



Helping you take your thinking forward

Small Business Guide to Equipping your business to harness the power of computers, broadband and the web

CONTENTS

Introduction	2
Question 1: Do you know enough about your business?	3
Question 2: ICT and success - linking ICT to your competitive strengths	3
Question 3: Do you have the capability to take advantage of ICT?	3
Question 4: Are you prepared to change the way you work to get the benefits from the ICT?	3
Question 5: Acquiring the right solution - saying what you want, buying it right and getting what you need	3
Question 6: Getting the benefits - ongoing support	3

Small Business Guide to

Equipping your business to harness the power of computers, broadband and the web

Introduction

Everyone has computers and the Internet nowadays. But equipping your business or organisation to harness the power of computers, broadband and the web is not like buying anything else.

It seems to affect everyone – but it is understood by no-one!

It costs more than you thought it would, takes longer to make it work than you expected and does less than you wanted.

But still everyone tells you: you must adopt the new technology to survive.

This guide has been written to help you ask the right questions and avoid falling into the same traps as everyone else. It is mainly written for smaller businesses which do not have the skills and experience to plan, implement and exploit the technologies for competitive advantage. However we are aware that many voluntary and non-commercial organisations are increasingly being expected to adopt ICT for similar reasons. We hope that this guide is relevant to you too.

What is ICT?

ICT is the catch-all name for anything which combines computing and communications. It stands for Information and Communications Technology. A computer is an ICT system. So is a fax machine. So is a complete networked business system. Online trading and web-based applications are also ICT systems. So that's the term we will use from now on.

Six key questions

There are six key questions that every business should answer before investing in ICT.

1. Do you know enough about your own business - how it operates and what makes it successful? Use our short self assessment questionnaire to establish whether you need business advice before investing time and money to introduce IT into your mainstream activities.
2. ICT and success - do you really understand how to exploit the ICT to gain business benefit? Go to this section to see how to link ICT to your competitive strengths.
3. Do have the capability to put this information to good use? Our self-assessment questions and complexity equation will guide you.
4. Are you prepared to change the way you work to get the benefits from the ICT? Look at what's involved.
5. Do you know how to say what you want, how to select the suppliers and how to buy the right solutions? Have a look at the sort of questions you need to ask of your supplier.
6. Having acquired ICT systems, are you exploiting them fully? We spell out what questions you need to ask suppliers to get the right kind of support

Small Business Guide to: Equipping your business to harness the power of computers, broadband and the web

Question 1: Do you know enough about your business?

Computer systems are only business 'processes' (activities) wrapped up in software. If you buy an accounting package, it only does what you already do manually. But you do have to understand your own business processes before you can choose the right software package. Otherwise you will have spent time and money on a system and will still be carrying out key tasks manually.

When to invest in ICT

Only invest in ICT when:

- you have a clear idea of how your business works now - do you have good manual systems?
- you know how you want it to develop.

A system for the business you have now may be wrong for the business that you want to become

When to invest is as important as what you buy

Monitoring your business

If you are not checking the business systematically now, you will find it harder to manage when a lot of your information is tucked away in the computer.

You need to be able to track whether the business is actually achieving what it sets out to do.

And you should be comparing its performance against other businesses.

Do you need business advice before you start?

ICT will only bring business benefits if you have a clear understanding of your own business.

The self-assessment below will help you decide if you need business advice and help before you spend time and money on ICT.

- Are the competitive strengths of your business's main product or service clearly understood within the business? (that is, why your customers buy your products and services and why they come back for more)
- Have you tested this understanding against your customers' perceptions (in some formal way)?
- Does the firm monitor its performance by checking (benchmarking) its performance against that of other organisations which have similarities?
- Do any of the following describe how the firm plans for the future? Check all that apply:
 - We have a written business plan
 - We have a recently developed marketing plan
 - We review performance against sales forecasts on a regular basis
- Has the business recently had advice from a business adviser (consultant, accountant, Business Link personal business advisor, etc)?
- If so, were you successful in putting the advice into practice (to the extent that you accepted it, of course)?
- Has the firm identified the main opportunities and threats it faces, especially in marketing?

If you have answered NO to more than half of these questions, the advice you require is business advice, but in the context of a possible ICT solution - not the other way around. Consider getting advice on basic business issues such as strategy, marketing and planning.

Sources of this advice may include your Business Links or TEC, management consultants or your accountant. ICT suppliers may be a source of business advice but recognise that they may have a vested interest.

Small Business Guide to: Equipping your business to harness the power of computers, broadband and the web

Question 2: ICT and success - linking ICT to your competitive strengths

Efficiency should not be the only goal

You might be working perfectly efficiently without computer-based office systems. Or you may just be using simple word-processing for letters and invoices and a spreadsheet for your accounts.

Computers can be the basis for a better-run office, if you have the right disciplines. But it is actually the **discipline** that brings the efficiency benefits.

Computers can help you do more of what you do already - for instance coping with higher turnover without expanding your staff - but this also requires training to change the way the business operates.

If you computerise chaos you get computerised chaos - which is worse than the hand-made kind.

Aim for competitiveness - look for the opportunities

The most important benefits of ICT come from taking opportunities created by the new ways of working that you introduce. So ICT will only bring business benefits if you understand how to select the right solutions to suit your needs and bring you competitive advantage.

Research shows that most smaller firms do not focus on competitive advantage as a benefit from ICT. They do not ask themselves the right questions to start with.

Even if the initial prompt to do something is as clear as your major customer insisting on your adopting e-mail, it is important that you ask yourselves: Have we really thought about our business and how ICT might bring new ways of working - new opportunities to improve our competitive strengths?

If the answer is no, then you risk spending money on ICT that will, at best be of little benefit and at worst, cripple your business.

Your business is unique - link ICT to your competitive strengths

So before you introduce any new systems, make sure that you really understand why your customers like buying from you - your competitive strengths. Then you can harness the new technologies to enhance this success factor. Failure to focus on your competitive strengths when you introduce ICT could mean you risk damaging your business.

Setting the priorities

Write down what you think your competitive strengths are. Include anything you think your customers might point to and say: "that's why we like doing business with them" and rank them in order of importance, in your eyes, to winning and retaining customers.

Small Business Guide to: Equipping your business to harness the power of computers, broadband and the web

Your competitive strength headings might include the following.

- Product or service quality (it's best to focus on one main product/service) - does it meet/exceed expectations?
- Product or service design/ specification - ability to customise to suit
- Presentation - marketing materials / packaging / advertising / website
- Response to customer - speed / availability / appropriateness of response
- Customer care - understanding of customer needs / good communication & follow-up / trust relationship
- Proximity to customers - physical location / on-site visits / local knowledge (reduces customers' risk)
- Image/reputation - reliability / word of mouth recommended
- Price – cheapest or best value for money?
- Other - any specific role you play for customers, for example: managing uncertainty or reducing complexity

Rank these in order of importance to winning and retaining customers. Then test this on your customers. Ideally this means getting an independent customer survey, but even talking to a few key customers will help you to see if you have got your priorities right.

Now look at the **activities** that go towards making the top three items on the list happen. These are your critical business processes.

Are these where you intended to invest in new computer and communications systems? If not, shouldn't you find out how modern technologies would enhance your competitive strengths in these areas before laying out lots of time and money?

Small Business Guide to: Equipping your business to harness the power of computers, broadband and the web

Question 3: Do you have the capability to take advantage of ICT?

Can you plan, acquire, implement and exploit ICT systems effectively? If not, you'll have to find someone who can. The skills needed include:

- project management - ICT projects are always more complex than you first think! - see our guidance on assessing project complexity.
- technical - people who understand ICT products and services and can make them work
- training - the right preparation and training for the people who are to use the systems is crucial. You may need to budget as much for training and managing the changes in working practices (that will actually bring the benefits), as you are planning to spend on the ICT hardware and software itself.
- contract negotiations - managing the relationship with suppliers - this has to last as long as the systems!

Organisations which have already implemented ICT and which use relatively sophisticated ICT are more likely to have the skills and understanding needed to get the business benefits from the introduction of new technologies into their organisations. Use the self-assessment below to judge whether you have sufficient in-house experience and skills to match the complexity of the project, or whether you will need to bring in the necessary expertise.

Self-assessment: managing ICT projects

- Does your business use software applications extensively in your main business activity?
- Do you use software applications extensively in any of the following business activities?
 - Accounts/Audit/Invoicing
 - Personnel/Payroll
 - Inventory
 - Management reporting
 - Sales & Marketing
- Do you employ a person or group with specific responsibility for managing the ICT functions?
- Are your computers networked?
- Does your business have its own website?
- Do your employees have access to the Internet for business purposes?
- Does your business use the Internet to buy?
- Has your firm demonstrated project management capability in ICT? (Have you implemented any significant projects in the recent past?)
- Do you view your business in terms of processes?
- Do you recognise the need for training when ICT is introduced (for example, if ICT is already being used, was sufficient attention paid to training when it was installed)?
- Does your firm have in-house IT development or implementation skills that would be available?
- Are potential users of the ICT systems likely to be consulted before systems are introduced?
- Has your firm gained measurable competitive advantage from ICT it has implemented in the past?

If you answered NO to more than half of these questions, you should either:

- scale down what you are trying to do to match the experience within your organisation or
- find a good external source of expertise to help you - remember, knowing when to introduce new systems is as important as knowing what to introduce - look for someone who understands your business.

Small Business Guide to: Equipping your business to harness the power of computers, broadband and the web

Complexity is the enemy of success in ICT

Why is it so difficult to get the business benefits you want from computer systems? One reason is the sheer complexity of projects involving introducing or changing information & communication technology (ICT) systems. Such projects are always more complex than you first think!

ICT probably affects every person and activity in your business. So it's not surprising that when you need to change the systems things can go wrong.

We have found that the complexity of ICT projects depends largely on the combination of three factors, shown below. If you are planning to implement an ICT project and can't currently provide good estimates for each of these, make sure they are on your list of issues to address before you go any further.

1. Number of people involved: More people = more complex

The more people (roles) are involved e.g. IT manager, user groups, product suppliers, consultants and sub-contractors, the more difficult it is to make sure you have consulted and trained all who need to be involved. Scope the project so that the number of people involved is kept to a minimum, to reduce complexity.

2. Number of business activities affected: More ambitious = more complex

The more far-reaching the solution, in terms of the business activities affected, the harder it is to make sure you have covered all the links and interfaces with other activities. Implementation is also more complicated and you cannot afford for the business to come to a stop because the new system doesn't work properly. So break large-scale requirements down into smaller projects and always make sure you have contingency plans in place. You can't afford to stop your business.

3. Elapsed time: Longer to implement = more complex

The longer it takes from your initial definition of what you want to achieve, to the time you can actually get the system to deliver these benefits, the more likely it is your project will fail. This is because the world does not stand still. Your needs change and you will be tempted to add new requirements and that adds complexity. Avoid lengthy project cycles (3 months is a long time in some sectors) and always control change requests rigorously – or suffer the fate of countless companies whose system implementations became top-heavy and never made it.

The Complexity Equation

Here's a rule of thumb you can use to see whether you have the capability to cope with the complexity of the ICT project you have in mind:

No of people x No of activities x Elapsed time (months) = ?

How to interpret the results:

Simple projects - if the total is under 10, yours is a simple project. Don't let it grow like Topsy!

More complex - if the number is between 11 and 30, make sure you plan and monitor the project properly - it isn't as simple as you thought. Give some thought to getting help if you have not tackled this type of project before.

Complex projects - a figure over 30 shows that yours is actually a complex project. Appoint a sponsor who will champion the project, select a project manager with sufficient experience and identify a business manager who will keep the project focused on getting the business benefits you first defined. Then put in place a project management method (it can be a simple one) and stick to it. If you don't have the experience to do this yourselves, scale down the project or find help.

Small Business Guide to: Equipping your business to harness the power of computers, broadband and the web

Question 4: Are you prepared to change the way you work to get the benefits from the ICT?

Remember - nothing changes until you use the technology. So making those changes to how you work and **training** the people who will be using the systems is the key to getting the business benefits.

Managing this change and implementing adequate training is where a lot of your investment should be focused. Allow time and budget for this - it pays off immediately.

Here are some practical steps to follow:

- Understand what the processes (activities) are today. If other people are involved, don't rely on what you think is happening – it almost certainly isn't.
 - Draw flowcharts or 'maps' to allow discussion and agreement
 - Spend time understanding the detail – that's where the problems will arise later.
- Decide how these processes need to change. Often the new software will require different ways of working but in any case you should not simply computerise what you do today, without asking:
 - Is this the best way (most efficient, brings greatest benefit) of working?
 - Could we make it better?
 - Are there any activities we don't need to continue doing?
 - Could the new technology allow us to do something we could not do before?
- Are you using accurate information? The old adage 'rubbish in, rubbish out' applies. Remember that computerising just adds speed and capability – not necessarily accuracy. Just because a report is printed off a computer system, doesn't make it correct. If your current data is not of a high quality, take steps to update and correct it before feeding it into a new system.
- Understand the capability of the ICT you are introducing – see next section. Don't believe the claims of suppliers without checking with other users – a good supplier will pass you details of other installations or customers using their services.
- Scope the size and complexity of the project based on the factors discussed earlier and limit this to create a realistic change programme – then manage the changes, giving people adequate time to learn their way around the new technology and for the system to 'bed down'. Assume that you will hit teething troubles in the first month of using any system.
- Trust your own people - this is a learning experience, for you and for anyone in your organisation who uses the system. Make up your mind to trust your people to experiment - they will find innovative ways of using the new facilities which you never expected (especially if they are under 25!). But do develop a properly managed way of introducing these changes into your business - if you don't, chaos will reign.
- Try to develop a good relationship with the suppliers who sold you the components of your new system. With any luck you will need to upgrade and expand the system to meet the new demands as your business grows and you need their help to exploit the opportunities you have created. A good ICT supplier will be interested in investing time to create this longer term relationship – see Question 6: Support

Small Business Guide to

Equipping your business to harness the power of computers, broadband and the web

Question 5: Acquiring the right solution - saying what you want, buying it right and getting what you need

When you talk to suppliers about an ICT system, most will immediately try to tell you about the technology. What you need to do is to move the conversation back to your **business** needs. So before opening such a discussion you really need to have done some preliminary thinking about what these are. It may as simple as: 'we need to be able to find information quickly' or, more likely, more complex problems, such as: 'we are losing business because we are not keeping track of a customer's order'.

Once you have included your key business objectives in your plans, you still have the big hurdle of specifying your requirements, finding the right suppliers and getting the right solutions.

If you are lucky, you will have someone in the company who has the experience and understanding of ICT to help you carry out the analysis and selection. But it's usually down to you in the end to:

- understand and specify exactly what it is you want the new system to do - in terms of your business, remember, not the technology
- focus on 'must-have', not 'would like'. Every technology can do lots of things you don't really need. List the requirements that are essential and make sure you get these – don't be distracted by the long list of other features!
- satisfy yourself that the supplier/s you have chosen can deliver solutions that work. Never believe a promise - always ask for a demonstration that simulates as nearly as possible the conditions in your business.

You might think about getting some outside help. Ask other companies who they have used and choose someone who has helped companies like yours.

Don't just rely on suppliers for advice. The best ones will be helpful and will know a lot about what they offer. But even the best do not have the margins to spend enough time with you to really understand your needs and to help you identify the opportunities and risks. Good support costs money - and it is worth it.

You might wish to look at other guides written for small companies – there are several on the Internet.

The benefits really lie in integrated solutions

One of the things that has changed over the last few years is the shift from stand-alone computer systems which just carry out one set of functions (such as accounts, customer sales records, inventory control) to an integrated approach, based on networking the computers and using more powerful software applications to improve the way you work across business functions. That's where the real opportunities for improvement lie.

To achieve these benefits you need to think about moving away from a typical 'bolt-on' approach - adding new technologies such as the Internet and mobile communications, without changing the rest of the business activities. The real benefits come from taking a more integrated approach, where you are able to use these technologies as part of your core business systems to give your people better access to information and use the improved communications to 'get closer' to customers.

Small Business Guide to: Equipping your business to harness the power of computers, broadband and the web

Question 6: Getting the benefits - ongoing support

Having acquired ICT systems, are you exploiting them fully?

Research shows that most companies are not using their ICT to its full potential. Systems are often installed to undertake a task or solve a problem and then not looked at again unless a problem occurs. Those using the systems often do not fully understand what the system can do, so no attempt is made to exploit its potential to further improve your efficiency and competitiveness.

Don't forget that the initial reasons for implementing ICT may not be the ones that give you the real benefits in the end.

Ongoing support is what allows you to actually use your ICT equipment productively and continuously. There are different kinds of support:

- Practical
- Technical
- Strategic

If you do not have in-house IT expertise, a single supplier providing all three levels of support has obvious advantages - if you can find the right supplier. Otherwise you might need to find more than one source of support.

The cost of support is likely to be based on the size and complexity of your systems and the level of support you need.

Trust is vital for successful support. It helps if the day-to-day practical and technical support is provided by a personal contact with whom you can build a trusting relationship. Only then will you go on to accept and rely on the strategic advice available from your support service provider.

Minimum set of requirements

Here is a minimum set of requirements for a support service. Use it to ask suppliers for the kind of support suited to your needs, not theirs.

Practical support - this might be a mixture of telephone and hands-on advice and training, and covers the day-to-day operation and exploitation of the systems

There is usually someone on hand who is more familiar with ICT than you, possibly a younger member of staff. It is useful for this person to act as primary channel of communication with the outside experts. However it is important that this person's IT support role is recognised within the company and that they are given the time and training to pass on good practice to colleagues. It is also essential not to assume that a person with technical skills has the business acumen to apply these appropriately – they need careful supervision!

Technical support - manufacturers already offer technical support in the form of maintenance contracts for their hardware and software. These vary, but are typically designed to cover systems operating problems or failure. Like an insurance policy they are usually only useful once a problem has occurred. They do not help you avoid the problem or deal with the chaos that ensues.

You probably need pre-emptive technical support. Larger organisations may have contingency plans in place for disaster recovery, but smaller companies rarely do. Indeed, many do not even operate regular back-up routines.

Technical support should be proactive, rather than reactive. It should pre-empt problems arising and should help to avoid the cost and disruption of a break-down. This might include inspection of hardware and testing of software on a regular basis, installation of virus checking software, advice on replacement of old systems and introduction of back-up routines.

Clearly, this does not replace the need for a call-out maintenance service for mission-critical systems.

Small Business Guide to: Equipping your business to harness the power of computers, broadband and the web

Consider web-based solutions – these are software applications similar to those you would buy and install in your office, but delivered over a broadband connection via the Internet to a supplier's service. Many of these are applications that previously would only have been available to larger organisations but which become affordable on this shared access basis. The advantage of this approach is that you eliminate the need for technical support. The downside is that any problems with the connection can play havoc with your business if you become dependent on the service for key activities.

Strategic support - some strategic support should be available in any good practical and technical support relationship. In addition, a company with no IT expertise in-house, needs advice on four key questions:

- does the existing ICT satisfy the current business needs?
- if not, what simple things could it be doing to improve the way it is working?
- does the existing ICT provide any new opportunities to change and improve the company's business activities?
- are there changes being planned that will need new or modified ICT support to make it possible?

Without advice on these questions, you will probably not get real competitive advantage from your ICT.

Do you need better ICT support?

Look for the following signs that you need to review your IT support arrangements:

- you are not achieving the business benefits from your ICT that you expected
- you have no-one to ask for advice and help on practical day-to-day matters
- your technical support does not include pre-emptive visits to avoid problems arising
- you have no-one to help you spot strategic opportunities and advise how to get competitive advantage from your ICT
- your sources of supply are not providing a comprehensive, effective level of support
- responsibility for dealing with problems falls 'between the cracks'

Questions to ask a potential supplier of IT support

Make sure that:

- they have quality systems in place and being used to check consistency and high standards of advice and service
- they provide training to their staff to ensure their knowledge and skills are up-to-date
- there is an adequate level of in-depth knowledge behind the individual consultants, to handle all situations
- each client has a relationship with named individual, not anyone who happens to be free to deal
- the contract clearly sets out exactly what service is to be provided and how much it costs
- terms of supply for any extras are also clearly set out.