

Cleverdis

SPECIAL REPORT



**DIGITAL CAMERAS AND DIRECT PRINTING
SOLUTIONS FOR THE CORPORATE
AND INSTITUTIONAL SECTOR**

you can
Canon

Editorial

by Richard Barnes



Digital photography within both corporations and institutions is being used - more than anything else - as a human communication tool; a means of capturing and instantaneously exchanging information and ideas in an interesting and engaging way. And people communicate best when they enjoy the experience and when they have the best available tools with which to do so.

The first use of digital still cameras, a number of years ago, was in the professional arena - for what was at the time high quality - high cost imaging solutions. Since then, the prime markets for digital cameras have evolved, to become those of the general consumer sector and that of professional photographers. Within this change, very few companies remembered that the corporate and institutional sectors also had a growing need for digital photography solutions. Canon not only remembered this; as a leader in the market, they have now gone one step further, commissioning a highly detailed survey of digital camera use in the corporate and institutional sectors in Europe (283 pages) by Cleverdis. By better understanding the needs of the market, Canon will be in an even stronger position to meet those needs with specific solutions.

This Special Report by Cleverdis highlights Canon's specific digital camera and PictBridge direct print solutions for you, the corporate or institutional user. We're sure it will greatly assist in improving your understanding of how to get the very best from these solutions.

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INTERVIEW by Richard Barnes

MOGENS JENSEN



Head of Canon Consumer Imaging, Europe

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Canon

Mogens Jensen took the helm of Canon Consumer Imaging Europe (CCI) in February 2004. The first non-Japanese executive to hold the title, Mogens brings to the role an extensive background in consumer electronics, which includes previous appointments as president of Canon Denmark 1995 - 2000 and president of Hewlett Packard Denmark from 1992 - 1995. CCI is one of three business units that make up Canon's European operation. The other divisions are UK based Canon Business Solutions (CBS) and Industrial Products. In his former role as Chief of Business Development & Strategy for Canon, Mogens oversaw a complete restructure of the European operation, with many core business functions centralised and integrated. Mogens takes over at a time of remarkable growth for the CCI business unit, and will preside over the launch of 90 new consumer products in 2004 alone. Mogens combines a master's degree in electronic engineering and a bachelor's degree in commerce.

Richard Barnes: **What makes Canon different in the corporate and institutional markets for digital cameras?**

Canon: Canon's heritage is photography, imaging technology and business machines. So the new role of digital photography in corporate markets plays right to Canon's strengths. Canon invests more than any other company on research and development into imaging technology. Our heritage in each of the fields of precision optics, electronics and semi-conductor manufacture means we are the only company in the world to manufacture our own lenses, digital imaging sensors and digital image processors. So we are the only camera manufacturer with complete control over the way light enters the camera, the consistency of the captured image, and the complex algorithms required to accurately and quickly process functions such as white balance, color rendition and auto focus, all of which are integrated onto our unique, high-speed DIGIC processor. The result is fast, efficient, reliable cameras that produce outstanding images, regardless of the conditions and with no waiting. Canon's expertise and technological advantages are the key reason behind our number one position with digital still cameras.

R.B.: **You're launching many new products this year. How will this affect redundancy of products currently on the market?**

Canon: Canon will release over 90 new products this year - meaning one every four days. Canon has always made every attempt to ensure that new products released are backwards compatible with previously released products. For example, not only do our latest Digital Still Cameras support the very latest PictBridge direct print standard, they still support Canon's original Bubble Jet Direct print standard, for direct printing to Canon's very first Direct Print Bubble Jet photo printers.

"Corporate clients want solutions that 'just work'"

R.B.: **In the corporate market and its various vertical sub-markets, what do you feel are the main factors buyers should take into account when choosing?**

Canon: Corporate clients want solutions that 'just work'; they don't have time for devices that don't interface seamlessly, immediately and without intervention. Purchasers are starting to look more closely at features other than Megapixels. Is the lens quality sufficient to provide high contrast, crisp, accurately focused images? How fast can the camera shoot continuously? How long does it take for the camera to start up? How long does it take to flip between images during review? How efficient is the camera's processor? How reliable will this camera be? Will it connect directly a photo printer? Is the connection proprietary or the open industry standard PictBridge?

DIRECT PRINTING

NEW PRINTING SOLUTIONS IN THE PROFESSIONAL ARENA

Thanks to the dye-sublimation technology used in Canon SELPHY Compact Photo Printers, photos are fade-resistant with a high-gloss protective coating. Besides looking and feeling like professional photolab prints, they're so durable that they remain unaffected by light for up to a hundred years and are even splash-proof. In corporate applications this kind of quality is not only important, it's often essential.

Those who don't own a Canon digital camera can still use Direct Print. As long as their camera is PictBridge compatible, they can also benefit from instant professional-quality prints.

With Direct Print, within minutes after taking a photo, hard copies can be available with no PC required. The user simply connects his or her camera to the direct printer, selects their image and prints.

EVEN MORE FLEXIBILITY

Direct Print puts the user in total control of their printing. Their Canon digital camera lets them add borders, crop, trim, zoom in, or rotate an image until it's perfect. They can even create Photo ID and Movie Prints with some of the latest Canon digital camera models when connected to a SELPHY Compact Photo Printer. No PC required.

The range of SELPHY Compact Photo Printers from Canon offer various print media sizes to choose from. These include 10 x 15cm (100 x 148mm) postcard size prints, 10 x 20 cm wide size which allow panoramas to be printed from a PC, credit card size photos and labels (ideal for staff ID cards) and even mini-stickers often useful for applying to a business card.



EASY PHOTO PRINTING ON THE MOVE

The SELPHY CP330 is ideal for when portability is essential.

- Photo-quality durable prints anywhere
- Traditional silver halide look and feel
- Includes a rechargeable battery for printing on the move
- Compact and light with irresistibly chic design
- Wireless printing from some camera-phones via IrDA
- Variety of print sizes
- Ease of use: Ink & Media sold together in packages

CASE STUDY

Leeds Teaching Hospitals Trust

Tim Vernon • Chief Medical Photographer

The Leeds Teaching Hospitals NHS Trust is one of the largest trusts in the UK. It provides acute services for the population of Leeds and is a regional centre for the treatment of diseases such as cancer and heart disease. It employs about 15,000 staff across eight sites and treats 125,000 inpatients, 65,000 day cases and 700,000 outpatients each year. It has 3,000 beds and an annual budget of £540 million.

Its usage patterns for digital cameras and direct print are typical of a UK institution in the medical field:

"Digital cameras and direct print have greatly improved the way we work: Wards use them instead of Polaroid to get instant photographic records of wounds. Direct printing is useful to our clients (Doctors & Nurses) to provide instant medical records of the visual appearance of patients."

EDF Energy

Prashant Bhojani • Senior Buyer

With 11,000 employees and more than 5 million customers, EDF Energy is one of the largest energy companies in the UK. Priorities and usage patterns of digital cameras are typical of large utilities.

"We think that Direct Print could be very useful for our facilities department and other network maintenance areas on networks."

Currently, our main issues when dealing with digital images are speed and cost of printing and keeping up with technology upgrades/changes. We see the main advantage of digital cameras in the fact that images can be displayed instantly."

Kier Group plc

Andrew Southard • Marketing Services Manager

About Kier

Kier Group plc is a leading UK building and civil engineering contractor also specialising in private house building, facilities management, property development and the PFI. The Group employs 7000 people worldwide and has an annual turnover in excess of £1.4bn.

What are your key problems when dealing with imaging?

Conventional film cameras produce high quality images but have the disadvantages of variable processing quality and printing. Also, even if the transparency or print is of acceptable quality they are easily subject to damage or loss and require expensive, time consuming scanning to make them useable in desktop publishing or litho-print

applications. The main problem with digital cameras is the apparent accessibility they offer. Whereas once our operations would always get a competent photographer to record images, with digitals, everyone will "have a go". In general they have far too many settings for the 'amateur' user who frequently chooses the lowest quality setting to get the highest number of images on the card. The results are so variable that the problems are sometimes worse than those with film.

How have digital cameras improved the way you work?

Digital cameras can vastly simplify the workflow process, providing the camera is of sufficient quality and the user has opted for a high enough quality setting. Personally, switching from film based cameras to digital has revolutionised the way I work. Whilst the initial investment in a Canon EOS D60 was hefty, the reduction in cost of subsequent shoots and the sheer convenience has made the purchase worth while.

Product-Application Couples

INTRODUCTION

It's true to say that digital still cameras are changing the way we work and live. Thanks to the in-depth study by Cleverdis of the use of digital cameras in the workplace, we are able to have a better understanding of what the real needs are of users in different industry sectors. It's true to say that a real estate agent will not have the same purchasing requirements as an insurance worker, and hospital medical personnel will not have the same needs as construction workers or engineers. For this reason, we have selected three of the top "vertical markets" in the UK to give you some ideas of how application requirements can be solved with different Canon digital cameras.



Each Case is Individual

These camera/application couples are purely indicative, as each case is really unique and will depend on many different criteria. In professional settings, you may need robust casing, changeable lenses, total simplicity of operation, high pixel count... the list goes on. Cost may also play a major factor, and here again it is important to consider Total Cost of Ownership of digital cameras in professional applications over time. What might be cheap at the outset may end up costing a lot more in the long run. It's also important to consider how, if your people are printing photos, this may be simplified by direct printing solutions.

Cleverdis has in fact matched the application requirements, as sourced from the end user research project commissioned by Canon, with specific cameras that we feel will best meet those needs. Hopefully, you'll find that the solutions offered will give you some clear guidelines as to what are the important criteria to take into account in your particular case.

Product-Application Couples

Construction

In this sector, digital cameras are primarily used by project managers, drafts persons and those in charge of calls for tender. Others include architects, website coordinators, site foremen and surveyors, just to name a few.

The main factors that are important include such things as picture quality (relatively high Megapixel count), zoom range (for more than 75% of users surveyed) and price. Ruggedness is also very important in this environment...

Also of major importance is colour reproduction, for which virtually all those spoken to in the industry said this was either important or very important.

Ideal Camera/Application couple

PowerShot G6 7.1 Megapixel CCD

The rugged, ergonomic PowerShot G6 incorporates a high resolution 7.1Megapixel CCD sensor making it ideal for capturing fine details or when large print sizes are required.

4x Optical, 4x Digital, 16x Combined Zoom

The fast f2.0-3.0 Canon 4x optical zoom lens gives excellent contrast and resolution and allows for better results when shooting in low light conditions. With a 35mm equivalent range of 35 - 140mm, that has a close focussing distance of 5cm, the focal length range can be extended with the use of Wide and Tele-converters which take the range to 24.5 - 245mm (35mm equivalent).



DIGIC Image Processor and iSAPS Technology

Canon's exclusive DIGIC Image Processor revolutionizes how you shoot digital by allowing the camera to process images faster and improving the speed and accuracy of the autofocus. DIGIC also reduces the effects of noise in your images.



Direct Printing

SELPHY CP330 Compact Photo Printer for Professional-quality Prints without a Computer

Super sleek and ultra-light, the Canon SELPHY CP330 Compact Photo Printer gives you the power to print direct from a wide range of Canon digital cameras and PictBridge compatible cameras - with or without a computer. And it's fast, the SELPHY CP330 produces long-lasting, high-quality 4"x6" (postcard size) color prints in just 85 seconds.



Product-Application Couples

Engineering

Project managers, engineers, and those in charge of calls for tender are the main users of digital cameras in this sector. Others include field staff, marketing coordinators, technicians, site foremen and surveyors. In this vertical market, image sharpness and therefore lens quality and focussing is of utmost importance. For capturing maximum detail, high resolution sensors are also essential. Colour reproduction is far less important than in some other markets, while compactness remains an important issue. In conclusion, ultra high quality photos and easy-to-use format...

8 Megapixels
Top-of-the-line 7x Canon
L-series lens

12 shooting modes
& 2 custom slots

DIGIC Image Processor
and iSAPS Technology

Ideal Camera/Application couple

PowerShot Pro 1 First 8 Megapixel PowerShot

PowerShot Pro1 gives you SLR-like performance in extremely compact form with all the capability and ease of use inherent to the PowerShot line. The camera's 8 Megapixel CCD captures life to the extent that even prints of 8" x 10" or larger are highly detailed and superbly colored. The PowerShot Pro1 incorporates Canon's top-of-the-line lens, the L-series Lens, legendary among professional photographers. Driven by an Ultrasonic Motor, the super-fast 28-200mm (35mm equivalent) f/2.4-3.5 lens uses fluorite and UD (Ultra-low dispersion) glass for clear, sharp image delineation with an absolute minimum in chromatic aberration.

Also incorporated is an Aspherical lens, precision-manufactured to within 0.1 microns, which reduces spherical aberrations and curvilinear distortion while keeping the zoom lens compact.

Amazing Flexibility An array of 12 shooting modes cover the most demanding requirements. In addition, the 2 custom modes can be used to save settings for quick switch to a standard shooting process or scene. Fast shutter speeds of up to 1/4000th second are possible and the extensive array of accessories include the full range of Speedlite flash units and converter lenses.



DIGIC Image Processor and iSAPS Technology

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Incredible Up-close Shots - Super Macro Mode

The PowerShot Pro1 features a standard macro function that allows you to shoot clearly at just 10cm from your subject. It also incorporates a Super Macro Mode that takes you in even closer. Position your subject as little as 3cm from the tip of the lens and capture a full 4 megapixels of astonishingly close detail.



Product-Application Couples

Real Estate

In this market, there is a huge importance placed on visual images of product to be sent to potential clients – either electronically or in hard copy. Here, digital cameras are used primarily by sales negotiators, marketing coordinators and surveyors. Other people using digital cameras in this sector include agents, project managers, site managers and office managers. In the real estate sector, there is a broad range of uses for digital cameras, with utilization varying from low pixel-count photos for use on internet and with e-mail right through to very high quality prints for displaying in shop windows. For internet applications, the most important element is **simplicity of use**, as the cameras are often used by unskilled workers in the field. On the other hand, when printing photos for use in agency shop-fronts, it's imperative to have reasonable pixel count and colour rendition. As the real estate representative is often with clients at the time he or she uses a digital camera, it's important that the camera should be stylish and attractive.

5.0 (S60) or 7.1 (S70) Megapixels
and 3.6x optical zoom

Canon UA 28mm wide angle
lens - fits more into your shot

One-touch printing with
Print/Share button



Ideal Camera/Application couple

PowerShot S60 and PowerShot S70

Fast, powerful and intuitive: the 5.0 Megapixel PowerShot S60 and 7.1 Megapixel PowerShot S70 burst with professional features, yet are compact enough to take everywhere. The new Canon original ultra-high refractive index aspherical (UA) lens yields a remarkably thin body and compact 3.6x optical zoom lens. Starting at 28mm wide (35mm equivalent) reduces the need to take a step back to get everything in the frame (great for shooting interiors).

Shooting modes

Use the SLR-style Mode Dial, shift quickly and easily between 13 different shooting modes including VGA movie and custom modes.

Visionary Technology

Canon's DIGIC processor with iSAPS technology ensures high quality, accurate colour reproduction and bright clear images; with an added benefit of enhancing battery life.

Focus and exposure

The 9-Point Artificial Intelligent Auto Focus (AiAF) system automatically detects subject from nine fixed focusing areas across the frame, keeping even off-centre subjects in-focus. Alternatively, FlexiZone AF/AE lets you scroll the auto focus area around the frame to select the desired subject and weights exposure accordingly.

Advanced printing/sharing

The cameras print directly to all PictBridge or Canon Direct Print compatible printers and support one touch printing or upload of images to a Windows PC with the Print/Share Button.

STRATEGIC OUTLOOK

INTERVIEW by Richard Barnes

SHUNICHI MORINAGA



Manager DSC Product Management

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Shunichi Morinaga joined Canon INC in 1984 in Japan. After years of experience in North America, Europe and at HQ in Japan for Photo & Video business in Canon, currently he is Manager of DSC product management of Canon Consumer Imaging Business Unit, Canon Europe - European HQ of consumer products.

Canon Digital Camera Product Strategy

Richard Barnes: **Canon has seen incredible growth in its digital camera business. What do you put this down to?**

Shunichi Morinaga: Canon invests heavily in the core technologies and the understanding necessary to develop digital cameras and believes strongly in sharing the benefits of these technologies to end-users. Benefits span every facet of the camera, from perfect ergonomics, to superb image quality, not forgetting intuitive and fast operation.

So maybe it's no surprise that when our 70 years of experience in the photographic industry are combined with our unique digital technologies the results are some of the world's best selling models. Our cameras also feature 21 different languages for their LCD screen menus, more than any other manufacturer and a key reason why our cameras are so easy to use and enable users to get the maximum out of them.

RB: **What's new at Photokina 2004 in Cologne?**

SM: At Photokina, Canon is launching 3 new Digital IXUS cameras. All Canon digital cameras feature DIGIC, a unique and dedicated processor especially developed by Canon to perform the key operations (image rendering, Auto Exposure / Auto Focus / Auto White Balance, signal processing, JPEG compression, memory card control and LCD monitor display) required by a digital camera - Ensuring that a Canon digital

camera operates efficiently, quickly and yet still reproduces vibrant images free from noise, yet full of detail. DIGIC II - featured in two of the new Digital IXUS cameras - is Canon's next generation processor, and delivers even faster camera performance with enhanced image processing and longer, higher quality movies.

RB: **Tell us more about the Compact Photo Printer & Direct photo print solution through PictBridge.**

SM: Evolution to digital technologies has drastically changed the business structure of the photographic industry. Digital camera users can now choose from so many different ways to print images and now home or corporate photo printing is a significant part of the total photographic industry business. A major concern for the majority of users is how to make easy prints.

Due to the convenience of digital cameras, the number of images taken per user is increasing dramatically. Given this increase, if manufacturers can provide the correct solutions making it easy to get prints then it is also likely that the number of prints will similarly increase. Thanks to PictBridge, an industry wide standard for digital camera to printer communication, digital cameras and printers from different manufacturers can be connected and images printed - a significant step in the right direction of making it easy to make prints.

CONCLUSION

by Richard Barnes

Several years ago, Cleverdis noted a marked interest for digital cameras within the corporate sector – basically at that time as a new computer “peripheral”. There was a great deal of confusion as to what criteria should be used when choosing hardware, and most people believed that everything centred on megapixels. In some ways that was true, as many devices had so few pixels that it was not necessary to worry about optics! And there was no way they could rival silver halide cameras when it came to prints. For this reason, photos were generally only viewed on the computer screen itself. Since the days of using simple, low pixel-count cameras as IT peripherals, things have now changed to the point that digital cameras are being used for applications that had never been thought of before. Added to this, with direct print solutions, the creation of crisp, spectacular photo prints is now not only easy, it’s a must when it comes to seeing the real detail given by high pixel-count cameras. Don’t forget the best computer screens are generally only good enough to show a 1 megapixel photo in native format! The rest of that detail is lost. Canon has emerged as a leader in the sale of digital cameras and direct print solutions to the corporate sector, and I believe they take this role very seriously. The proof lies in the commissioning of a major study on the sector by Cleverdis, and the sponsoring of the compilation of this special report, destined to educate and inform the buying public. We salute the efforts by Canon in this respect, and wish them continued success for the future.

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