GUIDE: CHOOSING A DIGITAL COPIER FOR YOUR BUSINESS

IF YOU'RE LOOKING FOR A NEW COPIER FOR YOUR BUSINESS, YOU'LL WANT TO MAKE SURE YOU CONSIDER WHICH DIGITAL COPIER IS RIGHT FOR YOU.

Although analog copiers are still available on the used market, the bulk of copier sales now belong to digital models. Often multifunctional in scope, digital copiers are all-in-one office suites, capable of scanning, copying, printing (via network connectivity), faxing, downloading and emailing.

This all-encompassing design provides a high degree of cost savings over analog models and even older digital copiers, making the ownership or lease of an in-house model far more cost-effective than outsourced copying.

In fact, recent studies conducted by a major copier manufacturer estimate a total savings of more than £6000 when comparing ownership to outsourcing. Broken down per print, this is further represented by a cost of about £0.26 per page in-house versus more than £1.05 for colour copies when the same job is outsourced.

HOW TO CHOOSE

Your purchase decision will depend on many considerations. The first step is understanding the key features of digital copiers, to help you compare different makes and models. They include;

PRINT SPEED– Unlike older models that capped out at around 30 pages per minute (ppm), newer digital copiers are capable of printing anywhere from 22 ppm on the low end up to 100 ppm with deluxe models. Reducing warm-up requirements, "first copy out" speeds have also improved and now range between 3.5 to 7.5 seconds.

PRINT VOLUME– Depending on the size of the machine, paper capacity is often listed as "tray" and "cassette." Basic models are capable of 100 sheets in the tray and 250 in the cassette. Large-scale, multifunction machines can accommodate up to 500 sheets in the tray and more than 2,000 sheets often distributed throughout two or more cassettes.

ADDED FUCNTIONALITIES– These are the features that really have the potential to cut costs throughout your organisation. Multifunctional machines may include wireless connectivity, interactive touch-screen controls, image editing, large built-in hard drives for document storage, enhanced security and reduced operational costs through Energy Star compliance.

GRAPHIC CAPABILITIES– Commonly known as multifunction or production printers, models with graphic capabilities ensure the highest resolution (2,400 x 2,400 dpi is standard) as well as colour management through five-colour control. These models provide reliable and exact reproduction of source material, whether it's taken from an existing physical document or produced new through one of a myriad of compatible software platforms.

ANALOG VS. DIGITAL

Analog machines are largely relegated to the past. Though many offices still have them tucked away in back rooms, they are normally seen as backups. In the same way that digital downloads replaced CD's, analog copiers have failed to keep pace with even the most basic of their digital counterparts for two reasons: productivity and quality.

Many organisations now use digital communication, whether it's sent direct to an individual through email or communicated to a mass audience through social platforms. This type of communication requires digital content. Even if the item being shared started as a physical printout, it must be digitised if it's going to reach the intended individual or audience quickly and cost-effectively.

To simplify this process, multifunction digital copiers include capabilities for scanning, faxing and distribution, whether delivered internally via intranet or to an external recipient via email. And to make the process even easier, most of these copiers now include large drives that offer 80 GB or more of built-in storage.

The other difference is quality. Graphic rendering is often built into many multifunctional machines, enabling the exact reproduction of intricate drawings, schematics or artwork. This feature is often one of the more valuable developments for a wide range of companies as it allows them to manipulate artwork and produce high-quality brochures, presentations and documents in-house. Analog copiers may be able to produce an image resolution of only 600 x 600 dpi, compared to digital models that offer up to 4,800 x 600 dpi.

Plus, depending on the machine, digital copiers offer a much broader level of control. Documents can be reduced down to 25 percent of the original size and enlarged to more than 400 percent in some cases. Common thresholds for reduction and enlargement for analog machines averaged 50 percent and 200 percent, respectively.

NEW VS. USED

One of the main questions many business owners confront is whether it will be more cost-effective to purchase new or used equipment. But with the reduction in cost of new technology, the marked improvements in performance mentioned above, and the increasing difficulty associated with finding parts and toner for older machines, a used copier will probably not be the best way to go for most businesses.

Add in repairs and maintenance and the fact that most of these printers will not be covered by a service plan or warranty, and you're looking at some hefty costs if something goes wrong – not to mention the cost of downtime to your business.

BUY VS. LEASE

This is another big question for many business owners, and one that is often not cut and dried. On the one hand, a lease may offer tax incentives, but you may also be able to claim depreciation with the purchase of a machine.

The real question when deciding whether to buy or lease is related to your estimated use. Take a moment to factor your seasonal increases and decreases in production, as well as any expected business growth in the coming one to three years. Now how many copies on average do you expect to make each month?

TYPES OF DIGITAL COPIERS

It's important to have a firm understanding of exactly what you need the machine to do, what type of volume you expect and how quickly you'll need to be able to complete each job. Each of these considerations will refine the options available to you and have a sizable impact on what you'll pay for one of the four following types.

1. Monochrome digital copier (black and white)

Typically one of the most inexpensive types on the market, black and white copiers save on the costly consumables required by their colour counterparts — multiple ink cartridges serving as a prime example. These copiers also tend to lean more toward bare bones in terms of the technology they include, usually providing straightforward copying, faxing and scanning without the more elaborate graphics-editing capabilities found in many colour copiers.

Ideal for small businesses or those requiring only occasional use, mono-digital copiers offer average print speeds of 30 to 140 ppm with paper capacities that include 100 sheets in the tray and up to 550 in the cassette.

2. Digital colour copier

Representing a major step up, colour digital copiers offer the ability to produce high-resolution reproductions of an endless range of source material. Increasingly used by a wide range of marketing departments and business professionals, they are commonly relied upon to create multicolour brochures, pamphlets and presentations, with resolutions that range from 600 x 600 dpi to 2,400 x 600 dpi.

Speeds average 40 to 90 ppm, with paper capacities that start around 1,000 sheets in the tray and may also include 500 to 1,500 additional sheets in a backup cassette.

3. All-in-one copier (AIO)

All-in-one copiers are essentially desktop models but may be multifunctional as well. Ideal for small businesses or home offices, they typically include only basic functionalities, such as print, scan and fax. Expect to find resolutions from 300 x 300 dpi to 1,200 x 600 dpi and output speeds of 19 to 30 ppm.

The resolution and print speeds provided by an all-in-one device are often not adequate for many business demands, and therefore these machines tend to be rare in office settings. However, given their compact size and portable nature, they are occasionally assigned to an individual employee or used for a satellite or temporary location.

4. Multifunctional copier

This is one of the most popular models among businesses of every size today, allowing them to eliminate unnecessary equipment and labor by providing a wide range of communication technologies. All models usually include print, scan and fax options. But depending on the levels of quality and finishing required, they can be vastly different. Categorising these differences, multifunction copiers are broken down into four different types:

AIO MFP– Desktop models designed for individual use; network capable but typically include little to no built-in memory.

SOHO MFP– Small office/home office models that include internal memory, document feeder and security features.

Office MFP– One of the most popular of the four types, this is the model found in many midsize to large businesses. Capable of meeting a wide range of needs, office MFPs are commonly networked among a workgroup or entire floor and include advanced scanning and document-editing features. Data encryption and advanced security features are also common, given the extensive use by a range of different people.

Production MFP– The costliest of the four types, production MFPs are the biggest of the four in terms of size and production output. They are geared to deliver high-volume copies and advanced document-finishing capabilities (covered in detail in the features section of this guide), including stapling, binding and collating. They also provide the highest resolutions available, ranging from 2,400 x 1,200 dpi for colour copies to 9,600 x 600 dpi interpolated with 8-bit color depth for black and white reproduction.

COMPARING DIFFERENCES

There are a number of different specs that cater to a wide range of business purposes. When comparing different models, here are the most important factors to consider:

Paper supply/volume- paper enters the machine through an internal cassette or the rear tray, with paper volume determined by the size of the machine. AIO copiers are usually only equipped with a tray that accommodates around 100 sheets.

On the other end of the scale, a production MFP may accommodate a minimum of 100 to 500 sheets in the tray and up to 2,000 sheets in a number of internal cassettes. Most have one to three cassettes on average, with the first capable of the greatest volume (1,200 sheets is a common example) and all additional cassettes accommodating around 500 sheets. Remember, refilling a machine takes time, so the greater the volume the better.

Paper size- Similar to paper volume, paper size is determined by the size of the machine. AIO models typically only accommodate standard (8.5 x 11 inches) or legal size sheets (8.5 x 14 inches). Most other digital copiers accept a variety of paper sizes, including envelopes and other types of media such as 14-lb. bond cover stock. Media is loaded either through the rear tray or an adjustable cassette. Max sizes usually cap out at around 13 x 19 inches.

Print speed (PPM) and copy speed- Print speed and copy speed (also known as scanning speed) are listed separately, as many modern offices use the machine only for scanning purposes, storing the files internally or distributing them electronically. And there's a substantial difference between the two.

Print speeds range from 20 to 100 ppm, with "first copy out" times that are anywhere from 3.5 to 7.5 seconds after powering on the machine. Scanning speeds are often broken into two parts: simplex (for machines with a single scanner) and duplex (for those with double-sided scan capability). Simplex speeds average 120 scans per minute (spm) for both colour and black and white, with duplex scans capable of 220 spm.

Toner- Other than paper, toner is one of the most costly consumables when considering a digital copier. Of the two main types (color or monochrome), the black and white version is going to be cheaper as it requires only one toner cartridge.

Colour machines require four individual cartridges: black, cyan, yellow and magenta. In a colour machine, black toner cartridges typically yield about 50,000 pages and color cartridges yield about 30,000.

For those interested in "green" options, many major manufacturers, including Canon, offer recycling programs that reuse certain parts and recycle the remaining materials, often providing free return shipping via UPS for cartridges bearing the company's brand name. Additional details can be obtained through your machine's manufacturer or your individual dealer.

Memory- With the exception of all-in-one devices, most digital copiers now have some type of internal memory that allows them to retain a substantial number of documents and scans.

This efficiency feature enables an individual to quickly reproduce countless sets of documents or printouts without requiring the original document. Sometimes referred to as the "scan once/print many" feature, the size and detail of the original papers dictates how many documents can be stored.

A copier's internal drive is similar to any other computer hard drive. Your production requirements will determine the amount of internal memory you need. Depending on the size of the machine, memory (RAM) ranges between 256 MB on the low end to 1.5 GB on larger black-and-white MFPs. Memory capacity (hard drives) also varies based on size, with black and white models offering as little as 1.5 GB of storage space and colour models featuring 640 GB to 1 TB of hard drive storage.

DIGITAL COPIER FEATURES

Every digital copier on the market includes a unique set of features geared toward its level of productivity. Many of these, such as email, scanning and fax, are standard. More specialised features, including duplexing and finishing options, are only available on the higher-end models.

Scanning/faxing/emailing– This feature has been shown to dramatically simplify distribution both internally and externally when networked within a workgroup. Most machines connect either through Ethernet or a high-speed USB 2.0 connection. Higher end models offer connectivity via Wi-Fi, enabling the quick printing or distribution of documents from almost any mobile device.

Document feeder– Sometimes known as an automatic document feeder (ADF), this device is mounted to the top of the machine and allows fast-batch scanning of large documents. Depending on the size of the machine, trays can hold from 75 to 110 sheets of paper. On a duplex-capable machine, the document feeder would also have the capability to scan both sides of a document.

Editing– Advanced machines allow basic editing of documents after they've been scanned and before distribution and printing. Common examples of editing features include the addition of page numbers, watermarks or date stamps. Most such features also allow image rotation to fit the selected paper stock as well as size reduction of originals to fit multiple pages on a single sheet.

Digital copier interface– Many new models include touch-screen operation on a monitor that resembles an iPad. Featuring a clean layout and large graphic icons, a touch-screen interface simplifies editing and also provides full access to the system including economy printing, language options, moving or deleting pages, contextually based print options and menus, and a real-time preview of the document being printed.

Security– Advancements address everything from document protection to access control and may include overwrite protection for the hard drive, removable hard drives and lock print, as well as user code, card or even biometric authentication. As a networked device, the machine itself may be protected by data encryption, WPA support and a range of unique IP addresses.

Networking capabilities– As mentioned in the scan, fax and email section above, network solutions are some of the most popular features among workgroups that have mobile employees. Whether workers are on the road or simply traveling throughout a single location, networked digital copiers simplify printing and document management for everyone. Plus, with a dedicated print server and standard TCP/IP protocol, most networks can support a limitless number of devices and printers.

ADVANCED COPIER FEATURES

Depending on the model you select, the features below may come built-in or can be added post-sale. If you think you may need one or more of the following in the future but don't want to make the investment up front, check about the possibility of upgrading the machine you're considering.

Account codes– Similar to security features, account codes are numeric indicators that allow employees to "bill" copies to a specific department or account. They're a type of user-group profile that can also be password protected.

Duplex copying– Duplex or doubled-sided copying allows printing on both sides of a sheet of paper. By reducing consumption, this feature is one way many businesses are making strides toward sustainable operation.

Wireless connection options– Designed to simplify printing while practically eliminating cables from an office environment, wireless connectivity allows users to print from or scan to any mobile device, including Apple, Android or Windows Phone devices.

Full-bleed printing– Ideal for professional-looking pamphlets and brochures, full-bleed allows printing on the entire surface of the document, including the trim area, and is often found on production models. Also known as "borderless print," full-bleed printing allows you to print up to 12 x 18 inches if the max copy size is 11 x 17 inches.

Sorter, stapler and three-hole punch– A specialized aspect of finishing, sorters, staplers and a three-hole punch simplify the creation of booklets. These may be included on high-end models but are largely considered additional accessories by most vendors.

Transparency interleaving– Used widely within educational institutions and for business presentations, transparencies can be reproduced on a digital copier, leaving a sheet of paper in between each transparency to simplify distribution. Paper sheets can also be printed with the same text and image as the transparency.

Software such as eCopy, Uniflow and M-Files can turn your copiers and scanners into productivity machines that can instantly, easily and securely turn paper documents into manageable electronic documents and create automated workflows. Benefits include eliminating time consuming manual data entry such as invoices, reducing unnecessary paper waste and increasing security of confidential documents that are used in-house or sent to customers.

MAINTENANCE AND SERVICE AGREEMENTS

The average digital copier service agreement encompasses toner, drums, and all parts, maintenance and repair—essentially anything that isn't paper stock. These service agreements are designed to free up office staff and employees from having to worry about toner levels and the long-term performance of the machine. Unfortunately, "parts" has a unique definition for every dealer.

The cost is usually determined by whether you've purchased or leased your copier. Leases often include free service calls on all machines covered under the lease and are usually billed on a per-click fee. Copiers that have been purchased may be subject to additional fees.

WHY EBC GROUP?

Documents whether in paper or digital format are a vital part of businesses, yet most companies don't realise or account for how much time and money they spend on printing, print devices document workflows. EBC Group helps businesses take control of their print environment and save up to 30% of time and cost.

EBC Group can perform an initial audit and discovery to create a business specific document and print strategy designed around your businesses specific objectives. We will manage the project from inception, through to implementation and ongoing support and our relationships with manufacturers ensures the best technologies to your requirements. EBC Group's print solutions fall into 3 categories: Hardware Management, Print Service, Managed Print Services.

Hardware Management:

- Sourcing the right hardware for a business's requirements
- Strong partnerships with the leading hardware manufacturers
- Support thousands of different device models across their ranges
- Networking and monitoring of hardware

iSense print service:

- Automated monitoring of network devices
- Automated toner
- Automatic meter reads
- Automated consumables ordering
- Optimised service and supply chains
- Maintenance alerting

Managed Print Service:

- Conduct a review of your businesses current print environment, processes and workflows to discover where there may be inefficiencies in time or cost resource.
- Monitor manage and optimise your print input and output environment using our the tools available in our Print Management solutions portfolio.
- Provide a roadmap to reduce the number and types of printing devices and supplies in-line with the needs of your business.
- Reduce environmental impact through less printing and paper usage and consuming less energy.
- Provide mobile workers with an easy and secure way to print.
- Introduce Balanced Deployment enabling you to have control of output-related costs and assets. Improvement in output functions – scanning, storing and workflows.
- Provide network management and further integrations and hosting via EBC Group's Private Cloud solutions.

JARGON BUSTER

Wireless printing | Wireless printers connect to your PC or Mac using your home WiFi network and can be accessed from anywhere in your house, meaning you don't even have to be in the same room to print.

Several computers and mobile devices can use the same printer, which can be placed in the most convenient location for you and your household.

If you want to wirelessly print from a tablet or smartphone, you'll need a printer that features AirPrint, Google Cloud Print or email printing.

WiFi direct | WiFi Direct provides a wireless connection between a printer and device, even if no WiFi signal is present - perfect for homes and offices without a wireless network or in an office as a backup should the network go down.

Apple Airprint | Apple AirPrint allows you to print directly from Apple iOS products and comes built in to iPhones from the 3GS and up, 3rd generation iPods onwards and all iPads.

Look for Apple AirPrint as a highlighted feature within our range to ensure you can print from your favourite Apple device.

Google Cloud print | Google Cloud Print is included on all Android devices and lets you print wirelessly from your tablet or smartphone. Simply create or log into a Gmail/Google account to get started.

Look for Cloud Print as a highlighted feature to ensure you'll be able to print from your Android device.

NFC | Near field communication (NFC) is a relatively new feature to printers. Often included on tablets and smartphones, it allows two devices to connect simply by touching together, making syncing a printer with another NFC device effortless. Look for NFC as a highlighted feature on our range of wireless printers.

Email printing | Email printing is a feature available on selected HP printers and provides wireless printing from any email capable device. Each printer has a unique, customisable email address and once connected to your home WiFi, prints any images or text documents it receives.

Most manufacturers have their own version of email printing. Look out for 'email printing' as a highlighted feature within our printing range.

Print quality DPI | DPI stands for dots per inch and is a basic measure of print quality. A printer with a higher DPI delivers clear, detailed pictures although other factors such as ink play a part in overall print quality.

If you're looking for vibrant, lifelike photographs, a good quality inkjet printer provides enhanced colour reproduction and the glossy, developed-photo look that makes for a fantastic printed image.

Print speed | We highlight print rate on all of our printers. Measured in pages per minute (PPM) for text and images per minute (IPM) for photographs, you should consider print speed if you regularly print in large amounts.

Monochrome printer | Monochrome printers exclusively print black and white documents. Monochrome laser printers feature higher print speeds over everyday inkjet printers.

Paper size | The most commonly printed page size is A4 and the vast majority of our printers print in this format. Many printers also print smaller, so whether you want the familiar 6 x 4 developed-photo size or specialist envelope sizes, most accept a wide range

of photo and document paper.
For larger prints, we stock a range of A3 printers that print in various sizes up to A3. Some are no bigger than A4 printers, making them ideal for small offices or homes where space is at a premium.

Double sided print | Comes in different modes to combat different types of camera shake. This results in smoother videos and sharper images.

ADF Feeder | An automatic document feeder (ADF) allows you to scan or copy multiple documents simultaneously, without having to manually insert individual pages.

They can be found on scanners and all-in-one printers and are usually located on top of the scanner or within the main paper tray.

Memory card slot | Many printers feature a memory card slot. This makes is possible to print directly from an SD or memory card without the need to connect to a PC. Simply pop the card in and use the printer's screen to select the documents you need.

Pictbridge | PictBridge makes printing from your digital camera easy. Simply connect your camera via USB cable to print photos directly, without having to remove your SD card or connect to a computer.

ORC | OCR stands for optical character recognition and is a feature found on a number of scanners and all-in-one printers. OCR allows a scanned document to be converted into a word processing document that can be edited on a PC or tablet. While this usually only applies to printed text documents, some models feature handwriting recognition too.

HP Instant Ink | HP Instant Ink is an instant ink replacement service - ordered by your printer, delivered to your door.

Epson Ecotank | Epson EcoTank printers feature unique ink tanks that can be refilled and topped-up

as necessary using cost-effective ink bottles.