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Sustainable TIMES

Efficient & Green Practices for the Workplace

SUMMER 2013

Take Control
of Document Workflow

OKI's award winning generation of multifunction devices combine energy efficiency, security and document workflow

greenAgenda

Choice shouldn't be a dirty word

Paperless processes are hugely beneficial to businesses and the environment, but in the rush to eradicate paper have the needs of consumers been forgotten? The Keep Me Posted campaign certainly thinks so – and with good reason (see page 16). Going paperless is a relatively easy way for an organisation to reduce its carbon footprint, but it is not always in the best interests of customers. A more challenging path is to accept that some people will always prefer to work with paper and find ways to reduce the environmental impact of their choices. In this issue we feature two outstanding examples of this approach: Toshiba's Eco MFP, which uses erasable toner so that a sheet of paper can be re-used five times (page 15); and the MegaNews print-on-demand magazine kiosk, which reduces the carbon footprint of magazines by as much as 60% (page 12). Both initiatives are a welcome reminder that an overly proscriptive approach is not the only way to achieve green objectives.

James Goulding, Editor

Dell builds boxes out of straw

Dell has set a goal of zero-waste packaging by 2020 and made a commitment to use only recyclable or compostable materials sourced from sustainable materials. Currently, more than half of Dell's packaging meets these criteria.

Starting this month, Dell is to package notebooks from China in recycled cardboard boxes containing a minimum of 15% wheat straw, a by-product of wheat harvesting that Chinese farmers would normally burn. During pulping, the wheat straw goes through an enzymatic process modelled on the way cows digest grass that uses 40% less energy and almost 90% less water than traditional chemical pulping.

By sourcing 200 tons of wheat straw from farmers in the Jiangsu Province each year, Dell expects to save 180 tons of CO_2 emissions – the carbon equivalent of planting and growing 4,600 seedlings for a decade.

Dell already uses bamboo cushions instead of foam when shipping notebooks and other lightweight products, and mushroom cushions for heavier products such as servers.
www.dell.com

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A WCC-validated woodland planting scheme at Crairieknowe in Galloway, Scotland. Copyright: Forest Carbon Ltd.

Woodland Carbon Code anniversary

After its first two years of operation, the Woodland Carbon Code, a voluntary UK standard set up to ensure that 'carbon forestry' projects achieve the carbon benefits they claim, is being used to validate 133 projects covering 14,200 hectares (35,000 acres). In total, these projects are forecast to remove more than 5 million tonnes of carbon dioxide from the atmosphere over the next 100 years.

The code administered by the Forestry Commission was recently amended to allow groups of smaller woodland projects to come together to share the cost of validation. It has also been added to the Markit Environmental Registry, allowing CO_2 sequestered or absorbed by WCC-validated woodlands in the UK to be traded and changes in ownership of each tonne to be tracked.

About 13% of the UK's land area is covered by woodland, more than double the woodland coverage of 100 years ago. The European Union average is 37%.
www.forestry.gov.uk/carboncode

UK courts to be paperless by 2016

As the Government announces a new digital courtroom strategy, Opus 2 International's Magnum document management system has been named Green IT Project of the Year in the 2013 Business Green Awards for its proven success in reducing paper consumption and facilitating paperless trials.

Opus 2 Magnum saved approximately 5 million sheets of A4 paper during its debut case (Berezovsky v Abramovich) in 2011 and it is now used in nearly every major UK case. All court documents are stored electronically in the cloud and can be accessed by solicitors, barristers, claimants, defendants, judges and juries from anywhere in the world.

In June, Justice Minister Damian Green announced a programme to make UK courtrooms fully digital by 2016. UK courts and the Crown Prosecution Service currently use 160 million sheets of paper a year, equivalent to the height of 15 Mount Snowdons.

The Government plans to spend £160 million on IT systems that will enable interested parties to present evidence digitally and access and share court documents at the touch of a button. In addition to new court presentation and collaboration software, Green plans to install digital evidence screens and WiFi in a majority of the UK's 500 court houses.

The investment will end an 'outdated' reliance on paper and improve efficiency and productivity, for example by preventing adjournments caused by lost or missing information.

Enjoy your stay, but don't leave the lights on

Hotels need to prepare for tomorrow's higher electricity bills by saving energy today, warns Ville Valorinta, CEO and Founder of Ecompter, a provider of carbon footprint calculation and sustainability services to the hotel industry.

He said: "According to data gathered from Ecompter's customers, at present energy prices, the average hotel spends approximately £1,000 per room on electricity each year. These costs are set to spiral and put a further squeeze on hotel profits as energy prices continue to increase across the country."
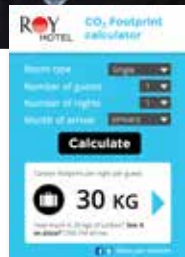
He added: "Hotels should be thinking right now about their energy consumption levels and encouraging guests to make sustainable choices during their stay. Ecompter offers hotels a CO2 calculator they can feature online so their guests are encouraged to reduce their energy consumption with useful suggestions about how to do so, such as choosing to shower rather than having a bath, or remembering to turn the lights and air conditioning off when leaving their rooms."

Ville advises hotel management to take the same approach with hotel staff.

He said: "The simple fact is hotel policies alone, however well intentioned, are not going to bring about the kind of changes in energy use needed to cut costs, improve profitability and have a positive effect on the environment. Hotels can only achieve this by working in partnership with their guests and their staff."

Ecompter's CO2 management and reporting services are based on the hotel industry's agreed common method for measuring and communicating carbon emissions, the Hotel Carbon Measurement Initiative (HCMI).
www.ecompter.com

A 21-metre living wall on the side of the 'Rubens at the Palace Hotel' is set to become a major attraction on the walk from Victoria station to Buckingham Palace, London. Designed to bloom all year round, it is packed with more than 20 seasonal plant species including buttercups, crocuses, strawberries, spring bulbs and winter geraniums. Green walls have many benefits: they improve air quality by trapping microscopic pollutants; deaden noise; keep buildings cooler in the summer and warmer in winter; and, it is claimed, even reduce the risk of flooding. Dedicated storage tanks in the living wall at the 'Rubens at the Palace Hotel' can capture 10,000 litres of rainwater from the hotel's roof.

James Cropper cures caffeine hangover

The UK's addiction to high street coffee has a big hangover in the form of an estimated 2.5 billion disposable paper cups that are sent to landfill each year.

James Cropper's new recycling facility at its Lake District HQ.

Now a recycling process has been developed that will allow disposable cups to be recycled and turned into high grade paper. Previously, this was not possible due to a thin layer of plastic on the inside of the cups.

The new method developed by paper manufacturer James Cropper separates plastic from paper pulp allowing both elements to be recycled.

Cup waste is softened in a warmed solution until the coating comes apart from the fibre. The plastic is then skimmed off, pulverised and recycled. The remaining material is filtered for impurities, leaving high grade pulp suitable for use in luxury papers and packaging materials.
www.cropper.com

Paper before plastic

Mondi has launched a campaign to encourage greater use of biodegradable, recyclable paper shopping bags, following research showing that only 2% of consumers in Germany and Italy and 0.5% of people in Spain choose paper bags when grocery shopping.

Clemens Stockreiter, COO of Mondi Kraft Paper Europe & International, said: "The raw material in Mondi kraft paper-based bags comes from responsibly managed forests. Our kraft paper can be recycled up to seven times and is suitable for industrial composting. If a paper-based bag is thrown away, it will naturally biodegrade." **www.paperforbags.com**

■ According to WRAP, supermarket customers in the UK used 8.1 billion single-use plastic bags in 2012. This is 1.3% more than in 2011 but 34% less than in 2006 when reporting began.

10 recycling fast facts

■ In the last 10 years, local authority recycling schemes have collected £2.4 billion worth of materials like paper and card (£1 billion), plastic (£339 million), cans (£174 million), glass (£153 million) and textiles (£124 million).

■ Household recycling has risen from 11% in 2001 to 43% in 2013. More than half of business waste is now recycled.

■ More than 9 billion drinks cans are made in the UK every year – 80% are aluminium. In one year, a single drinks can can be recycled as many as eight times, saving enough energy to make 160 new cans.

■ Over 3 billion cans are recycled in the UK each year – equivalent to the weight of 18,000 double-decker buses.

■ All steel cans contain up to 25% recycled steel.

■ In the last 10 years, the UK has recycled 50 billion plastic drinks bottles – enough, laid end-to-end, to stretch to the moon and back more than 10 times!

■ Recycled plastic bottles can be turned into all kinds of things – even fleece jackets! It takes 25 recycled drinks bottles to make a fleece jacket.

■ It takes 75% less energy to make a plastic bottle from recycled plastic than 'virgin' materials.

■ In the UK, we send 700,000 tonnes of clothing to be recycled each year – enough to fill 459 Olympic swimming pools – but still £140m worth of used clothing ends up in landfill.

■ Aerosols and foil are the two materials that the greatest proportion of people throw away due to a lack of awareness that they are included in council's kerbside recycling collections.

For more recycling facts and figures go to www.wrap.org.uk

Idling vans cost billions in wasted fuel

Idling vehicles are costing businesses in the UK & Ireland £3.3 billion in wasted fuel each year, according to analysis by Fleetmatics Group, a global provider of fleet management solutions for commercial fleet vehicles.

Analysis of 32 million data points received each day from the company's 331,000 subscriber vehicles reveals that vehicles operating without a fleet management solution idle for an average of 96 minutes per day. By implementing a GPS fleet tracking solution, SME fleet owners can reduce vehicle idling times by an average of 25%, or 24 minutes, daily.

In 2011, it was estimated that only 24.9% of all commercial vehicles operating in the UK and Ireland had implemented a fleet management solution. Fleetmatics Group argues that with 4.5 million commercial vehicles currently operating in the UK and Ireland, a penetration rate of 24.9% should already be realising a saving of 1.7 million litres of fuel worth £2.3 million daily.

If all commercial vehicles operating in the UK and Ireland were to implement this technology, business could save a further five million litres of fuel or almost £7 million, adding up to daily savings of 6.7 million litres of fuel or £9.2 million.
www.fleetmatics.co.uk

Wishing on a toner

MFP supplier DMC has announced that in its first year of operation, the company's planitgreen range of printer products has saved as much CO2 as an average petrol car would emit in travelling 165,055 miles or 6.6 times around the world. DMC developed planitgreen to meet the print needs of eco-conscious businesses. It includes big brand printers and MFPs chosen for their energy-efficiency and low running costs and an extensive range of remanufactured toner cartridges that are up to 60% cheaper than OEM originals. For every planitgreen toner sold, DMC donates 25p to the Starlight children's charity, which brightens the lives of terminally ill children by granting them a once in a lifetime wish. **www.planitgreentoner.co.uk**

The gift of light

Sustainia has recognised Philips' Community Light Center as one of the 100 most innovative sustainable solutions for local communities.
A Philips Community Light Center is an area of about 1,000 square metres lit by solar-powered LED lighting systems that enables communities without reliable lighting to enjoy communal activities after dark, including markets, sports, education and healthcare. In the next two years, Philips plans to install 100 Philips Community Light Centers across Africa.

BBOXX best social enterprise

BBOXX, the solar energy company dedicated to supplying off-grid communities with sustainable electricity, has been named Best Social Enterprise at the inaugural British Young Business Awards. Since its inception in 2010, BBOXX has brought electricity to more than 20,000 households in off-grid locations throughout the developing world through the distribution of solar-powered battery packs charged centrally at a network of Energy Kiosks.

Energy services provider Inteb Sustainability Limited claims that Britain's biggest energy and carbon-using businesses (i.e. those with energy bills of more than £500k per annum) could save £1.7bn in a single year by managing their energy consumption more effectively. Inteb argues that businesses can easily reduce energy consumption by 16% without any capital outlay.

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Finding the profit in carbon reduction

The World Wildlife Fund (WWF) and Carbon Disclosure Project (CDP) are urging US businesses to cut carbon emissions by an average of 3% a year between now and 2020 and enjoy increased profits as a result.

Their new report, *The 3% Solution: Driving Profits Through Carbon Reduction*, states that a 3% annual reduction will put the US corporate sector on track for a 25% reduction in greenhouse gas emissions (from 1990 levels).

A 25% reduction by 2020 is at the lower end of what the Intergovernmental Panel on Climate Change (IPCC) says is needed to help avoid a global temperature rise of 2 degrees Celsius above pre-industrial levels.

The report states that four out of 5 companies from the S&P 500 that report emissions to CDP have seen greater financial returns on carbon reduction investments than on capital investments overall. This suggests that businesses can look forward to greater profitability by reallocating capital expenditure towards energy efficiency and renewable energy projects.

The 3% Solution: Driving Profits Through Carbon Reduction calculates that to unlock billions of dollars in cost savings, the US corporate sector would on average need to invest 3 to 4% of their capital expenditure each year on low-risk, profitable carbon reduction projects.

To help companies reach these goals, the report includes a Carbon Target and Profit Calculator, which provides a guide to setting emission reduction goals; and the Carbon Productivity Portfolio, a set of five actions that form a new strategic approach to maximising business value and carbon reductions.
www.worldwildlife.org

Energy efficiency product of the year

The NextiraOne Energy Efficient Data Centre Architecture solution has been named Data Centre Energy Efficiency Product of the Year at the Data Centre Solutions Awards 2013 after it helped lower the energy consumption of Howden Joinery's Northampton-based core site by 60%.

Introduced when Howden's power supply had nearly reached full capacity, the solution cut overall power consumption from peak readings of 392 amps to 158 amps, giving Howden's the capacity to grow its business without having to move premises or pay higher running charges.

Clive Cockburn, Head of IS Infrastructure at Howden Joinery Group plc, said: "The combination of new energy-efficient technologies and improved management techniques has brought our power consumption down by an incredible 60%. Thanks to NextiraOne's solution we continue to have the capacity to grow our business on our main site."
www.nextiraone.eu/uk

Sainsbury's sets new solar landmark

With 100,000 photovoltaic solar panels on the roofs of 210 stores, Sainsbury's is the largest multi-roof solar panel operator in Europe. Its solar arrays cover an area the size of 35 football pitches and have reduced the company's total CO2 emissions by an estimated 9,785 tonnes per year.

Other low carbon technologies used by the retailer include ground source heat pumps in 12 stores; 74 biomass boilers; and GE's Lumination Linear Suspended LED lighting system in Sainsbury's new Leek supermarket, which is expected to reduce energy use from lighting by 59%.

Paul Crewe, Sainsbury's Head of Engineering, Sustainability, Energy and Environment, said: "We've achieved a 9.1% absolute reduction in electricity use over the past four years in our supermarkets, despite a 25% increase in space, and we're really seeing the benefits from using our underutilised space for solar panels, and from the other renewable technologies we've installed."

By 2020, Sainsbury's plans to reduce operational carbon emissions by 30% from 2005 levels.

Room for improvement

The education sector is failing to maximise savings from PC energy management solutions due to a lack of knowledge about the technology, or so Verisimic claims.

Its survey of more than 100 IT managers working in education found that only 9% had 'considerable knowledge' of PC management software and nearly 50% underestimated the size of the proven savings – £60 per PC, according to Verisimic.

The most popular cost-saving measures cited by respondents were 'reducing IT power and cooling costs' (20%), PC energy management software (17%) and virtualisation (16%).

Loughborough University has saved £30,000 a year since 2011 when it installed Verisimic PC energy management software to control the nocturnal and weekend energy consumption of 1,700 PCs. Wake-on-LAN functionality ensures machines are powered-on to receive patches and upgrades and powered down as soon as that process is complete.

Loughborough University is using PC energy management software to cut costs and carbon emissions.

Treading the light fantastic

Rexel has helped The University of Essex reduce lighting-related energy consumption by 77%, saving £10,311 each year.

As part of a £1 million energy-efficient lighting project, the University installed LED lighting with a life expectancy of more than a decade in all external walkways on its Colchester campus.

Replacing the existing T 150w HQL tubular lighting with 197 Kingfisher LED-IN1BC4.7 lamps has reduced energy consumption from 133,509 Kwh to 30,396 Kwh per annum and shrunk the University's annual carbon footprint by 56 tonnes.
www.rexel.com

Renewables on the rise

Worldwide power generation from hydro, wind, solar and other renewable sources will exceed that from gas by 2016 and will produce twice as much energy as nuclear, according to the second annual *Medium-Term Renewable Energy Market Report* from the International Energy Agency (IEA).

The IEA expects renewable power to grow by 40% in the next five years and to make up almost a quarter of the global power mix by 2018, up from an estimated 20% in 2011. The share of wind, solar, bio-energy, geothermal and other non-hydro sources in total power generation will double to 8% by 2018, up from 4% in 2011 and 2% in 2006.

Non-OECD countries are expected to account for two-thirds of the global increase in renewable power generation between now and 2018.

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Waste not, want not

Since launching O2recycle in conjunction with O2 in 2009, mobile phone recycler Redeem Holdings Limited has made payments of more than £50 million to O2 customers for their traded-in mobile phones and contributed over £2 million to O2's Think Big community programme.

Redeem, which recently announced a strategic partnership with Blancco, the global leader in certified data erasure solutions, securely wipes all data from smartphones before they are recycled or refurbished for resale. **www.redeem.co.uk**

Electronics recycler Redeem Ltd has re-located its headquarters from Falkirk to 10,740 square feet of office accommodation in the Pyramids Business Park, West Lothian.

Free computers

Prism Disposal is offering free recycled computers to registered UK charities. Gary David Smith, co-founder of the Prism Total IT Solutions subsidiary, said: "We are constantly receiving computers that can be re-used and if charities email us with an outline of what capabilities they require we will match machines to the requests as they become available." Before donating the computers, Prism deletes all data to Ministry of Defence (MoD) standards. **www.prismdisposal.com**

Crate repair service launched by Pluscrates

Crate rental specialist Pluscrates has introduced a new crate repair service to support the growing use of Returnable Transit Packaging (RTP) by major retailers and supermarkets. Currently an estimated 100,000 damaged crates, or totes, are scrapped each year.

Pluscrates' Managing Director John Mitchell said: "We've been recycling the plastic raw material in our own broken totes for many years, but more recently we decided to introduce a 'speed welding' technique to repair damaged totes and return them into service. It proved very successful, so it was a logical step to begin offering the same repair service to our clients in the retail sector."

Speed welding uses a plastic welder similar to a soldering iron to fuse broken parts together. On average, the cost of repairing and recycling is half that of purchasing new stock.

Extend PC life with memory upgrades

Online memory upgrade retailer Crucial.com is urging businesses to consider memory upgrades before replacing their computers following new analysis suggesting that UK consumers throw out more than 5,000 tonnes of PCs and laptops each year – the equivalent in weight to 790 double-decker buses or 27 Angel of the North sculptures.

According to a survey of 2,000 consumers, 38% of people have thrown out an old laptop or PC because they wanted one that would boot up more quickly, run faster and handle multiple tasks simultaneously. Almost 37% said they would delay buying a new machine if they could make their old computer run faster.

Roddy McLean of Crucial.com said: "People often go out and buy a brand new computer simply because their old one doesn't perform as quickly as it used to and this habit can be extremely costly, time consuming and damaging to the environment. Rather than discarding a perfectly good computer, the problem of a slow-running laptop or PC can be resolved in as little as ten minutes with an easy system memory or SSD upgrade." **www.crucial.com/uk**

Second hand computer costs NHS Surrey £200,000

The importance of removing data from old computers and other electronic devices before recycling or re-use is highlighted by a £200,000 fine imposed by the Information Commissioner's Office (ICO) on NHS Surrey after 3,000 patient records were found on a second-hand computer bought through an online auction site.

The PC was sold by a data destruction company employed by NHS Surrey since March 2010. The company provided data and computer destruction services for free on the basis that they could sell salvageable materials after the hard drives had been securely destroyed.

After being alerted to the data breach by the purchaser of the computer, NHS Surrey managed to reclaim a further 39 computers sold by the trading arm of their data destruction provider, 10 of which had previously belonged to NHS Surrey. Of these, three still contained sensitive personal data.

An ICO investigation found that NHS Surrey failed to observe and monitor the data destruction process; had no contract in place explaining the provider's legal requirements under the Data Protection Act; and had mislaid the records of equipment passed for destruction between March 2010 and February 2011.

The data destruction company was unable to trace where the Trust's computers had ended up or confirm how many might still contain personal data.

NHS Surrey was dissolved on 31 March 2013 with some of their legal responsibilities passing to the NHS Commissioning Board.

Guidance on how to ensure old IT equipment is destroyed in compliance with the Data Protection Act can be found on the ICO website at **www.ico.org.uk.**

Fifty new jobs at DCI

Dynamic Cassette International Ltd (DCI), Europe's leading collector and recycler of inkjet and toner cartridges, has doubled the remanufacturing capacity at its factory in Boston, Lincolnshire and, in the last three months, created an additional 50 jobs. The expansion follows the addition of Epson remanufactured cartridges to its product range. **www.jettec.com**

Cash for old projectors

NEC Display Solutions has launched a 'return, refurbish and reuse' programme for any make or model of projector. Open to customers who have recently purchased an NEC projector, ReTrade pays cash for unwanted projectors that are then refurbished or recycled. NEC expects to refurbish 85% of returned projectors. **www.nec-display-solutions.com**
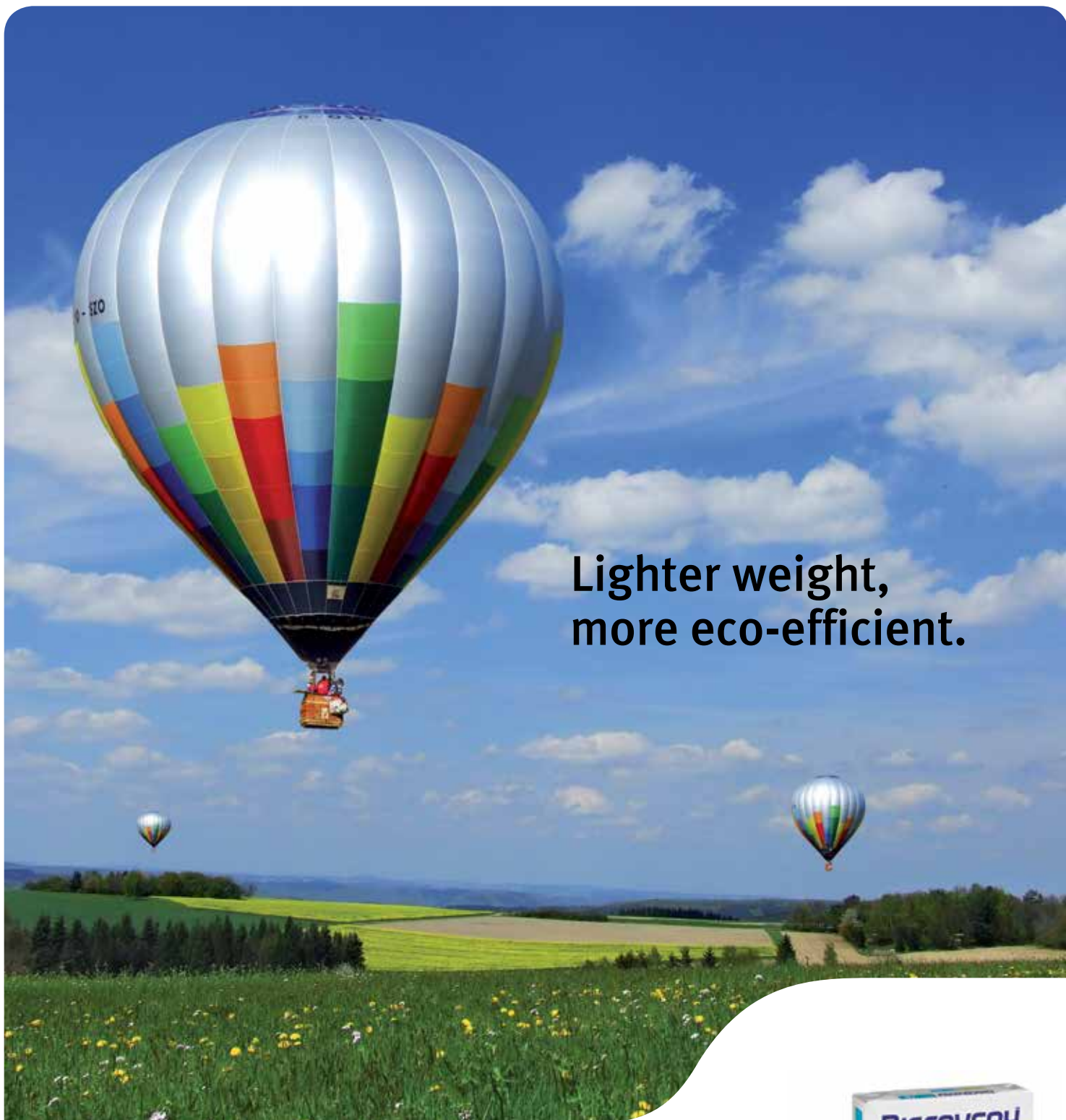
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Taking Control of Document Workflow

Andrew Hall, marketing manager, OKI looks at a new generation of multifunction devices which combine energy efficiency and security with document workflow support

Over the past couple of years, Oki Systems UK's new range of multifunction printers for the smaller business has been extremely well received and gained a reputation for being highly reliable and energy-efficient.

OKI has now built on this success and developed an equally innovative range of A4 colour multifunction printers for medium to large businesses and other organisations. Multifunction printers combine printing, scanning, fax and copying capability and sometimes document finishing (sorting and stapling) in one compact device. This cuts down on the space needed, as well as the overhead of managing and maintaining individual models.

OKI's new range, the MC700 series, combines OKI's trademark environmentally-responsible features with enterprise class functionality, security and flexibility plus comprehensive document workflow support. These are designed to deliver workflow efficiencies and cost-savings as organisations improve the way documents are handled, managed and processed.

The series comes with OKI's smart Extendable Platform (sXP), an open

> **OKI launched its first generation digital LED-based printers as long ago as 1989 and has continued to refine and improve the technology over the past two decades.**

platform architecture that enables customisation of the user interface in order to integrate all document-related tasks seamlessly into an organisation's enterprise document workflow. The key benefit here is that it enables the move from a manual paper-based workflow to an automated digital flow.

Printing speeds are impressive – up to 40 pages per minute – and both the scanner and print engine are based on OKI's light-emitting diode (LED) technology. LED is now used across a range of progressive industries such as automotive, laptop and contemporary lighting design and manufacture and has been hailed as a new and highly-innovative technology offering greater cost control and reduced environmental impact. OKI launched its first generation digital LED-based printers as long ago as 1989 and has continued to refine and improve

the technology over the past two decades. As a result, the company's latest printers are able to offer substantial gains across key aspects of performance.

Further features of the MC700 series include duplex printing and scanning. Setting printers up to print double-sided as default is a simple but effective way to save paper – after all printing on both sides of a piece of paper cuts down paper consumption by up to 50 per cent.

These devices also provide support for multi-scan destinations and have an integrated stapler and some models feature high-speed fax plus an internal finisher for the automated collating and stapling of document sets.

But among the main benefits of this new range are its advanced security features. These include an encrypted hard disk; secure PIN printing; data encryption; disk

wiping; and secure print with card release options.

These secure print features enable the user to store documents to print on the printer's hard drive disk. Only when a four-digit, user-defined password is entered on the printer's front panel can the document be printed with features such as secure erase which can automatically delete all data once printed.

Print security has become even more important with the increase in remote working supported by wireless and follow-me printing, which allows users to print to any supported network printer within an office space. These developments make it much harder to control printer usage and who has access to specific devices unless the correct security features are in place.

These enterprise class multifunction printers are not only an important addition to OKI's product portfolio, they will also significantly strengthen its managed document services offering. OKI works with its wide network of managed services partners to deploy strategies that help customers take control over the costs of document output and management, without sacrificing quality.

At a basic level, these services help organisations gain a transparent view of their print landscape and review their existing practices. It's surprising that even those businesses that are in other ways meticulous about cutting costs and minimising their carbon footprint often don't have a clear view of their current print environment, energy usage or spend.

When the organisation is aware of what they are printing, as well as how and why, they can consider automated document management workflows to ensure that their files are stored exactly where they are supposed to be to ensure fast and easy access. A holistic, customised approach to document workflow can add to cost-savings and make further efficiency gains.

Different organisations have diverse priorities. Some will focus on productivity and efficiency gains while others will look to identify and control print usage or look for an environmentally-friendly solution with low running and maintenance costs. In each case OKI's highly flexible MC700 range can be tailored to meet these differing demands.

> **Print security has become even more important with the increase in remote working supported by wireless and follow-me printing...**

Contact:
Email: ukenquires@okieurope.co.uk
Tel: 01784 274300
www.oki.co.uk / www.cleverprinters.co.uk

The News Stand of The Future

Could the MegaNews kiosk be a more economical and sustainable means of distributing newspapers and magazines? James Goulding reports

The transition from a 'print and distribute' model to 'distribute and print' has transformed the way documents are created in many areas of life, from airline tickets to bank statements. Could it also change the way our favourite magazines are produced?

This is the question posed by the development of the world's first print-on-demand news stand by Swedish company MegaNews, in association with technology consultancy Sweco and industrial design company LA + B.

Together, the three companies have created a magazine vending machine for use in areas where traditional news stands don't exist or where there is demand for 24/7 availability or greater choice, such as in airports, railway stations, hotels & resorts, shopping centres and hospitals.

Instead of buying a magazine that is printed centrally and then distributed to retailers, the MegaNews kiosk lets you select a magazine via a colour touchscreen display, pay for it with a credit/debit card and wait two minutes while it is printed, bound and output on the spot.

Eliminating over-supply

A print-on-demand model overcomes the two major drawbacks of existing distribution methods: the expense of transporting magazines and newspapers to retailers, which can account for 10% of a magazine's entire cost structure; and the cost of over-supplying printed copies.

Because publishers don't know where consumers will buy their magazines, they tend to print and distribute 30-40% more copies than are sold. This adds significantly to printing, paper, distribution/collection and recycling costs – and to the overall carbon footprint of printed media.

According to analysis by Innventia, a single copy of a typical Swedish magazine printed at a MegaNews kiosk produces 60% fewer GHG emissions in its lifecycle

The MegaNews kiosk houses a colour touchscreen display, card reader, Ricoh ProC 751 colour printer and EFI Fiery server.

It takes two minutes to print and bind an entire magazine.

than one printed and distributed in the traditional way.

This is a rough estimate based on the assumption that due to surplus copies and waste in the printing process, 2.2 copies will have been printed for every copy sold in the conventional way. It doesn't include emissions created by MegaNews' servers or those associated with the manufacture and installation of its kiosks (or traditional printing presses). Nor does it take into account the additional copies that could be generated by MegaNews' model.

In the future it may be possible to create customised publications containing material from a number of sources.

Extra sales channel

From a publishing perspective, one of the most exciting aspects of this system is that it gives publishers an additional sales channel for no extra cost. All they have to do is supply print-ready PDFs that will already have been produced as part of the normal production process. MegaNews then pays a commission for every copy printed and sold.

This model has particular benefits for niche publishers that are unable to finance mass printing and distribution, but which might have large numbers of potential readers who will now be able to find and print their magazines on demand.

MegaNews founders Lars and Hans Adaktusson hope that giving people the ability to print magazines that would otherwise be unavailable will increase news stand sales and maintain the relevance and importance of print media in the digital age. Whether the public agrees should become clear over the next few months as kiosks and their underlying technology are trialled in a number of locations.

The first MegaNews kiosk is already up and running in the MOOD shopping centre in Stockholm, and three more are soon to be installed at Landvetter Airport, Skavsta Airport and Elit Avenue Hotel in Gothenburg. All going well, there will be a full roll-out next year.

MegaNews currently sells more than 100 Swedish and American magazines from leading publishers such as Bonnier Tidskrifter, Aller Media, Albinson & Sjöberg, LRF Media, IDG, Talentum and Medströms. For now, magazines must be printed in their entirety but in the future it might be possible for consumers to create and print their own publications using material from a number of magazines.

The MegaNews kiosk is an exciting response to the challenges facing the newspaper and magazine industries at a time of escalating costs and greater competition from online media. In its current form, it provides an economical and sustainable alternative to traditional distribution methods. In the future, it could fundamentally transform how we buy and read published material.

Introducing the next generation of sustainable printing

Further strengthening its reputation as the world's leading sustainable printing technology pioneer, Toshiba TEC UK Imaging Systems has announced the introduction of its highly anticipated e-STUDIO306LP/RD30 multifunction product (MFP). Incorporating the company's unique erasable toner technology it sets new standards in office waste reduction and cost savings.

'The paperless office is far from a reality and business people are still printing in vast quantities,' commented Jeremy Spencer, Toshiba TEC's marketing director. **'It is estimated that 70 per cent of office waste is made up of paper and the average office worker gets through up to 50 sheets of paper a day. Most of this activity comprises print outs of internal documents, emails and memos, most of which are soon thrown away.'**

The e-STUDIO306LP/ RD30 looks like a typical MFP and uses standard copier paper. However, when used paper is fed into the eraser unit it heats the ink, wiping the print, providing a blank sheet of paper to use again.

Not only that, documents can be annotated with the use of a Pilot FriXion pen. The unique gel ink in this pen also responds to the heat generated by the e-STUDIO RD30, removing notes and comments as part of the erasing process.

With companies of all kinds now being encouraged to operate in a way that's good for people and the environment, other high volume paper users such as educational

establishments, financial institutions and local governments can look forward to experiencing these benefits. If the same piece is used five times, paper usage can be cut by a dramatic 80 per cent, providing massive cost savings. Therefore, not only is it good for the environment, it also offers an excellent return on investment

The e-STUDIO RD30 will also convert the contents of a document into an electronic file, which can be stored in a document management system (DMS). Individuals can then access it from any location and amend it as part of a workflow.

The e-STUDIO306LP/ RD30 is part of Toshiba TEC's ongoing commitment to introducing solutions that help businesses achieve their operational and corporate social responsibility based objectives. Jeremy Spencer concluded, 'We firmly believe that the e-STUDIO306LP/ RD30 opens the door to a new way of working by encouraging users to save money and reduce the massive amount of waste paper that is created in offices every day. By developing a system which also helps reduce carbon emissions Toshiba TEC has once again proven its commitment to a better future.'

For more information on this amazing new product, go to: 5x1.toshiba.eu

OLIin1

The OLIin1 is the new All-in-One PC, operated simply at the touch of a finger.

With its clean modern design, this PC combines the power of a third-generation Intel processor (I3 or I5), with the immediacy of use of a tablet. The ten-point multitouch capacitive full-HD screen ensures maximum interactivity and control.

This is a highly efficient tool, whose advanced technology and backlist LCD monitor deliver outstanding performance and reduced consumption. The display can be set in three different positions (10°, 20°, parallel with the work surface).

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c.gordge@olivetti.com

Now you see it, now you don't

Virgin Media recently completed a successful trial of Toshiba's paper-saving erasable toner MFP.

Virgin Media is synonymous with modern entertainment technologies and was the first provider of all four key services in the UK – broadband, TV, mobile phone and landline. As well as delivering ultrafast broadband connections to over half of all UK homes, it was the first to offer HDTV and 3DTV on demand.

The company prides itself on growing its business in a way that's good for people and the environment. Managing waste is a key element of this objective and customers, staff and social commentators are all encouraged to provide input and ideas about how this can be achieved.

Virgin Media is a long-term customer of Toshiba TEC UK Imaging Systems. Responsible for an estimated 7 million colour print-outs a year, it is keen to make its print-based functions as efficient as possible. So when Virgin Media IT Regional Support Manager Dave Holdsworth was offered the opportunity to trial the new e-STUDIO306LP erasable MFP, he jumped at the chance.

"We'd heard about systems from other manufacturers that claimed to do a similar thing – albeit with limited success – so wanted to see what Toshiba TEC had come up with. We were particularly interested in finding out how this new multifunction product (MFP) could help us save money and reduce print-related waste," he said.

The concept of erasable printing technology isn't new. However, previous systems have relied on plastic-coated paper that erases toner via a printer's thermal heads. The e-STUDIO306LP is different because it works with erasable, blue-coloured toner and standard copier paper that can be wiped clean and re-used five times or more.

Toshiba TEC marketing director Jeremy Spencer explained: "When previously printed paper is fed into the eraser unit it heats the ink, which wipes the print and provides a blank sheet to
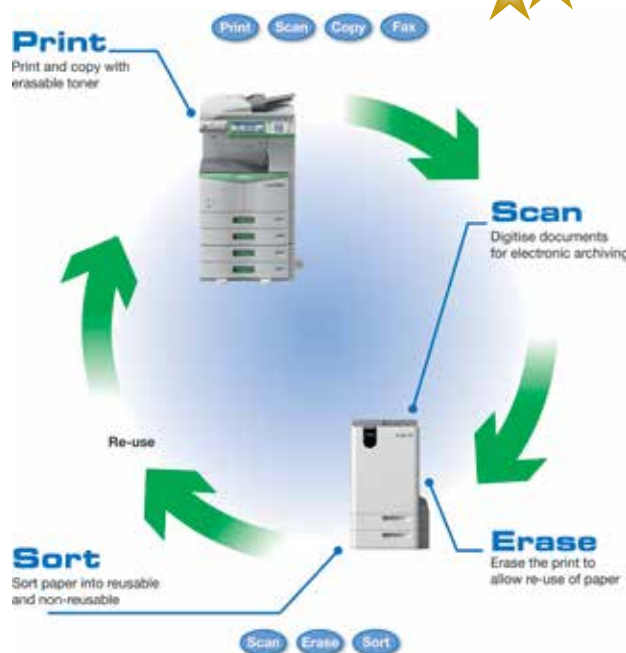
use again. This drastically cuts overall paper usage which obviously saves costs. Just as importantly, if the same piece of paper is used five times, total CO2 emissions can be reduced by 60% compared to printing once per sheet."

When erasing a printed page – and notes made on it with a Pilot FriXion erasable gel ink pen – the RD30 erasing

unit captures an electronic image of the document for storage in a document management system (DMS). Files can then be accessed from any location and amended as part of a workflow.

User feedback

Earlier this year, Toshiba TEC installed a prototype e-STUDIO306LP at Virgin Media. After the trial, people were invited to provide feedback and offer their views about how the MFP could be used longer-term. The response was unanimously positive, with widespread recognition of its potential to reduce waste.

Tony Duffy, ERP Support Analyst in the IT Development & Support department, said: "The e-STUDIO Eco is a great idea and is typical of the innovation that we expect from Toshiba TEC. I was impressed with the ease-of-use of both the MFP and the eraser unit. The e-STUDIO Eco is particularly suitable for printing internal documents, emails and memos and would definitely be useful at Virgin Media as it could save us money and help us meet our sustainability-based goals."

This view is shared by John Adams who works in Virgin Media's Remedy Support & Development department. He said: "My job involves printing documents which I then annotate. It's not possible to use standard ink pens to do this, as the paper cannot then be re-used, but I was able to use a FriXion ball pen as its ink is erasable like the toner. What's more, the eraser unit is able to detect if the sheet is reusable and automatically places unusable sheets in a separate bin, which is remarkably clever."

Virgin staff also suggested ways in which the e-STUDIO306LP could be improved. Pam Ratcliffe, who works in the Support & Development department, said: "Although I preferred printing in the blue ink rather than black, as it provided better contrast, most of the documents that I produce include graphs and line drawings and these need more than one colour to be easily read. I was therefore pleased to hear that Toshiba TEC is currently developing other options, potentially with a full colour version in the pipeline."

Jeremy Spencer concluded: "The feedback we have received from Virgin Media confirms our belief that the e-STUDIO306LP will open the door to a new way of working by encouraging users to save money and reduce the massive amount of waste paper that is created in offices every day."

www.toshibatectalk.co.uk
www.toshibatec.co.uk
01932 580190

An unstoppable trend

Mobile working accelerates the transition to digital, paperless processes

Last month saw the launch of a new campaign calling for the communication preferences of consumers to be protected as organisations, such as banks and utilities, switch from paper-based to electronic billing.

The Keep Me Posted campaign is funded by Royal Mail, TNT Post and UK Mail, but not all of its backers have a vested interest in postal communications. It is also supported by Mind, the National Consumer Federation and The National Federation of Occupational Pensioners.

The need for a campaign such as this reflects the growing adoption of electronic processes in business and the expectation that customers/suppliers will follow suit. Increasingly, consumers who still demand paper bills are penalised with surcharges and/or excluded from discounts available to online customers.

The fear is that older and disadvantaged consumers suffer disproportionately from a trend that is only going to grow as businesses seek to eradicate paper from their operations. According to IDC, the number of pages printed on laser MFPs and printers in developed economies fell by 4.2% and

Fujitsu has released a free ROI calculator for its scanners, including the Fujitsu ScanSnap iX500, which lets you scan documents to PCs, Macs, tablets and smartphones over WiFi. http://scanners.fcpa.fujitsu.com/scansnapit/go-green/roi-calculator.php

5% respectively in 2012, following similar declines in 2011.

Environmental responsibility is frequently used as the justification for e-billing but cost-savings and process efficiency are the main drivers.

In an e-book published to mark last year's World Paper-Free Day, *The Paper-Free Process Revolution*, AIIM, the global community of information professionals, claims that removing paper from workflows can result in a 30-50% gain in process productivity and a three- to ten-fold reduction in turnaround customer response times.

Fast-growing sales of document scanners that can capture paper-based information electronically at the start of a process suggest that businesses have taken note. New figures from IDC show

that in Q2 2013 (April-June), the overall document scanner market in Western Europe increased by 29.9% year-on-year (source: *IDC Western European Quarterly Document Scanner Tracker*).

Even so, adoption of paperless processes has been patchy. According to a new AIIM report, *Winning the Paper Wars*, only one in four businesses (24%) has a specific policy to eliminate paper from its operations. Of the 562 organisations surveyed for the report, 47% claim to have made only 5% progress towards updating processes that could be paper-free and 19% have actually increased their use of paper.

AIIM says that low adoption rates are partly due to the enduring misconception that paper copies and physical signatures are required for legal reasons. However, there are signs that things might at last be changing, with flexible working practices and greater use of mobile technologies accentuating the need for electronic access to business documents.

There is also growing recognition that implementing paper-free processes delivers a rapid return on investment. In AIIM's study, two-thirds of organisations that have gone down this route reported a return on investment (ROI) within 18 months; 50% achieved payback within 12 months.

www.keepmeposteduk.com
www.aiim.org/wpfd
www.aiim.org/paper-wars-2013

Space savers

Cost-savings and employee productivity aren't the only reasons why one might want to invest in a scanner. For many businesses, a scanner is also a great space-saver.

Take the Neopost IMW-20 for example. This all-in-one electronic document management system is ideal for scanning incoming post and invoices – and routing them to the right person/department using easy-to-use, pre-configured workflows. Many customers also use it to digitise paper archives.

Scanning and storing files electronically makes it quicker and easier for staff to find the documents they need

and also allows PC and hard copy-generated material to be kept in the same folder. Files can be accessed at the device or remotely, in and out of office hours.

Once paper archives have been scanned, they can be destroyed (in line with a company's records management policy) or stored off-site if there is a legal requirement to keep hard copies. This frees up valuable office space that can then be used for more productive

The Neopost IMW-20 combines an A4 duplex scanner, 1,000GB hard drive and document management software in one compact desktop unit.

purposes.

Neopost saved so much space by scanning that it was able to create an extra meeting room, while a marina in South West England has eliminated much of its day-to-day paper filing and created a more comfortable working environment in the process.

Another customer, car parts and accessories supplier Mill Auto Supplies, is now scanning all sales invoices and looking forward to the day when it no longer has any paper invoices on-site.
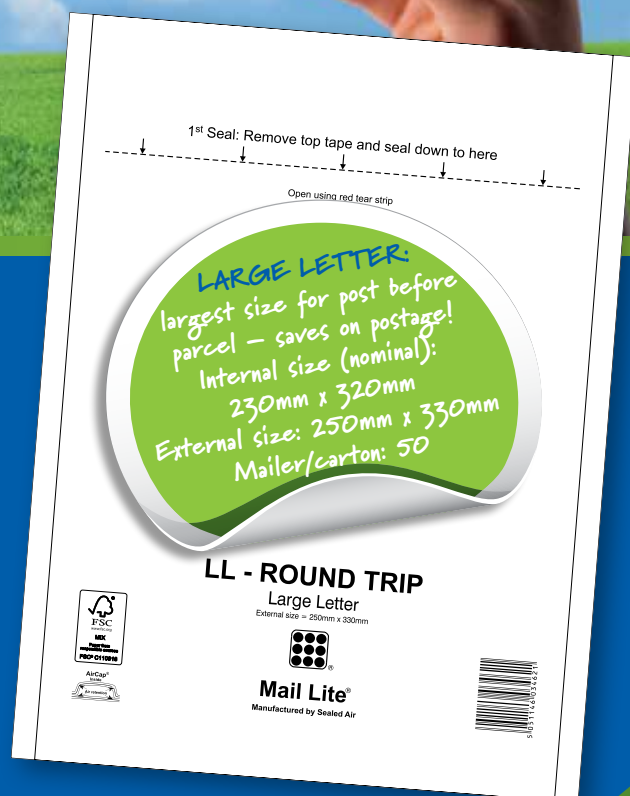
Company accountant Tony Watson said: "Increased document availability coupled with reduced handling and storage has saved a lot of time, and although we're not back scanning any old documents, we will notice storage space rapidly opening up as we begin to get rid of old files."

www.neopost.co.uk

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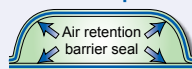
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Round Trip Mailers – ideal for e-commerce

what's new...

Blue Angel shredders

In an industry first, IDEAL has received Blue Angel accreditation for its shredders. The eco-label has been awarded to all models, from the IDEAL 2360 to the IDEAL 4005, in recognition of the company's ISO 14001-accredited manufacturing processes and the environmental features of its products. These include automatic and complete power cut-off after 30 minutes in stand-by mode and solid shred bins that remove the need for one-use plastic bags. They also feature quiet motors and specially hardened steel cutting shafts that come with a Lifetime Warranty. The shredders are distributed in the UK by Duplo International.
www.ideal-uk.co.uk
www.duplointernational.com

Keeping tabs on energy

Rexel has launched a new monitoring tool for measuring the energy efficiency of a home, office or retail environment. The MeasureMyEnergy web portal provides data on energy in real-time, with easy-to-understand graphs showing daily, weekly and monthly usage statistics and related costs. Email and SMS alerts warn when appliances have been left on, switch off unexpectedly or run at unplanned times of the day.

The only way is up!

Already the winner of a Next Generation award from NextGreenCar.com, Volkswagen's all-electric up! city car accelerates from zero to 62 mph in 12.4 seconds and has a top speed of 81 mph. Its lithium-ion battery has a range of 100 miles and can be charged to 80% of capacity in under 30 minutes at a DC fast-charging station. It can also be re-charged at a standard 230 Volt socket. UK sales are due to start later this year, with deliveries expected in early 2014.
www.volkswagen.co.uk

A bulb for all

Osram's 60-strong range of LED lamps boasts models for virtually every application and price point, including classical shapes and reflector lamps with the option of premium (LED Superstar) or economy (LED Star) sub-brands.

Osram has calculated that if every household in Germany replaced just one 60-watt incandescent bulb with an LED lamp, over half a billion euros in energy costs would be saved.
www.osram.com

Best for energy efficiency

Philips has developed the world's most energy-efficient warm white LED lamp for general lighting applications. A replacement for fluorescent tube lighting (TL) in offices and industry, the prototype TLED delivers 200 lumens per watt (lm/W) compared to 100lm/W with fluorescent lighting and 15lm/W with a traditional light bulb. Converting fluorescent lamps to 200lm/W TLED lamps that are twice as efficient will generate significant energy and cost savings. In the US alone, fluorescent lights consume around 200 terawatts of electricity annually. If these were all replaced with 200lm/W TLEDs, the US would use 100 terawatts less energy, saving more than US$12 billion and preventing 60 million metric tons of CO_2 from being released into the atmosphere. The 200lm/W TLED lamp is expected to go on sale in 2015. Lighting accounts for more than 19% of the world's total electricity consumption.

World first for Galaxy

The Samsung Galaxy S4 has become the first device to have TCO Certified Smartphones accreditation. The new sustainability certification addresses the entire lifecycle of a smartphone and covers manufacturing standards, ergonomics, health and safety and the use of hazardous materials. TCO Development has more than 20 years' experience in sustainability certifications for IT products including displays, notebooks, tablets, smartphones, desktops, all-in-one PCs, projectors and headsets.

Plastic-free substrate for printed electronics

Powercoat from Arjowiggins Creative Papers has been awarded a 2013 InterTech Technology award by The Printing Industries of America. The plastic-free, FSC-certified, 100% recyclable and biodegradable paper-based substrate has been developed to simplify and reduce the cost of integrating electronics with printed graphics. It has numerous applications in the labelling, packaging, advertising, medical, food, textile and pharmaceutical industries, including the ability to embed RFID tags or apply condition-sensitive sell-by dates to fresh produce. With roll-to-roll capability, it can also be used for large scale prints, such as sensor walls and flexible displays. Despite being plastic-free, PowerCoat's paper formulation and coating has a polymer-like smoothness and high thermal stability that prevents discolouring when conductive inks are fused to substrates. Its fine surface also reduces the consumption of expensive silver inks and allows high-resolution fine patterning of any solution-based electronic layer.
www.powercoatpaper.com

Ink this in for energy savings

Brother's new HL-S7000DN network printer is an exciting option for businesses eager to cut energy consumption and running costs. The B&W inkjet printer combines super-fast print speeds of 100 pages per minute with remarkably low energy consumption – 90% less than comparable laser printers. A 30,000-page super high yield ink cartridge also contributes to low running costs.
www.brother.co.uk

Editor's Choice Award
SustainableTIMES
Brother – HL-S7000DN

Coming back with the goods

Haulage companies and freight forwarders are being invited to reduce congestion, CO2 emissions and costs by taking advantage of a new online platform designed to optimise the loading rate of light commercial vehicles making express deliveries across Europe. Currently almost 60% of light commercial vehicles that carry out urgent deliveries come back empty on the return leg of long-distance journeys. The Express-online platform developed by Sesame Active System addresses this problem by matching unladen vehicle journeys with demand for low volume express freight deliveries. This is done in real-time, taking into account a vehicle's estimated location. When the Express-online system identifies a freight/vehicle match, it immediately alerts both the haulage company and the freight forwarder enabling the two parties to get in touch.
www.express-online.com/en/

Powers down when you move away

MMD's Philips-branded 24-inch LED displays come with PowerSensor technology that automatically dims the display when a user moves away, cutting energy bills by up to 80% and extending the life of a product. The 16:10 monitors are made of 25% recycled material and the housing is free of harmful brominated flame retardants (BFR) and polyvinyl chloride (PVC). The displays have a 16:10 screen ratio and high resolution of 1920 x 1200 pixels. **www.mmd-p.com**

XX in AAA

Eneloop's new high power XX battery range has been expanded to include an AAA size for the first time. The batteries come pre-charged with solar energy and can be recharged up to 500 times.
www.eneloop.info

Complete control

Eaton Ellipse PRO Uninterruptible Power Supplies don't just protect workstations and small servers from surges and power outages: they also feature user-selectable EcoControl power outlets that can reduce energy consumption by up to 20% by automatically disabling peripherals such as printers and external hard drives when power to the PC is turned off. A useful LCD display shows everything a user might want to know about the state of the mains supply, UPS battery charge level, estimated runtime and overall UPS status. Ellipse PRO UPSs are available in four versions: 650 VA, 850 VA, 1,200 VA and 1,600 VA.
www.eaton.eu/ellipsepro

FSC certification

Following the recent announcement of EU Eco-label accreditation for HP Everyday Papers, International Paper has received Forest Stewardship Council (FSC) accreditation for the HP Home and Office and HP Office brands. All paper brands within the HP Everyday Papers range produced by International Paper are now either FSC or Programme for the Endorsement of Forest Certification (PEFC) certified.
www.internationalpaper.com/uk

Solar charging

The Sandberg Solar Power Bank has built-in solar panels that give users a third charging option in addition to USB charging from a computer or car adapter. The back-up battery supply provides power to most portable devices via a USB port.
www.sandberg.it

A bird's eye view

3D visualisation and modelling software can be more effective than spreadsheets in communicating the benefits of changing processes to reduce energy consumption.

What's the most effective way to cut energy consumption? Is it to take responsibility away from employees, for example by implementing automated controls? Or do you get better results by encouraging staff to take the initiative and do their bit to eradicate wasteful practices?

A six-month experiment funded by the Engineering and Physical Sciences Research Council (EPSRC) and the Technology Strategy Board (TSB) suggests that the latter might be the most effective course of action.

The Energy Project run by a consortium of UK universities and businesses recently conducted a trial at the Chapel-en-le-Frith factory of Federal Mogul, a supplier to the automotive, power generation and aerospace markets, and found that by giving employees responsibility for energy conservation – backed up by PC-based monitoring tools – it was able to cut power consumption at the Derbyshire plant by up to 20%.

Much of the project's success lies with a PC-based 3D computer model of the factory that displays real-time energy data collected by low-cost sensors. The combination of 3D modelling and colour-coded graphs showing energy use by machine or factory area makes it easy for staff to pin-point where energy is being wasted and take remedial action.

Data reporting is supported by a

> **Competitions to see which shift can achieve the greatest energy savings provide further motivation to eradicate wasteful practices.**

Below left: Colour-coded graphs show Federal Mogul's energy consumption.

Below right: Text alerts keep energy efficiency front of mind.

variety of text and email prompts. For example, the 'last man out' at the end of a shift receives a message just before they leave reminding them to turn off unnecessary lights and machinery. Competitions to see which shift can achieve the greatest energy savings provide further motivation to eradicate wasteful practices.

Project Manager for the consortium, Dan Mason of Moixa Technology, argues that this collaborative approach is more effective than highly automated energy-saving systems that require substantial capital investment and can unwittingly foster a 'not my problem' attitude towards all aspects of energy consumption.

"The 'joined-up' approach to energy savings developed by the consortium, integrating different technologies and putting major emphasis on motivating and mobilising staff, really pays dividends," he said. "When empty areas are over-lit or computers are left on at night, it's the workforce that's best placed to do something about it. Engaging with them about energy saving through workshops and interviews has been at the heart of the consortium's approach. What we've seen is that it really is possible to change people's mindset about energy use and get them to think 'what can I do to make a difference?'."

Federal Mogul is now rolling this system out to the whole factory, with a view to extending it to other Federal-Mogul sites. The consortium itself is exploring ways in which it can be taken up by other businesses.

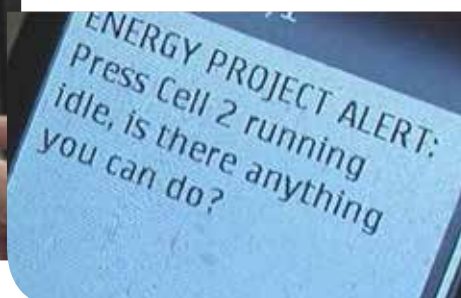An Eco3D visualisation of G.H. Sheldon's bakery

Try before you buy

Another organisation making use of digital 3D technology to aid understanding of complex data is CyberPharm. Its Eco3D virtual reality modelling software enables users to create 3D models of business processes and make adjustments to see what impact changes have on their carbon footprint and energy costs.

"One of the biggest advantages of this solution," claims CyberPharm company director Ian Aubrey, "is that it allows users to try out a wide range of alternative solutions to their problems before spending any money on costly real-life changes: to try before they buy, in effect."

A 3D replica of a business and its existing processes is created using measurements and observations taken on a business's premises. This baseline simulation gives users a bird's eye view of a facility, with the option to 'walk-through' the system, as in a computer game. Analysis reveals any problems with rates of carbon emissions, energy wastage or logistical inefficiencies.

The next stage is to use Eco3D to gauge the effects of new processes, designs, input or components on running costs, productivity, energy consumption and an organisation's carbon footprint – now and in the future, taking into account the impact of higher energy prices and carbon taxes. In this way, users can try out ideas in virtual reality before any actual change or investment is made.

Eco3D software is available

Continued...

...continued

in a range of options, from Lite to Professional, to suit the needs of different businesses. It can be supplemented with advice, training and details of 60,000 energy-consuming products from CyberPharm's expanding 'component' library.

Seeing the light

G.H. Sheldon, a North Western firm of industrial bakers, is using Eco3D visualisation and modelling software to reduce the carbon footprint of its outdoor lighting by 80%.

It employed the software to visualise lighting at its two industrial bakeries and identify where savings could be made, and in what quantities, over periods of one, five, ten and 20 years – taking into account accurate sunrise and sunset times and on-going maintenance costs.

Eco3D simulations were altered to assess the financial and environmental impact of alternative lighting technologies and changes in the position of outdoor lighting.

As a result of these exercises, G.H. Sheldon selected new lighting systems that are projected to cut carbon emissions by 80%, reduce the total cost of ownership by 50% and produce better quality CCTV images.

CyberPharm is now collecting data on other areas of the bakery so that G. H. Sheldon can make on-going improvements to its methodologies and, when appropriate, implement new processes and systems.

A recipe for success

Another CyberPharm customer, the Lumière restaurant based in

The Energy Project created a 3D model of Federal Mogul's Chapel-en-le-Frith factory

> **Seeing the new kitchen in 3D made it so much easier to understand the new workflow...**

Below left: Preparation of Lumière's popular sea bass dish in 3D. Below right: Lumière's old kitchen.

Cheltenham, has used Eco3D to increase productive workspace in its kitchen by one third.

Before embarking on a costly refit, it used the software to create a 3D working model of the restaurant's old kitchen, including the processes involved in making the restaurant's popular sea bass dish. This allowed chef patron Jon Howe to view and confirm timings in a way that was instantly understandable to him.

Once satisfied that the model and software were accurate, Lumière moved to stage two. Thanks to the huge database of product information built into Eco3D, they were able to test the efficiency of different equipment in a range of layouts. Using the information associated with making the sea bass dish, Lumière worked out the most efficient kitchen configuration and choice of equipment and created room for three chefs rather than just two.

For Jon, 3D simulations are far more illuminating than spreadsheets. "Seeing the new kitchen in 3D made it so much easier to understand the new workflow before the alterations took place. This was a huge reassurance for us before we made such a large investment, and made it easier for the staff to return to work and start performing at their best from day one," he said.

www.youtube.com/
watch?v=eAxNl2vCYA4
www.moixaenergy.com/tsb.asp
www.federalmogul.com
www.cyberpharm.co.uk

Self-regulation preferable to further eco legislation

Leading printer and copier suppliers are extolling the benefits of self-regulation after the imaging industry's Voluntary Agreement (VA) on Ecodesign was shown to have resulted in a 13.2% drop in the energy consumption of printers, copiers and MFPs in Europe within just 10 months.

In 2011, EuroVAprint, an association of the 16 leading imaging companies operating in Europe, committed to a VA as an alternative to EU eco-design legislation. This obliges them to comply with a set of design and information requirements, relating to energy consumption, recyclability and the use of compatible cartridges.

Manufacturers also agreed to undertake measures to encourage the use of duplex (double-sided) and 'N-up' printing (several pages on one sheet) to save paper.

EuroVAprint chairman, William Dazy of Canon, said: "We were among the first to opt-in for self-regulation in Europe and the results highlight the fact that we made the right choice: our industry is rapidly becoming even more environmentally friendly, it is contributing to the energy savings targets of the EU and is removing administrative burdens and costs from the national authorities. This is not the end of the process though; we will continue setting higher targets and identifying new ways of achieving concrete environmental and energy saving targets."

A recent impact assessment conducted by the European Commission found that the VA, which is backed by the European Commission and binding for signatories, will have been more effective than a regulatory approach.

It estimates that over the period 2011-202, the VA will have saved more than twice as much energy and three times as many CO2 emissions as would have been achieved by regulation, whilst also saving €2-2.5 million in administration costs.

Printer, copier and MFP design changes are expected to have saved one million tons of office paper in the period 1990-2020 – 15-17% of the total estimated EU office paper consumption.
www.eurovaprint.eu

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