The Essential Technology Guide

Real World Technology Advice from Computer Ambulance

Celebrating **10** years
of Satisfied Customers

Computer AMBULANCE
Serving Residential & Small Business
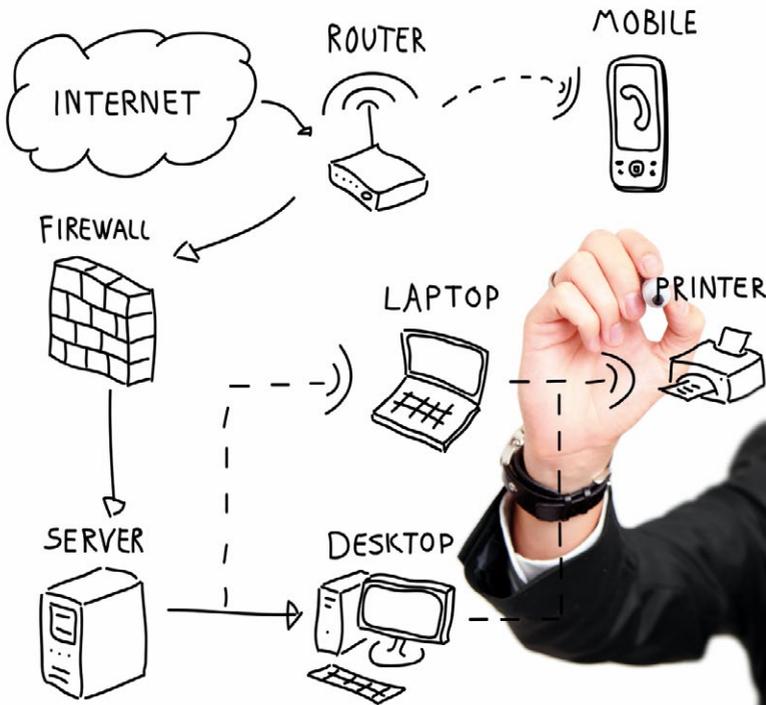
Celebrating 10 Years in Business Thanks to You.

The technology landscape is a very different one to that of 2003 when Computer Ambulance first started. Back then, desktop computers were the mainstay of the computer world. Laptops were seen either as a business tool or a luxury purchase. The average size of a hard drive back then was a paltry 40 gigabytes and the average RAM size was 256 megabytes. Your computer was considered to be quite powerful if it had a processor speed of 1.4 Ghz. Microsoft were the king of the operating system world. Apple computers were seen as the preserve of graphic designers or those involved in the media. As far as internet bandwidth speeds were concerned, most users were still on dial-up connections - you were lucky if you got an internet speed of 45 Kbps. The closest you got to a broadband connection was an ISDN line.

How times have changed! Today, the average computer user carries around more computing power in their smartphone or tablet PC than used in a desktop computer back then. Today the average amount of RAM in a desktop has soared to 4 gigabyte and the average hard drive size is now around 2 terabytes. Processors are no longer single core, most are now dual or quad-core. Hype-threading technology now means that chips are not only faster, but can multi-task much better, use less power and produce less heat. Laptops are no longer seen as a luxury or business purchase; in fact they are now even sold in supermarkets. Back then, the idea of a device such as the iPad as a mainstream computing device or serious business tool would have been seen as ludicrous. For it to be a "proper computer," it had to be beige or grey, and it had to have a keyboard and a mouse.

Apple have finally gone mainstream. This has been in part due to the "halo effects" of the iPod and iPhone. The rise in popularity of Apple was also greatly helped by their operating system which tends to be less prone to attacks than Windows. Some Windows users went out and bought Macs simply because they could no longer tolerate any more virus or malware infections.

Internet connection speeds have improved in leaps and bounds. The average ADSL broadband subscriber in the Dublin area can now get a connection speed of between 8 and 20 Mpbs. Meanwhile, some cable broadband subscribers are enjoying whopping speeds of between 30 and 100 Mpbs.

However, technology never sleeps. More change is on the horizon. In the coming few years, personal and business computing technology is going to be less about hardware and more about the software. Except this time, the software won't come in a box or won't be downloadable. It will be stored on the internet or, to put it another way, software will be "in the Cloud". In fact, in the not-too-distant future, the very idea of buying software in a box and installing it on your computer will seem as archaic as using a typewriter. Expect more and more computing tasks from word processing to accounts processing to be performed online. In terms of hardware, expect nanotechnology to change everything from the size of computer screens, the capacity of storage devices to the acceleration of processor speeds.

Back in 2003 my goal in setting up Computer Ambulance was simple. It was to bring technical expertise, which was backed-up by excellent customer service, to the residential and small business market. These two simple ideas are still at the cornerstone of our business. Picking up a newspaper or reading the internet today, one could easily be forgiven for thinking that the success of a business today is based on how good your Facebook or Twitter page is. For us, after every customer interaction, we ask ourselves two simple questions: "Would the customer use us again?" and "Would they recommend us to their friends?" This philosophy has thankfully stood us in good stead. A substantial number of our customers from our first year in business are still with us today.

I would like to thank everyone who has used and continues to use our services. We hope you enjoy reading this booklet and hopefully you will glean some tips or some practical computer know-how to make your digital life easier.

Rob Scanlon
Computer Ambulance.

The 10 Commandments of Implementing Good Computer Repair / I.T. Solutions.

Good Computer Support is Timely – It is delivered when you need it most. Computer problems are unpredictable and always seem to appear at the most inconvenient times. Running a small business and knowing there is a computer support company that you can depend on greatly adds to your peace of mind.

Good Computer Support Delivers on Promises – Talk is cheap. Computer solutions, no mater how hi-tech they sound, or how eloquently they are talked about, account for little unless they are implemented properly and meet the client's expectations.

Good Computer Support talks with the Customer not down to the Customer. Good computer support technicians will always talk to their users in a language they can understand. Tech-jargon can be demanded on request...

Good Computer Support Implements Robust Solutions – "Quick Fix" computer repair solutions that only cover up a more serious underlying problem and never get to the root of the real issue are rarely a good idea. A good solution pinpoints its root cause, stands the test of time and endures the vagaries of the "average computer user".

Good Computer Support never Compromises Data Integrity or Security. Your data is irreplaceable and confidential. When computer repair or I.T. solutions are implemented, the safety and confidentiality of your data should always be paramount.

Good Computer Support relies on Excellent Troubleshooting Skills – Being able to distinguish between a symptom of a problem and the actual cause is one of the most vital skills a computer technician will ever acquire. Good troubleshooting skills require both systematic thinking and the ability to "think outside the box".

Good Computer Support Meets Budget – Your computer support / computer repair company should use their judgement and experience in providing you with the most accurate quotation possible.

Good Computer Support should be Hassle-Free – Having a computer problem can be frustrating but having unreliable or un-cooperative computer support technicians can turn an annoying problem into an infuriating one.

Good Computer Support Delivers Solutions that have a Right "Fit" for You. – For every computer problem, there are hundreds of different solutions. A good computer technician will choose a solution which suits your workflow and your level of computer competence. A one-size fits all solution is sometimes not the best one.

Good Computer Support is Backed up by Quality After-Service Care / Follow-through. Good technical support should not just end when the technician leaves your home or office. Even the best and most fastidiously implemented computer solutions can have occasional teething problems. Every solution implemented should be followed up until the user is 100 % satisfied.

Who Makes the Best Laptops?

In the same way that there is no "best car", there is no "best laptop". Each system has its own merits, with features that are salient to different users.

Here are a few key deciding factors to bear in mind when buying a laptop:

Processor – Otherwise known as the CPU. This is the "brain" of your laptop. It is perhaps the most important factor which determines how fast your laptop is going to perform. Intel-based processors are generally better as they perform faster (in general) and dissipate heat more effectively, which again means more speed.

Docking Station Compatibility – If you intend using your laptop as a desktop replacement, it would be advisable to get a laptop that is docking station compatible. A docking station is a device which your laptop connects to, so it can be used like a desktop computer. Business-class laptops will usually have their own docking connector port on the base.

Screen Size – Standard screen size for most laptops is 15.4". Any screen size smaller than 15" can usually be found on ultrabooks or netbooks. As a general rule of thumb, the bigger the screen, the greater the power consumption of your laptop.

Numeric Keypad – If you intend doing a lot of data entry, accounts or any other type of number crunching, it is advisable to buy a laptop with a dedicated keypad.

Weight – If you intend taking your system around with you frequently, you might want to consider an Ultrabook. (A very thin and lightweight type of laptop, which usually does not come with a DVD-CD drive.) These can be superb systems for their portability, keyboard size and battery life.

As far as brands are concerned, a lot of the components used in laptops come from the same factories. It is therefore the design, component choice and quality control that sets some manufacturers apart. Computer Ambulance recommends **Apple, Toshiba, Dell, Samsung** and **Asus** laptops.

TOP TIP

When buying a laptop system you might want to consider getting a **business-class laptop**. These usually have better build quality than consumer-grade laptops, a longer battery life and sometimes come with a built-in docking station port. Examples of business-class laptops would be the Dell Latitude series or the AsusPro series from Asus.

Is it still worth buying a Desktop PC?

Even though laptops and tablets are extremely popular, the humble desktop computer still has a lot of advantages.

Desktop PCs are **more ergonomic** than laptops or tablets, as the user is not scrunched over a small screen typing on a small keyboard. This makes work less tiring and more enjoyable!

Desktop PCs are **more upgradable** than laptops or tablets. On a desktop PC you can install cutting-edge hardware, even when it is a couple of years old.

Desktop PCs are **safer for children**. Because a desktop is usually located in a fixed position, parents can more easily observe what their children are doing on the internet with a desktop PC.

Desktop PC's are **cheaper to fix** than laptops or tablets. As most desktops use generic parts, it is often cheaper to fix hardware problems on desktops.

Desktop PCs are **more powerful** for processor hungry tasks, like video-editing or games.

Desktop PC's are more amenable to a **dual-monitor display** set up. This can be extremely useful if you work on several applications at once.

Windows or Mac?

"Should I buy a Windows or a Mac system?" is a fairly common question we get asked.

Both operating systems have their pros and cons.

Your decision to buy a Mac or Windows-based system will primarily be determined by the type of applications that you use and the size of your budget.
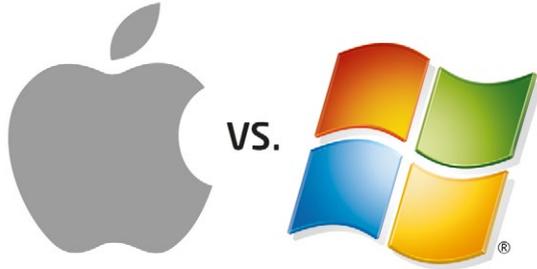
Advantages of Windows

Most Windows-based PCs let you **upgrade** as often as you like, often with cutting-edge hardware. This is not always the case with Mac computers. Macs do not allow easy upgrades of components like video cards.

There are still some major **business applications**, like Sage accounting packages, that still only run in Windows. (Cloud-based versions of software can bypass these limitations however).

Older programs have better compatibility with Windows. Apple discontinue compatibility with older programs more quickly than Microsoft.

Windows-based systems are on average **less expensive** to buy.

Windows has **more third-party software available** than Mac-based software.

Windows can handle **gaming applications** better than a Mac.

Windows offer better functionality for **dual-display** setups.

Advantages of a Mac

Macs are less afflicted by **viruses and malware** compared to their Windows-based brethren.

Macs are on average **less likely to crash**. This is because a lot of the software and hardware used in Mac computers is specifically designed to run on Macs.

Some people find Macs easier and **more intuitive to use** than Windows. This is especially true when you consider the less-than-friendly user interface provided by Windows 8.

Mac operating systems are **less prone to OS Rot** than Windows-based ones.

Other Apple devices work best with a Mac. For example, the iPhone and the iPod sync better with a Mac, compared to a Windows PC.

The Best of Both Worlds

If you want to enjoy the best of both operating systems, you could use Bootcamp for Mac or VMware Fusion.

Bootcamp gives you the option of starting Windows or Mac OS when you switch on your Mac. (You will need a valid Windows license to run this).

VMware Fusion allows you to start Windows from within your Mac desktop. Both are fairly robust applications that offer you the best of both worlds.

What Printer Should I Get?

You should buy an **inkjet printer** if:

- You do a lot of printing in colour.

You should buy a **laser printer** if:

- Most of your printing is in black and white.
- Print speed is important to you.
- You print in high volumes.
- You are tired of the expense and hassle of ink-jet refills.

The UK consumer magazine, Which?, found that inkjets are over seven times more expensive per mili-litre than 1985 Dom Perignon champagne.

If you intend **networking your printer**, make sure it has a LAN port. Or better still, make sure it is WLAN-enabled for wireless printing.

If you intend **printing from your iPad or iPhone**, make sure that you buy a printer that is AirPrint enabled. AirPrint is a special protocol featured on some wireless printers than enables you to print directly from iOS devices.

From our experience, **Epson** and **Canon** make some very good inkjet printers, while **Brother** and **Oki** make some fast and reliable laser printers.

TOP TIP

As a general rule of thumb, the cheaper the printer, the more expensive the ink.

Why is my PC so slow?

"There is nothing more frustrating to computer users than a slow PC. Even the simplest computer task can take an age to complete".

There are a number of reasons why your PC is not as fast as when you first bought it, these include:

Hard Drive Wear and Tear – Apart from system fans, hard drives are the only mechanical part inside a PC. Like all mechanical parts, they are subject to wear and tear. Worn out hard drives will make a scratchy or labouring noise, even when opening up a simple webpage or Word Document. A worn-out drive will significantly slow down the speed of your system.

Insufficient RAM – A PC with insufficient RAM will struggle. When you bought your PC, the level of RAM might have been sufficient. But as time goes by, modern websites and applications demand more and more RAM, making your computing experience slower than it used to be.

Overheating – One of the holy grails of computing is to keep components cool. When components, like your CPU and GPU are cool, they run at optimal performance. When they begin to overheat, your system will crawl along.

Bloated Registry – Every time you install a piece of software on your PC, your registry fills up with lots of new entries. After a while, this will make your system slow down as it has more searching to do.

Runaway Processes – Each program is coded only to use a certain amount of RAM or CPU cycles. However, when corruption of a program occurs, it will begin to use more RAM or CPU cycles than it's meant to use. This can significantly drain on your system's resources and cause a slowdown of the complete system.

"OS Rot" – After a while, tiny errors begin to develop in your operating system files. These files are needed to run your PC properly, so when they degrade or get corrupted, you will notice your PC getting slower. OS Rot affects both Windows and Mac operating systems.

TOP TIP

If you want to keep your PC running at optimal speed, only install programs that are really necessary. This will help keep registry bloat at bay. Secondly, only ever visit secure websites. Avoid "free" file sharing sites and x-rated sites. This will prevent viruses, malware, rootkits and other nasties being installed on your PC.

Keeping Your Computer Secure and Being Internet Savvy

Always have **Java and Adobe Reader fully updated**. These are some of the most targeted plug-ins for malicious exploits.

Set up **Limited Accounts** on your computer, instead of allowing all users to have full administrative rights. A feature known as User Access Control can be enabled on Windows Vista 7 and 8, which makes it more difficult for viruses and malware to install on your computer.

Use a **secure and updated browser**, such as Mozilla Firefox. On the application level, your browser is one of your first lines of defence.

Never open email **attachments or links from unknown senders**. Set your email client to view all emails in Plain Text instead of HTML format.

Use **Strong Passwords** for logging into sites. Preferably the passwords you choose should not be found in a dictionary. They need to be as random as possible and ideally contain numbers as well as letters. For example, "United" would be a weak password, but something like "Ui862wECvo" would be much more secure.

Install and run a quality anti-virus package on your computer, such as Kaspersky. Keep it updated. An out-of-date anti-virus package is worthless.

Do not use Peer-to-Peer file sharing applications on your PC, such as UTorrent. There is usually too high a risk of getting infected by this type of software.

TOP TIP

Use extreme care when divulging personal information, such as credit card numbers, over the internet. If you are making online payments always make sure you are doing so over a secure connection. You can identify a secure connection when you see **HTTPS** in the browser URL. Bona fide payment gateways will never use a HTTP site for payments.

A lot of these attempted "con" emails might sound obvious, but some exhibit amazing authenticity and have tricked even the savviest users.
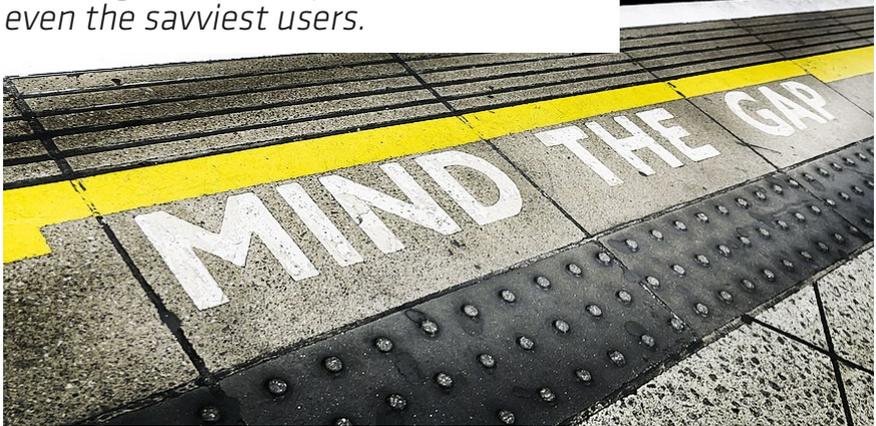
There are some IT security experts who would now argue that the greatest threat from the internet is not from viruses or malware, but from **"clickfraud"** or **"social engineering" attacks**. This is where the users are manipulated into performing actions or divulging confidential information. The user might receive bogus email messages purporting to be from financial institutions or state bodies. For example, one scam which has affected Irish computer users has been where scammers have sent email messages purporting to be from AIB or the Irish Revenue Commisioners demanding credit card details or PPS numbers. A lot of these attempted "con" emails might sound obvious, but some exhibit amazing authenticity and have tricked even the savviest users.

Why would anyone want to hack into my PC?

There is nothing important on it anyway?

A lot of users hold the misconception that their PC would be useless to hackers. This diagram by computer security expert Brian Krebs shows all the ways in which a compromised PC can be useful for hackers.

Web Server	• Phishing Site • Malware Download Site • Warez/Piracy Server • Spam Site
E-Mail Attacks	• Webmail Spam • Stranded Abroad Advance Scams • Harvesting E-mail Contacts • Harvesting Associated Accounts • Access to Corporate E-mails
Virtual Goods	• Online Gaming Characters • Online Gaming Goods/Currency • PC Game Licence Keys • Operating System Licence Key
Reputation Hijacking	• Facebook • Twitter • LinkedIn • Google+

Bot Activity	• Spam Zombie • DDoS Extortion Zombie • Click Fraud Zombie • Anonymization Proxy • CAPTCHA Solving Zombie
Account Credentials	• eBay/Paypal Fake Auctions • Online Gaming Credentials • WebSite FTP Credentials • Skype/VoIP Credentials • Client Side Encryption Certificates
Financial Credentials	• Bank Account Data • Credit Card Data • Stock Trading Account • Mutual Fund/401k Account
Hostage Attacks	• Fake Antivirus • Ransomware • Email Account Ransom • Webcam Image Extortion

Hacked PC

How Do I Extend My Wireless Network?

There are several ways in which you can extend a wireless network.

Use a Quality Wireless Router or Access Point – At the core of any wireless network will be a good quality router or access point. A quality wireless device configured correctly maximises your wireless experience. Good quality routers or AC points use quality chipsets (such as those from Broadcom) and have built-in wireless network management software. Quality brands of wireless router include Asus, Billion and Draytek.

Position your Router in a Central Location – No matter how good your router is, if it is positioned in a poor location in your home or office, signal attenuation will occur. Wireless signals get attenuated (weakened) by concrete walls or floors, filing cabinets, metal shelving or any other physical objects. For optimal signal strength, position your wireless router or wireless access point in a central location in your home or office building.

Avoid purchasing any devices marketed as "Wireless Boosters" – You might come across devices online or in computer stores, describing themselves as wireless "boosters". They can be very alluring to someone with a wireless network that is not extending far enough. However, most wireless "boosters" work by splitting the signal of your router and re-transmitting it. Therefore, you can almost instantly lose up to 50 per cent of your data throughput rates. Not ideal.

Use an Access Point – There are certain situations where the best option to extend your wireless network will be by using an Ethernet cable run. For example, two concrete floors might attenuate a signal so much that no wireless router will penetrate. In times like this, your best solution might be to get a cable run from the modem direct. Then, where the cable terminates, you can install a second wireless access point, thus giving full wireless access to the previously "wireless unreachable" location.

TOP TIP

Some areas such as offices or apartment buildings have an abundance of wireless networks. If some of these networks are using the same channel, interference will occur and your wireless internet performance will lag. If you want to find out what channel your wireless network is on, and which channel your neighbouring networks use, you can download a great application called **InSSIDer** from **www.metageek.net.** If you discover, for example, that all the wireless networks in your area are using Channel 6, you might want to change your wireless to Channel 1 or 12.

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Gmail or Outlook?

Deciding whether to use a hosted email application, such as Gmail, or an email client, such as Outlook that stores your email locally on your computer, usually depends on how you use your email.

If you are a predominantly mobile computer user, a hosted email application like Gmail will probably best suit your needs. But if you predominantly use email in your office or at home, and would like a birds eye view of old correspondence, then an email client such as Outlook will probably better suit you.

Gmail

Gmail has a **powerful search facility**, much better than the patchy internal search function provided by Outlook.

Gmail has a whole host of useful third party plug-ins which gives the program a lot of **enhanced functionality** according to your and/or your team's usage. There are thousands of these Apps available in the Google Apps Marketplace.

Gmail is less **likely to corrupt your messages**, unlike Outlook where corruption of PST folders can be a problem.

Gmail is **accessible from anywhere** and comes with a reliable app for checking emails from your smartphone.

Note: A lot of business users are concerned that Gmail can only be used as a personal email address. However, Google now allows you to use Gmail but with @yourcompany.ie domain address instead of @gmail.com.

Outlook

You have the ability to **search for and write emails while offline**. This can be a very handy feature when working in locations where there is no internet access.

Outlook provides an **excellent bird's eye view of old correspondence**. This contrasts with Gmail where you might have to click through several web pages to view old correspondence.

Outlook is an email application that a lot of people use and are already **familiar** with.

For some, Outlook is not just an email client, but a **calendar and contact manager**.

The Best of Both Worlds

It is possible to use Gmail and Outlook for the same email account and have a copy of all emails on both email applications. This will give you the benefits of both applications. Gmail can be setup as an IMAP account in Outlook. Or Outlook can be configured to just download the headers and footers of each email.

Alternative email applications:

• Thunderbird
• Atmail
• Fastmail
• Outlook.com
• Microsoft Exchange
• Hosted Exchange

Google Apps or Office 365?

The great Cloud war between Google and Microsoft has been raging since Google recently entered the market with Google Apps for Business in order to compete head-on with the Microsoft Office suite.

Microsoft have responded by launching their rebranded Cloud version of Microsoft Office called Office 365. The days of Microsoft selling perpetual versions of their Office software-in-a-box are now well and truly numbered.

Google Apps

Google Apps is operating system agnostic – All you need to run Google Apps is the Chrome browser. Office 365 on the other hand is designed to primarily work on Windows desktops. Trying to use Office 365 with iOS, Android or Blackberry might cause problems.

Google Apps offers better third-party software integration. For example, many CRM packages integrate better with Google Apps than Office 365.

Offline editing is free. If you want to edit a document with Office 365 when you are not connected to the internet, you must buy the full retail versions of Office. In contrast, Google Apps and Google Docs offers free editing tools that work within the Chrome browser.

Google Apps give you **more power to control the way you want to organise your workflow** in the Cloud.

Better website integration. You can embed Google Forms in your website. This enables your website users to fill out contact information and describe the problem they are having. This information can then be centralised in a single spreadsheet that is updated in real time each time a form is submitted. This enables you and your team to track your customers enquiries more easily and respond to them more efficiently.

Office 365

Office 365 is more **feature-rich** than Google Apps. For example, Word in the Office 365 suite offers more editing features than Google Docs.

Office 365 is **familiar**. Most people have used Microsoft Office products whether they be Word, Excel or Powerpoint.

The Excel spreadsheet **does not lose any formatting** when used within Office 365; some users have reported substantial formatting loss when using the spreadsheet facility of Google Apps.

Integrates with **Sharepoint and Exchange** Online.

Office 365 works very well with **Windows-based smartphones**.

Alternative Cloud office suites:

- ZoHo
- Open-Xchange

TOP TIP

Before you rollout any new software solution, avail yourself of free trail periods and try the software out on a small-scale first. When you are completely satisfied that it enables you and your employees to work more efficiently, then you can purchase it safe in the knowledge it is the right solution for you.

The Art of Collaboration
Going Beyond Email

Tracking email conversations and using email as a group collaboration tool can incur a huge time burden. Thankfully, the Cloud offers better collaboration solutions

The genesis of the internet has its roots in the education and military establishments of the 1960s and 1970s. The reason why these establishments found the internet so alluring was because it enabled users to collaborate on projects quickly, easily and from anywhere in the world. Back in those days, it was email which was the "killer app".

Email is a great tool, but it has its limitations. Email was primarily designed as a two-way communication tool, which is great for one-to-one communication, but not so great if, like many people nowadays, you need to work and collaborate in groups. This is where email gets a little messy. User A sends a message to User B. Then User B has to send a message back to A, and then possibly forward it to User C, and so on. Tracking email conversations and using email as a group collaboration tool can incur a huge time burden. Thankfully, the Cloud offers better collaboration solutions. It makes remote team-working both quicker and easier.

Here are some great applications that we like:

- Box.com
- Yammer
- Podio
- ZoHo
- SugarCRM
- Salesforce
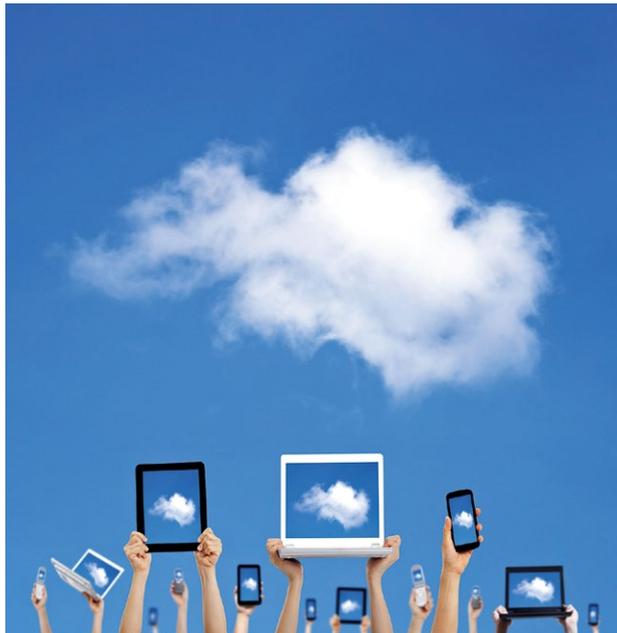
Windows 8
Should I Upgrade?

A lot of Computer Ambulance customers have asked us whether they should upgrade to Windows 8. This has a number of pros and cons.

Pros:

Faster boot times – A fresh installation of Windows 8 only takes on average 8-30 seconds to boot-up. This is a significant improvement on Windows 7, which takes nearly a minute to boot-up.

Security - Some IT security experts, such as Aryeh Goretsky of ESET, claim that Windows 8 is the most secure version of Windows ever.

Windows 8 can work with a **touch screen tablet**, such as the Surface RT.

If you are using a **Windows phone**, 8 offers you a more seamless experience.

Cons:

Poor Multi-Tasking – Do you like several applications or web pages open at the same time while you work? With Windows 8, it is very difficult to view three different apps or three different webpages simultaneously. Windows 8 has made PC multi-tasking very difficult. In fact, the world renowned usability tester Jakob Nielsen has stated, "The product's very name has become a misnomer**...the product ought to be renamed Microsoft Window**."

No Start Menu – Microsoft decided to remove their traditional Start Menu from Windows 8. This means that all your "start" buttons for programs are now under the Start Screen instead. This makes programs more difficult to find and makes your start screen look cluttered.

Decreased Usability – Several users have reported difficulties in differentiating between normal text, as used by the operating system, and clickable text used to change settings.

Optimised for Touch – Windows 8 is the first ever mainstream Windows operating system that has been optimised for touch. Many users have reported that using certain features of the operating system, like the Charms bar, are more awkward to use with a mouse and keyboard than using a touchscreen device.

The Best of Both Worlds

If you are using Windows 8, but still hanker for the traditional Start Menu, you can download **Start8** from: **www.stardock.com**. This is a neat application that gives you back the Start menu for Windows 8. Alternatively, you can still use Windows 8 on a Mac using VMware Fusion or Bootcamp.

Is it worth getting my computer or laptop repaired

Is it really worth getting my computer or laptop repaired - it is a few years old now?

In deciding whether to get a laptop or computer repaired, a number of factors should be taken into account. These include:

- Is your computer or laptop economically viable for repair or will you be "throwing good money after bad?" After doing an assessment of your system, your computer repair support provider should give you an honest appraisal of repair viability.

- If there are no serious underlying issues, some computers or laptops can be given a new lease of life with a new hard drive or some additional RAM.

- Some older, lower spec'd systems are not always viable candidates for repair. For example, an aging Celeron-powered computer simply might not be worth getting repaired.

- Bear in mind that some older computer systems might be worth getting repaired as "secondary" or "backup" PC's. If your main computer does break down, it is always nice to have a fall-back.

Server or Cloud
for Small Business

The Pros and Cons of using the Cloud instead of a traditional office file server

The Cloud is talked about a lot in the media these days. Some of our business users are asking us whether they should decommission their office server and move over to the Cloud altogether.

Pros

The Cloud facilitates **remote working** much better than a traditional server. There is a whole host of Cloud-based applications that make communication and collaboration between employees quicker and easier.

There is **no single point of failure**. In the Cloud, the probability that something catastrophic will happen to your data is much less than if it was stored in your office or home.

Software is kept up-to-date automatically in the Cloud. This saves you the hassle of having to upgrade to the latest software versions.

Cloud solutions are typically **more scalable** than traditional server-based ones. This can be a real advantage if your business or organisation is growing.

With Cloud solutions you typically **only pay for what you use**. Most traditional servers are not used to their full capacity.

It is much **easier to file share items**, such as documents, emails and calendars. in the Cloud than using a traditional file server.

Cons

Speed – Some applications will run slightly slower in the Cloud than if they were stored in-house.

Vendor Lock-in – There is a risk that the conversion rates could be high if you have all your files in the Cloud and wish to change provider.

The **reliability** of some Cloud vendors has been overstated. Just as a website can "go down", a Cloud-based service can go down or have "slow days". So do your homework before choosing to go with a particular provider.

Security – Some users will worry about their data or customer data being stored in the Cloud. This is understandable. As with any new technology, there will be a natural reluctance to use Cloud computing at first (just like with online banking).

Doing your Accounts in the Cloud

A lot of business IT applications are now moving over to the Cloud and accounting packages are no exception.

The problem with a lot of traditional software-in-a-box accounting packages is that they can be very restrictive. Most of them have to be setup on a server and then shared amongst your employees. So if employees need to access these packages, they have to be physically in your office.

Cloud-based accounting packages mean that your accounts are securely hosted online. This has several advantages:

- You do not have to be in your office to access your accounts. Invoices can be made from anywhere.
- You accountant can **remotely login** to your accounts.
- Authorised **remote working employees** can login to your accounts.
- Employees can submit expense claims electronically. This saves you time and administration costs.
- You do not have worry about **servers or configuring accounts** packages on different PCs – they will all be stored securely online.

The idea of putting all your business accounts in the Cloud may be seem insecure, but so was the concept of online banking 15 years ago. Now most businesses use online banking without giving it a second thought. Companies such as **Xero** invest substantial amounts of money into making sure that your data is protected with the highest standards. Xero uses 128-bit SSL encryption, which is the same encryption used for internet banking.

Moving over from your traditional accounts package to a Cloud-based solution is easier than you might think. For example, by using Movemybooks.com you can transfer all of your Sage accounts over to Xero. Alternatively, you can stick with Sage by moving over to their online accounts platform, which is called Sageone.ie.

Other Alternatives:

- Quickbooks Online
- Freshbooks
- Bigredcloud.ie

Handy Business Apps
for iPhone and Android Devices

Photon App – One of the big disadvantages of using an iPhone or iPad for web surfing is that they do not support Flash. This is needed for some websites to display fully. The Photon App enables you to fully view websites using Flash.

Right Signature - Sign documents online – without the hassle of scanning.

Grexit – Offers a great way to tag Gmail messages. This makes sharing and finding email messages easier.

Where's my Droid – It is every users nightmare to lose a phone. An excellent app which helps you locate your lost Android phone, if the unthinkable happens. You can even turn up the ring tone of your lost phone remotely.

DataVizDocuments to Go – Create and Edit Word, Excel and Powerpoint files on your Android phone or tablet.

Dropsync – Helps you keep your phone/tablet and your Dropbox in sync at all times.

Abukai – A quick and easy way to create expense reports. Allows users to take a photo of a receipt from a smartphone, submit it and receive a finished expense report. Excellent.

Frequently Asked Questions about Computer Repair

How much will it cost to repair my laptop or computer?
The cost will be purely dependant on the problem. If you are fairly confident about what the problem is, please contact us for a repair or support quotation. We would be happy to oblige you.

I live outside the Dublin area. Do you do remote computer repair and support?
Yes, we provide a full remote computer repair and support service. Please bear in mind, certain hardware issues cannot be fixed remotely.

Basic Rules you should follow when repairing a computer or laptop

1. **Are there any patterns to the problem?** – For example, does the problem only occur only when you run certain applications? Is the problem permanent or intermittent? Did the problem only appear after you made hardware or software changes to your computer?

2. **Are there any physical signs of failure?** – For example, does your laptop or computer have any components which feel excessively hot to touch?

3. **Have you tried fixing the problem using the process of elimination?** - Have you tried removing the battery, RAM, network card and graphics card of your system? A defective component can cause complete system failure or cause unusual symptoms to appear.

4. **Are there any audible indications of a problem?** – Does your system make any beeping noises or clicking noises?

5. **Have you tried using error messages to help diagnose the problem?** – Are there any error messages on the screen which might indicate the problem and help you perform a successful repair of your computer?

Remember when attempting to repair a laptop, desktop or server; **never mistake the symptom of the problem with the actual cause.** For example, a slow computer might be an indication of a virus or malware infection, but it can also be a sign that your hard drive is failing.

Common Laptop and Computer Problems and How to Repair them

Computer system is not booting up successfully.
There are a number of possible reasons for this. These include:

1. Failed RAM – A failed RAM module will prevent your computer system from booting up successfully. Repair normally involves replacement of the faulty module.

2. Failed Hard Drive – A hard drive that is failing or has failed will prevent your computer from booting up successfully. The repair normally involves the replacement of the failed drive.

3. An Overheating CPU will prevent a computer system from successfully booting. Overheating CPUs are often caused by disjointed solder joints on a motherboard. On some systems, motherboard repair or replacement is not always a viable option.

4. Failed Graphics Card – A graphics card that has failed will prevent your computer from booting. Graphics card replacement can solve this problem. If the graphics card is integrated into the motherboard, the GPU (graphics processor unit) chip normally has to be re-balled.

5. Corrupt Operating System Boot Files will also prevent a computer from starting. Boot files can be corrupted by viruses, updates and by other programs. Repair of corrupt boot files can be performed by using your system repair DVDs.

I live in the Dublin area. I have an ADSL broadband line, what internet speed should I be getting?
The average internet speed for an ADSL line in Dublin is between 8 and 20 Mbps.
For cable broadband subscribers, it averages between 20 Mbps and 100 Mbps. Typically, people living on the fringes of suburban areas or outside the Dublin agglomeration will experience lower-than-average broadband speeds.

Computer Repair and Maintenance Tips

1. Always keep your computer away from excessive dust – Dust can very easily get inducted into your system (especially in rooms where there are non-carpeted floors). Over time, dust can form a layer of insulation over your delicate electronic components, which can cause them to overheat and fail.

2. Only install programs that you actually need onto your system. Installing programs willy-nilly will cause "registry bloat" and cause your system to slow down.

3. When carrying around your laptop or tablet computer, always **make sure you use a well-padded case**. This protects your system from shock-damage and scratches.

4. Before you install new software on your computer, make sure you **create a new system restore point**. This can make it easier to "wind back" your system if the new software causes corruption.

5. When attempting to repair your computer yourself, **always take a note of settings which you have changed**. If your repair is unsuccessful, it will be easier to bring the computer back to a known working state.

6. Never attempt a repair of non-serviceable parts inside your computer. For example, the PSU (the power supply unit) is not designed for repair.

My computer is beyond repair and I would like to recycle it in an environmentally-friendly way. Where can I recycle an old computer in Dublin?

Before you recycle your old computer, we strongly advise that you **remove your old hard drive(s) first**. There are two computer recycling centres in Dublin. These are:

Dublin North: Shamrock Terrace Recycling Centre, North Strand.
Dublin South: Pigeon House Recycling Centre, Ringsend.

Contact Us - It's Good to Talk

We hope you have found this booklet informative.

This guide presents only a tiny snapshot of what we do. If you would like further information on a specific I.T. related issue and need a solution, or you simply just need a computer fixed, pick up the phone. **Call us on 01-685 4833 or 086 337 1476.** We are here to help (and our phones are answered by real humans...).