

The British Chambers of Commerce guide  
to simplifying technology for business.



**BCC**  
THE BRITISH  
CHAMBERS OF  
COMMERCE

In association with

**Microsoft**





## British Chambers of Commerce – the national voice for local business

**The British Chambers of Commerce (BCC) campaign nationally, exerting a powerful influence to create a more favourable business environment. Uniquely positioned at the heart of every business community in the UK, no other business organisation can claim the quality, credibility and reach of our relationship with decision-makers and opinion formers.**

**The BCC is delighted to be working in association with Microsoft, BT, HP and Intel in the production of this Technology Guide. It is designed to assist the small and growing business community understand the benefits that the managed implementation of computer technology can bring them.**

**For more information on what we do, how we can help your business and how your business can become a BCC member please visit [www.chamberonline.co.uk](http://www.chamberonline.co.uk)**

Time is one of the biggest problems we all face. There's never enough to do all that you need to do, accomplish all that you have to do and plan properly for what your business demands that you must do. This guide is designed to save you time by bringing together four technology partners in a knowledge alliance. Our aim is to demystify technology and help you to find the level of technology that your business needs now and will probably need in the future.

Our knowledge and collaborative expertise are being pooled to give you the technology advice that relates directly to your business. How you can use ICT to improve what you do, empower personnel and raise your profile. Use it to reach more customers in different markets, do more and sell more. Start and grow a business, adapt more easily to change, understand and use technology to realise your business vision. With this guide, we want to help you to acquire the confidence to take your technology to the next business level.

## Microsoft bCentral

Microsoft® is the worldwide leader in software, services and Internet technologies for personal and business computing. We offer a wide range of products and services designed to empower people through great software and we take our responsibility to business customers very seriously. We understand the unique challenges you face, and how the right technology can help your business to succeed. At Microsoft, we believe that the right technology is critical to overcoming core business challenges. But we don't stop at delivering great software. Microsoft bCentral.co.uk is an online information resource that is designed specifically for small businesses. It offers business-critical information, services and advice to businesses across the UK. It gives users comprehensive advice and tips on marketing, finance, technology and administration, and can be found at [www.bCentral.co.uk](http://www.bCentral.co.uk)

## BT Business

BT Business is a dedicated business unit within BT Retail, which is a business division within the BT Group. It was created to serve the needs of smaller companies, from one-person start-ups to those employing around 500 people. BT Business aims to help its 1.2 million customers overcome barriers, which may prevent them from adopting the information and communication technology (ICT) they need. Common problems include shortage of time, lack of ICT skills and understanding, high up-front cash outlays and lack of awareness of the business benefits of efficient ICT solutions. Help is provided through a range of products and services developed to help modern smaller businesses cope with the demands being made on them.

BT is the largest supplier of broadband for UK businesses and the \*No.1 Internet Service Provider (ISP) for small businesses (1-250 employees) in the UK. Further details are available by visiting [www.bt.com/business](http://www.bt.com/business) or calling **0800 400 400**

\* As per OfTel Figure (Jan 2003)

## Intel

You and your colleagues have many responsibilities when growing your business. You have customers to care for, new sales prospects to close, products and services to develop and market, employees to recruit, train and retain. In addition you have business operations that are part of the everyday functioning of your company. Like communication, accounting, inventory control, etc. Accomplishing these business operations more efficiently can leave you more time to spend on your larger business responsibilities. Applied effectively, Intel® technology can help you accomplish many of your business operations more efficiently.

These efficiencies contribute to your employees' productivity, thereby reducing costs and enabling you to offer more value to your customers. Whether you are considering desktop PC's, notebooks, servers, or networks, Intel's technology leadership, reliability and compatibility make it the right choice for your business. In fact, companies worldwide confidently select Intel technology for their computing needs.

To learn more visit:

[www.intel.com/ebusiness/smallbusiness](http://www.intel.com/ebusiness/smallbusiness) or visit your preferred Intel reseller/PC manufacturer.

## HP

HP is a leading global provider of technology products, solutions and services to a wide range of UK customers. We are very focused on making technology and its benefits accessible to small and medium businesses. Our offerings span ICT infrastructure, personal computing, access devices, and imaging and printing. We also appreciate that small to medium sized businesses may not have a dedicated ICT resource or in-house expertise. With this in mind HP has created a nationwide network of accredited resellers who can guide you towards the right technologies for your individual business needs. These are HP Centres of Excellence and there will be one locally for you to use. For questions regarding your existing ICT set-up, your future ICT requirements, or ICT first-time installations just call or visit your local HP Centre of Excellence. For more information on our wide range of products, business solutions and Centres of Excellence visit [www.hp.com/uk/smb](http://www.hp.com/uk/smb)

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# What is ICT?

At its simplest level, ICT (Information and Communication Technology) is computers, software programs and all of the peripherals that it drives to support your business. It's the hardware (PCs and servers) and software (programs), the interconnected network of peripherals (printers, scanners) and the ability to communicate data both externally and internally – which simply make your business work better.

## Why is ICT necessary?

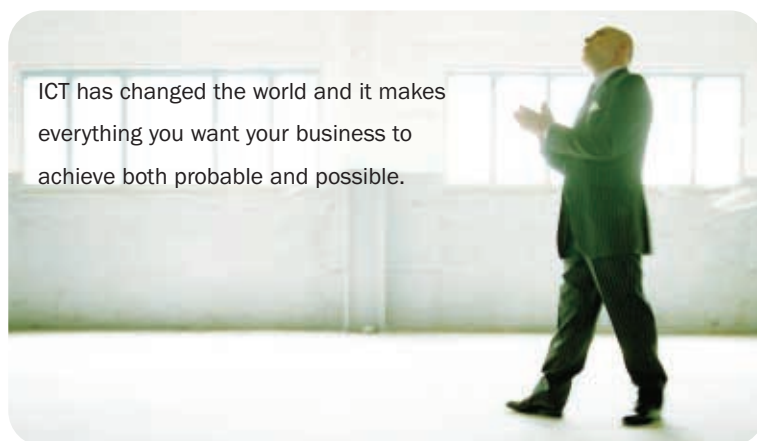
Practically every business, these days, whether it's the largest or the smallest, is driven by technology. ICT has changed the way the world works and moves, how it collaborates and communicates.

Businesses are better because of ICT. It has made them nimbler, quicker and infinitely more agile. Using ICT and its many layers of options and devices, businesses can now do more. They can accomplish more with greatly improved levels of productivity and better performance, consistently achieving higher levels of customer satisfaction with massive improvements in accuracy and efficiency. They can now communicate with anyone, anywhere in the world, at any time and make their people even more productive, whether they are working at the desk, from home, on the move, in meetings, or in front of the customer. And everybody in the business feels better about it because, once they've mastered ICT, they are often left wondering what all the fuss was about!

Whether you're starting a new business, or trying to take your business to the next level, you need the right technology and the right level of technology. But what technology is right for your business? How do you evaluate ICT, what should you choose and what business benefits can you expect?

That is the purpose of this guide. It is intended to take you through the options and to provide information that will enable you to make an intelligently informed choice on the many things you need to consider at whatever stage your business has now reached.

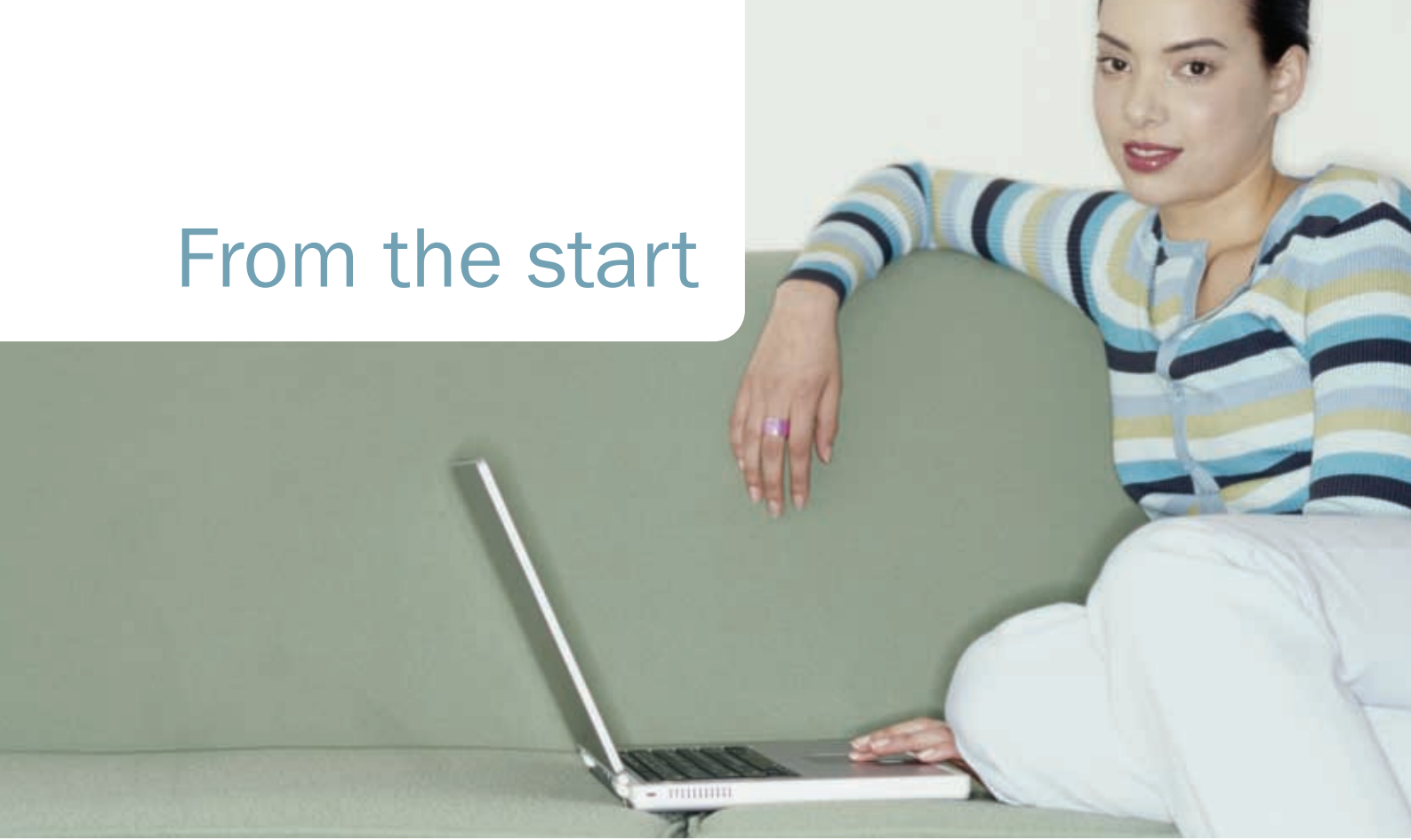
And there is much to consider. Your first PC (Personal Computer) and Internet access. A web presence and networking PCs together. Adding servers, distributing information internally and talking to the world. Managing software and upgrading. This guide is designed to help you, give you answers and direct you to the information you need to steer your business to succeed with technology.



ICT has changed the world and it makes everything you want your business to achieve both probable and possible.

“ ICT is the future of every business. Of that, there can be no doubt. ”

# From the start



ICT enables you and your people to get more done in less time. It empowers and enriches communication and makes it easier for your people to work more effectively with all of your customers, suppliers and partners, anywhere in the world. With elementary ease, it allows everyone the freedom to work from practically any place, anywhere and at any time, in almost any situation.

## How?

Simply by converting information into digital data using a language that is understood by computers. Properly formatted, even the most complex information, images, voice and data, can be

moved around the office, or around the world, at unbelievable speeds, in copious quantities and on arrival, it is unravelled, perfectly, often in seconds.



*Perhaps it's even harder to believe that today's most basic PC possesses more computing power and capability than the computers that were used to land the first man on the moon!*

## The desktop PC – it changed the world

In the early 1980s, the PC was launched and ICT changed the business world. Information was brought instantly to the desk, empowering people and transforming by the hour what could be done in a business day. Slowly and surely, ICT became affordable and accessible. Productivity increased, more business could be managed and more taken on. Records, details, files and information could be processed, accessed, stored and retrieved, easily. ICT created an entirely new way of working and businesses benefited on a massive scale, as they do today.

Evolution took hold and new industries emerged as companies created new and better tools and new

methodologies to help businesses work even better using ICT. Now, whatever size your business has reached, you've reached a point where you seriously need to invest in ICT. This guide focuses on PC-based systems running the Microsoft® Windows® operating systems, since this largely is the standard used by most businesses, worldwide.

ICT is a business enabler and it will enable you to take advantage of opportunities. However, it is not a panacea and the business benefits it delivers belong to those companies that can embrace ICT knowledgeably, use it effectively, build upon it carefully and extend it sensibly to contribute consistently to better business performance and productivity.

“ ICT has changed the world. It makes everything you want your business to achieve both probable and possible. ”



### Checklist

## What can ICT do for your business?

- Make people more productive
- Give them the confidence to tackle new tasks
- Enable better levels of customer service
- Improve business efficiency
- Enhance communication with your field and mobile workers, customers and trading partners
- Extend your capability to enter new markets and handle more business comfortably
- Develop business management through better control of and immediate access to essential information
- Deliver your vision of your company's future.

# Essential business components

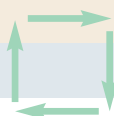
From the outset and in order to feel comfortable with business enabling technology, it helps to 'see' and understand how it all fits together. Basically, there are four elements:



**Hardware**



**Software**



**The network**



**Hardware peripherals**

At whatever level your business operates using ICT you cannot do it without hardware and software. The network adds layers of progressive sophistication that help you to extend your business's capability, accommodate changing requirements and satisfy a broad range of diverse demands from your customers, trading partners and your own people.

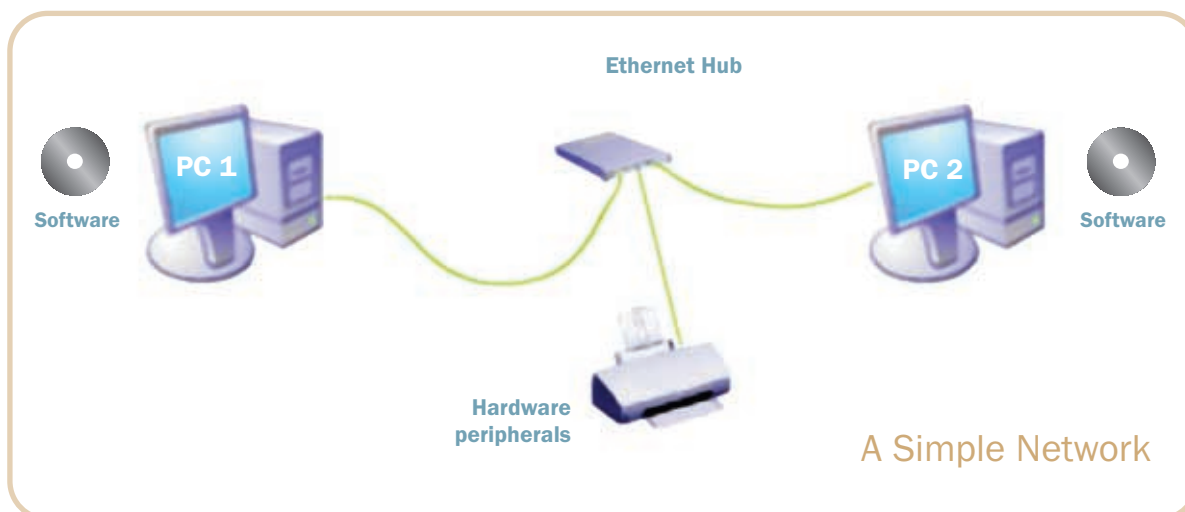
**Hardware** is the manufactured devices on which your software applications run. It's the bits you can see and touch, the 'boxes'.

**Software** is the intelligent programming that enables the 'boxes' to work effectively.

**The Network** connects all of your different devices, making them work cohesively for everyone. It ties everything together, desk by desk, office by office,

room by room and so on, so that all the elements of your ICT solution (computers, printers, scanners) work effectively together and can be used by everyone, all at the same time.

**Hardware Peripherals** include printers, scanners, copiers and all of the storage and other utility devices that are linked directly to your PC system. What goes in to your PC is one thing but it takes technology to make impressive sense of what comes out in professional and high quality print and to store and save it so that you can find it in a matter of seconds. And it's technology that enables you take virtually any content (print, picture, slide, book page, poster), scan it and use it for a whole range of business, publicity and marketing applications. It can also be connected to the World Wide Web via the Internet.



Essential business components

# Hardware

**It's all a matter of what you need and what you need to do with it. You need to process business in your office, handle business on the move and ensure that everyone has all the tools they need to do their jobs, wherever they are. Your computers and the ICT system you create will quickly become the backbone of your business.**

## Hardware in the office... Personal Computers used for:

- Word-processing
- Data and voice communication
- Financial control and business planning
- Accounting
- Sales and marketing presentations
- Database management
- Archive, storage and retrieval of customer records and business information
- Researching web-based information
- eCommerce applications with online ordering and payment
- Online marketing
- Training programmes
- Regional, national and international collaboration
- Global marketing opportunities.



## Checklist

### What should I be looking for when I buy a PC?

- RAM (Random Access Memory)
- Processor speed
- Hard Drive storage capacity
- CD-Rom reader and writer
- DVD
- Expandability
- Connectability
- Software included in the price
- Support
- Size.



**Desktop Computers** come in a wide variety of shapes, sizes and configurations. They can also be very confusing! As a buying guide, there are certain things you need to consider carefully:

- RAM (Random Access Memory) – the area of a program you actually work in
- Processor speed – how fast the machine actually gets things done
- Hard Drive capacity – the computer's storage 'warehouse'
- CD-Rom reader and writer – software is usually loaded to the computer from CD and you can output content (data, images and voice) or back-up easily to CD
- DVD – training programmes and information is increasingly being delivered this way
- Expandability – expansion slots enable you to add more devices.
- Chipset – look for the latest chipset with the fastest bus speeds.

Go for the most powerful processor available and as much memory as you can afford. Choose computers that let you do what you need them to do today but, whatever you choose, allow for the fact that you will want them to do more tomorrow than you've thought about today.

“ And there is so much more yet to come as the rapid advances in ICT continue to deliver all that they have promised to help every business, whatever its size. ”



Essential business components

# Hardware

## Getting to grips with the basics

**Motherboard:** a motherboard is the physical arrangement, on a board, of a computer's basic circuitry and components. Additional components are added to a motherboard through its expansion slots.

**Processor:** this is the microchip that drives your PC. Processor speeds are increasing all of the time, so when you're buying new PCs for your business, go for the most powerful chip on the market. Processor speeds are measured in Megahertz (MHz) and Gigahertz (GHz) and the higher the value, the faster it is. Generally, the Intel Pentium 4 Processor is widely regarded as the best there is.

**Operating System [OS]:** the platform that runs all of your software. Most new computers run on the Microsoft® Windows® XP Operating System. There are different versions available, Home Edition and Professional Edition. You need to make sure that new PCs for your business have Windows XP Professional. It's the new standard in reliability and performance and is designed for businesses of all sizes and for users who demand the most from today's technology.

**Memory:** the electronic holding place for instructions and data that your computer's microprocessor can reach quickly. Memory is often used as a shorter term for Random Access Memory (RAM). The more RAM

you have, the less frequently the computer has to access instructions and data from the hard drive.

**Hard Drive:** your PC's storage area. Go for at least 20 Gigabytes of hard drive storage – although 60GB is fairly typical these days.

**Modem:** a modem is a device connected to the expansion slots of your computer (either USB, or ethernet) that allows you to access the Internet and use email. It's also the key element in enabling anyone to work anywhere using a mobile device.

**Monitor:** your choice is between 15, 17, 19 and 21 inches. They used to be very bulky, but flat-screen technology (FST) is now becoming increasingly affordable and very popular because of the desk space it saves. Choose quality monitors, built with health, safety and energy-preservation in mind, for obvious reasons.

**CD [Compact Disc]:** CDs store up to 700 megabytes of information making them very useful for back up purposes. Buying a PC with a CD reader/writer is a sensible option. This enables you to write and copy your files, to 'burn' them to CD, using a software program, as well as read them. This can be combined with a DVD (Digital Versatile Disc) player.

# “ Your computers and the ICT system you create will quickly become the backbone of your business. ”

**DVD [Digital Versatile Disc] player:** DVD has become the standard for the highest quality broadcast playback, replacing VHS tape. In business, information, demonstrations, training and multimedia content (data, voice and video) is now often presented on DVD. Businesses are also starting to use DVD for storage purposes and to output content since it can hold six times more than a re-writable CD.

**USB [Universal Serial Bus]:** the standard ‘plug’ that connects most peripheral devices (printers, scanners, storage devices) to your PC enabling you to ‘play’ with a simple and instant install procedure. Hence the term, ‘Plug & Play’.

**SCSI [Small Computer System Interface]:** colloquially known as ‘scuzzy’, the Small Computer System Interface allows PCs to communicate with peripheral hardware such as disk drives, tape drives, CD-Rom drives, printers, and scanners. SCSIs are parallel interfaces for faster speeds. In general, serial connections usually indicate a simpler, slower operation and parallel indicates a faster operation, which is something to watch out for whenever you are buying peripheral hardware devices.

**FireWire [or IEEE1394]:** is an industry standard high performance serial bus for connecting devices to your personal computer. It provides a single plug-and-socket connection and data transfer at blazing speeds.

**Ethernet:** an expansion socket that enables access to superfast data transmission standards particularly for intranet and Internet activity.

**WAP [Wireless Application Protocol]:** communication protocols that standardise the way wireless devices can be used for Internet access to deliver online content, onscreen, to users on the move.

**Wi-Fi [Wireless Fidelity]:** connects different devices wirelessly enabling you to work productively without cabling restrictions. WiFi enables you to work anywhere and online without any cable infrastructure.



**Bluetooth:** another means of connecting without wires. It enables connections between PCs, printers and a wide variety of handheld devices including PDAs, home and business phones using a short-range wireless connection.

**Infrared:** also a means of connecting devices without wires it is gradually being superseded by other more robust methods of wireless interconnectivity.

**GPRS [General Packet Radio Services]:** a packet based wireless communication service that provides continuous connection to the Internet for mobile phone and computer users.

**Software:** typically the cheapest way to purchase new software is to have it pre-installed on your new PC. Check to find out what software is included and ask for a quote on packages you’ll need, such as Microsoft® Office XP.

**Parallel interfaces:** provide faster speeds. In general, serial connections usually indicate a simpler, slower operation and parallel indicates a faster operation, which is something to watch out for whenever you are buying peripheral hardware devices.

# Hardware

“ Upgrades to PC's can be very expensive, so it is wise to buy the best that you can afford from the start. ”



## Hardware on the move...

**Portable & mobile computing** – Notebooks & Tablet PCs give you enormous flexibility and almost limitless productivity, wherever you are. In fact, you can take your desktop with you and both are available in a variety of configurations designed to suit a versatile range of business needs.

Notebooks (or Laptop PCs) are powerful, mobile desktops. They come with an integrated high-resolution colour screen up to 15 inches, keyboard and mouse pad and offer a range of personal productivity options. At the time of purchase, you can choose from processor power, size of screen, hard drive storage capacity, RAM, graphics and sound cards and DVD/CD readers and writers. All have an integrated modem for online connection. As with a desktop PC, you should go for the best processor and as much memory as you can afford. Ports (expansion slots and connections) are important, too, because

they vastly extend the notebook's capability to work with other devices and interconnect easily.

## How does my business benefit?

Notebooks give you and your people enormous flexibility to work anywhere – while travelling, in airports and hotels, from home, abroad and even in client and customer meetings. With a simple online telephone connection via the notebook's internal modem, you've got full Internet access providing email and web search, access to your office and business database and all aspects of information, purchase, inventory and accounting. You can download and upload information easily and work anywhere, carrying everything in a smartly designed piece of technology, weighing little more than two bags of sugar. Notebooks are simply a brilliant business innovation!



**Tablet PCs** like the HP TC1000, are an advance in personal computing that will revolutionise what you do and how, enabling you to work in new places and in entirely new ways. They're laptops with a difference. Roughly the size of a standard paper notepad, it takes your handwritten notes and turns them into type, or files and stores them as script for instant retrieval. They are lightweight, have attached and detachable keyboards, use common peripheral devices (printers, CD drives, monitors) and have all the features needed by mobile users, including high-resolution displays, networking capability and fully integrated peripheral support.

Data entry is by special tablet pen and you have all the power and functionality, with the mobility and versatility to work anywhere, easily. Make notes, draw diagrams, highlight content, send emails, convert script to type and much more in both landscape and portrait format. It's already fully configured for wireless operation and exploits the power of new generation programs, like the latest version of Microsoft Office and Digital Ink.

It uses Microsoft® Windows® XP Tablet PC Edition, Microsoft's most advanced operating system, and its advanced versatility enables broad customisation. You can calibrate the pen to suit your personal working preferences, optimise the Tablet PC for left or

“ You can even send handwritten emails! ”

right-handed use and program hardware buttons for specific actions, such as opening applications or changing screen orientation instantly from landscape to portrait and back.

It's a notebook that works just like pen and paper. Designed to exploit the power of new generation technology, it's probably the most mobile PC ever.

### How does my business benefit with a Tablet PC?

It provides a mobile business solution that is easy for everyone to use. You can take notes in meetings and draw sketches to explain points made or ideas discussed. You can take basic designs and initial concepts and develop them, just as productively as if you were in the office. You can check stock instantly from the factory or warehouse floor, write notes and send order confirmations, copying them to everyone involved in the transaction. You can collaborate and communicate easily online and interconnect simply with your office devices and business databank, wherever your business takes you, keeping you in touch and in control. And you'll be using familiar Windows XP software.



## Checklist

### What to look for in a notebook?

- Optimal screen size
- Weight (from 1.4kg)
- RAM (Random Access Memory)
- Processor speed
- Hard Drive storage capacity
- CD-Rom reader and writer and DVD options
- Expandability
- Pre-installed operating and productivity software
- Warranty
- Battery life
- Go for the format that suits you best.

# Hardware



## Hardware for personal productivity...

### **PDA, Smartphone, PocketPC**

All of these are handheld devices. They are designed to be portable, lightweight, compact and powerful. Feature-rich, they help you to ensure that your business and your people have the right tools to do the job and meet customer and business demands. Obviously, their relevance depends on the type of business you run and manage, and the way you prefer to work.

“ Designed to be portable, lightweight and compact. ”



### **Offline PDA [Personal Digital Assistant]:**

An offline PDA (Personal Digital Assistant) is, for many business people, a highly useful, productivity-enabling tool. With simple efficiency you can store contact details, run your schedule, calendar dates, jot notes, track expenses, write and transfer email to and from your PC. It's easy to synchronise your offline PDA, either wirelessly or through a cabled cradle, with your PC, backing-up your information and enabling you to be even more productive on a daily basis whenever you're on the move.



**Online-enabled PDA:** With an online-enabled PDA you can do even more. You've got instant access to email, Internet and corporate information. You can make contact, make appointments, use multimedia files, interact with others through Instant Messenger, browse the web and synchronise information with a desktop computer. An online PDA is usually either WAP-enabled, or operates as part of a GPRS-networked mobile business solution, such as Outlook Anywhere, which is a small business mobile initiative from HP, Microsoft and Vodafone. See [www.outlookanywhere.co.uk](http://www.outlookanywhere.co.uk)



**Smartphone:** A Smartphone is a new generation mobile phone that gives users always-on access to enhanced voice, web and data services. With colour screen, familiar software and easy navigation, users can access personal and business information, safely and securely, with a device no bigger than a mobile phone. Another option is an integrated phone and PDA (personal digital assistant), with a colour screen. The phone connection is 'always on' for web browsing, email applications and live updates online. The familiar Windows XP operating system provides enormous practical functionality on a truly portable device.

“ Business continues even when you're out of the office. ”

### What are the benefits to my business?

Business continues even when you're out of the office but when you want to contact the office for data, information, messages and more, what are your options? Mobile computing presents a broad range of personal options to help you manage your time, stay in touch easily and use the power of online technology whenever you're on the move. You can even stay connected online while making phone calls without having to continually reconnect.

“ Mobile computing puts you in touch and keeps you in control. ”



### Checklist

#### What should I be looking for in a mobile solution?

- Functionality – buy what you need, to do what you want. Is Photomessaging really necessary? Do your mobile devices have to be Internet-enabled? Do you need to print remotely?
- Practicality – it helps a lot if your mobile devices can be synchronised with your PCs and work seamlessly with your mobile phone.
- Usability – always go for rechargeable devices, featuring good battery life
- Look for expandable or scalable options – many companies are now producing software packages that will enhance the functionality of most mobile devices
- Consider solutions such as Outlook Anywhere or Hosted Exchange. Low cost, all in one solutions that can be tailored to suit your mobile business needs.

# Software

**When you've got everything in place and you've bought your hardware, you're going to need software to make it work. Every PC, notebook, portable or handheld device has to have an operating system. It's even better if the operating system that you use in your PC is compatible with your other portable computing devices.**

Software is the general name given to the various kinds of programs used to operate computers and connected devices. It is often divided into application software (programs that do the work) and system software (which drive the computer).

## What is an operating system?

An operating system (OS) is the program that manages all of the other programs in the computer. Windows XP is an operating system. The other programs are called applications. The application programs use the operating system by making requests for services and users interact directly with their operating system through an interface such as a command language (computer code) or a graphical user interface (GUI) such as Windows. Word-processing is an application.

## What should I be looking for from my software?

Perhaps it would be better to ask what you want it to do for your business. There's quite a range of software to choose from offering a different span of applications, all of which are designed to make everyone's life in the office easier and more personally fulfilling.

There's a whole raft of software available for a wide range of different purposes:

- Word-processing
- Spreadsheet
- Financial management
- Asset control
- Presentations
- Daily diary and scheduler
- UK and European route planners
- Digital imaging
- Computer protection
- System security
- Email and web browsing.

Some of this you can buy as stand alone software but you would be better advised to:

- pre-purchase pre-installed software with your new computer
- choose a multitask productivity package.

“ Software is designed to make everyone's life in the office easier and more personally fulfilling. ”

Many new business computers now have Windows XP pre-installed as their operating system. That takes care of the licensing issue – it's a legal copy (providing it was bought from a reputable dealer!) and you're safe. You may also benefit from volume discounts negotiated with the hardware vendor. More than that, the installation has been done for you and within a few minutes you're up and running.

And what a wealth of technology you have at your fingertips. Everything is simple, straightforward and clear. You can work reliably with in-built online security, network easily with fast Internet access, support multiple users on the same PC and make routine business tasks simpler to manage and easier to handle. Intuitively, it works the way you want to, remembering frequently used items, offering wireless networking support, multitasking simplicity and high level interconnectivity. Email and mobile communications support is so easy.

“ Purchasing pre-installed software is a sensible option. ”

Microsoft® Office XP is a multitask productivity package. It's a versatile suite of first class business applications designed to help you get more done, more easily. A range of the most essential office programs bundled to provide easy ownership including:

- Microsoft® Word, a professional word-processing program
- Microsoft® Excel, a spreadsheet program that's simple to use
- Microsoft® PowerPoint®, for superb, simple to create, slide presentations
- Microsoft® Outlook®, probably the best way to schedule your business life, onscreen.

### Can I have email?

If you've got Windows XP then you've got Microsoft® Internet Explorer (IE), a web browser that's packed with features and ready to use. You will of course need an ISP (Internet Service Provider) so you can go online to access email services and use the web but there's lots of onscreen help and advice to get you started.



“ Choose a multi-task productivity option. ”



#### Checklist

### What should I be asking about software?

- Is it genuine?
- Will it give me what I want?
- Is the software pre-installed or not?
- Do I need additional security software?
- How can I keep my computer system 'clean'?

# Licensing & the Law

**Software is an important asset for your business, so you should be aware of your legal responsibilities.**

**First of all, it is very important to understand that whenever you buy software, whether it is in a box and bought from a retailer, or pre-installed on any computer, you do not own the software. You are buying the rights to legally use a copy of the manufacturer's software program and the licence is the written document that confirms the terms of what you are or are not allowed to do with your copy of the software program. So you should be aware of your legal responsibilities.**

## What type of licence can you buy?

You can buy licences in three fundamentally different ways:

1. In a box, from a retailer
2. For software already installed on a new PC
3. Volume licensing – when you need five or more licences.

### **Buying from a retailer**

Often called full packaged product, this is when you buy software 'off the shelf' in a shop or from a mail order catalogue. You receive the right to use the software and the CD for installation plus the licence agreement and instructions. You'll also be able to buy upgrades to the latest versions of software.

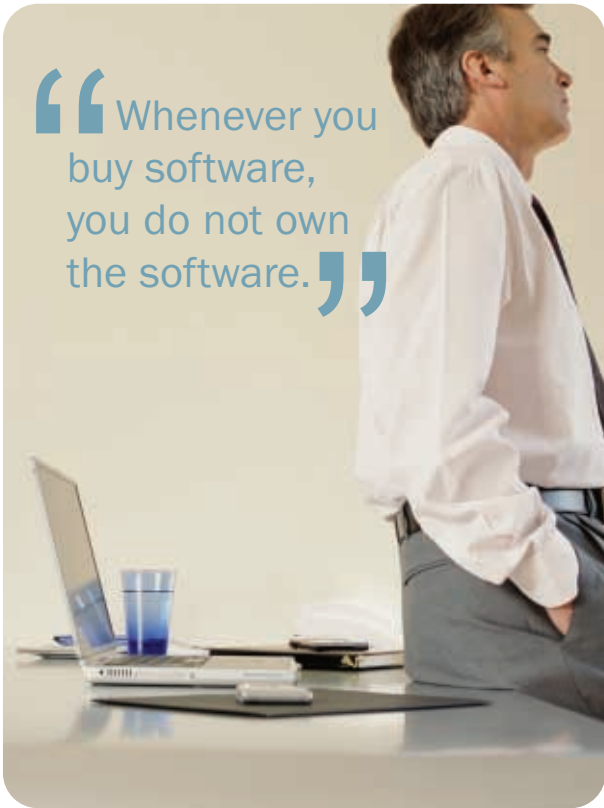
### **Licensing on a new PC**

When you buy a new PC with software already loaded onto it, the licence is part of the package. The licence is known as an OEM licence and can be the most cost effective option – you don't need to worry about support as it's automatically provided by your PC supplier.

However, there are a number of restrictions with this type of licence as you cannot remove the software from one PC and put it onto another, as you can with a full packaged product licence.

### **Volume licensing from Microsoft**

With this option, you get discounts for buying more than one licence. The discounts start from as few as five licences. You'll receive one copy of the software program which you are then permitted to install onto the number of machines identified in your licence agreement.



“Whenever you buy software, you do not own the software.”



## Things you need to know

Every business must be fully and legally licensed for the software they use. The ultimate responsibility for this rests with the owners of a business and, in the case of companies, its directors. Using unlicensed software is unlawful and can result in legal action.

There are many forms of non-compliance or software piracy. These include:

- Installing software on more desktop PCs than your licences allow
- Informal disk-swapping among employees, colleagues and business partners
- Counterfeit software.

## Don't be fooled!

Counterfeit software is more insidious. It can be very hard to recognise. There are many risks associated with counterfeit or otherwise illegal software. It often comes with key code and components missing. Manufacturers will not support pirated software. So you have no access to expert help and no warranty protection should problems occur. It is impossible to upgrade pirated software and also very difficult to download add-ins, which software vendors regularly provide over the Internet for legitimate customers.

To avoid risks, you should only buy software from a reputable source of PC equipment and software and familiarise yourself fully with the security and anti-counterfeiting features included in Microsoft software (see how at [www.howtotell.com/uk](http://www.howtotell.com/uk)). If you are offered Microsoft software that you are unsure about or if you have already bought it and have doubts, then Microsoft offers a Product Identification Service, where you can check on what you have bought or are thinking of buying. Certain terms and conditions apply to the use of this service visit [www.microsoft.com/uk/piracy](http://www.microsoft.com/uk/piracy) for more information.

If you're not sure where you stand, you can also call the Microsoft Customer Licensing Team on **0870 60 10 100** and choose the Business option for lots of helpful advice.

“ Set up your own software security policy. ”

Set your own software security policy. Record what software you bought, where from and on what date. This will help to make management, upgrading and licence renewals so much easier for you.



## Checklist

### What should I know about software?

- You must have a licence for every software installation
- Make sure that you buy only genuine software
- Use only reputable resellers
- Get to know the security features of Microsoft software
- Set your own software security policy.

# Upgrading

**Like cars, technology is constantly being modified to provide better service and greater satisfaction. And, just like cars, at some time or another, you'll need to upgrade, replacing or improving your hardware and working with the latest version of your productivity software.**

## Upgrading hardware

Just like life – something new is always happening! Over time, processor speeds change and things get faster. New and innovative ways are found to interconnect everything, or to see things more clearly onscreen, or to print with better resolution and richer colours, or to take photographs without film and so on.

You don't have to have the latest invention or the newest product. That's your call but you will find that if you don't upgrade your equipment at the right time it becomes noticeably slower, even obsolete, and may not be able to load new software programs, or be able to read files written using the latest programs.

Upgrade, as and when your business needs to, but do keep up to date with latest product releases and newest innovations. How? By reading computer magazines, visiting relevant websites, browsing ICT business press and by visiting computer resellers and stores. A good reseller will make a point of keeping you up to date with what's happening and the stores will give you free demonstrations of the latest and newest innovations.

Upgrading memory is always worthwhile but there is a limit to the amount of memory that you can add to a PC. You can also upgrade the CD and DVD drive and the hard drive, as well as the monitor, sound and video cards. But there comes a point when it is more costly to upgrade than it is to buy the latest PC built exactly the way you want it.

## Upgrading software

As a general rule, you should buy only what your business needs, allowing you to budget sensibly and control costs effectively. It's a fact of business life that your business will change over time. So, perhaps, will what it does and the tools it uses to do it. Your software will definitely change as technology advances and new ways of getting things done are developed.

When it comes to software upgrades, much depends on how you originally purchased the software and what type of licences you bought:

- If you bought a full packaged product from a retailer and a new upgrade comes out you can buy an upgrade version
- If the software was pre-installed on a new PC, then you have a choice. You can buy a new PC with the latest software on it, or you can buy an upgrade from a retailer
- If you need to licence more than five PCs in your business then one option for your software upgrade path is through Microsoft's Software Assurance which will give you the right to upgrade to the latest version of Microsoft software for the term of your licence agreement.

Your ICT reseller can help you with this, or simply call the Microsoft Customer Licensing Team on **0870 60 10 100** for help and information.

“ Just like life – something new is always happening! ”

## Keeping track of your software

Software is a business asset and keeping a record of your hardware and software benefits your business. It means that you have the right information should you need ICT support and you have the details necessary for insurance purposes.

A software asset management programme can help you to protect your business from software piracy and under-licensing. An effective software asset management programme will also help you to determine what software you need – and which programs you don't.

One of the first steps to take is a complete audit. As a minimum, your audit should include:

- Device
- Date of purchase
- Serial number
- Operating System
- Software packages.



### Checklist

#### For upgrading to your advantage

- Don't ever buy because 'it looks nice!' Buy only what your business needs, when you need it
- Read the computer and business press for the latest advances and newest innovations – then decide if your business really needs them
- Keep track of all your hardware and software – they are your primary business assets and you will need the information for a variety of purposes
- Consider Volume Licensing for software upgrades on 5 or more licences.
- Consider technology finance programmes that can make your IT purchase easier

# Network and Data Storage

**In a simple scenario, a single PC, a printer, a scanner, there's nothing to worry about. You simply connect everything together and away you go. But, as soon as you have many users, working with many PCs and wanting to use the same device all at the same time, it does create problems. Then you've got to network everything together connecting everything so that everyone has access to hardware devices, to the web and, with appropriate permission, to company data and information. Even then, they won't all be able to use the printer at the same time!**

## Why should you network?

Networking enables people within your business to work with each other and seamlessly with other people in other locations and other businesses. Networking enables contact in entirely new ways and entirely new levels, across the office and right around the world. When your business is networked, no one is ever very far away.

“ If you don't network your business is going nowhere. ”

## What type of network?

There are really only three types of networks:

- LANs (Local Area Networks)
- WANs (Wide Area Networks)
- and the Internet.

LANs make it possible for everyone in your office to share a printer, for example. With the right software, they can also share files, work on projects together, send instant messages and emails simultaneously. It's simply a small, localised network and all you need is cabling and lately, not even that, as wireless LANs continue to grow in popularity.

WANs are big LANs. They simply connect multiple LANs together usually over large distances.

The Internet is the world's biggest network yet it belongs to no one, every business and everybody – all at the same time. It's a global collection of LANs and WANs, connected in a way to facilitate the sharing of resources. Intranets are simply special private connections maintained across the Internet.

## Starting small...

Small businesses are concerned with LANs and, of course, the Internet. When you're small, say two computers, you can network each to the other and share resources, accessing files from each other, sharing a printer and so on. This is commonly called a peer-to-peer network and it's fine until you reach a point where whatever you're doing slows the other computer down, or you can't print anything until the other user closes down some applications. Productivity plummets as the frustration rises.

## Growing bigger...

When that happens you move your LAN over to a client/server relationship. Basically, you need to install a server, which acts as a standalone computer and networks everyone together. Although everyone on the network – the clients – has business content held on their own hard drives, the files and resources that are intended for sharing are connected to the server. Hence client/server terminology.

“ The Internet is the world's biggest network yet it belongs to no one... and everyone. ”

Now, your resources are controlled centrally and your business content can be backed-up and archived easily. And because it's the server's responsibility to process the network's requests, workflow and productivity is optimised – the server automatically organises everything, queues requests and sets priorities.

Your computer reseller will be able to advise you on the client/server architecture that is best suited to your business.

## Storage

Every business creates a great deal of crucial data that needs to be 'backed-up'. That means it is stored and saved somewhere that is easily accessible so that it is all easily retrievable.

In business, you never know what is going to happen. Everyone's premises are susceptible to power failures, fire, theft, flood and accidental damage. Drinks fall onto keyboards and things accidentally get knocked over. It's not always the technology that lets you down but if you haven't backed up that vital data or information somewhere safe and easily retrievable, the effects can be disastrous and recovery very costly.

Get used to backing-up regularly either to disk (CD), tape or, if you're generating a lot of information, you should consider a network storage solution.

Network storage automates many standard back-up tasks and makes them easier. You've got vast storage capacity, instant and immediate search capabilities and enormous flexibility to add devices that, with the right permissions, can access your archives from any location.

## Using the giant...

The Internet is a giant resource. It's the world's biggest network. But you can't get to use it on your own. You need the help of an Internet Service Provider (ISP) who has the equipment and the high-speed lines to connect you. BT is a good example of this.

Choose your ISP carefully. If you want useful information, with specialised content gathered, organised and sorted, choose one of the best-known ISPs.

Shop round, ask around, talk with your business colleagues and trading partners, read the technology and business press and discuss your needs with your computer reseller who will be happy to help and advise you on where to look.

“ Network storage automates many standard back-up tasks and makes them easier. ”



### Checklist

#### Important notes on networking and storage

- Networking is both sensible and essential to a growing business
- A client/server architecture helps to optimise everyone's time
- Proper data storage and back-up is a must in any business
- Choose your ISP carefully to meet your business needs
- Check whether the ISP offers Internet access for single and multiple users, what type of email they offer, domain name registration, webspace and website services, and if they offer local call rate helpdesk services
- A well-managed business knows what it needs and where it's going, so do set time aside, at regular and frequent intervals, with your technology advisor to plan for your business's ICT future. Always ask for advice on the different options that are available.

# Hardware Peripherals: Printing, Scanning & Imaging

Having invested in the best hardware for your business and bought the right software, you naturally want your business to look good on paper. This is the point where everything that went in to your system and looked great onscreen now comes out! What you buy depends very much on what you want it to do and, of course, what you can afford. The innovations in print technology, led by manufacturers such as Hewlett-Packard, have been huge. So good that you'd even be forgiven for believing that the colour image you just printed out actually moved on the page in front of you!

## Printers

### What to buy?

If your business has a light print requirement for letters, order processing and general business correspondence then you don't need a colour printer. But what you do need is speed and sharp, crisp quality from a Printer Control Language (PCL) driven monochrome (black and white) laser printer with optional Postscript.

PCL is the industry standard for printing as is Postscript for graphics and imaging. All major printer manufacturers make printers that contain or can be loaded with Postscript software, which also runs on all major operating system platforms. It is an extremely powerful programming language that makes a huge number of typefaces available to you.

There's a huge choice on the market but LaserJet printers come highly recommended for performance, reliability, value for money and low running costs. Look for print speeds of at least 10-12 pages per minute and a print resolution of 600dpi (dots per inch).

“ Look for performance, reliability, value for money and sensible running costs. ”

If your business has a high profile print requirement (reports, sales and marketing presentations, direct mail campaigns) then you should consider a colour printer. There are both laser and ink printers available.

Laser is best for colour business documents, but if you need to create slides for presentations then ink printing is best. Obviously, because you are printing in four colours (CMYK – cyan, magenta, yellow and black) the cost of consumables will be higher, but the effect can be simply breathtaking. Look for print speeds of 16-20 pages per minute and an optimised print resolution of up to 4800 x 1200dpi.

To satisfy both requirements, there's a wide choice of combination mono and colour laser printers.

You may also want to consider an ink-based **All-in-One** option which combines both mono and colour photo printing, colour and mono copying (often with collation), image scanning and faxing. This is an ideal solution if space in your office is at a premium. If you are looking to share such a device with a number of users, look for a network enabled all-in-one that offers full expandability with additional paper trays and other useful accessories

Something that you will need to consider if more than one person is likely to use the printer, or as your business grows and you take on more people, is that the printer you buy is network-enabled. That means that it can accept server cabling and interconnects, or wireless instructions from several sources.

Visit [www.hp.com/uk/ifonly](http://www.hp.com/uk/ifonly) for more printer advice.

## Scanners

Scanners are inexpensive colour input devices. A scanner captures images from photographic prints, posters, magazine pages and similar sources for computer editing and display. Scanners come in hand-held, feed-in and flatbed types. Flatbed types are best for your business needs. Scanners usually come with productivity software (such as Adobe® Photoshop), which enables you to resize and modify images that you capture and import into your PC.

Flatbed scanners can accommodate a letter or a page from a book and some can scan 35mm colour slides and transparencies. Most can easily deal with photographs and colour images and the packaged software guides you through the scanning process and various techniques and lets you manipulate images onscreen in your computer while telling you what to do.

Prices are falling, memory is increasing and now, with major advances in manipulative desktop software you've got all you need to make digital imaging an important low cost part of your business.

You can then place your scan in a letter, document or report, load it to your website or email it to anyone, anywhere. Scanning adds new dimensions to your business capabilities – but do be mindful of the laws governing copyright. Images, illustrations, logos,

photographs and text all have owners and you do need their permission to use them!

For information on copyright visit:

[www.patent.gov.uk/copy](http://www.patent.gov.uk/copy) which is an excellent resource for everything you need to know governing copyright laws, or try [www.cla.co.uk](http://www.cla.co.uk)

For more on Intellectual Property rights visit:

[www.intellectual-property.gov.uk](http://www.intellectual-property.gov.uk)

Look for a flatbed scanner (preferably USB for plug & play simplicity) offering true 36-48 bit colour at 2400-4800 dpi.

## Imaging

Slowly but surely digital cameras are becoming commonly used. That's because digital photography is instant, easy, requires no film and can be downloaded straight into your PC ready for enhancement, manipulation and usage in lots of business applications.

Prices are falling, memory is increasing and now, with major advances in manipulative desktop software you've got all you need to make digital imaging an important low cost part of your business.

Look for a compact camera, with a quality zoom lens, offering 1280 x 960 down to 640 x 480 pixels image resolution in 24-36 bit colour.



## Checklist

### Buying Guide

- Buy only what your business needs – why pay more for things you don't need or won't use?
- Try to think and plan ahead – will you need to print in colour soon?
- Buy the best products your business can afford and from authorised resellers only.
- Think about networking and the business future. Will more than one person use the device? Will the device handle more than one user? Does it work wirelessly?
- Consider technology finance programmes that can make your IT purchase easier

# Making the Internet work for your business



**The Internet is every company's window to the world. It's your route to new markets, more customers, global information, business opportunities and so much more. It carries your emails and just as easily carries huge volumes of data, handles telephony and conferencing and transports broadcast quality video to practically any global destination. So, what could the Internet do for your business?**

## Does my business need a website?

A website enables you to display your company's products and services to the world. But first you need a domain name, a URL (Uniform Resource Locator) that enables users to find you on the World Wide Web. For example – **www.fabrikam.com**. Your ISP or any of the many Net Name companies will search the web for you to see if the name you have, or wish to use, is available to buy, on an annually renewable contract. The domain name gives you all the variants you will need for everyone in your company to have their own personalised email address, for example – **myname@fabrikam.com**.

As soon as you have acquired the name you want and sorted out your ISP you're ready to create your

website. In fact, you're almost ready to compete with the biggest players in business because having acquired a domain name that is uniquely personalised to your business (**www.fabrikam.com**) you alter the perception that everyone now has of your business. As valuable as the Hotmail service used by the public widely undoubtedly is, somehow, your business credibility is not quite as convincing when you are simply **anothername@hotmail.com!**

BT offer a range of dial-up and broadband ISP services designed for small businesses that include domain name registration, webspace and business information.



## Creating a website

It's easy to create simple but strikingly effective web pages using Microsoft® FrontPage®. You can even develop and manage your website with FrontPage to help you. Using it, you can build online catalogues to promote and sell products and services, manage product listings and take care of online payment requirements. You can add dynamic photographic and image content (using scanners and digital cameras) and produce professional results using the program's customised content. You'll save hours, without having to know anything about complex programming.

## Hosting your website

Normally, your Internet Service Provider will do that, offering you free web space (up to 10 or even 20 megabytes) and 10 or so email addresses. That may be fine for what you want but it may not provide all that you need. Website hosting is a service provided by many specialist companies at a very low monthly cost which often includes many important extras such as generous hosting space, massive monthly bandwidth (30,000+ visitors) detailed analyses of your website visitors, shopping cart set-up, a free mailing list facility and much more.

### What exactly is email?

Email is probably the most important Internet application for most businesses. It's the ability to send letters, reports, presentations, photos, spreadsheets and short simple messages from one computer to another, all over the world, at local telephone rates. All you need is an email program (usually part of your computer's operating system) and a modem connected to a phone line and you've got 24 hour email capability. It's a great way to do business and stay in touch at a very low cost.

If your website is likely to have a large amount of regular traffic, or if security is really important to your business, then dedicated hosting may be your best option. BT has hosting datacentres across the UK which host thousands of business websites.

## Taking payment online

If your business currently accepts credit, debit or charge card payments, offline, BT can help you to organise and implement a secure online payment system. It will work around the clock and verify card details in seconds, accepting most major credit and debit cards and currencies. Rapid settlement is a feature and low set-up costs with monthly billing plus a flat rate transaction fee, means that it won't cut into your margins. It's quick to set-up and can be fully operational within days.

Talk to your reseller or BT for help and advice on getting more from the Internet.

“ A website is your company's window to the world. ”



## Checklist

### Working the web successfully

- A web presence may well help your business – but only if you use the address on all your correspondence and encourage customers to come and find you
- Monitoring your website regularly means you know what's happening
- Creating a website can be as easy as the software you use
- Think carefully about who should host your website and why
- Buy a business class domain name such as [www.mybusiness.co.uk](http://www.mybusiness.co.uk) which gives you business class email addresses such as [aname@mybusiness.co.uk](mailto:aname@mybusiness.co.uk) and not simply [anothername@hotmail.com](mailto:anothername@hotmail.com).

# Broadband

**For most businesses, a broadband Internet connection is definitely the way to go. Put simply, it's a blazingly fast, high-speed, usually cable Internet service, that puts the entire resources of the web instantly at your fingertips.**

**Broadband is a collective term for a group of technologies that enable high-speed Internet access, at speeds of up to 2MBs (megabytes per second) – in other words up to forty times faster than today's dial-up connections via conventional telephone lines.**



“Broadband is also changing the way companies work.”

## What does this mean for my business?

It means there's no dial and wait which typifies the standard 56Kbps modems that are fitted into many PCs and notebooks. With dial-up modems, you may have to pay local-call rates for the time you spend online actually connected. But broadband is a superfast connection that is always-on. This means users can access the Internet 24 hours a day 7 days a week for a flat-rate fee and you have instant email, messaging and web browsing.

Broadband is also now changing the way companies work. It's helping to facilitate new services such as video conferencing and expanding genuine multiservice capability for companies enabling them to combine huge volumes of voice, data and video and send it easily, anywhere. All of which means new business opportunities and exciting new industries. Broadband is even making working from home a much more practical proposition.

## How does Broadband work?

Broadband uses a technology called adsl (Asymmetric Digital Subscriber Line) and requires an external modem which is simply fitted into the USB or Ethernet expansion slot on your computer.

With Broadband from BT, adsl transforms your existing standard BT telephone line into a high-speed digital line capable of carrying the high-speed broadband service. This means you don't need a new line installed – saving you money and hassle. In most cases you won't even have to change your telephone number. With some of BT's Broadband products, all you'll need at your end is a computer that meets the minimum requirements, plus a broadband modem and microfilters (phone adapters). Other broadband suppliers are available for you to consider.

Choosing other broadband suppliers (cable) may require the installation of a new telephone line into your premises to deliver the broadband service, although you may be able to keep your existing telephone number.

Even though your Internet connection is always-on and you may be working on the web, you can still send and receive telephone calls using the broadband

telephone line. Because of the way it works, broadband has an enormous capacity to carry traffic and, because it's digital, the quality is simply astonishing.

The connections are reliable, the clarity superb and image quality is TV standard. More information on broadband for businesses can be found at [www.bt.com/business](http://www.bt.com/business), or contact BT on **0800 400 400**.

“ Broadband has an enormous capacity to carry traffic and, because it's digital, the quality is simply astonishing! ”

## A word about security

The always-on Internet connection means that you must take and maintain adequate security precautions to protect your business from unwanted intruders. With the right assistance, you can lock down your ICT system and prevent outsiders from accessing your company information or disrupting your essential business services. You'll find lots of useful information on Internet security on Pages 28-29.



## Checklist

### Working with Broadband

- Broadband enhances the productivity of your people
- It also helps to improve the profile of your business by increasing customer satisfaction with the speed of service and response that you can provide
- Consider the options and choose your broadband service provider carefully
- You don't have to have a new telephone number or even a new line
- Broadband can help to improve business performance by enabling you to do more at lightning speed
- Ensure you have all the right security in place for doing business online. Your reseller, ISP or BT can help you.

\* Broadband technology really has had a huge impact on our business, saving time and money and really helping to drive efficiency and customer service levels. The company couldn't function in the same way now without it" Richard Brucciani, Chairman of Pal International Ltd

# eCommerce & eBusiness

**eCommerce (electronic commerce) is the buying and selling of goods and services on the Internet. eBusiness (electronic business) is about trading electronically with your suppliers and retail partners to automate, speed and simplify businesses processes such as stock control and payment.**

As a place for direct shopping, with 24-hour availability, global reach and the ability to engage customers and interact with them, the Internet is now a massive source of revenue even for the world's smallest businesses. You can reach customers that you might otherwise never find with impressive multimedia presentations at low cost.



## How do I get started?

Doing business on the Internet has five specific requirements:

- **Online Store** – you need a 'shop window' for your goods and services, a commerce-enabled website where what you're offering can be presented and described, selected and bought
- **Payment Processing** – accepting credit card payment online is essential
- **Order fulfilment & shipping** – delivery of goods is vitally important, especially when your order could well be coming in from all over the world
- **Customer Service** – satisfy your customers and serve them properly and they'll keep coming back regularly
- **Promotion** – even the most wonderful website is useless if no one is encouraged to find it! Without successful promotion your online business will fail.

## Who can help?

It is important for your business to get your website absolutely right and there are many options to choose from and much that you need to consider to make it the best that it can possibly be. Speak with your reseller or BT and/or chat things through with your ICT manager or consultant (if you have one).

## Do it right

People have to want what you are offering. That means good graphics, clear and precise explanations, short copy and a clean, logical structure. Take people through it, step by step. Ask yourself how you would want to be 'sold to'? Then ask yourself, does your website work for you?

“ Every business that is serious about itself and its long term success needs a website. ”

## Brilliant effects

When you consider eCommerce and what it can do for you, it is easy to see how ICT is a business enabler. It:

- Simplifies processes
- Speeds transactions
- Improves your cashflow
- Brings new customers
- Creates sales opportunities.

and gives you the chance to enhance your business efficiency and market penetration in ways that are simply astonishing.

you can capture the names, addresses and contact details of all the people who visit your site and want to know about your business services or buy your products.

Keep your website up to date and make frequent offers to entice repeat business. Always remember that, although the world is a big place, eCommerce puts it right at your fingertips. There may be huge eCommerce opportunities for your business in other countries, even in different markets.

BT have a range of services available to help you build and host your website and also have trained professionals who can design the right website for your business.

## Don't let them get away!

People who visit your website are often looking and ready to buy so you've got to make your website interesting, attractive and relevant. More than that, it's got to load fast, be simple to navigate, offer a good selection of payment options and provide a first class shopping basket or online shopping trolley service. Microsoft FrontPage features usage analysis reports that show how your website is being used in daily, weekly, or monthly summaries. Essential marketing data and customer information can also be collected for you to use through the online form in FrontPage. Visitors simply complete the form and FrontPage collects the data and sends you the results.

Remember, a website doesn't have to sell to be successful but every business that is serious about itself and its longterm success needs a website. It's the easiest way for people who are interested in your products and services to find you. And it's the best way for you to show and tell them in words and pictures how you can help them, at the lowest possible cost to you. There are no postal charges and no expensive printing costs. You can update your website as often as you need to, at very low cost and



## Checklist

### ideas for using eCommerce effectively

- Use it to keep your distribution costs down
- Make it work for you geographically – eCommerce takes your business anywhere in the world
- Offer products that can be sold online, unseen and untried
- Work closely with your retailers and trading partners to develop common systems and processes which can cut costs and save time.

# Safer web browsing



**So you're up and running and your business is now web-based. Everyone in your company can access the Internet, send messages, receive emails, handle and process documents, easily, simply and at superspeed.**

And, just as easily, if you don't protect your computers and the network that links everything directly to your core business data and essential company information, anyone with access to a computer, anywhere in the world, can 'burgle' your business. The damage they can cause is unbelievable and sometimes irreparable. They can corrupt your files, steal confidential information, spread viruses and plant system crawlers that unpack and wreak havoc.

Without security to protect your business whenever it's online you won't know a thing about it, until it's much too late.

## Use a Firewall

First, you need a firewall. Firewalls are security gateways that filter what comes into your network and control what your computers send out. Windows XP includes a robust firewall and setting it up is literally a single-click operation. The Internet Explorer web

browser also offers security zones that will give you control over when it will download and run content from websites and both Microsoft Outlook and Microsoft Outlook Express offer a wealth of security features to help block malicious code.

But don't just leave it at that. Set your own business security policy to govern and control who has access to what internally and what they can do externally. Update your security regularly with all the latest online add-ins to keep you current. Stopping intruders is one thing but managing your people is another. Are they downloading inappropriate material? What content are they distributing and could it reflect badly on your company? Are they spending too much time shopping online? With a strong security policy you can defend your business and control and manage what goes on, online.

You can also protect your website and customer transactions using digital certificates. With a digital certificate on your website you can prove your authenticity and reassure your customers, protect any data transmission from hackers and maintain the integrity of data being passed to and from your website. BT provides integrated security solutions, helping to safeguard your company data against the threats you can be exposed to through Internet, wired and mobile networks.

“ Without security to protect your business online you won't know a thing about intruders or attacks – until it's much too late. ”



### Should I get help?

If you need to outsource help with your Internet security there are several options available at different costs, offering various levels of service. Some are subscription based and you'll be asked to renew your contract and the vendor's commitment each year and with each new product release,

or upgrade. Others simply offer protection or security with defence, control and management products. Increasingly, security providers are offering composite solutions that will give you all that you need now and deliver all that your business will need in the future.

“ Set your own business security policy to control and manage what goes on, online. ”



### Checklist

#### Working sensibly on the web

- Whenever your business is online you need security controls
- Monitor and manage what your people do online – your money and reputation are at stake
- Update your security regularly and often
- Use a Digital Certificate on your website to reassure customers and protect your data transmissions
- Leave nothing to chance – your business is too important
- Whenever people leave your company remove their password from your system immediately
- If you or your people get an unexpected email attachment from someone you don't know, don't open it!

# The mobile workforce

**The business world is a fast changing place and ICT is continually setting the pace. New advances in technology are changing the way every one works. Not only at the desk, where more can be done in a day, in less time than ever before, but also on the road and away from the office.**

Today's great software programs and commonly used operating systems empower people on the move but it's the technology that's making so much more possible.

An increasing number of businesses are recognising the need for mobile data solutions and there are typically two routes:

- a hosted exchange solution where everything is simply managed for you and your people. All you see are the messages, emails, data, reports and content which is delivered to your PC or mobile online device as part of your hosting agreement.
- a mobile information server, for example Outlook Anywhere, which is a full solution, managed inside your business or by a hosted supplier. For a simple monthly fee, plus airtime costs, you get everything you require, including all the hardware, software, configuration, installation, training and support.

Most businesses that have invested in mobile solutions are reporting significant productivity gains. And, with any mobile solution, as your business grows and you perhaps move offices or even relocate, you simply 'unplug' the solution and take it with you. It's ready to work for you straightaway.

## What's out there?

Wireless systems are so obviously useful. With no cables to worry about you can easily add new users to your network. You can also download files and print documents from your laptop or handheld device without any awkward connections to fiddle with and roam about the office still connected to the Internet at high speed.

**Infrared systems** let you swap data and synchronise calendars between infrared-enabled devices such as mobile phones, laptops and Personal Digital Assistants (PDAs) without any cable connections. They operate over short-ranges (generally, you place the devices next to each other) but they can crash if anything interrupts the infrared beam.

**Bluetooth** enabled devices also communicate wirelessly and don't need 'line of sight' to make them work. Bluetooth enabled PCs, notebooks, PDAs, printers, mobile phones can talk to each other over a short range – up to 10 metres – without any wires. Wi-Fi (Wireless Fidelity) is another wireless technology offering a range of up to 550 metres.

**GPRS** (General Packet Radio Services) is a packet-based wireless communication service that provides continuous connection to the Internet for mobile phone and computer users. It enables users to take part in video conferences and interact with multimedia websites and similar applications using mobile handheld devices and notebook computers.

**BT Openzone** – gives you a public access, wireless Internet connection, enabling you to access the Internet at selected public venues or 'hotspots', using your wireless-enabled laptop or PDA. Soon you'll be able to walk into motorway service stations, airports, conference centres, hotels and cafes all around the country, sit down and log-on. You'll be able to access your office network securely, just as if you were really there to send and receive emails, browse the web and do much more, all at broadband Internet speeds.

“ With Outlook Anywhere, we are demystifying the technologies for small businesses and unlocking substantial revenue associated with enhanced productivity. ”



### The next generation

Next generation mobile phones are getting more feature-laden by the day, letting users browse the Internet in colour, make voice calls, send text messages and emails. They can also work as digital cameras allowing users to take and send photos with voice messages attached. New 3G (3rd Generation) mobile phones transfer data 100 times faster and allow it to be shared in real-time between multiple users, as well as featuring video conferencing and enabling access to documents, databases and work schedules stored on company intranets and secure websites.

Add to all this, the stack of powerful handheld computer devices now available (PDA, Smartphone, Tablet PC) and you've got everything you need to do everything you want!

“ You've got everything you need to do everything you want! ”

### What does all this mean for me?

Mobile options give you and your people speed, freedom, flexibility and the resources to work anywhere, at any time and in any way.

The technology can enable you to:

- Increase productivity
- Save money on the cost of renting office space
- Increase your employees' motivation
- Optimise the flexibility of your trading hours (your staff can work outside of office hours)
- Reduce your employees' stress levels
- Save the cost of hiring a central office
- Reduce your employees' business travelling costs
- Improve your company's resilience against weather or transport problems
- Reduce your employees' commuting time and costs
- Employ specialist personnel irrespective of location
- Offer an attractive proposition when employing new recruits

and help you to provide the highest levels of customer satisfaction – and that's exactly what your business is really all about.



### Checklist

#### Working wisely with mobile devices

- Ask yourself what the device will add to your business – before you buy!
- Study the contract carefully
- Bulk purchasing can give you better prices
- Log and track what you buy carefully for insurance and audit purposes
- Buy with the future in mind – wireless is going to be the way ahead



# Looking into the future of ICT

**One thing is certain – things are going to get even faster! Processor speeds will improve, memory will grow and handheld devices and notebooks are likely to shrink while packing a lot more power and offering even richer resources.**

## Things are going to get even faster!

Wireless ways of working over long and short distances are sure to take-off and the cost of long term online storage will plummet, as capacity and speed soar.

Broadband will boom and processors like Intel's Itanium and Xeon which are capable of performing at breathtaking speeds and addressing massive amounts of memory will continue to transform what every business is capable of achieving.

## Broadband will transform training

In turn, digital broadband delivery will transform the training and education of your people, at their desks, on the move and even at home. They'll benefit from TV quality delivery of training tools such as seminars, workshops and 'how to' programmes over the Internet, at low cost, through an even broader range of devices. The digital broadband explosion will make videoconferencing cheap and affordable and probably create new ways of order and transaction processing for you, too.

## What will all this mean for you?

Tomorrow is not going to be the same as today. Innovative advances in ICT will bring new ways of working, create new revenue opportunities and provide better ways to achieve even higher levels of customer satisfaction.

There'll be far fewer cables cluttering up your office and the capacity for personal productivity will reach impressive new standards. Costs for things that may seem expensive today will almost surely fall as newer technology takes over. And maybe, just maybe, the virtual office isn't too far away. That place where no one ever is – yet everyone is always there.

All silently connected and working at prodigious speeds, just as efficiently as if they were in the office. Think how much your business could save then! It's technology that is making tomorrow such an exciting place for every business to be.



## Checklist

### Looking into the ICT future

- Think about Broadband – it offers speed and simplicity
- Wireless is coming! Is your business ready to benefit?
- Should you be thinking about network storage or an offsite option?
- Would your people work better with mobile flexibility?

# Starting a new business

Having made the decision, there's lots to consider. But it's all very exciting!

ICT can help you to accomplish much of what you need to with simple, direct effectiveness using a:

- PC to manage your business and sort your finances and accounts
- printer, scanner and copier to profile your business properly
- broadband Internet connection for fast, instant and easy email, and information gathering
- website to talk to the world

and any of the vast range of mobile options to keep you in touch with your business and in total control.

But there are certain things you have to do:

- Get professional advice. There are many consultants who can offer enormous experience in helping start-up companies. Ask at your Chamber of Commerce, talk with your bank manager, your accountant or financial adviser
  - Get to know what you are legally required to do, from accounting procedures to tax requirements
  - Write a plan that is sensible, realistic and that you can stick to. What do you want to achieve and where will your business be in say two, five and ten years time?
  - Think about getting yourself a lawyer, just in case you need to consult one. You may want to buy a defunct company's name or need funding. Again, you may need legal assistance and help from your bank manager or any of the many venture capital companies who will help you for a share in your achievements
  - Then you need to get connected and go online
- You need to speak to a computer reseller or a communications provider who can help you to select and install the technology your business will need. Sound them out and assess their business credentials carefully.

Whoever you choose, ask these simple questions:

1. How long have they been trading?
2. Who are their typical customers and do they service start-up businesses like yours?
3. What is their support policy? Can they give you the advice and help you are going to need?
4. Do they have any specialist expertise? In what – networking, imaging, storage, web, software asset management?
5. What professionally recognised qualifications do they have?
6. Do they understand the technology that a start-up business needs?

- Choose your ICT hardware and software carefully and select the ISP (Internet Service Provider) that you think best suits your business needs. Put a software asset management plan in place, as soon as you start.

- Next, you need to market your company to bring in business. You'll need to target possible customers, talk to them regularly, meet them, make them aware of your products and services and persuade them with irresistible offers.

Starting and running a business can be hard work but technology can take so much of the strain for you.



## Checklist

### Starting a business

- Get professional help, including a good lawyer
- Understand the legal requirements for starting a business
- Make a plan – and stick to it
- Choose your ISP carefully
- Use online resources for help, information and advice
- Market hard – but make it easy with technology to help you
- Get to know your reseller thoroughly – their strengths, support policy, trading record and qualifications to give your business the help it needs.
- Know what you want your business technology want to do:
  - process and store business information
  - talk electronically with your customer base and trading partners
  - give you access to the web
  - provide reliable mobile computing and communications
  - give your business a web presence
  - possibly interconnect everyone in your business via a network – though this may be a consideration for later.

# Growing a business

**You've taken the plunge and made the commitment. Now you're running your own business and it's working. But you want it to work even better and there are key choices that you now have to make.**

## Can technology grow my business?

It's a big question but the answer, undoubtedly, is yes, it can. Just because you don't have an office in Europe or the Middle-East, Australasia or America doesn't mean you can't be there. Technology takes you there.

## Should you employ more people?

Or can you actually achieve bigger sales and better performance from smarter use of today's technology? Training is essential to get the best from your people and to ensure that they are using technology in the most productive ways possible.

## How can a server help my business?

A server makes it easy for everyone in the business to access everything they need and all at the same time. There's no waiting and everyone can simply get on with what they have to do, writing emails, reports and documentation, processing orders and business information, archiving, storing and updating, advising customers, handling queries and dealing with finance. A server makes sense because of the speed it adds to your business and brings scalable flexibility to your future technology requirements.

## Do you need bigger premises?

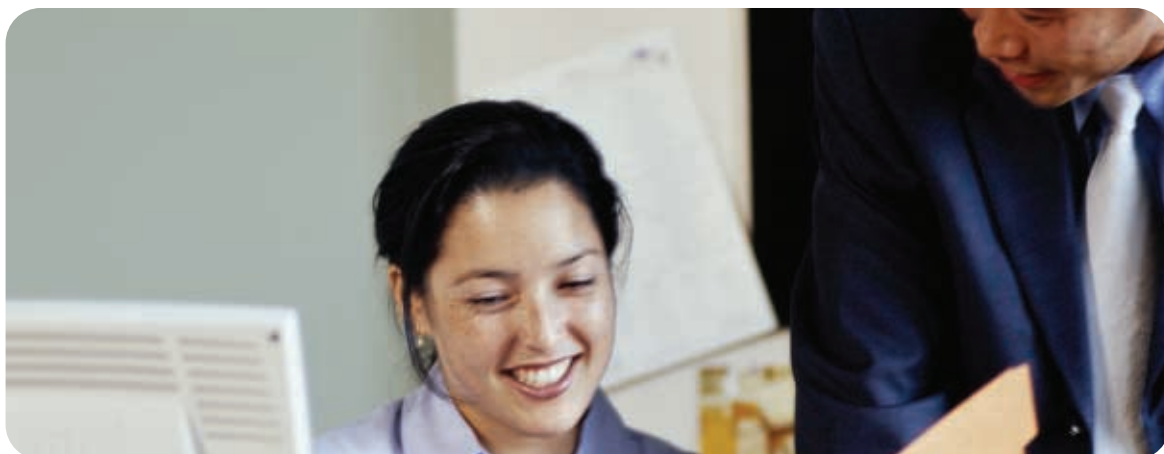
Larger premises and more people are direct overheads that require business capital. Could this capital be better used in deploying technology to improve the speed of what you do and to simplify and accelerate your office and operations processes? Bigger premises will enable you to improve the technology you are using which could directly improve your performance and profits.

## What about a flexible working policy?

With today's fantastically enabling technologies people are working as effectively from home as they do in the office. Think how much productive time is saved when people don't spend hours driving in and out of the office. Everything they need is to hand on the business network and with video conferencing, email and messaging they can 'attend' every meeting and never be out of touch.

## Is hot desking an option?

Nobody 'owns' the desk space but it is fully equipped and technology-enabled for everyone to work at it and use it when they are in the office.



# Making sense of growing a business

- Make your website work even harder for you. Other markets are always beckoning. Work with a design consultancy or do it yourself with today's fantastic authoring tools and make it the best it can possibly be. It should be attractive, load instantly, be informative, easy to use and highly persuasive.
- Train your people for better efficiency, optimised performance and improved productivity. Much can be done online, at any time and anywhere, cheaply.
- Market hard, regularly and sensibly to attract new customers, possibly in new markets. Target precisely so that you can control costs and make effective use of your budget – and see the results.
- Provide the best possible customer service. You'll only ever hear from a dissatisfied customer once, but even when things go wrong – and in every business, they can! – if you work hard to resolve the issue most customers will come back – and tell others about the excellent service you provided.
- Use technology. A company that cannot be contacted is more than just an irritation. Mobile technology keeps everyone in touch. The more business you do, the more you'll have to do to control and manage it and that means faster processing, faster productivity and technology solutions that you can scale up to work successfully for you in the future.
- Look at better technology before you consider bigger premises and more people.

Technology can add so much more power and performance to your current business enabling you to accomplish even more, so much more easily, without necessarily investing more capital in either premises or people.

“Can you achieve bigger sales and better performance simply from smarter use of today's technology?”



## Checklist

### Know what you want technology to help you to do

- Get more done every day and handle increasing amounts of business
- Network everyone in your business for optimal use of your office technology and to extend that efficiency into mobile computing and on the road communications
- Work wirelessly, without the clutter of cables and over longer distances
- Store everything centrally with immediate availability and set levels of authorisation for each person
- Dramatically improve the speed at which everything gets done
- Work better and faster, locally, nationally and internationally.

# Managing a changing business

**Change is a fact of life and very much a fact of business. Little stands still and never for very long. Businesses need to be agile and able to respond, quickly, to the changes occurring all around them. And not just in technology, though ICT is by far the biggest area of constant and continual change.**

## New ways quickly make old methods obsolete

New ways quickly make old methods obsolete and it is vitally important to keep up if your business is to compete effectively in existing and emerging markets. That's why you need good ICT information because technology will work for you to keep you ahead of your competitors. Help you to provide better customer service, reach more customers, open new markets, sell new products and win a growing share of the market, simply by doing things better and being seen, online, in all the right places.

Perhaps you need to appoint an ICT manager, or consultant, who can keep your business fully up to speed with all the technology required to do business on a better and bigger scale.

## Training is absolutely essential!

Training is absolutely essential. Skills, especially these days, are quickly superseded unless they are regularly refreshed in classes, courses, workshops and seminars. Much training can now be delivered, cheaply, online, direct to the desktop and to mobile devices.

Technology roadshows, software trial versions and product upgrades are regular features on every business calendar. Your people should be encouraged to get involved with what's happening on every front that could possibly have an impact on your company.

## What causes the biggest headaches and hold-ups?

Last, but not least, people should always be encouraged to think about ways in which they could be helped to do a better job for the company. What tools would make their job function easier? What skills do they need that they don't currently possess? In their opinion, what causes the biggest headaches and hold-ups in the business and how can these problems be successfully resolved?

Yes, change is a fact of business life, but with your finger on the pulse providing good intelligence and informed awareness, managing change is so much simpler. The idea is to make change part of your business vision so that you can see and assess how changes impact directly on your people and how they affect your business capability.



## Checklist

### Managing a changing business

- Use technology to deliver high level, relevant training programmes to develop and enhance the skills of everyone in the company
- Know what it is that you want your technology to deliver – faster, better ways of working, speed and efficiency in the office, better data management and communications for travelling and field personnel
- Establish your own private intranet to enhance internal and networked communications efficiency
- Mobile technology can help you to speed up processes and enhance business efficiency – on the move, in the factory and on the warehouse and despatch floors
- Use training to keep your people up to speed and personally satisfied in their jobs
- Consider using an ICT consultant or appointing a manager to help you use technology to its fullest capacity
- Ask your people to help you run a better business – its success involves all of their futures
- Be aware – always of what is changing in business technology and how it can help you to work smarter, more efficiently and more effectively.

# Information online

**For information on starting and running a small business visit:**

[www.chamberonline.co.uk](http://www.chamberonline.co.uk)  
[www.ukonline.gov.uk](http://www.ukonline.gov.uk)  
[www.businessbureau-uk.co.uk/](http://www.businessbureau-uk.co.uk/)  
[www.bba.org.uk/public/smallbusiness/](http://www.bba.org.uk/public/smallbusiness/)  
[www.bt.com/business](http://www.bt.com/business)

**For information on technology options, change management and for guidance, comment, explanation and in-depth analysis on the very latest developments in technology and how they could impact on and effect your business visit:**

[www.bcentral.co.uk](http://www.bcentral.co.uk)

**For information on copyright visit:**

[www.patent.gov.uk/copy](http://www.patent.gov.uk/copy)  
[www.cla.co.uk](http://www.cla.co.uk)

**For more on Intellectual Property rights and who really owns what visit:**

[www.intellectual-property.gov.uk](http://www.intellectual-property.gov.uk)

**For more information and helpful advice on mobile computer and communication solutions visit:**

[www.bt.com/business](http://www.bt.com/business)  
[www.outlookanywhere.co.uk](http://www.outlookanywhere.co.uk)  
[www.bcentral.co.uk/mobility](http://www.bcentral.co.uk/mobility)  
[www.hp.com/uk/gomobility](http://www.hp.com/uk/gomobility)

**For business software and productivity solutions visit:**

[www.microsoft.com/uk/office](http://www.microsoft.com/uk/office)  
[www.microsoft.com/uk/windows](http://www.microsoft.com/uk/windows)

**For information on software and the law visit:**

[www.bsa.org/uk](http://www.bsa.org/uk)

**For hardware, server and peripheral devices go to:**

[www.hp.com/uk](http://www.hp.com/uk)

**For processors information and new technology updates visit:**

[www.intel.co.uk](http://www.intel.co.uk)

**For information on network storage and business collaboration solutions visit:**

[www.hp.com/products1/storage/](http://www.hp.com/products1/storage/)  
[www.microsoft.com/uk/servers/](http://www.microsoft.com/uk/servers/)

**For information on how to grow a small business go to:**

[www.smallbusiness.co.uk/](http://www.smallbusiness.co.uk/)  
[www.bl.uk/services/information/business.html](http://www.bl.uk/services/information/business.html)  
[www.chamberonline.co.uk](http://www.chamberonline.co.uk)  
[www.bt.com/business](http://www.bt.com/business)

**For information on eBusiness go to:**

[www.bt.com/business](http://www.bt.com/business)  
[www.ukonlineforbusiness.gov.uk/](http://www.ukonlineforbusiness.gov.uk/)  
[www.dti.gov.uk/](http://www.dti.gov.uk/)  
[www.e-tax.org.uk](http://www.e-tax.org.uk)

**For information on web security go to:**

[www.microsoft.com/uk/security/](http://www.microsoft.com/uk/security/)  
[www.bt.com/business](http://www.bt.com/business)  
[www.security-survey.gov.uk/](http://www.security-survey.gov.uk/)  
[www.dti.gov.uk/cii/datasecurity/index.shtml](http://www.dti.gov.uk/cii/datasecurity/index.shtml)  
[www.ukonlineforbusiness.gov.uk/](http://www.ukonlineforbusiness.gov.uk/)

**For information on broadband and business communication services go to:**

[www.bt.com/business/broadband](http://www.bt.com/business/broadband)

**For your local HP Centre of Excellence who can give you unbiased technology advice visit:**

[www.hp.com/uk/centres](http://www.hp.com/uk/centres)

**For information on tablet PCs go to:**

[www.microsoft.com/uk/tabletpc](http://www.microsoft.com/uk/tabletpc)  
[www.hp.com/uk/tabletpc](http://www.hp.com/uk/tabletpc)

# Glossary of ICT terms

**A** **adsl (Asymmetric Digital Subscriber Line)** – a method for moving data at high speeds over regular phone lines. adsl circuit is much faster than a regular phone connection.

**B** **Bandwidth** – how much stuff you can send through a connection measured in bits-per-second (bps).

**Bps (Bits-Per-Second)** – rate of data transfer between computers or modems.

**Broadband** – a wide band of frequencies used to transmit information. Information is multiplexed and sent on many different frequencies or channels within the band, allowing more information to be transmitted at the same time.

**Browser** – program that allows you to view web pages and explore the Internet.

**byte** – a set of bits that represent a single character. There are 8 bits in a byte.

**C** **Client** – a computer that accesses shared network resources provided by another computer (the server – hence client/server relationship).

**CD-R** – Compact Disc Recordable.

**CD-Rom** – Compact Disc Read Only Memory.

**CD-RW** – Compact Disc Re-Writable. CDs that can be written on many times. Data can also be removed at any time but data written onto a CD-RW disc can only be read by CD-RW drive.

**Compress File** – way of reducing a file or files sizes for Internet transport via email. Usually in ZIP format.

**CPU** – Central Processing Unit. The brain of a computer.

**D** **Desktop Publishing** – creating documents on your computer, such as web pages, flyers, posters, catalogues, newsletters and graphics.

**DNS** – Domain Name System. System that locates a website via the site's numerical address.

**Domain Name** – an address of a network connection that identifies the owner of that address in a hierarchical format: server.organisation.type. For example, **www.fabrikam.co.uk** identifies the Web server at the company Fabrikam.

**Download** – load a file from a host, such as a website or another computer onto your own computer.

**Downtime** – the length of time that a website or network can not be accessed.

**DVD** – Digital Versatile Disc.

**E** **Email (Electronic Mail)** – content sent from one person to another via computer over the Internet.

**Ethernet** – common method of networking computers in a LAN.

**F** **Firewall** – a computer security system used to restrict access to and from a network.

**FireWire (or IEEE1394)** – a very high-speed serial bus for connecting devices to your personal computer at data transfer speeds up to 400Mbps.

**G** **Gigabyte** – Measurement of memory. 1 GB = 1,024 Mb.

**GHz** – GigaHertz. Measurement of internal processor speed.

**GUI** – Graphical User Interface. Allows you to control a computer through graphics and icons displayed on screen.

**GPRS (General Packet Radio Service)** – enables data to be sent and received via a mobile phone network.

**H** **Hacker** – a person who breaks through computer security systems.

**Hardware** – physical items such as computers, printers, scanners and external modems.

**HD** – Hard Drive.

**Host** – usually a computer, which hosts other computers for a person or organisation.

**Hub** – a device used to connect computers together.

**I** **ICT** – Information and Communication Technology.

**IE** – Internet Explorer – Microsoft's web browser.

**Internet** – a vast collection of inter-connected worldwide networks.

**Intranet** – a private network inside a company or organisation that uses the same kinds of software that you would find on the public Internet, but only for its internal use.

**ISP** – Internet Service Provider. Company providing access to the Internet.

**J** **JPEG (Joint Photographic Experts Group)** – JPEG is common format for image files.

**K** **KB** – Kilobyte. Measurement of memory equal to 1,000 Bytes.

**Kbps** – one thousand bits per second. The measure of data that can be transferred by a modem.

**L** **LAN (Local Area Network)** – a computer network limited to the immediate area, usually the same building or floor of a building.

**M** **MB** – Megabyte. Measurement of memory. 1Mb=1,000k.

**Mbps** – Million bits per second.

**MHz** – MegaHertz. Measurement of internal processor speed.

**Microprocessor** – an integrated circuit that accepts coded instructions for execution.

**Modem (MOdulator, DEModulator)** – a device that connects your computer to a phone line, enabling the computer to talk to other computers through the phone system.

**Motherboard** – main piece of hardware inside a computer. Other parts can be added to it, such as sound cards, RAM, graphics cards, modems, etc. The motherboard enables everything to work together.

**Multimedia** – combination of text, graphics, sounds and video.

**O** **Online** – computer that is connected to the Internet or network.

**OS** – Operating System. Program used to help run programs on a computer.

**P** **Parallel Port** – connection used to connect printers to a computer. Can also be used to connect other devices, such as digital camera's or scanners.

**Patch** – an add on or upgrade for software.

**PC** – Personal Computer.

**PCL** – Printer Control Language. De facto printer language developed by HP for the printing industry.

**PDA** – Personal Digital Assistant. Hand held basic computer.

**Peripheral** – any piece of equipment attached to the computer (ie. disk drives, printers, CD-Rom)

**Plug-in** – a small piece of software that adds features to a larger piece of software.

**Port** – place where information goes into and out of a computer. For example, the serial port is where a modem would be connected.

**R** **RAM** – Random Access Memory. All memory accessible at any instant (randomly) by a microprocessor. This memory is erased when the power is switched off.

**S** **SCSI** – Small Computer Systems Interface. Known as 'scuzzy' it is a method of connecting devices to a computer, such as hard drives and CD-Roms.

**Search Engine** – a program that searches a database of websites.

**Serial Port** – Part of a computer where you can connect devices, such as a mouse or modem.

**Server** – a computer, or a software package, that provides a specific kind of service to client software running on other computers.

**Shopping Cart** – software that allows users to browse a website and add items to a shopping cart. The value is totalled up and all goods can be ordered at a checkout.

**U** **URL** – Uniform Resource Locator. Addressing system of the World Wide Web.

**USB** – Universal Serial Bus. Port on a computer that allows USB devices to be added, such as scanners, Zip Drives, etc.

**V** **Virus** – file or program used to harm or destroy a computer system.

**W** **WAN (Wide Area Network)** – a network that covers an area larger than a single building or campus.

**WAP (Wireless Application Protocol)** – enables access to advanced digital communications and the Internet over a mobile phone network.

**Web Page** – single page accessible on the Internet.

**Website** – collection of web files accessible on the Internet.

**WWW** – World Wide Web – all the resources and users on the Internet.



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