

Can Kodak Reinvent Itself After Bankruptcy?

By Matthew Daneman It looks like a magic trick. A sheet of ordinary office paper rotates rapidly on a spinning drum. In literally the blink of an eye, the sheet is covered in black text, using drops of ink measured in picoliters - a picoliter being a millionth of a millionth of a liter. Eastman Kodak Co. scientists are tinkering with the technique, called Stream Inkjet Technology, to improve performance. Nearby, scientists are working on further perfecting SquareSpot laser-writing technology and potentially toward breakthroughs in spatial atomic layer deposition, bonding an atomic-level layer of film onto the contours of a surface. Done right, such work could find its way into even higher-speed printing presses and products such as foldable smartphones, a new generation of solar cells and wearable gadgets that monitor vital signs. More immediately, the hope is that this kind of technology can save a 121-year-old company emerging from 20 months of bankruptcy this week. The question of whether Kodak can succeed will take years to answer. But, sink or swim, the company is now officially entering its next era with a much smaller workforce, dramatically cut costs and a narrower focus on a specific set of markets and offerings. The new old technology

Stripped to its basics, the company has always been one of the world's foremost experts at coating. It became a household name by layering a plastic base with light-sensitive chemicals and selling it in little yellow boxes by the billions. Essentially, Kodak's plan for survival is to continue putting stuff atop other stuff. Kodak has bet its immediate survival in part on commercial printing. But for tomorrow, it has that atomic layer research and other similar technology, bonding microscopically thin materials to surfaces. It's a fitting technology for Kodak. For the company that brought photography to the masses, smartphones and computer tablets were too rich a realm to pass up. The company has signed agreements with Kingsbury Corp. and Uni-Pixel Inc. to churn out miles worth of thin sheets of touch sensors at Eastman Business Park in Rochester to be used in screens of consumer electronic devices. The touch-sensor module market is expected to reach \$32 billion by 2018, according to Kodak. Likewise, Kodak wants to turn semiconductor production on its head. Today, making these building blocks of virtually all digital products is an onerous, laborious process. Big, industrial clean rooms are needed, with work done in sterile vacuum chambers. The staff is often covered head to toe in special protective clothing to eliminate the chance of even the slightest mote of contamination or dirt. A breakthrough in spatial atomic layer deposition could fundamentally change how semiconductors are produced, essentially "printing" them onto circuit boards and eliminating the need for those vacuum chambers. 'On the top' in printing

When Mercury Print Productions Inc. of Rochester installed its first Kodak Prosper press in April 2011, "it was a train wreck," said company President Christian Schamberger. "They were on the bottom on image quality." But then came a series of upgrades and new inks. "Now," he said, "they're on the top." Kodak today often sends prospective customers to Mercury to see the Prosper technology in action; Mercury has two Prosper presses for its textbook and educational material printing work. Mercury owner John Place is hoping that Kodak will further formalize its relationship with Mercury, making it a test site for new Kodak printing technology. "They need someone like that," Place said. "That's one of the problems Kodak's always had. They've got to give (prospective customers) a wow experience. They

need a partner to show a wow experience. They're very bad at that. They're very good at technology, but bringing it to the market â?!"Added Schamberger, "We always joke, they've been a company of engineers. They just don't know how to market it."However, Place said, Kodak's technology is good enough to ensure its survival in the commercial printing industry. "They're really the top in a lot of areas," Place said. "They're positioned very well for the future."Even if the company itself stumbles and falls, he added, "I think their technology is that good; somebody will buy it out."And as functional printing - layering materials, not ink - becomes a bigger part of Kodak, Place said he sees it becoming a bigger part of Mercury's business. "We're going to hook right onto Kodak and be their guy."While it has banked for some years on its high-speed inkjet printing presses to be one of its success stories, sales have not been inspiring. Kodak last year had only about 5 percent of the market, according to industry watcher Infotrends.And in such realms as black-and-white digital presses and toner color presses, Kodak also lags well behind such competitors as Xerox Corp., Hewlett-Packard Co., Ricoh Co. Ltd. and Canon Inc. in market share, according to Infotrends.The printing industry itself is in the midst of a steep decline. Commercial printing in the United States in 2012 was a \$78 billion industry - down more than 20 percent from a 2001 peak of \$101 billion, according to the National Association for Printing Leadership. Consider that Xerox has seen its traditional printing technology business eclipsed by its foray into business services, which now accounts for more than half of the company's sales.Even if the print market is declining, Kodak Chief Technology Officer Terry Taber said, the digital printing portion is growing. "We're well-positioned for that transformation," he added.In printing, particularly the high-speed inkjet world, "I think it's their market to lose," said Frank Romano, professor emeritus at Rochester Institute of Technology's School of Print Media. Kodak has sold many digital inkjet printheads that attach onto traditional, non-digital printing presses. "They're ahead of most of their competition because of their experience in inkjet."Big plans

If all of Kodak's plans pan out, it will stop a slide in revenues that dates back to 2005 - the last year Kodak grew. Kodak projections have it bottoming out this year with sales of \$2.5 billion, and then slowly growing to \$3.2 billion in 2017.And by one measure of profitability, Kodak expects to be in the black this year after two consecutive years of losses, and then grow from there. That growth, the company told U.S. Bankruptcy Court, is expected to be the result "of both Kodak's increase in the installed base of new products introduced in the last four years ... plus a strong focus on new growth markets and new product introductions that drive higher gross profits, as well as the concerted actions to reduce corporate cost structure."Post-bankruptcy, "Kodak is not for the most part a big revenue growth story at all," testified David Kurtz, global head of the Restructuring Group of Lazard FrÃres & Co. LLC, one of Kodak's bankruptcy consultants, in U.S. Bankruptcy Court last month. But where the company does expect to see big growth is in its cash flow through tighter control of expenses and as it shifts its business mix, Kurtz said.However, the company has a lengthy history of promising that it's finally turned the corner and starting next year

, things are going to be better. In early 2011, CEO Antonio M. Perez told a crowd of financial analysts that 2012 would be a profitable year for Kodak. "It's almost inevitable we get to that point (of sustained profitability). This is going to happen."Perez, who has been in charge since 2005, has announced plans to step down within the next 12 months, though he will remain as a paid consultant. He declined requests to be interviewed for this special report.That printing-centric strategy is one of Perez's key legacies, one he latched onto when he came to Kodak in 2003 and saw the inkjet technology the company had in its labs, said Art Roberts, head of the Kodak retiree group EKRA Ltd. And the strategy largely reversed steps Kodak took in the 1990s that jettisoned printing from the mainstream of Kodak as the company was expanding its presence in China with photographic film and paper plants, Roberts said.Kodak has argued that bankruptcy gave it the ability to essentially catch its breath and unload a variety of costs - including retiree health care coverage and some pensions - and it is ready to soar. Now comes the challenge of taking that revamped and slimmed-down Kodak and

making it into something the old Kodak has not been for years: consistently profitable.
Confidence and doubt

"I'm not sure my job will change" with the end of bankruptcy, said Pablo C. Biggs, who was hired in fall 2011, just a couple of months before the bankruptcy, to oversee strategic alliances and partnerships for Kodak's business solutions and services group. But, he added, "I think it'd be a good place to have a long-term opportunity." Even though Kodak has made big changes, it's not automatic that it will be successful this time. At least statistically speaking, it's not inconceivable that Kodak might end up in Chapter 11 bankruptcy again in a few short years. According to the University of California at Los Angeles LoPucki Bankruptcy Research Database, roughly one in five companies ends up back in bankruptcy in five years. While a court approving a reorganization plan, as happened with Kodak on Aug. 20, is supposed to be an indicator that the company is on solid financial ground, "I think what happens frequently is that in the reorganization process, the underlying pathology that led the debtor to Chapter 11 in the first place has not really been rectified," said Robert Rock, senior counsel with the bankruptcy practice at Tully Rinckey PLLC. "The core problem Kodak had was that its core business no longer existed," Rock said. "Nobody uses film anymore. My suspicion is that Kodak has a very good chance of succeeding because its underlying pathology ... was abundantly obvious and has been dealt with. The question becomes, is what is left independently economically viable?" Moody's Investors Service in July was fairly pessimistic as it rated the odds of Kodak defaulting on its various bonds. While printing gives Kodak "the most promising opportunity to resume revenue growth," its future is also tied to an ongoing decline of printed materials, Moody's said. And while Kodak has slashed billions of dollars worth of liabilities, "there is limited visibility in whether the company has sufficiently stabilized its operations and cut expenses to stem further weakening of its financial obligation." "Jack Welch, the very successful CEO of General Electric, had a rule of thumb of GE that if you can't be number one or number two in market share, you're not going to be successful," said retired Kodak Vice President Terry Faulkner. "That's going to be the problem (for Kodak) as I see it. It will be limited on its resources; how is it successfully going to compete with these other (commercial printing) companies that are much larger and much richer?" But Kodak also has its champions who see big potential and opportunities. David King McMullin, president of WhiteSand Research LLC, an investment firm that specializes in companies in bankruptcy and turnaround, said that while Kodak faces competitive challenges in its business-to-business strategy, its recent cost-cutting should help its business focus. "Should the newly appointed CEO effectively execute the company's go-forward business plan, we believe Kodak would have nearly all the necessary ingredients needed for success - a patent-differentiated business model ... growth prospects, a streamlined cost structure and a well-capitalized balance sheet." EKRA's Roberts said that if anything gives retirees confidence in the company's future, it's that different investment groups bought the IOUs of unsecured creditors at more than what Kodak was going to pay - the implication being that those investment groups wanted the IOUs because it gave them a way of buying stock in the new Kodak before it begins trading openly. "There's some analysis these places are doing that says there's value, and they've got access to a lot deeper kinds of analysis than any one of us do," Roberts said. "If they're saying, 'We're willing to buy (one of those IOUs) for 17 cents or 18 cents on the dollar' while Kodak is saying the claims are going to be paid out at about 5 percent ... there are some financial markets that are valuing Kodak. So that would say to me they don't look at it as a fool's errand or else their jobs are in jeopardy. That gives you a little confidence, a little wind in your sail, if you will." Always a challenge

Even in promising technology, the challenge for Kodak and its partners Kingsbury and Uni-Pixel is that a number of other companies - such as an old film nemesis, FujiFilm - also are looking at that touch-sensor market, said Kingsbury CEO Bill Pollock. But given the potential size of that industry, he said, "Neither of us is going to dominate. We want very much to succeed, so we want Uni-Pixel to succeed." As far as Kodak's Taber is concerned,

the company is ready for its comeback story. "We believe in what we're doing. We have creative, innovative people. We have strong technology platforms. We've been able to maintain and encourage and motivate (during the bankruptcy), and that passion is going to be unleashed."The latest generation of Kodak employees is trying to focus on the potential, not the pain of downsizing and lost glory. Maria Celeste "Cel" Tria of Greece started with Kodak in the summer of 2011 as a research scientist specializing in functional printing. At the time, the company already was dealing with growing rumors about its potential insolvency. And the bankruptcy definitely "dampened the mood," she said. "At first I was worried. But the way I see how we've progressed during the bankruptcy ... and we have the right direction and focus. Now I can really see the brighter future."