling JDF … and that was well before the first big wave of JDF-enabled products hit the market at drupa 2004. The CIPPI awards (see www.cip4.org/cippi/) bear this out. Not one of the twelve award winning case-studies is from a billion dollar company; in fact the largest winning printer, Williamson Printing, has revenue of around $80 million per year and most of winning printers would be classified in mid-sized or even small printers.
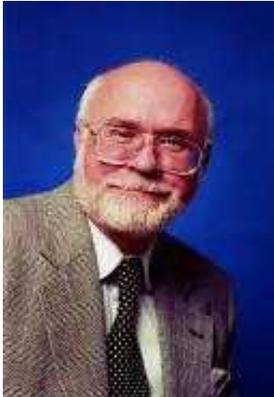
It's not size that matters, so what is it?

Why do some printers adopt technology aggressively while others need to be dragged kicking and screaming into the future? Until recently, I would just shrug my shoulders and answer, 'some printers get it and some don't.' And then Ron Davis opened my eyes.

Ron Davis is PIA/GATF's Chief Economist. I've known Ron since 1993 when I was a VP at GCA (now IDEAlliance), which was then part of PIA. He's a great guy that does scholarly and incisive work for the industry. One of his responsibilities is the annual PIA/GATF Ratio Studies which provide a detailed look at what printers spend their money on and what they are earning divided into sizes, profitability, and regions; a tool that managers can use to judge their performance against their peers. What Ron has known for many years is that 25% of all printers in North America make 100% of the profit. Yes, I mean ALL the profit. The other 75% average a profit of -.01% … not very good by anyone's measure.

In 2006 Ron conducted a study to find out what the different is between the 25% of "Profit Leaders" and the other 75% of "Profit Challengers", or what I prefer to call the "Profit Challenged." He found a statistically significant correlation between profitability and two factors. First of all, Profit Leaders have a strategy and the profit challenged do not. The strategy could be anything — pursuing a market niche, focusing on a specialized type of printing, mergers and acquisitions, networked sales partnerships — whatever. Although they tend towards what Ron calls "diversified specialization" which means provide more ancillary services such as web-based marketing portals, mailing services, DAM, and so on, it didn't seem to matter as much what the strategy was, as it did that they had one and could articulate it. The Profit Challenged could articulate any strategy … they are general commercial printers and they have sales staff and that's about it.

The full report of Ron Davis' report is *Keys to Profitability: Strategic and Operational Characteristics of Printing Industry Profit Leaders* and can be ordered from PIA/GATF Press at 866-855 4283 or 301-393-8624 or on PIA/GATF's website at www.gain.net

Profit Leaders Invest in Technology

The second significant finding is that the Profit Leaders invest in technology and substitute capital for labor (e.g., software, hardware and systems). The Ratio Study bears this out in detail:

- Profit leaders have a lower cost of goods sold (67% vs. 70%)
- Profit leaders have a lower payroll as a percentage of sales (25.1% vs. 26.8% for digital printing)
- Profit leaders save 2%- 3% back room costs (administration)

This is true regardless of the size of the printing company. It's even true in new and growing areas of the business as well. Digital printing, as a segment of the printing industry, is growing at 5.28% as compared to 2.8% for conventional printing. You might expect that digital printers were more profitable than conventional printing, but Ron finds the same 25%/75% split between Profit Leaders and the Profit Challenged in digital printing as you would find in conventional printing.

Comparison of Average Digital Printers
(with annual revenues of $2 million)

	Profit Leader	Profit "Challenged"
Employees	14-15	20-21
Factory Employees	11-12	15-16
Net Assets	$1.09 Million	$.77 Million
Machinery	$1.66 Million	$1.09 Million
Profit	*$192,000*	-$22,000

At the PIA/GATF Variable Digital and Personalization Conference, when Ron first made his findings public, he provided a comparison of the average digital printers; Profit Leaders versus the Profit Challenged. The Profit Leader had fewer people on the shop floor and in the front offices, but had spent 50% more on equipment. And the bottom-line difference was staggering; the average profit for Profit Leaders was $192,000 (USD) while the Profit Challenged lost and average of $22,000 (USD). Ouch! Ron pointed out that the Profit Leaders' investment in technology was not just in capital, they also spent more than the Profit Challenged on training and education; and not just for upper management, but for all employees. This explains the difference between my perception of the industry and Bill Lamparter's perception. I run into printers at industry conference and meetings and if I'm visiting a plant, it's usually because the printer is hosting an industry meeting or wants to specifically talk about new technology; so odds are, according to what Ron has discovered, almost all the printers I know are probably among the Profit Leaders. In addition to conducting original industry research, Bill is also often called into printing companies that are not making profit to take a look at what they are doing and to suggest improvements to management. By definition, Bill is exposed to many more of the Profit Challenged than I.

Work Smart!

The root of this division within out industry is not new, is not unique to our industry, and isn't going away. We all crave stability in our lives; it is synonymous with safety and security. Change itself costs money, grief and pain, and it is not surprising that a large number of printers seek to minimize change and try to get the longest life possible out of the investments that they have made. On the other hand, it is true that in all industries the long term trend is to substitute material and labor with intelligence and that means constant innovation and change.

This principle was established by Thomas Stewart's in his 1997 book, "Intellectual Capital: The New Wealth of Organizations." Stewart shows that all industries are working smarter and explains this phenomena and why it is likely to continue for a long time. A more modern derivative is the currently popular, "The World is Flat: A Brief History of the Twenty-First Century" by Thomas Friedman. The conclusion is the same: access to information, material, machinery and labor is never a long-term advantage in business. In the long-term, market forces will always drive profit down towards the "economic zero" (e.g., the cost of inflation and opportunity lost … usually pegged at around 4%, below which companies will leave the market to search of profit elsewhere … does that sound familiar?). And as the speed and effectiveness of communications and transportation quickens the fast you will lose any advantage. The only way to breakaway from the pack and create profitability is to innovate, and innovate continually.

On a personal level, stability can come with a very high price. According to the World Bank the average per capita income for all countries in 2005 was $8080 (USD). That does not account for the number of people in each country, considering that countries such as India, China, Indonesia and Pakistan with the largest populations all fall well below that number. The average income per capita for the world is just $2,640 (USD). If technology stabilizes in an industry, in the long-term the work will gravitate to where the cost of labor is cheapest. Are you willing to work for $2,640 (USD) per year? I didn't think so.

If you look again at Ron's comparison of profitable and unprofitable digital printers, you'll see that the profitable printer has between 5 and 7 fewer people on staff. That is equivalent to a payroll savings of between $218,700 (USD) and $306,180 (USD), using the World Bank's average income for the US in 2005. That doesn't all translate to the bottom-line profit in Ron's example. In fact, profitable printers are also paying higher salaries than the unprofitable printers. If you have fewer employee's using better systems, software and hardware to produce the same amount of work, then they need to be better trained and educated to handle not just greater responsibility, but to also

understand the smarter machinery around them — if you want better than average folks, you need to pay better than average wages.

So printing companies need to work smarter and so do their employees. We are all going to lose our jobs at some point — after all, life is terminal — but by continually innovating and leaning to work smarter, we can take control and decide for ourselves when its time to go fishing.

A Shout Out to the Twenty-Five Percent

As the Executive Director of CIP4 it is my job is to promote the adoption of JDF through education and training. CIP4 has an Education and Marketing Committee with some hardworking and dedicated folks that have been banging the heads against the wall trying to figure out how to reach out to that Profit Challenged 75%. I might just be a pointless task. In the mid-to-late 1990's I was responsible for a group call the C-t-P Users Group, which was a group of early CTP users that got together, cataloged all their technical and business with CTP, and proceeded to tackle them one at a time.

Dennis Redman, former co-chair of the C-t-P Users Group and currently the President of C-t-PLUS, Inc. and PLUS Digital Print, LLC in Milwaukee, WI, hit it on the head when he said that some printers will move to CTP based upon the ROI and the rest will move when it becomes a matter of RIB … Remain in Business. The roughly 25% of printers that have started down the JDF-enabled process automation path will not only be more profitable, but eventually their greater efficiency and improved cycle times will be demanded by market and the other 75% will have to decide to either make the move for themselves or leave the printing business. This is what has been happening with digital proofing, CTP and PDF … the adoption rates are now well past the 25% because it's becoming increasingly difficult to compete (if not impossible) without those capabilities. The same will be true of digital printing, JDF and soft proofing soon enough.

So the best thing we can do for the industry is to focus on helping the 25% identify, tackle and overcome any issues they have with implementing JDF and integrated process automation; creating the path and eventually the motivating force for the other 75% who will wait until there is no profit to be gain from implementing JDF, only revenue to be preserved.

Ray Hartman, formerly with RR Donnelley and Sons, and John Charnock of St. Ives have the right idea. They want to form a JDF Users Group and CIP4, as well as the NGP Community program, is ready to foster and support that activity. Ray and John are scheduling JDF User Group Meeting later this Spring. If you are printer that has already invested in JDF-enabled integrated process automation and you are interested in sharing lessons learned and issues to be resolved with your peers, drop me an email message at Executive_Director@cip4.org and I'll make sure your invited. In the meanwhile …

Work Smart!