

Information Sheet: THE INTERNET

The internet

The internet is helping businesses reduce costs, become more efficient, find new business opportunities and work more closely with customers and suppliers. According to the DTI International Benchmarking Study 2003, around 90% of UK businesses already have access to the internet.

The Benefits

Some of the immediate benefits of connecting to the web are instant communication and access to a wide pool of information. But it can also transform the way that your business operates by helping you cut costs, gain new markets or work more efficiently. Increasingly, not having access to the internet is like trying to run a business without a telephone or electricity!

- Fast, low-cost global communication
- Internet access allows you to use e-mail (electronic mail) to send and receive messages and data worldwide, quickly and cheaply.
- User-groups and newsgroups are discussion and problem-solving areas on the internet, which enable you to communicate with other users who share your interests.
- Instant access to information and resources
- User-friendly access to a range of websites and resources.
- Staff can familiarise themselves with industry-related issues, information about competitors and availability of suppliers.
- Search for new ideas, support or help facilities.
- Access business data from all over the world, such as research analysis and product and market information, often free of charge.

Buying and selling online

- Save money and time by sourcing and purchasing goods and services online, you can compare prices and find the best deal.
- Set up a website on the internet so you can market your business and sell your products or services online.
- Compete with the large companies whatever size your business is. On the internet no one need know if you are multinational or a home-based business.
- Find and tap into new markets worldwide; you can accept orders and enquiries 24-hours a day, automatically.
- Work more closely with your customers and suppliers
- Having access to the internet can streamline the way you work with your trading partners and save time and money in the process.
- This can be as simple as saving costs by using e-mail instead of the post, or putting your company brochure or stock list on your website rather than printing it.
- Or it could be as radical as sharing your forecasting data with key suppliers so that you can both order only what you need, when you need it. Or tracking and storing customer buying patterns from your website, so you can then more accurately target them with personalised marketing.
- Remote log-in and file transfer, such as file transfer protocol (FTP), enable you to upload and share files and resources with other authorised users wherever they are based.

Getting started and what you will need

Computer

If you don't have a computer yet, you should be able to buy all the equipment you need to connect to the internet for a few hundred pounds. If you get a second-hand computer, make sure that it has a CD-Rom drive and a modem and is no more than 3-5 years old. Nearly all new computers will be adequate for the internet. You will also need a connection from your computer to your phone socket.

Telephone line

Your computer and phone can share a single telephone socket, but this does mean that you cannot use the internet and phone at the same time so you will probably want to think about having a second telephone line installed.

If you think you will be accessing the internet regularly, consider investing in a dedicated phone line for internet usage.

Modem

The modem links your computer to the phone network. Modems come in different speeds, measured in kilobits per second (Kbps), or KÖ. Most computers already come fitted with a 56k modem, so it is unlikely that you will need to buy one. If you do it will cost less than £50.

Web browsing software

When you look at web pages on the internet, you use a web browser. Web browsers also appear in simpler devices, such as internet-connected mobile phones, and PDA's (Personal Digital Assistants), such as the Palm Pilot.

You will probably already have web browsing software on your computer, as it will have been pre-loaded when you bought it. If you don't, you will be able to get the software from your Internet Service Provider (ISP). Some of the most common web browsers are: Microsoft Internet Explorer; Netscape; Safari for Apple Macs; Opera; and Lynx which is a text-only browser that has been adapted for the visually-impaired.

Choosing an ISP

The main thing to consider is whether to choose a dial-up connection where you connect to the internet by making a call through the phone line or broadband giving you a faster always-on connection.

To connect to the web you will need to set up an account with an Internet Service Provider (ISP) and there are lots to choose from. Some of the larger ISPs are AOL, BT and NTL, but there are plenty of smaller operators out there. Make sure you research the packages that are on offer thoroughly before you commit to one as the features they offer differ and this includes software and scripting support.

You'll also need to choose between a dial-up connection where you connect to the internet by making a call through the phone line, or a broadband connection, which gives you a faster always-on connection. The two options are covered in more detail over the next few pages.

Internet magazines, available from most newsagents, will often give comprehensive listing of ISPs and the packages and offers that they provide. Prices change frequently, so it's worth spending the time to research the best deals.

Dial-up access

Dial-up access to the internet is via a telephone connection, and the connection remains on for a limited amount of time. You are charged according to how much time you spend on the web, and the rate charged will depend on your package and possibly when you use it. There are several different options you could consider:

- Option 1: pay-as-you-go
- Option 2: package deals
- Option 3: subscription

Option 1: Pay-as-you-go

This works like a pay-as-you go mobile phone package: it's quick and simple to set up. There's no monthly fee, but you do have to pay for internet phone calls which are usually charged at a local rate.

Pros

- It's a pay-as-you-go service, so you only pay for what you use.
- It can be more secure than always-on packages as your system is only open to the internet at certain times.

Cons

- Connection speed is slow.
- Download time is slow for files or large e-mails as it uses the standard 56K modem.
- You have to dial up every time you want to go online or send and receive e-mails.
- Some ISPs end the connection after a period of inactivity, which means you have to keep on reconnecting.

Providers and costs

You will need to compare individual providers and make sure you check the small print, for example support will often cost around 50p per minute. NTL's Pay-as-you-go package lets you use the internet any time for 1p per minute, though this service can be subject to a connection charge of 5p (4.9p in some areas) for each call. Other packages include: Breathe Breathe Anywhere; Virgin Net Pay-as-you-go; and Tiscali Pay-as-you-go.

If you only use the internet for e-mail and occasional browsing, say a few hours a month, then this is probably your best option.

Option 2: Package deals

Many ISPs offer packages where you get free unmetered internet access for a fixed fee every month. Expect to pay around £8-£11 per month. This is suitable if you anticipate using the internet for longer periods. A lot of these packages still require a BT line and some are in conjunction with BT SurfTime, though the amount of choice is improving.

Pros

- Cheaper than pay-as-you-go for heavier users of the internet.
- You can choose a package tailored to your requirements (all-day or off-peak only).
- You can leave it on, so you don't have to keep connecting.

Cons

- Download times for larger files and e-mails are still slow (this still uses the standard 56K modem).
- Some ISPs have more users than they can cope with, leading to difficulties in signing on at peak times, and connections may be cut if there is a period of inactivity.
- You must consider security, such as a firewall, if you leave the connection open all the time.
- Some packages are not designed to meet normal business needs, for example they may prevent you from sending bulk e-mails.

Providers and costs

Make sure you check the terms and conditions as some ISPs will restrict what you can download, or have cut-off times to prevent continuous use and other usage restrictions.

Option 3: Subscription

There is a range of subscription packages where you pay a monthly fee and call costs. The benefit is that you often get a quicker more reliable service with good technical support and other services.

Pros

- Quicker more reliable service.
- Good technical support.
- Additional services such as security options.

Cons

- More expensive.
- May not be worth paying the additional costs, if your business is not using the internet for business-critical communication or information sharing.

Providers and costs

Here are some examples of subscription services. It is always worth checking the details to find out exactly what you are getting for your money and also for any price changes to those shown which happens frequently:

- PIPEX Dial Internet Service one-off set-up fee of £11.50, monthly fee of £12.75 and unlimited technical support at no extra cost
- Netscalibur £11.49 per month or £100 annually (excluding VAT)

- Swift internet specialises in the needs of Small to Medium sized companies and offers a range of different products, starting from £13.50 a month for Business Anytime
- U-NET £12 per month or £100 per year, £12 set-up fee.

Other considerations

The ISP market is very competitive, which means you may be offered a wide range of other services. These include: a set amount of free internet access each month; improved after-sales and technical support; better security; and free content or web hosting. Remember to shop around to get the best deal for your business.

IMPORTANT – when taking up a free web hosting offer the services supplied as to scripting and services can be limited and if you were to transfer domain at any time you would probably have to pay a fee.

Broadband

Broadband is the common term for a high bandwidth internet connection. A broadband service can transmit data at up to ten times the speed of a standard modem and is always-on so you don't need to dial up every time you want to receive your e-mail or visit a website; you are already connected.

It is probably worth investing in broadband if your business:

- frequently sends or receives large file attachments
- views web pages with lots of pictures, complex graphics or rich media.

A broadband connection will also enable you to rent certain applications and services via the internet.

What you need

You pay a monthly fee for this type of connection, which is available via an existing phone line, fixed wireless links, cable or satellite.

To establish a broadband connection, you'll need:

- The correct hardware, a modem and possibly a network card. The ISP will usually supply the modem (or antenna or dish) plus cables, and will charge a fee for installing and setting up the connection. Several ISPs also offer a less expensive plug and play DIY install ADSL product that the technically aware can install without help.
- An ISP. Your connection fee could range from £20-£200, depending on which service you opt for, but your monthly fee will probably cost around £20-£30 per month. Some of the best value deals are through the cable companies, where you can get high-speed internet from just £25 per month.
- There may be extra costs for additional features, such as multiple e-mail addresses and handling, domain name services and website hosting.

Pros

- Much faster than a conventional modem.
- You can use the phone at the same time as being connected to the net with no loss of connection or speed.
- A reliable and permanent way of connecting to the internet.
- Rapidly transfers or downloads files.
- It can handle much more information, more quickly than other forms of web access.
- Web pages download almost instantly, sound and pictures are of almost broadcast quality.

Cons

- As you are permanently connected you must consider proper security measures, such as a firewall to prevent hacking (unauthorised access to your files).
- Not all types of broadband service are available in all areas.

Providers and costs

Here are just some examples of broadband services and costs but it is always worth shopping around, as prices frequently change:

- Virgin Net broadband is now available for £24.99 a month.
- BT offer broadband from £29.99 per month to for businesses dependent upon service.
- Telewest Blueyonder broadband internet starts from £17.99 per month up to £35.00 per month dependant on the broadband service you require.
- Clara.net offers a number of different Broadband packages, including an ADSL Self-Install for £53.00 + VAT per month.
- PlusNet offers business broadband from just £24.99 a month for ADSL Biz Surf

ADSL

The most common form of broadband, it uses existing phone lines and is relatively cheap.

Cable modem

Also relatively cheap, it is delivered through cables like cable TV so you would need to live in a cabled area.

Satellite (1-way)

Uses a satellite to receive information and a telephone or ISDN for uploading information, it is widely available but there can be delays with transmitting information.

Satellite (2-way)

Uses a dedicated satellite dish to send and receive information. It is widely available but there can be delays with transmitting information.

Leased line

A private telephone line reserved solely for an individual business, this is very fast and reliable, but expensive.

Wireless

Using radio transmitters and receivers to link computers this gives lots of flexibility, as you can access the web on the move, but it is still quite a new technology and can be complicated to set up.

Considerations

It's worth examining your business strategy to see how the internet could be used to achieve specific objectives.

Dial-up versus broadband

You will need to decide whether a dial-up connection will be sufficient for your business, or whether you need to invest in broadband. If you plan to send or receive large files and images, such as CAD/CAM files or video clips, then you will need broadband. There are also some online services that you can only really take advantage of if you have broadband. For instance a broadband connection is essential in order to use trading hubs and online auctions.

SLA (Service Level Agreement)

Whichever ISP you choose, make sure you have a Service Level Agreement (SLA) with them. This is a contract that specifies what services the ISP will provide. It is likely to cover the following things:

- the percentage of the time that services will be available
- the number of users that can be served simultaneously
- specific performance benchmarks
- how much advance warning you will get if there are going to be any network changes
- help desk response time for various types of problems

- usage statistics.

Security

Opening up your computer, or your computer network, to the internet does mean there is an increased risk to your data, for example from a computer virus or hacking. However there are lots of things you can do to minimise this risk, such as using virus protection software, or installing a firewall.

Implementation checklist

This checklist will help you implement internet access in your business. To keep track of your progress, tick off each area as you work through it.

Research & analyse

- Check availability
- Set goals for using the internet; do you want to expand your customer base, reduce costs, or improve efficiency?
- Agree specific, measurable objectives for what you want to achieve, such as reduction in supplier prices or percentage increase in new clients.

Cost benefit analysis

Compare the costs of going online including the monthly cost of the ISP, increased phone costs, any equipment upgrades or staff training with the benefits of greater efficiency, reduced operational costs, cheaper research.

Research the options

- Establish what your business needs from your ISP.
- Explore the available options ask about packages that are available, and find out about other business's experiences of their ISPs.
- Decide whether your business needs broadband or a dial-up service.
- Compare prices of a package solution, pay-as-you-go, subscription and broadband.

Compare ISPs

- Shop around and compare rates and services.
- Can you connect to the internet and remain online as often and for as long as you like as part of your monthly subscription?
- Does an additional charge come into force after a set number of hour's free access?
- How many e-mail addresses are provided for your monthly subscription?
- Does your ISP offer faster access via ISDN or ADSL?
- Does your ISP offer after-sales support, advice and guidance?
- Does your ISP offer any additional content or services, e.g. local weather or traffic reports, internal conferencing or access to databases of businesses information?
- Does the ISP cater for different sized businesses and would you be able to upgrade as your business grows?
- Does the ISP offer any additional facilities for businesses? Can you register a unique domain name (website address) for your business? How much commercial web space is available? Is there a limit to the number of pages available for your website?
- Can the ISP deal with high volumes of online traffic?
- Is technical support available 24-hours a day?
- Is there phone, fax or e-mail support?
- What level of security is provided?

Consult

Internally/externally

Speak to staff to find out what they hope to gain from access to the internet. Talk to customers and suppliers, who are already online to find out what they use and what they get out of internet access.

Plan & test

Evaluate options. Try before you buy, take advantage of freebies, many ISPs offer free trials, which will give you a chance to see how they work and what you could get out of internet access. If you're uncertain of how much benefit your business will get from internet access, consider using pay-as-you-go initially, where you are not tied into a contract you can always upgrade later if you decide it is worthwhile.

Plan the rollout phase

Decide whether staff will need training in how to get the most out of internet access and allow time for them to adjust to using it.

Act

Implement internet access. Roll out any necessary training and encourage staff involvement and feedback, this will help smooth implementation, as staff buy-in can make or break a technology project.

Measuring the results

Get feedback from staff about how they use the web and whether they think it is a useful addition. Evaluate the impact on your supply chain has the web opened up possibilities for new trading partners? Keep track of new suppliers and customers, and note how you found them or they found you.

Evaluate

Monitor and review the impact on your business and against your objectives. Get feedback from customers and suppliers on the changes. Evaluate the impact after 6 months and 1 year. Have you achieved your objectives? Establish how you could improve things further.

More advice can be obtained from Centred Dot on 0115 941 4705, enquiries@centred-dot.co.uk who will be happy to discuss your internet and web site requirements with you, or you can visit www.dti.gov.uk/publications who offer support businesses in order to implement best business practice