

Over the last few years, companies of all sizes and types have made great strides in adopting technology. Internet access and e-mail are now an everyday part of our working lives, whilst extranets and mobile communications are beginning to transform the way we work internally, and with our customers and suppliers. The challenges facing businesses now are how to help their staff get the most out of existing technology and how to prioritise further investment, balancing the benefits of integration with the costs and potential risks of dramatic change.

This brochure is for any business wanting to know more about how technology can help you work more effectively. It covers the benefits of using technology in all areas of your business.

THE BUSINESS MIX

DESIGN AND PRODUCT DEVELOPMENT

Electronic communications can help you dramatically speed up the design process by enabling clients, suppliers and employees to work together better.

Design and production is all about close collaboration and teamwork. It is an on-going process of continuous refinement, approval stages and tight deadlines. New ways of sharing information and working together can simplify this process.

CUT TIME, NOT CORNERS

Share every aspect of the development process documents, images, designs, project plans and technical data amongst a project team, regardless of where its members are based. E-mail lets you send documents anywhere in the world instantly. Many common software

packages have document management and version control facilities that track changes and approvals, and let several people work on the same file at the same time.

MEETINGS WITH TRAVEL

Some things are best dealt with face-to-face. However, the cost and time involved in gathering together people from different locations can be prohibitive. Video and data conferencing offers a way round this, putting people in touch by video link.

FILE SHARING

An extranet is effectively a website with restricted access. If you already have a website, then at low cost you can build an extranet to share files like high resolution photos, Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) files or presentations which are too large to e-mail to clients. Using proper security measures, an extranet is suitable for even the most sensitive and confidential information.

SHARING INFORMATION

Sharing manufacturing information can speed up

the production process without harming quality control. For example, using a Virtual Private Network (VPN) to share your production plans with suppliers lets them adjust their stock levels and processes accordingly. This can result in shorter lead times and make just-in-time deliveries possible

CASE STUDY: PHOENIX PRECISION

Phoenix Precision, which manufactures sheet metal enclosures for electronics companies, has used technology to streamline its whole design and production process.

Computers are networked and staff use e-mail for sending and receiving quotations, photographs and drawings. An integrated module-based software system handles stock control, invoicing, estimating, costing and purchasing, with scope to add e-commerce modules.

"Our niche is small to medium sized OEMs (Original Equipment Manufacturers) who might put out a million pounds worth of sheet metal per year and we might get a third of that business", explains George Grainger, Managing Director. E-mailed 3D drawings are fed to a CAD/CAM system to produce a prototype and engineers progress development through the e-mailed exchange of drawings. "More than 60 per cent of our jobs come in on e-mail and the percentage increases every year", says George. A dedicated ISDN line is set aside for videoconferencing and Phoenix's website provides customers with a comprehensive service portfolio.

"The engineering package saves us so much time," says George. "We take a 3D modelling drawing directly into our system. It's getting to a stage where a customer doesn't send us dimensions with their drawing. They are so confident that if their draft is correct, our tooling

will automatically tool that part to the right dimension. We achieve the same turnover with three engineers that we used to achieve with four. The production process would be impossible without our CAD/CAM, e-mail and integrated management system." E-mailed drawings can be turned into parts by the next day.

Phoenix has invested around £70,000 on technology over the years to tackle the varied technology needs of its supply chain partners. "Originally the aim was to organise ourselves as a company internally, but we made sure we put in a scalable system which could move outwards into supply chain management."

Future projects include collecting shop floor data and introducing barcoding to track and record jobs efficiently, enabling the website to handle transactions, and installing a new broadband telephone system.

OPERATIONS

If you are looking to create a more flexible workforce, use information more intelligently or manage your processes better, technology can help you create a leaner, more focused operation.

STORAGE AND RETRIEVAL

Computers have brought massive storage benefits a single CD-Rom can hold 300,000 pages of text, and a database can draw together information from across the business. However, the absence of a single, physical location for information can cause problems with duplication of work, the inability to find the right file or the use of out-of-date documents.

Investing in document management software or an intranet can remedy these problems. They allow staff to store documents in one location where several people can work on them at the

same time. Alternatively, a simple cost-effective way to improve access to electronic information is by creating a filing and archiving procedure, setting out where staff must store files and how they should title them.

RELATIONAL DATABASES

If your business has many different sets of data or regularly changes price or product information, you could take one step further and invest in a relational database. This ensures that if you make a change in the pricing section of the database, that change is also made automatically in the accounts, invoicing, stock and other price-related areas. It makes it quicker and easier to update information, and your business can make better use of more accurate data.

INTERNAL COMMUNICATION

An intranet is a network whose use is restricted to staff of the same company. Its main purpose is to share information and computing resources among employees. An intranet can be used simply to store contact details, corporate news and company forms, or as a complicated workflow management programme; it depends on your needs and budget.

WORKFLOW

Companies with complex internal procedures or important quality control processes could invest in workflow management software to link and control the different stages and documents. This would ensure the correct processes are followed and allow for management control and review.

FLEXIBLE WORKING

E-mail and internet access means your staff can now work much more flexibly. With the right security arrangements, they can work on-site, on the move or from home. The increasing

availability and popularity of mobile communications, such as Personal Digital Assistants (PDAs) and WAP phones, also means it is much easier to work away from the office without losing touch. Not only can this flexibility improve productivity, it can be an excellent way of attracting and retaining skilled staff, many of whom see the opportunity to work from home as a valuable benefit.

CASE STUDY: CHANCE & HUNT

Chance & Hunt has embraced technology right across its business producing new service offerings and an extensive degree of supply chain integration.

The company, which markets and distributes chemicals, is using a telemetry system to manage its clients' inventories. This system constantly monitors client inventories checking stock levels against optimum levels. Should stocks fall below this level, the system delivers alerts to the client budget holders and relevant sales staff, before channelling orders back to Chance & Hunt's internal systems.

Chance & Hunt's recent investment in technology includes: the infrastructure to provide remote network access, online credit card purchasing (an industry first) and an integrated ordering system that checks stock and links to the warehouse, which has reduced processing time and speeding dispatch.

Last year the company saw profits grow by 5%. This was higher than the industry average, something that Chance & Hunt attributes to its technology infrastructure. This has resulted in more efficient order processing, more sales leads, improved customer service and satisfaction, and reduced administrative burden allowing reassignment of staff to sales work.

Chance & Hunt also uses a Customer Relationship Management (CRM) system. This

provides valuable information about customers' buying patterns and enables customer profiling, contact management and campaign management. It also invested in a Virtual Private Network (VPN), which gives staff working remotely dial-up access to in-house systems. With one eye on the future, Chance & Hunt has run a series of EDI (Electronic Data Interchange) trials, linking its systems with those of key suppliers. The company is sure that, in the long term, supply chain integration will be an important source of competitive advantage.

Chance & Hunt doesn't see technology investment in isolation, but believes it will deliver growth, cut costs, improve service, help win new business and build its brand. Dr Peter Fields, the Managing Director, explains: "E-business is embedded in the business plan and strategy. It is a fundamental enabler to help grow sales, cut costs and improve relationships".

PURCHASING

The internet can widen your search for any product to a global level and help you make significant savings.

Effective purchasing means sourcing supplies at the best price delivered on time, in the right amounts and to the right specification.

Technology does not just give you access to a wider range of suppliers; it can change the way you buy and cut costs and paperwork.

SOURCING SUPPLIES

Millions of businesses around the world now have websites. Everyone from the smallest niche suppliers to huge corporations promote their wares online. This gives you a simple way of investigating products and comparing prices to find the best deal.

PURCHASING ALTERNATIVES

Increasingly, online marketplaces that aggregate supply or demand are springing up. This means small purchasers can cut costs with group discounts, while small producers can band together to pitch for larger contracts. Some larger companies are also investing in online auctions to simplify their procurement process. This allows them to manage the whole bidding process electronically and negotiate discounts from suppliers.

STREAMLINING TRANSACTIONS

Working electronically with your key suppliers can help cut time from the way you work and increase your efficiency, for example by exchanging orders and invoices for automatic processing.

Transmitting data 'including payment data' electronically ensures tight, efficient control of the purchasing process and faster payment. Electronic Data Interchange (EDI) can streamline transactions, allowing faster and simpler processing with less paperwork and fewer mistakes. EPOS (Electronic Point of Sale) is also a useful way of getting products from your warehouse to your point of sale quickly. It is most useful for companies with many regular sales, or who have suppliers and customers that need fast, accurate product information. For more information on e-procurement, online auctions and EPOS, visit our website at <http://www.businesslink.gov.uk>

CASE STUDY: CLARKES STATIONERS

Office supplies retailer, Clarkes, has really grasped technology to improve the way its supply chain works. As a result, the company's turnover has increased by 25 per cent and it's managed to crack the lucrative business market. Clarkes' website is an impressive e-commerce

sales tool: "We try to get all our business customers to order online. They can log on with a user name and password and get budgeting reports, customer history details, tailor-made pricing structures and bespoke products", explains Clarke's Sales Director Kiren Patel.

When it comes to ordering from its own suppliers, Clarke's does that electronically too. The company is part of a buying consortium and all members have special software to connect into the purchasing system direct from their computers. Kiren continues: "Online ordering is established for general stationery and computer consumables and contracts are arranged by our buying group all communications in these areas are done via the web."

Launched in January 2002, the office intranet improves communication between staff members and sales reps in the field, as well as cutting down on phone bills. Kiren has seen a change for the better in Clarke's relationship with both customers and suppliers thanks to around £55,000 of technology investment over three years: "Suppliers have opened up and offered us special deals for trying out their electronic ordering systems. And with customers it's the 'feel good' factor we're now able to look after them better and give them a more personal service. We're all about having partnership relationships with our long-term customers and suppliers." One big customer has put 20 per cent more business through Clarke's since it started ordering online.

The website has also pulled in new customers, as Kiren explains: "We've just picked up our largest customer to date because they saw the website and they called us in to tender. They knew we existed but hadn't realised our B2B (Business to Business) capabilities until they'd seen the site."

MARKETING

Using technology to get your message across to existing and new customers has never been easier but this also means new ways of working.

Technology is not a solution in itself but a way of enabling you to market your business more effectively and more widely.

EFFECTIVE WEBSITES

Most UK companies have websites, though not all are getting the best from them. When people surf the net they tend to jump from page to page, skim reading to find the information they want. If you want them to linger, you need to review your site regularly to check that visitors can find what they want in the format they want it. Not everyone wants to read masses of material, so you could make information available in Portable Data Format (PDF) format for them to download and print off. Often simple oversights, like the lack of a telephone number or pages that don't work, can be enough to send users away. It is worth monitoring your competitors' sites to see what they offer and if you need to improve your site.

TARGETING PROSPECTS

Visitors to your website can give you a tremendous amount of valuable information. By offering prizes, discounts or premium content you could get them to fill out questionnaires or surveys. However, this kind of research should be a fair exchange people will find it off-putting if you bombard them with questions or ask for too much information. If you intend to use personal information for marketing purposes, make sure you have a clear privacy policy.

NEW MARKETING CHANNELS

E-mail and SMS (short messaging service, otherwise known as text messaging) offer

exciting new ways to reach customers. The increasing sophistication of mobile communications means that you could also consider MMS (multimedia messaging), which allows you to send images or video or music, alongside a text message. Unlike advertising or direct mail, these are very personal media. You can time when people receive the messages and, in the case of e-mail, monitor with whom they share this information. Most interestingly for businesses, bulk use of e-mail can reduce the cost of each message to only a few pence. The flipside of e-mail and SMS is the danger of overuse as irrelevant or constant marketing can provoke a strong negative reaction.

If you intend to run an e-mail campaign, you also need to have the facilities in place to handle the response. While you can encourage people to phone you or visit your website, many may want to reply by e-mail. If you experience a surge in responses, using an automated e-mail reply will help you manage them without disappointing your customers.

CASE STUDY: ANTEC INTERNATIONAL

Antec International has transformed itself from a supplier of disinfectants to a total biosecurity provider with specific experience in emergency disease control. Its website has been crucial in achieving this expansion.

Antec's website is a vital resource for customers and allows Antec to respond quickly to the needs of its supply chain partners. The site provides information about all the products Antec distributes, and the pages are available in ten languages, including Japanese and Mandarin Chinese.

Mark Blackwell, Antec's Marketing and International Sales Director, explains: "All enquiries from the site are automatically added to our database. The system logs which country

the e-mail is from and sends an e-mail to the nearest distributor." The site includes PowerPoint presentations, video clips and the Product Calculator, which suggests appropriate products for customers according to the user's country and biosecurity procedures.

Antec's account customers have taken the online ordering and invoicing route. There are also secure areas specifically designed for partner distributors. As a marketing tool the site is invaluable says Mark: "The cost of delivering the same amount of information to the same people by other means would be enormous. The cost of a one-page ad in Pig International is \$4,000 and that buys us a lot of web pages."

The site has improved Antec's communication with its distributors and changed the company's business model. "Our distributors are now partners and engage in full two-way information exchange. Since we implemented the new model we've increased our export of health animal products by 80 per cent."

Antec has also cut the cost of distributing information to its 80 business partners around the world. "We've developed our intranet to give instant access to product information. We used to spend three days photocopying press clippings and handouts to post to them. Now we just send out a weekly e-mail update."

Mark is bullish about the benefits of technology: "Knowledge equates to power and if you don't invest in knowledge you will lose power and you'll lose your competitive edge."

SALES

On the internet, your company website could enable customers to browse detailed descriptions of your products and prices, check delivery times and place orders.

With appropriate security measures, you should also be able to accept payments online.

A GLOBAL SHOP WINDOW

Not all products and services lend themselves to e-commerce, but you can certainly use your website to stimulate interest in your business and help prospective customers through the buying cycle. This could include offering product specifications, detailed lists of frequently asked questions or video demonstrations of your products.

MAKING SALES

There are few more important ambassadors for a business than its sales team. As the public face of your company, it is essential you provide them with the resources to present your business in the best light. Using mobile communications, you can keep them in constant touch with the company. With a PDA or laptop with internet connection, sales staff can access information on the move. At a simple level, this can mean keeping up-to-date with any important developments in the business by e-mail.

At a more advanced level, giving staff access to the company's systems as it could give them the tools to clinch more deals on the spot they could check stock availability, prices and delivery times, send orders back to head office and generate invoices.

SMOOTHING THE PATH

EPOS helps you to process your most popular products from warehouse to point of sale in the shortest time. An EPOS system can be a costly investment, depending on the type of system you need for your business, but it can bring a lot of benefits, such as handling payments quickly, updating inventory lists and providing instant stock information. It can help you focus on more profitable lines, improve your demand forecasting and minimise inventory.

MAKE IT EASIER TO PAY

If you are planning to use your website as a new route to market, and allow customers to order and pay online for your goods or services, you will need to consider setting up an online payment system. There are lots of different ways of doing this, and the costs will vary accordingly. Our website at <http://www.businesslink.gov.uk> has more information about EPOS and online payment systems.

CASE STUDY: FARMRITE ANIMAL HEALTH

As a result of integrating technology into its business, agricultural supplies company Farmrite has seen its sales increase by 40% in two years. Farmrite has used its e-commerce-enabled website as a powerful selling tool it is able to offer its customers 5,000 stock items. "We simply couldn't run this number of stock lines without the appropriate technologies", comments Managing Director Philip Crawford. "We computerised our stock system from the start. We originally used a Psion handheld and designed a database for that to manage the stock."

"This has now grown and we use a Sage accounting product integrated with a few custom written utilities. We estimate that, without these systems, we would be carrying an extra £70,000 of surplus stocks." E-enabling the stocklines has also removed the need for a massive printed catalogue and all the associated costs. According to Philip, the website has also enabled the company to extend the range of its business from outside of its immediate commercial area. "Our website has enabled us to attract new customers from beyond the immediate geographical region of our base; the proportion of our customers from outside our area has risen to 15% from 2%."

"In addition to the website, we also use

technology throughout our other business systems. The point of sale, stock and accounts systems are fully integrated and there is a custom designed database system for stock control."

Technology has given Farmrite a valuable commercial edge over its competitors by offering customers greater choice. "We can give our customers the benefit of a 24-hour service, they can ask questions and investigate stock availability as well as track deliveries, at a time that suits them. We also offer a specialist service to farmers where we can produce the statutory tags for their livestock here on the premises. This procedure is carried out using lasers and specialised computer systems." Farmrite's decision to use technology to e-enable its business has driven it to become one of the leading farm suppliers in the country, able to offer its products nationally from a single base.

CUSTOMER SERVICE

Electronic communication has changed the nature of the customer relationship bringing new opportunities and new challenges.

In an increasingly competitive world, new technology could give you the edge with your customers. By offering customers the chance to determine their own information needs, you could increase their satisfaction and cut your costs.

THE CUSTOMER IN CHARGE

Answering phone calls is an expensive and time-consuming activity. Sometimes, it's not even necessary as a well-structured website, with good e-mail support, could provide product details, prices, delivery times, stock availability, contact details, FAQs and account information.

Whatever you offer, it's important to manage customers' expectations. If you give e-mail

support, explain how long it will take to reply. If you offer online ordering, make it clear whether the item is in stock and how long delivery will take.

AFTER SALES SERVICE

E-mail is an excellent, low-cost way of monitoring customer satisfaction. If you send some of your customers a questionnaire, possibly with an incentive to complete it, you can get valuable feedback on what you are doing right and how to improve the service you offer.

THE INFORMATION YOUR STAFF NEED

Of course, sometimes customers will want to speak to someone. Here, Computer Telephony Integration (CTI) which links up your computers and telephones to handle all voice, fax and data traffic can resolve queries quickly and increase customer satisfaction by giving staff instant access to customer details and history on screen when they take a call.

CTI is particularly useful for customers who call regularly, or if your staff spend a lot of time on the phone dealing with incoming calls or outbound telemarketing.

Visit our website at <http://www.businesslink.gov.uk> for further information about CTI and CRM.

CUSTOMER RELATIONSHIP MANAGEMENT

A more ambitious undertaking is CRM (Customer Relationship Management). This seeks to use technology to build up a picture of each customer's habits and motivations so you can tailor your service to meet their needs and target your marketing.

Although the philosophy behind CRM is useful for most companies, it may not be necessary to invest in costly CRM applications.

INTERNATIONAL BUSINESS

Geographical boundaries are disappearing as the internet makes your business accessible anywhere in the world.

While many small suppliers of niche products are thriving by selling over the internet, service companies are finding they can promote themselves, source products and tap into new markets abroad.

REDUCING THE COSTS

Using EDI (Electronic Data Interchange) with your suppliers and customers can streamline shipping, dispatch and money transfer, and minimise the documentation, charges, risks and delays of currency exchange.

RAPID CUSTOMER CONTACT

Register your site with some search engines, and you could start to pull in customers from all over the world. Of course, if they are in different time zones, you need to think about how you are going to handle enquiries and orders in out of office hours. One simple step is to set up an automated e-mail reply service that sends an acknowledgment e-mail stating when they can expect to hear from you.

Pick a reasonable response period say, within 24 hours and stick to it. For an extra outlay, you could invest in an automated e-commerce package letting your customers order and pay by credit card online.

TALKING TO YOUR CUSTOMERS

The internet gives you access to a potentially huge customer base, but for many customers, English won't be their first language. One simple step you can take to make things easier for customers abroad is to make sure your website is written in plain, clear English without colloquial phrases.

If it's worthwhile from a business perspective, you could even employ a specialist company to create foreign language versions of your site.

COMPLYING WITH THE LAW

If you intend to use your website to operate abroad, you need to be aware of potential additional costs and constraints for example, export restrictions, business regulations and data protection guidelines in other countries. Because legislation dealing specifically with e-commerce is still evolving, it is worth monitoring developments on an ongoing basis.

CASE STUDY: EUROPA BIOPRODUCTS

When Europa Bioproducts launched its website, turnover was £1 million a year and there were just six staff. Today thanks to the efficiencies information technology has brought there's still a workforce of six, but turnover has increased by 50%.

Europa, which distributes high-value biochemical products, has been using information and communications technology to reposition its business from bulk supply, to the supply of small quantities to a large number of individual researchers. The company's website is set up for online ordering and also carries extensive technical information about the products.

It hasn't only increased its turnover, Managing Director Mike Bannister says it's been "bombarded with companies from Asia, especially Taiwan and China, who want to find a distributor in Europe. We now have a distribution agreement with a company in Korea something that came from them posting to our website."

The website carries the entire product range with minimum quantities and prices. Online ordering is handled by the ISP (Internet Service

Provider) on a secure server and sent to Europa by e-mail. Customers can pay by credit card and, when product and stock databases are integrated, stock checking and order confirmation will be automated too. Europa has worked with a software consultant to develop a customer database that links customer orders and purchase orders to manufacturers, and handles stock control and invoicing.

With bioproducts, technical information can be more important than price. Europa makes sure prospective customers can get all the information they need online, including links to technical data on Europa's suppliers' sites.

"At one time telephone calls were driving me potty," admits Mike. Now, using the website to carry product details and data sheets has saved the time that used to be spent dealing with telephone enquiries. And the company hasn't needed a printed catalogue for five years.

The company has used IT to make itself more competitive in supplying directly to researchers. Electronic working had made it possible to process a large number of small account customers more efficiently. As a result, Europa can compete well against the major catalogue companies and still make a profit margin of 30%.

ISSUES

This section looks at some important topics surrounding the use of information and communications technology.

Security

It is a common myth that the web and e-mail are insecure. In fact, with the use of encryption technology, virus scanning software and a 'firewall', electronic communication can be much more secure than offline communications. For example, you are more likely to have money stolen from your credit card when using it in a

restaurant than you are on the internet. Half the battle with online security is creating confidence. By having a professional-looking website, explaining your security precautions and involving suppliers in your plans for any technology changes, your trading partners will respond more positively.

For more information, visit the Security section of our website at <http://www.businesslink.gov.uk>

Regulation

Companies using electronic communications are subject to certain legislation. It is important that you familiarise yourself with:

- The Data Protection Act governing how you use and store personal information
<http://www.dataprotection.gov.uk>
- The EU's Distance Selling Directive which applies to sales over the internet
http://www.europa.eu.int/comm/consumers/cons_int/safe_shop/dist_sell/index_en.htm
- Intellectual property legislation this covers issues about using, infringing and guarding copyright trademarks and domain names.

You can find out more about this on our website at <http://www.businesslink.gov.uk>

Training

The future of a company depends on retaining and developing the right skills. It's also important to make sure that your staff have the skills they need to use any new technology you're implementing. This may mean investing in training.

Software can also help by providing a fast, flexible and cost-effective delivery method for training. The result is that employees can learn on-site at their convenience, so saving time, course and travel costs. The quality and range of training available is continually expanding and electronic delivery makes it easier to conduct

regular assessments of employees' skills and identify any gaps.

Look at our factsheet on Technology and training on our website for more information on this.

Knowledge management

Technology doesn't just help staff work better and more efficiently; it can change the way a company operates. The ability to share information using intranets and collaborative working has the potential to break down 'silo' mentalities based on departmental and group allegiances. This can unlock people's knowledge and ideas and make them available to the whole company, leading to better ways of working and new products and services. As well as generating revenue and cost savings, this can have a big impact on staff morale by fostering an open culture in which people feel valued and listened to.

Using technologies: websites

As more companies focus on improving communication, better customer relationships and cost savings, it is becoming increasingly important to get value for money from your website.

Rationale

Ask yourself who uses your site, why and how they get there? Before you go after new customers, make sure you are looking after your current ones. Use your website to offer troubleshooting advice or account information. You could also cut time spent dealing with press or recruitment enquiries by making information packs available for download. Finally, register your site with search engines, ask relevant industry sites to include a link to it, and make sure your current customers know you have it.

Quick fixes

If your website has not delivered the results you expected, you may not need to spend a huge amount on improving it. - Contact details should be easily accessible.

- Information must be current and error free.
- Make navigation, page titles and writing simple and clear.
- Give an incentive if you want people to register.
- Animation or large graphics take time to download make sure they are actually useful they need to inform or sell, not just impress.
- Check internal links work and that links to external sites are helpful, not simply sending your customers away.
- If you sell online, explain the length and complexity of the purchasing process.
- Benchmark your site against your competitors for speed, functionality and ease of use.
- Give people a reason to return by updating your content regularly.

Selling online

If you think your business model lends itself to selling over the internet, you could invest in e-commerce functionality. For less than £1,000, this technology lets you process credit card transactions securely online. As people become more used to buying online, fraud worries are receding. A professional-looking site redesigned with clear information about your security precautions can help customers overcome any worries about credibility.

Promoting your website

There is no point in spending time and money on your website if no one knows it's there. There are many ways in which you can promote your website, and most are quite simple. Make sure your web address is included on all printed

material, such as business cards, letters and flyers, as well as on all outgoing e-mails. You may also want to consider reciprocal marketing (linking to your trade association and other sites with complementary content), e-mail marketing and online advertising.

Search engines are also a useful way of attracting customers, particularly if your company operates in a price-sensitive or niche market. If you want your website to generate significant revenue, consider enlisting the help of a professional search engine placement agency. If your budget for promoting your website is limited, there are ways in which you can improve your site's listings yourself.

For more information visit our website at <http://www.businesslink.gov.uk>

BROADBAND

This is only the beginning of the internet revolution. Many small businesses and home offices connect to the internet using modems. These narrowband connections have a slow data transfer rate, which means web pages and files can take a long time to download.

What is broadband?

Broadband connections transfer data up to ten times faster and are permanently connected. This means you can send and receive large files quickly, you don't have to dial up each time you want to connect, and you only pay a flat rate fee.

What can it do for you?

Broadband will let your business:

- receive e-mail, surf the web and take telephone calls all at the same time, all using the same connection
- cut down on paperwork and time spent on administration and data transfer
- make more use of the internet to access

research, and up-to-the-minute data, and keep an eye on competitors

- use facilities like videostreaming to save on time and money spent travelling to meetings
- set up a virtual private network, so staff can connect to your server wherever they are.

What are your options?

You can get broadband in four ways:

- ADSL using telephone lines
- Cable using cable TV lines
- Wireless using a fixed antenna and modem
- Satellite using an antenna and a two-cable connection to your computer

The cost, availability and data transfer rates of these services vary. If you are a very small operation, the cost of broadband could be as low as £40 a month, but you may have to pay an installation charge of between £50 and £200. However, these prices are only a guide. Broadband costs vary considerably, depending on which solution you decide is best for your business.

For more information visit our website at <http://www.businesslink.gov.uk>

E-MAIL

E-mail is now a widespread feature in UK business. Around 90% of UK businesses use it, and one-fifth claims their company could not survive more than one day without e-mail access. As e-mail and unsolicited e-mail (spam) become more popular, make sure your business gets the most out of electronic communication, and that staff do not feel they are at the mercy of their in-box.

Setting up e-mail

It is fairly easy to get e-mail if your business has a computer less than five years old. All you need is internet access, an account with an Internet

Service Provider (ISP), an e-mail server and e-mail software. It is a good idea to compare various packages as features and prices vary considerably. For example, it costs approximately between £9-£60 per person, and there may be additional charges for licenses.

Getting the most out of e-mail

Although e-mail is an exceptionally useful tool, it should be viewed as just one part of your communications toolkit. If you have a number of staff, you could benefit from an e-mail policy that covers what you would consider offensive or obscene material if it were sent and discourages excessive personal use. It can also urge people not to clog up your system with unnecessary e-mails not everyone needs copying in on everything and many matters are better handled face to face. Though e-mail is less formal than letters, it should still be professional so ensure e-mails are spell-checked before they are sent out.

Marketing

E-mail can provide an extremely cost-effective way of marketing to your customers. Whether this is with regular newsletter updates or special offers, it gives you the ability to target customers cheaply and instantly, without the time lag and costs associated with printing. Be careful not to overuse this option though. What makes it so effective, namely the personal, time-sensitive interaction is also what makes people react to irrelevant or unwanted e-mail. Even if you don't run an e-mail campaign, you can use the automatic signature feature to include your company's contact details and a brief description of your offer on all outgoing e-mails.

Customer service

While it can be an excellent way of reducing the costs of customer support, the instant nature of

e-mail has made customers more demanding. They do not expect to wait days to receive responses by e-mail. Best practice here is to manage expectations by setting up an automatic e-mail response. This will send an instant acknowledgment to the customer in which you can thank them for getting in touch and let them know how long it will take you to respond.

Communicating with staff

The immediacy and lower cost of e-mail makes it easier to keep your staff informed. A regular e-mail newsletter can help staff to understand other areas of the business, share marketing intelligence and foster a sense of belonging and involvement in the company.

For more information visit our website at <http://www.businesslink.gov.uk>

Mobile communications

You can make better use of your time from managing e-mails to accessing company information on the move. Mobile staff can be more productive and remain in contact with the office, while warehouse workers use portable barcode scanners to check stocks more easily.

A mobile office

With a Personal Digital Assistant (PDA) or laptop and a mobile phone, you can have your own 'virtual office'. You can access e-mail on the move, send and receive documents and digital photographs or tap into your company's database or customer information. As well as being enormously useful for mobile sales staff or home workers, this is a relatively cheap option and applicable to firms of any size. Costs range from £70 to £500.

3G PHONES

Like Wireless Application Protocol (Wap), 3G allows you to connect to the web using your

mobile phone. Unlike Wap, 3G is permanently connected and also has a higher data transfer rate some 3G phones are faster than a home broadband connection. They have other useful features including video messaging, digital cameras, and the ability to play music and video files.

Staff can use them to instantly show colleagues images and make decisions quicker. As popularity increases, the price of 3G phones is beginning to fall handsets start from £50 and monthly line rental is around £30, with additional charges for calls and services.

A WIRELESS OFFICE

By setting up a wireless network in your office a wireless Local Area Network (LAN) you can dispense with fixed desks and the tangle of cabling. People could work anywhere with a wireless network using radio waves to transfer data at high speed, making 'hot desking' a real possibility.

Wireless packages cost from £120-£500 (including a Wireless-Fidelity (WiFi) router), though you may need a wireless network card (£40-£60) for each computer. Wireless technology is increasingly being built into laptops and PDAs.

Bluetooth also connects electronic devices, using low frequency radio waves. It is probably more suitable for creating ad-hoc networks for consumer devices, and can connect to another device within a 10 and 100 metre range. More and more electrical devices are Bluetooth-compatible or can be adapted. Compared to Wireless-Fidelity (WiFi), Bluetooth is more of a shortrange solution and is not considered robust enough to replace a standard wired network in an office. Bluetooth routers cost from £120 and adaptors cost around £50.

VIDEO, TELE AND DATA CONFERENCING

As the internet continues to globalise business, companies are likely to find they have an ever more widely spread network of clients, suppliers and even employees.

TELECONFERENCING

Though a familiar technology, teleconferencing can still be a very useful alternative to meetings. It is most effective when used with a small number of people and a clearly defined agenda. For other applications like complex discussions or sales pitches, videoconferencing may be a better alternative.

VOIP

Voice over Internet Protocol (VoIP) allows you to make phone calls using a computer network such as a LAN or the internet. This means you can integrate your phone system more closely with business data and make cheaper calls. VoIP compresses voice data so it uses 90% less bandwidth than traditional calls. With VoIP, you can also take advantage of cheap long-distance and international calls, and free internal calls to anyone on the company network whether they are on the road or in another office.

VIDEOCONFERENCING

Videoconferencing allows people to see and speak with trading partners anywhere in the world, present products and discuss new ideas. Although it has been around for over 20 years, recent technological advances have dramatically improved the ease-of-use, and the cost, and the sound and picture quality.

Videoconferencing isn't just valuable for improving client relationships and cutting costs. It can dramatically improve internal communication in geographically diverse businesses particularly those with home workers and satellite offices.

DATA CONFERENCING

Data conferencing is an addition to video-conferencing that expands the range of possibilities from discussion and presentation to full interactive and collaborative working. You can transfer and work on a range of files and using electronic white boards, you can illustrate and exchange ideas.

DESKTOP VIDEOCONFERENCING

Digital cameras and new software make it possible for you to videoconference using your PC and an internet connection. Current camera and bandwidth limitations make this more suited to one-to-one discussions rather than important meetings, but in the next few years, the quality is likely to improve substantially.

Many Business Links have videoconferencing facilities available for a small charge.

EDI AND EXTRANETS

EDI and extranets help you share information with customers, suppliers and business partners.

What is edi?

Electronic Data Interchange is the exchange of business documents such as orders and invoices between trading partners. Standardised messaging and business software allows purchasers and suppliers to handle transactions electronically.

Benefits of EDI

Electronic processes are generally easier to audit, faster and less prone to error than manual ones. EDI takes this logic to its ultimate conclusion and seeks to make the flow of information straightforward, not just within a company, but with its customers and suppliers as well. Benefits include:

- closer trading partnerships and increased

customer satisfaction

- simplified order, invoice and trade documentation
- reduced postage, paper and admin costs
- greater control with precision timing and reduced stock holdings
- improved accountability and document tracking.

EDI works best where there is a large volume of transactions, an ongoing management commitment from all parties, and an upfront investment in the system.

Extranet

For companies who want to work more collaboratively with clients, extranets can prove a tremendous asset.

What is an extranet?

Where a website allows you to publish information for public consumption, an extranet lets you share confidential information with a restricted group of clients and suppliers. It can be anything from a password-protected page on a website to an extended network of websites. You can use it to share applications and information, initiate orders and collaborate on product designs all in real time.

Benefits of an extranet

Like a website, an extranet is accessed through a web browser. It can be a simple, secure area for exchanging files too large to e-mail, or a place where work can be viewed and approved remotely. Giving clients the opportunity to monitor and test ongoing progress can reduce the need for travel and create a much greater sense of involvement and collaboration on projects.

Companies who already have a website can set up a simple extranet at very low cost. With

greater investment, however, they could create an extranet that allows clients to access account, product and stock information or place orders. For more information on EDI and extranets, visit our website at <http://www.businesslink.gov.uk>

Networking and extranets

Networking can help your business become a more flexible and efficient organisation.

Networking

A network is simply a set of computers joined together, which lets them communicate and share data, software, storage, printers and other hardware.

A set of computers linked by cable in one location is called a Local Area Network (LAN). This is probably what you have if you have one office and several computers with shared file storage space. A new, and currently quite expensive, alternative to LANs are wireless LANs (also known as WiFi). These are networks based in one location that transfer data by radio waves instead of cabling.

Networks that link different sites are called Wide Area Networks (WANs). If the cost of linking remote offices is prohibitive, you could consider a Virtual Private Network (VPN). A VPN uses data encryption to allow secure access to a company's network over the internet. This is cheaper than connecting offices by owned or leased lines.

Benefits

Even a company with just a few computers can benefit from networking. It allows:

- shared hardware
- shared access to databases and software programmes
- collaborative working on documents
- use of e-mail.

Most of all though, a network helps you organise your business data can be stored centrally for ease of cataloguing, retrieval and back-up.

Intranets

An intranet is a private network for a company's employees. Like a client extranet, it uses a web browser to access and display information. As with websites, this can be anything from simple pages of news and contact details to complex software applications and databases.

Benefits

From discussion forums, to staff profiles and online training, intranets can be enormously effective for sharing information, improving efficiency and cultivating staff morale. Some large companies are now using their intranet as a way of moving a whole swathe of administrative functions and workflow tools online.

Successful introduction of any substantial changes to the way people work requires staff buy-in IT projects included. One common tactic is to start small by easing the burden of administrative tasks by putting applications like automated timesheets and expense claims on your internet.

For more information on networking and intranets, visit our website at <http://www.businesslink.gov.uk>.

GENERAL BUSINESS ADVICE

For more information on achieving best practice in your business: Contact your local Business Link advisor by visiting the website at <http://www.businesslink.gov.uk> or calling 0845 600 9 006.

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