

Kodak Technology Spearheads Renaissance in Profitable Retail Printing

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Driven by advancements in dry lab technology, as well as new choices for consumers to make something brilliant with their photos, Kodak has in the past year ushered in a renaissance in retail photo printing. And for retailers, Kodak's timing couldn't have been better.

Soon after the world's foremost imaging innovator unveiled its KODAK Adaptive Picture Exchange (APEX) behind-the-counter dry lab system at PMA 2008, the world economy fell into the most serious recession in 60 years. At a time when many conventional big-box retailers and smaller specialty chains have entered into retrenchment mode for much of their business lines, APEX and the instant-printing KODAK Picture Kiosks have combined to give retailers two key recession-busting advantages – significant *operational efficiencies* and foot traffic-driven *profitable growth*.

Operational Efficiencies – Low Capital Cost and Labor Savings, with “Eco-friendly” Benefits

In 2008 in Las Vegas, USA and in Cologne, Germany, APEX was honored with two awards in recognition of innovation, competitive differentiation and retailer benefit – the DIMA Innovation Award at PMA in Las Vegas and the TIPA Award for Best

Photofinishing System at Photokina in Germany. The timing of APEX was perfectly aligned with the need to provide retailers with investment flexibility – a theme that has taken on high importance during the recent global economic crisis.

APEX and KODAK Picture Kiosk customers are reaping real benefits where it counts the most – on the income statement and balance sheet. The total cost of operation for an APEX dry lab system, when compared to more traditional silver halide (AgX) mini-lab systems, is significantly reduced.

The factors that combine to generate these impressive benefits can be grouped into the following categories:

- Low capital investment
- Low labor (operational and maintenance)
- Low service/repair costs
- Low utility costs
- Small footprint

Kodak has a complete line of full self-service instant printing solutions that provide consumers with the powerful combination of Kodak's award winning user interface and proven, highly reliable thermal printing technology for stunning image quality.

Depending on the retailer's needs, these self service printing solutions can start at a low capital investment of around \$3,000 for the KODAK Picture Kiosk GS Compact. And, if the retailer already has a Kodak G3 or G4 order station, the ability to connect Kodak's DL2100 Duplex Printer (only \$4,000 additional) enables them to efficiently enter the premium photo products market with offerings such as photobooks, calendars and greeting cards. The DL2100 offers a fast, economical, highly reliable duplex printer designed specifically for challenging retail printing environments.

For retailers looking to create more of a full service photo destination, the KODAK APEX is totally modular and scalable, and the cost of entry for retailers who have no existing equipment starts at only \$22,000. That means the initial *capital investment* is more than 50 percent lower than the amount required for mid-volume digital minilabs,

and this low starting point significantly reduces amortization risk - vitally important to ever-scrutinizing procurement departments and cash wary photo retailers.

In addition, the modular nature of APEX means that a retailer need only invest in what is required today. System upgrades, enhanced features and increased capacity can be purchased later, when emerging trends, economic climate or other changes in the business model call for it.

Kodak’s retail partners who have implemented the APEX dry lab are expected to generate thousands of dollars annually in operational and maintenance *labor* savings when compared to retailers using AgX minilabs. An internal Kodak cost estimate comparing APEX and various AgX minilab systems of ~1,000 prints per day capacity reveals an estimated annual labor cost savings of over \$3,500.

Cost of Operation - Labor Computation

	APEX Daily	APEX Annual	Minilab Daily	Minilab Annual	Labor Savings /yr
Start Up	0 min	0 hrs	26 min	130 hrs	130 hrs
Daily Activities	0 min	0 hrs	40 min	200 hrs	200 hrs
Paper Load	3 min	10 hrs	10 min / 2 days	25 hrs	15 hrs
Maintenance	0 min	0 hrs	2.5 hrs / month	30 hrs	30 hrs
Training	4 hrs / event	8 hrs	40 hrs / event	80 hrs	72 hrs
Total		18 hrs / yr		465 hrs / yr	447 hrs / yr \$3576 @ \$8/hr

At 1000 prints per day, 300K/year, labor cost savings per print = ~\$0.012

NOTE: U.S. based cost estimates

Eastman Kodak Company, 2009

Why such big savings? Because APEX reduces or eliminates the time-consuming startup, calibration and shutdown process associated with AgX minilabs. Also, with the elimination of wet lab chemicals, water and other supplies, the amount of time needed to prepare, mix, clean and maintain the system is significantly reduced. Importantly,

because APEX is less complex than AgX systems to operate, employees need far less ongoing training time, too.

As a result, a retailer can reduce or redeploy the man-hours needed to operate an APEX system. Ideally, labor redeployment will move an employee from behind the counter to customer-facing sales or customer service roles at customer kiosks or even outside of the retail printing workspace – this is incremental to the calculation above.

Service costs are also starting to mount for older digital mini-labs. Some laser replacements alone can be as expensive as buying a new APEX dry lab. Even routine maintenance and repair can be costly with service agreements running into thousands of dollars annually, not to mention the lost business that comes from down times. The simplicity of APEX supports lower service costs and the low cost and compactness of the thermal photo printers allows for printing redundancy so that any downtime is minimized.

Other important APEX-driven cost savings are in the area of *utility costs*. Since no energy is required to maintain the complicated chemistry process associated with wet lab systems, APEX consumes far less electricity than comparable AgX minilabs. Kodak testing indicates that APEX can be operated and maintained using an astounding 70 to 90 percent less energy than comparably-sized AgX minilabs. On average, the potential electricity cost savings are around \$1,500 annually – and that's in addition to the labor savings mentioned above.

**Electricity Consumption and Costs to Print 4x6 Prints
from a DPS 900 System vs. OM Traditional Mini Labs**

System	Prints/day	watt-hour/day (Wh/dy)	kilowatt-hour/day (KWh/dy)	Annual Cost-USD	Cost/Energy Increase
				\$0.10 per kWh @ 365 days/yr.	%
APEX	1500	3051	3	\$111	baseline
Noritsu	1500	46813	47	\$1,709	93%
Fuji Frontier 340	1500	19002	19	\$694	84%
Fuji Frontier 570	1500	14321	14	\$523	79%
Gretag Master Lab 742	1500	25050	25	\$914	88%
Range of Savings:				(\$412-\$1598)	

NOTE: U.S. based cost estimates

Also, because APEX is a dry lab system, it consumes no water, saving an estimated 5,000 liters of water annually when compared to manufacturers' specifications for comparably-sized AgX minilabs – and that's good for the environment and also eliminates the need for installation and support of water supply and waste handling.

Annual Water Usage Among Comparably Sized AgX Minilabs

		Annual Water Usage			
1000 4x6" Prints/day => 15.5 sq. meters		450 ppd	750 ppd	1000 ppd	1500 ppd
Noritsu 3300 DLS with SM Cartridge Chemistry (KPT-750)					
CD	59.08 ml/sq. meter				
BF	26.39 ml/sq. meter				
Rinse	193.74 ml/sq. meter				
Total	279.21 ml/sq. meter =>				
	4.3 liters/day				
	30.3 liters/week				
	132 liters/month				
	1,579 liters/year	711	1184	1579	2369
Noritsu 3213 Standard C41 Chemistry Mix					
CD	135 ml/sq. meter				
BF	215 ml/sq. meter				
Rinse	248 ml/sq. meter				
Total	598 ml/sq. meter =>				
	9.3 liters/day				
	64.8 liters/week				
	282 liters/month				
	3,382 liters/year	1522	2536	3382	5073
Fuji Frontier 340 with CP-49E Cartridge Chemistry					
CD	45 ml/sq. meter				
BF	35 ml/sq. meter				
Rinse	215 ml/sq. meter				
Total	295 ml/sq. meter =>				
	4.6 liters/day				
	32.0 liters/week				
	139 liters/month				
	1,668 liters/year	751	1251	1668	2503

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APEX has a modular and efficient design, and – as a dry lab – requires no chemical preparation or storage area. This means it requires a much smaller *footprint* in the store, and the space saved can be used for merchandising rather than production and chemical storage. And, the scalable technology affords retailers the space and ability to add services rationally as customer demand and market opportunity grow. This also gives retailers complete flexibility as to system location – breaking down the barriers of traditional retail photo environments.

Not surprisingly, given dramatically lower utility costs and the elimination of chemicals, APEX is among the most *environmentally-friendly* retail printing solutions. APEX has no indoor air quality issues, lower greenhouse gas emissions due to reduced energy consumption, and has virtually none of the environmental issues associated with AgX minilabs.

Revenue Growth – New, Profitable, High-Quality Photo Products

Clearly, both Kodak Picture Kiosks and APEX save retailers money. That benefit is the underlying foundation for even further profit-generating potential, and both solutions shine in that area, too. Each solution on its own, and especially the combination of APEX and KODAK Picture Kiosks, gives consumers new, innovative and exciting options for making something brilliant with their photos; and this provides retailers with highly profitable, traffic-driving offerings that increase revenue per digital exposure.

In particular, APEX has opened the door for customers to use Kodak Picture Kiosks to quickly and easily create unique photo solutions such as KODAK Photo Books, photo collages, calendars, invitations, announcements, and greeting cards. Kodak Picture Kiosks also enable retailers to offer premium non-print products such as the KODAK Picture Movie DVDs, which are now available in more than 10,000 retail locations. Additionally, the Kodak Rapid Print Scanner offers a shoebox scanning service connected to APEX and KODAK Picture Kiosks that can help consumers bring digital life to analog prints and enable them to tell stories with photobooks and DVDs. These accomplishments are not going unnoticed by retailers who have embraced Photo Kiosks and APEX.

According to Ken Stait, Director, Stait Photography, Morpeth, UK, “We have been delighted with Kodak’s APEX system. When used to its full potential, it opens up so many opportunities with the services we can now offer customers – photo books, gift cards, wide format prints and collages. Initial investment is a lot less than a traditional lab so we can invest in other areas. The APEX system has freed up cash flow”.

Even the industry's traditional bread-and-butter business – the production of 4 x 6 digital prints – is enhanced by APEX. Customers can select more printing options, and have the job completed quickly, thanks to efficiencies embedded in the APEX system. With the fifth generation printers APEX offers, it's the world's first retail dry lab system to combine ribbon optimization and dual finish features to cost effectively allow a broad range of print sizes and finishes from *one media SKU*. Only Kodak offers this innovative combination of technologies found in the Kodak 7000 series printers with KODAK XTRALIFE II Paper that makes the system 1-2-3 easy:

- ONE single media SKU
- TWO finishes – satin and gloss
- THREE sizes - 4x6, 6x8 and bordered 5x7

Smart retailers are always looking for ways to delight customers, reduce costs and profitably increase revenues. That desire is further magnified in a trying economy, and is a key reason why Kodak's retail printing renaissance – headlined by APEX and Picture Kiosks – has been eagerly embraced worldwide by businesses representing low, mid and high volume retail environments. Not only do Kodak systems offer low cost of entry but also reduce the cost of operating and maintaining in-store photo centers. Innovative photo processing technologies allow staff to spend less time managing orders and more time helping their customers and selling higher profit solutions that consumers want creating “smiles” for both.

Importantly, Kodak retail systems solutions give retailers low investment opportunities to deliver powerful emotional products just when consumers need them most..

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