

Picture perfect solutions for the photo specialty industry

End-to-end HP Indigo digital photo specialty solutions



“With the HP Indigo presses we have been able to drive costs in the right direction so that we help meet the profitability needs of Shutterfly. Our relationship with HP has been a great collaboration, and I’m personally excited about continuing into the future.”

Jeffrey Housenbold, President & CEO
Shutterfly, Inc., USA



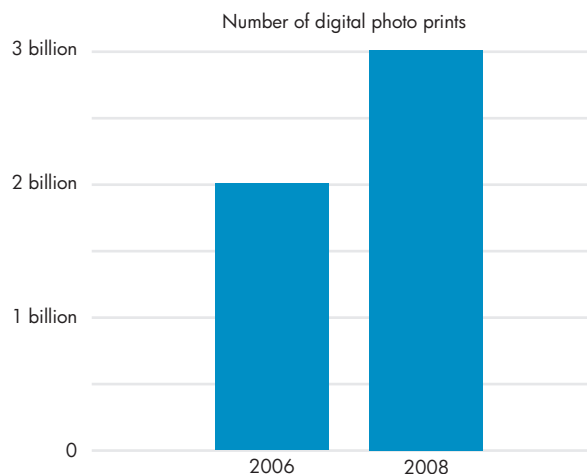
The picture is clear: photo specialty services are growing worldwide

The world of photo finishing is quickly adopting new applications. Driven by the growth of both the web and the use of digital photography, the market has seen the rapid growth of high volume, high margin, digitally produced photo specialty products, such as:

- Photo books
- Photo calendars
- Photo greeting cards
- Postcards

These new applications appeal to a broad audience. For amateur digital photographers, they preserve precious personal and family memories. For professional photographers, they can mean creative portfolio arrangements to attract new customers. For business communicators, they may consist of new and compelling photo-based selling tools.

Growth in digital photo prints



Here are just a few of the key factors driving growth in the photo specialty business:

- 70% of all professional photos are taken with digital cameras
- From 2006 to 2008, online digital print orders will grow from two to three billion images
- Revenue by 2008 for digital photo prints at retail will exceed 4 billion globally
- In 2005, nearly one third of internet users were online photo service buyers

Building revenue with photo-rich content

Photofinishers are looking to expand beyond traditional imaging in order to raise print value, increase orders and maintain margin. Meanwhile, print service providers are also looking for new opportunities to provide products rich in photographic content.

While intent on building creative, high value services, photofinishers and print service providers still have strict criteria for any new photo production business model, including:

- Superior, photo-like quality
- Productive, easy to use and scalable printing solutions
- Cost effective finishing systems
- Competitive and creative cost structures
- Highly responsive and reliable service from manufacturer partners
- Differentiation through product quality, special inks and media versatility



High-performance print engines from HP Indigo

HP Indigo press 5500—your profitable and productive printing solution

Capable of printing over 1.5 million color pages or more than five million monochrome pages per month, the HP Indigo press 5500 is the one true digital offset press that combines the look and feel of traditional offset with genuine photo quality.

Unmatched print quality

Only the HP Indigo press 5500 offers both offset and photographic quality, with features like:

- HP ElectroInk liquid ink technology
- Wide color gamut, with up to 7-color printing
- Robust color management with HP Professional PANTONE® emulation and ICC profiles
- Special and spot color capabilities, including new photo inks—light cyan and light magenta, digital matte and brand colors
- High definition dot placement technology enables 1200 dpi and zero dot gain for superior line work and micro text printing

Maximum productivity: making every minute count

The HP Indigo press 5500 offers exciting new features which help you reach higher productivity and easily migrate to full color digital direct mail:

- Supports 68 ppm full color, 136 ppm in 2-color and 272 ppm monochrome in one press, regardless of media type or thickness

- Continuous printing with multi drawers and stackers, seamless switching between jobs, proofs and media types
- Adjustment-free, minimum-touch paper handling
- A single operator can run two machines simultaneously
- On-the-fly ink replacement for CMYK, special colors and spot color for uninterrupted production
- JDF-ready for integration into end-to-end automated workflows

Print profitably: boosting your bottom line

The HP Indigo press 5500 is a complete solution designed to help you grow margin by offering:

- Extensive automation, which reduces operator involvement
- Support of a wide range of coated and uncoated substrates including specialty media
- Multiple Digital Front End (DFE) options, which offer workflow flexibility and scalable processing power
- Oil recycling system, which reduces the oil consumption and waste

HP Indigo press w3250 – for high quality, web-fed production

The HP Indigo press w3250 is the fastest, most productive and cost effective digital color production press in the market with offset print quality.

Designed for high volume, 24/7 manufacturing, the 7-color, web-fed HP Indigo press w3250 is well suited to handle high volume photo specialty applications.

It prints 8,000, high quality, 4-color, 8.5" x 11" images per hour (two-up), and allows for near-line or in-line finishing. It lets you produce four million full color pages per month, printing at speeds from 136 ppm in full color to 272 ppm in 1 and 2 colors. Print in full process color, as well as up to three spot color jobs in a single pass.

The HP Indigo press w3250 also allows you to dramatically reduce total production costs by printing on any standard off-the-shelf paper from 27 lb text to 100 lb cover. HP's breakthrough in-line priming technology lets you print digitally on any paper required by the publisher or the customer – reducing your substrate costs and opening the door to new applications.

With in-line finishing capabilities, the HP Indigo press w3250 lets you complete the entire process quickly and easily in a single pass. It also automates post print processes with in-line finishing to produce a final trimmed, collated and stacked product in one pass by a single operator.

Two powerful HP Indigo digital presses – the keys to success in photo specialty services

HP Indigo press 5500



HP Indigo press w3250





HP Indigo solutions: your clear advantage in the photo specialty market

To meet the requirements of printers and photofinishers, the HP Indigo photo Specialty solution delivers the most comprehensive menu of features and advantages in this exciting new industry. The end-to-end solution includes:

- Best profit building strategies
- Best print quality
- Powerful workflow solutions
- Full end-to-end solutions
- Wide variety of inks and substrates

Photo-quality, only from HP Indigo

HP ElectroInk. Consistent, high quality, digital offset color is a hallmark of HP Indigo digital presses – using HP ElectroInk to deliver depth of color, image sharpness, color stability, and repeatability.

Light Cyan and Light Magenta inks. When used with CMYK process HP ElectroInks, light cyan and light magenta inks deliver significantly enhanced photo quality, giving photofinishers and print service providers a source of competitive advantage in the professional album and photo specialty markets.

The new light inks provide an improved image with smoother tone transition and saturated colors, enhancing the quality of photo-specialty products such as photo books, photo calendars, greeting cards and more.

HP Indigo Digital Matte ink. Add impact and sophistication to your photo specialty products with HP Indigo Digital Matte ink. It creates a differential gloss effect by adding a spot varnish look – an effect that always adds visual impact. And it's all happening on-press and in-line, so it's convenient to use and won't slow you down.

A broad selection of substrates. The HP Indigo solution encompasses the highest quality media for photo production. Specially developed HP Indigo Printing Paper includes both coated and uncoated substrates. The HP Indigo digital presses also support a wide range of high quality coated, uncoated and specialty substrates from other suppliers.

HP Indigo Photo Enhancement Server. The HP Indigo Photo Enhancement Server quickly and easily optimizes digital photographs for printing on an HP Indigo digital press. This powerful application that applies sharpening, contrast, shadow details, smoothing, 3D boosting and JPEG artifact reduction to your photo streams.



This is an HP Indigo digital print.

2005

fotoKASTEN



This is an HP Indigo digital print.

Feb

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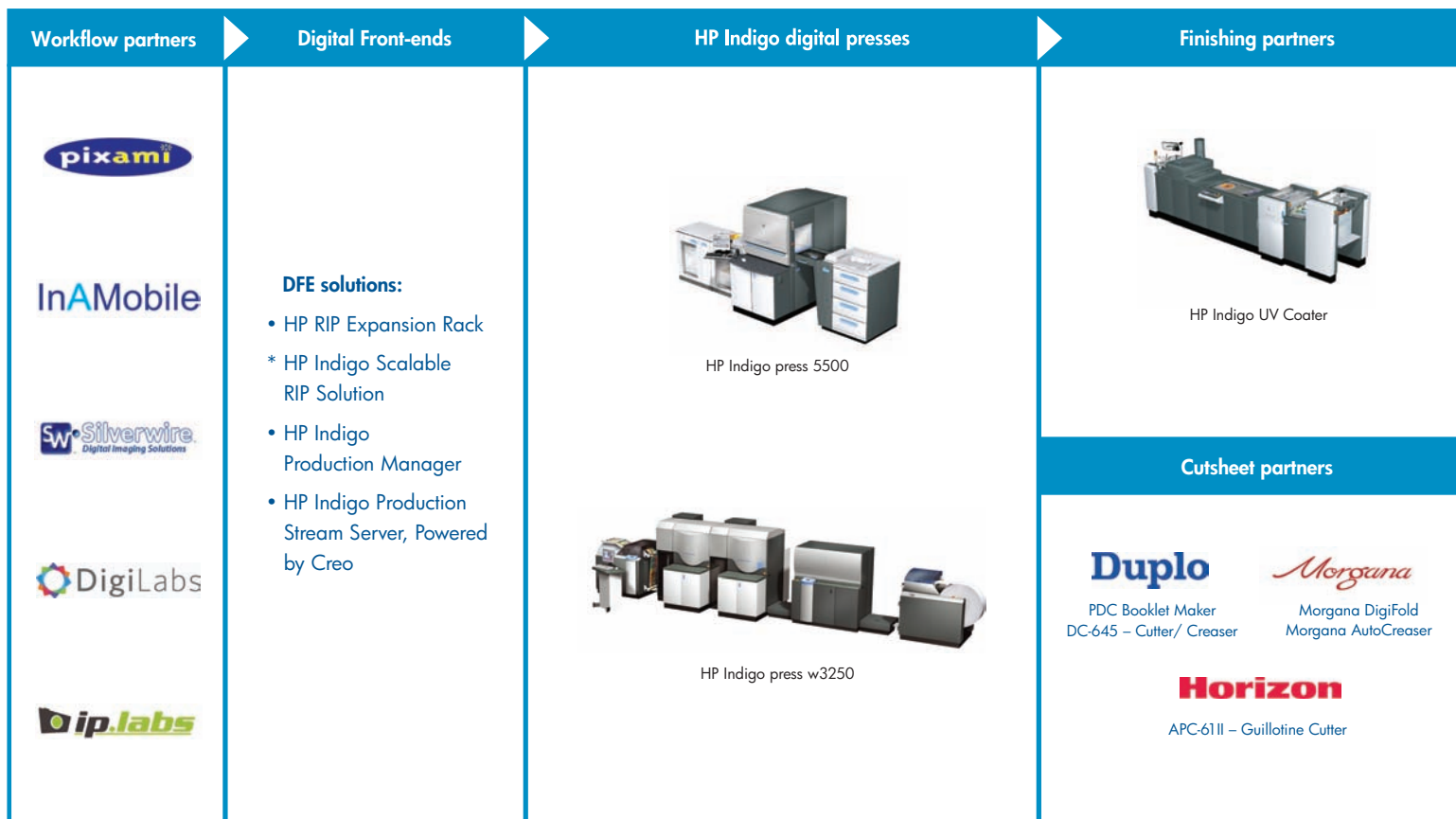
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World-class photo specialty application providers complete the picture.

To complement HP Indigo photo specialty solutions and support services, many leading third-party partners have optimized their own solutions for use on the HP Indigo presses.

HP Indigo photo specialty application partners include:

Pixami Digital Print Production System is a complete web-to-print solution for online order creation and delivery. It drives orders to HP Indigo digital presses while significantly reducing cost of sales. The Pixami system is configurable for custom products and accepts custom content with a brandable user interface. The solution delivers imposed, press-ready PDF files, thus eliminating file preparation costs. Pricing is based on actual volume created with the system, plus a very low startup cost. (www.pixami.com)

InAMobile mobile postcard solutions enable photofinishers and print service providers to offer branded mobile postcard services to their customers. In addition to providing an innovative camera phone product to the market, service providers will also create new revenue streams for their businesses, as well as increased brand loyalty among its customers.

For customers/end-users, the InAMobile solution is an easy, affordable, one-step application that uses the

camera facility in handsets. It lets them send a highly personalized, printed keepsake item for a variety of events. The InAMobile service also allows camera phone users to take a picture and then add a message and address. The picture – in the form of a physical postcard – is printed on HP Indigo presses and mailed first class. (www.inamobile.com)

Silverwire Photobook is an award-winning software solution for photo album production, QuickBooks, calendars and logo integration. It includes an extensive selection of pre-designed templates, and also enables fully customizable page layout with images and text, as well as customizable cover and background colors. The application accommodates double page layouts and overlapping pictures and text pages.

Professional photographers and designers, as well as digital imaging amateurs and home users use Photobook. It provides a quick solution for applications ranging from archiving pictures to producing lavishly designed gift books, wedding books, vacation albums, photo gifts, company booklets and exhibition catalogues. (www.silverwire.com)

Digilabs. Digilabs offers easy-to-use software to make fully customized and professionally looking photo calendars, cards and photo books. Materials may be printed in home offices, studios or labs, or through Digilabs printing services. (www.digi-labs.net)



ip.labs. A market leader in digital photo service software solutions, ip.labs serves retailers, ISPs, media companies and specialized photo service providers with its Internet Photo System (IPS). The application supports all types of photo products, including prints, posters, photo gifts, calendars, photo books and many more, as well as back office and CRM solutions. (www.iplabs.de)

Robust RIPs and digital front ends for photo-rich production

Special HP Indigo Scalable RIP Solution

This customizable RIP solution supports high volume, short run, image-rich print productions for photo specialty businesses. It's ideally suited for the production of full color on one- or two-sided static jobs (PDF, JPEG) with high page coverage images – especially in environments with dedicated workflows to multiple HP Indigo presses for printing jobs at the full-rated speed of their press engines. The completely automated, scalable solution centrally processes and feeds jobs in parallel to the multiple presses and reports production status in real time to MIS systems.

HP Indigo Production Manager

HP Indigo Production Manager is an off-press Digital Front End (DFE) hardware and software solution that supports multi-press environments of HP Indigo digital presses. As HP Indigo's premier DFE for automated workflows, it is ideally suited to high-volume variable data and complex document printing. HP Indigo Production Manager ensures high volume throughput with multiple, scalable RIPs.

HP RIP Expansion Rack

The HP RIP Expansion Rack expands the capability of the HP Press Production Manager for the HP Indigo press 5000. It is an off-press RIP hardware and software solution that delivers the processing horsepower for high volume jobs. Scaling the

performance of the HP Press Production Manager, the HP RIP Expansion Rack delivers maximum RIP throughput with additional off-press scalable RIPs. Available as an accessory to the HP Indigo press 5000, the HP RIP Expansion Rack comes as an external rack in either a two- or four-RIP configuration.

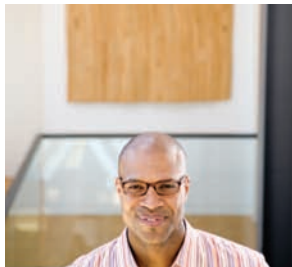
HP Indigo Production Stream Server, Powered by Creo.

A comprehensive graphic arts feature set, the HP Indigo Production Stream Server includes a robust DFE that addresses the demanding workflow needs of the hybrid print service provider. The HP Indigo Production Stream Server is built upon industry-leading technology from Creo, a recognized leader in workflow solutions and mature, feature-rich DFEs. It offers unique and easy integration with the Creo Prinergy and Brisque workflow solutions for the traditional commercial print industry. It also integrates into a unified, hybrid offset/digital production operation to help printer expand their service and solution capabilities.

Optimized photo specialty finishing solutions

HP Indigo UV Coater. The HP Indigo UV Coater is an advanced, near-line coating solution designed specifically to optimize production on HP Indigo digital sheetfed presses. Now you can grow your revenues—especially your short-run digital business—with enhanced speed and efficiency.

The user-friendly HP Indigo UV Coater both protects and preserves the aesthetics of your digitally printed materials. It also provides resistance to water and solvents, while its gloss, matte and satin finishes add high-value appeal to the finished piece. With throughput up to 4,000 sheets per hour, the HP Indigo UV Coater supports multiple HP Indigo presses.



Duplo DC-645 is a near-line slitting, cutting and creasing solution that automatically slits, cuts and creases a sheet in one pass. The Duplo DC-645 is fully automated and easy to use. Sheets from the press are loaded onto the feed tray. The machine's functions are set by reading a bar code printed on the top right-hand edge of the sheet – or by programming via the PC controller.

In both cases the standard CCD camera checks the image registration mark so that all the operations of the machine are related to the position of the image on the paper rather than to the dimensions of the paper itself. Each sheet is slit, cut and creased according to preset design template and then neatly stacked on the output stacker. (www.duplo.com)

Morgana AutoCreaser is a comprehensive creasing solution that eliminates the problem of cracking while folding digitally produced output. It is equally effective with conventionally printed cards, as well as laminates or cross-grained stock. The AutoCreaser uses a creasing rule and matrix action that applies several tons of pressure to weaken the fibers of the paper. Unlike a scorer, the operation does not tear the surface – even when the fold is made in an area of solid color. The AutoCreaser is a fully automatic suction fed device that is supremely easy to use. It accepts a maximum sheet size of 24.8" x 13" and stock up to 235 lb text or 130 lb cover. The AutoCreaser performs 3,840 creases per hour on letter size/8.5" x 11". (www.morgana.co.uk)

Morgana DigiFold is an automated creasing and folding solution using a creasing rule and matrix that creases the substrate before feeding it into the folding unit. The suction-feed device is the world's first creasing and folding machine designed primarily for the digital print market. It's the only automated folder using a creasing rule and matrix that first creases the

substrate before feeding it into the folding unit. It also uses a patented, new folding system which eliminates the need for conventional buckle plates or knives. It won't mark or scratch even the most sensitive digitally produced material.

The DigiFold can be used as a creaser/folder, a folder or just a creaser. It uses an electronically controlled 'flying knife' that is contoured around extra-large diameter rollers and moving at the same speed as the material passing through the machine.

Horizon APC-61II is a programmable hydraulic guillotine cutter. Both the clamping and cutting mechanism is hydraulically powered for reliable operation. A touch-screen display enables easier operation. The back gauge is precisely positioned by a servo-motor drive. The large, five-inch, icon-based touch screen is easy to use, eliminating the need for a skilled operator.

Job memory capacity is 99 jobs and 99 steps per job (total of 3,000 steps available). The numeric keypad screen is available for cutting size entries and calculations. Multiple program functions include even divide cutting, total cutting and repeat cutting and compressing. (www.horizon.co.jp)

Horizon BQ-270 is a 1-clamp, perfect binding solution. It features speeds up to 500 books per hour and single person operation, as well as strong binding system that exceeds industry standards for page pull and flex tests. The BQ-270 also enables a square accurate spine and accurate cover registration.

The system programs up to 20 different perfect binding jobs into memory for easy recall. An icon-based, intuitive touch screen assures easy set up and operation and the system features fast, accurate and automatic set-up of in-line scoring.

Horizon HT-30 is a fully automatic three-side trimming solution. The innovative system trims three sides of a book with a single knife. A pressure clamp holds and rotates the books for sequential top, fore-edge, and bottom trimming. Through robotic trimming, the operator simply inputs untrimmed and trimmed book size at the touch-screen. The HT-30 then performs all necessary setups automatically and transports and trims each book.

Precise servo-motors are used for knife positioning to insure high quality trimming. The servo-controlled hydraulic unit adjusts pressure automatically for markless trimming. If the book dimensions are the same, the HT-30 can trim books of different thickness continuously. Maximum trim thickness is 2 inches.

Knife operation and book clamping are hydraulically controlled for safe and powerful trimming. The trimming section, feed table, and stacker are all interlocked and covered for maximum operator safety.



The voice of the customer

Shutterfly: preserving memories with HP Indigo

Founded in 1999, Shutterfly is a leading independent photo service company helping people connect with their loved ones and friends through the powerful medium of photographs. Via its website, users can crop images, remove red-eye, order pictures in a variety of sizes, and transform them into photo books or calendars. The company makes it simple to send prints and personalized gifts, or to share pictures online. Prints are developed and mailed within 24 hours.

"Customers also expect that, if they have a favorite image that they've seen typically on a 4 x 6 print, they want the image to look the same – colors, sharpness, all the characteristics that are important to them."

Reliability was another concern for Shutterfly. At peak ordering times, such as the holidays, the company is focused on 24/7 printing, delivering consistent quality output, getting orders out on time and exceeding people's expectations for holiday cards and gifts.

HP delivers quality, reliability and profits

When Shutterfly decided to expand its product offerings, they sought a new printer technology beyond silver halide printing, and HP was clearly a leader in the market. The company deployed HP Indigo digital presses, primarily the model 3050, which has up to seven color printing options with PMS and custom color capabilities, and tremendous flexibility for short and mixed runs – including variation by content, images, and print media.



Growing in a competitive environment

Shutterfly wanted a print solution that would open up opportunities for more diverse substrates and products onto which photographic images could be transferred.

Jeannine Smith, Chief Engineering Officer for Shutterfly, elaborated, "4 x 6 inch prints are an important entry point for our customers. This is how they first learn about Shutterfly. Once customers are comfortable with the online ordering experience, we can offer them a wider variety of products – photo books, calendars, and other items they can't get at retail locations and they can't easily create at home."

The company was able to expand with a unique collection of "design-it-yourself" photo gift items, adding favorite pictures to calendars, thank you note cards, greeting cards, photo books, and many other items.

Shutterfly President and CEO Jeffrey Housenbold enthused, "With the HP Indigo presses we have been able to drive costs in the right direction so that we help meet the profitability needs of Shutterfly. Our relationship with HP has been a great collaboration, and I'm personally excited about continuing into the future."

R & R envisions the future of photo specialty printing

R & R Images is an Arizona-based marketing solutions company that specializes in personalized 1-to-1 marketing, commercial photography, large-format output, design, production, scanning, bindery, fulfillment and mailing. For its custom-order business, R & R creates short-run books, greeting cards and wedding albums for photographers and online retailers. The orders go straight from the client's Web site to R & R's automated workflow systems for fast-turnaround printing, finishing and mailing.

A related side of this business is the creation of custom wedding books. R & R works with high-end photographers who take wedding pictures for the rich and famous, including many movie stars and sports celebrities. The photographers resell the albums for up to \$4,000 each.

"These books are absolutely stunning," R & R president Rod Key says. "Top notch photographers want a top notch product. To achieve the quality we need, it has to be done on an Indigo."

Turning to the HP Indigo press 5500

The HP Indigo 5500 is a cornerstone of this strategy. Its six-color Light Cyan/Light Magenta process stands to open new markets for R & R bridging the gap between digital and traditional silver halide photographic printing.

R & R is also using the 5500 to print on a variety of substrates, including less expensive papers. Success here would both increase profit margins and open the door to new markets requiring lower price points. Its simple user interface and automated self-diagnostics enable R & R to hire and quickly and easily train workers to handle the new volume as business grows.

Fulfilling the strategic vision

"We're brainstorming through our marketing department. Our pressroom is testing its new capabilities. We're surveying clients and consumers to find out what they really want," Key says. "Our goal is to develop new product lines that will get us into markets we haven't been in before."

The ideas already are popping. R & R is thinking about branding photo prints with the photographer's name and marketing messages on the back, driving more business back to their photographer clients. They are also considering school fundraising efforts with customized photo books that parents could order online.

Scrap-booking, personalized kids' books, Little League event albums—the possibilities are endless.

R&R Images uses the HP Indigo press 5500 to produce a wide range of photo specialty items, including this personalized, high quality, photo-rich calendar series.





World-renowned support and service

HP is fully committed to maximizing the “Total Customer Experience” with programs that include:

HP financing opportunities. Financing your collateral-on-demand solution through HP Financial Services gives you access to competitive rates and flexible terms.

Full setup and maintenance services. Includes site preparation, workflow setup, on-site field service, fast parts delivery, and hotline help desks.

World-class training. Ranges from basic to advanced levels, as well as pre-press training.

Instant support/remote diagnostics. The HP Service Support Center is automatically alerted when a problem requires remote troubleshooting. Available for the HP Indigo press 5000.

My HP Indigo. A secure online portal providing HP Indigo owners access to vital tools, training and development materials – www.myhpindigo.com

HP Indigo Capture Business Success program.

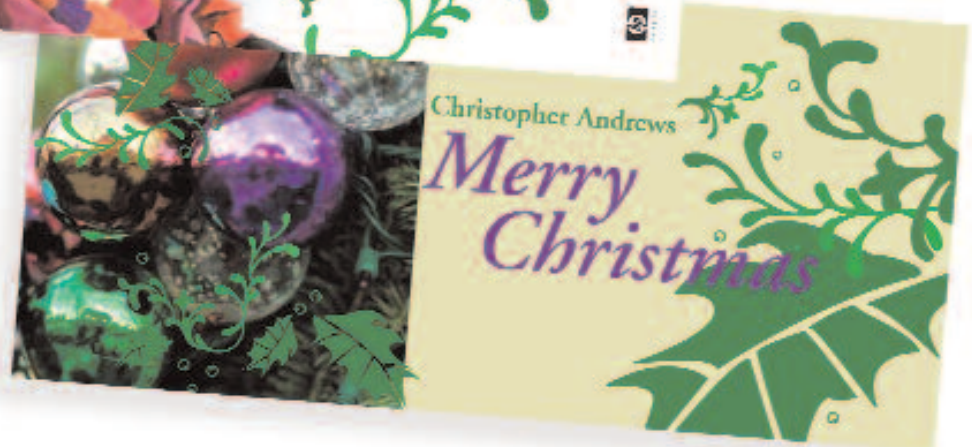
A wide range of innovative tools, services and resources to help you compete successfully in your market and attract new business opportunities.

A global brand and a trusted partner

HP innovation provides the momentum to help you transform your business, acquire new customers and sustain existing relationships. Through higher value services, such as collateral-on-demand, as well as personalized direct mail, manuals and photo-related services, you can take a leading and profitable role in the growing digital printing era.

HP – driving the digital photographic ecosystem

HP is driving the photo ecosystem by transforming the customers’ experience and enabling them to share and preserve their photographic memories anytime and anywhere. HP does that by offering solutions for home photo printing, online and retail solutions for photo printing and sharing.



Print postcards, wedding announcements and holiday greeting cards with personalized images and text.

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HP DreamColor

To learn more, visit www.hp.com/go/graphicarts

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