



In the last decade alone there has been a host of new technologies that have completely transformed the way we work. Yet for many organisations an integral part of their IT infrastructure has remained static – their print fleet. What few realise is that in the background printers have been experiencing a quiet revolution and have evolved far beyond their humble origins to become powerful devices with a host of advanced features.

This whitepaper looks at recent innovations in the printing sphere, as well as potentially ground-breaking advancements that lie on the horizon. Discover how these new print processes are quickly becoming ubiquitous in the workplace and learn more about the benefits early adopters can enjoy.

#### **Break Free From Your Desk**

The market place has long been rife with mobile printing services and applications, from Google Cloud Print to the Brother Print Service Plugin. But today's tools don't just simply enable us to launch print jobs from our mobiles; their culmination is transforming our relationships with documents entirely.

The borders between hardcopy and digital have been blurred irrevocably and you can now seamlessly share, edit and print documents on the fly. With today's fully connected devices you can scan a document straight to the cloud, easily edit it on the go and quickly share it with whoever you desire. Drop it in online storage, publish it on social media or send to any connected printer.

Developments have even revolutionised day-to-day working. You can now easily push and pull files to and from your printers and scanners with a quick tap of your phone. Simply open a file on your mobile device and touch it to the printer. With Near Field Communication (NFC) it will recognise the user and launch the job. This approach can drastically reduce the loss of sensitive information; a huge priority in today's compliancy landscape.

These solutions have broken down longstanding barriers to work. Regardless of operating system, device or location you can now effortlessly edit and share from wherever you are.



### Printing on the go

When most people think of printers they imagine static devices parked on their desktop. But in a world where business never sits still, you can't afford for your devices to either. Just as workers are increasingly utilising tablets and mobiles to work on the go, high-quality portable printers are now offering the opportunity to print where and when you need to. Durable and lightweight they range from A4 printers you can carry in a bag down to A7 printers that comfortably fit in your pocket. And these gadgets are far from being gimmicks. They now come with the functionality of their larger counterparts, with mobile connectivity, in-built security and high resolution thermal printing.

Hillarys, the UK's leading made-to-measure blind company, were able to transform their operations with Brother's mobile printers. Combining a customised mobile app with portable printers allows their sales advisors to print tailored orders for clients on site, enabling them to cement contracts without a moment's delay.

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## Going green

The concept of the paperless office has been gaining traction in recent years; driven by increasing concerns over the environment. Despite the idea's popularity, global paper consumption has increased by almost half since 1980¹ and office equipment has become the fastest growing energy user in the business world, consuming 15% of the total electricity used in offices.² Fortunately, the print sector has risen to combat these eco threats, developing devices and solutions that are far more environmentally friendly than their precursors.

For instance, modern print devices are drastically more efficient, providing a 30% reduction in energy consumption and 20% reduction in toner use.<sup>3</sup> They can also include features that help to proactively reduce waste, such as pull-printing. This enables users to delete files no longer required and forces them to actively release print jobs from a device, thus preventing documents being mistakenly left in the tray. This alone has been proven to reduce wasted output by up to 15%.<sup>4</sup>



Currently a staggering 375 million printer cartridges are thrown away every year with the majority ending up in landfills. Considering it can take a thousand years for a cartridge to decompose and they contain a number of harmful compounds, the potential danger to the environment is huge. However, printer manufacturers are working hard to significantly reduce this footprint, with many offering complimentary recycling services that will even involve collecting recycling boxes directly from their customers' offices. With recycling made this easy there's no excuse not to.

# Modern print devices consume 30% less energy and 20% less toner.

### The end of DIY printing

It's not just print technology that's evolving; print purchasing models are too. As with much of the tech industry, as-a-service models have emerged that are providing businesses with superior flexibility, support and ROI. Managed Print Services have numerous benefits that make the idea of purchasing and maintaining your own devices feel archaic. Providers can reduce initial procurement costs by leasing all of your hardware. They'll advise on how to achieve efficient fleet deployment and keep you updated with the most advanced, secure and efficient devices. They'll automate supplies ordering, maintain your fleet and be on hand with expert advice.

All-in-all they can reduce your total cost of printing by 20% to 30% and claw back hours of lost administrative and support time. It's the perfect solution for businesses regardless of budget and size.

# Managed Print Services can reduce the cost of printing by up to 30%.

#### What the future holds

The evolution of print is far from over. A number of emergent technologies lie on the horizon that could reimagine printing entirely and change the very way we work.

3D printing has been stealing headlines in recent years, but beyond industries such as manufacturing, healthcare and product design it has offered little practical use. However, that could change as capabilities develop and prices drop. Every office could contain a 3D printer, for anything from marketing material to printing replacement parts for everyday office equipment. Startups are even developing the technology to rapidly print solid objects from a liquid resin pool. Eventually we could see a future where we're all able to print customised versions of any product.



On the other hand, the good old world of 2D printing has some tricks up its sleeve. New technologies won't just make print eco-friendly; they could do away with its environmental issues altogether. Several inkless printing technologies are currently in the works that could soon make ink and toner a thing of the past. The University of Denmark has had recent breakthroughs with a form of ink-free printing that uses laser beams to heat geranium-coated plastic sheets. Not only does this technique achieve incredibly high-resolution prints but the plastic on which it prints can be re-melted for future use.<sup>6</sup> Other solutions could allow for temporary printing, where chemicals are applied to paper, only to fade within 16 to 24 hours, allowing for the sheet to be reused again and again. With the average employee wasting 6,800 sheets of paper a year,<sup>7</sup> the potential to reduce waste is colossal.

### **Conclusion**

The rumours of print's death have been greatly exaggerated. Rather than falling by the wayside as digital processes arise, the printing industry is quickly adapting to these new challenges and offering up solutions that will see its vital role in the world of work continue to grow for years to come. Businesses that move quickly and adopt these new technologies have an opportunity on their hands to cut costs, drive up efficiency and empower their workforces.



<sup>1</sup> https://www.orsgroup.com/news/paperless/some-paper-waste-statistics-in-the-office

<sup>2</sup> https://www.carbontrust.com/media/13113/ctv005\_office\_equipment.pdf

<sup>3</sup> http://www.officeproductnews.net/sites/default/files/BeneathTheSurface.pdf

<sup>4</sup> Ibid

<sup>5</sup> http://www.theenergycollective.com/bobbyg/2401395/ink-waste-environmental-impact-printer-cartridges

 $<sup>\</sup>begin{tabular}{ll} 6 & https://www.altodigital.com/blog/post/is-ink-free-printing-the-future-of-office-technology and the printing-the-future-of-office-technology and the-future-of-office-technology and the-fut$ 

<sup>7</sup> https://www.greenbiz.com/news/2010/08/23/uk-office-workers-addicted-paper