

Making ICT Decisions

Everyone has to make decisions and making them about ICT issues is no different to any other decision making process, but knowledge helps. Below are some pointers. These are not definitive... ask colleagues in other organisations... ask suppliers... never ask just one supplier.

There are a range of areas of ICT decision making. These are just pointers. Virtual Riders takes no responsibility for decisions you make based on knowledge supplied.

Firstly consider the industry. It is very new and it is moving very rapidly. [Moore's law](#) is applicable to many more aspects of the Computer industry, and so you have to acknowledge that a decision today will be out of date tomorrow. This means that you should contextualise your decisions to the strategic direction of your organisation. So, if you are in receipt of public funding you might want a group of staff to monitor their work by recording it on a single spreadsheet. This eases reporting but lends weight to having a network. You might be considering moving premises within the next 2 years and so cost consideration should be given to installing a wireless network (or part wireless) as an interim measure.

The next consideration is to assess where your knowledge and information are coming from. If it is from a supplier, consider if the option being proposed is to the suppliers advantage, not just because of cost, but also because of expertise. Always consider the ongoing costs of any investment.

When taking advice from technical staff, ask them to write down what they are proposing. This allows you to accurately discuss this with other 'experts' and keeps a record to ensure that what was proposed has achieved its' claims. It is advisable to negotiate deadlines for information and with anything new, get an indication as to implementation time and overhead costs.

When buying ICT make sure you have a policy in place which indicates the kind of specification for the purpose of the equipment. In other words, does the telephonist need a fully specified graphics computer on their desk. Check your replacement policy and programme to make sure that there is no equipment about to become available, and if it is project funded, consider if there are sustainability conditions. In other words will the computer continue to be used after the project (build in extra costs for higher specification or upgrade costs at the end of the project).

For comparison in purchasing (and for tender purposes) use the internet and or one of the main computer magazines found in major newsagents. These are always full of adverts and reviews. [Dell](#) is always a good benchmark for computers, [Dabs](#) for computer products (there are others) and trustedreviews.com is a good way to see if what you have been recommended is what everyone else is saying.



There are buying, tendering and commissioning guides available on the ICTHub website:

http://www.ictHub.org.uk/cms/openCMS/ictHub/articles/Buying_and_Commissioning_ICT.html

http://www.ictHub.org.uk/cms/openCMS/ictHub/commissioning/Good_ICT_guide_invitation_to_tender.doc

http://f2.futurate.net:8080/cms/openCMS/ictHub/about/ICT_Hub_Commissioning_principles.doc

All this is fine if you know what you are looking for in the first place. Start with what you want to achieve. Produce a description, such as:

"I want to be able to write reports and then present them in a professional manner integrating financial information. I also want to have email and have access to the internet for research"

A professional can then identify which tools and arrangements will work for you. The more you specify the easier it is to get the right result.

When having to make a decision on budgeting there are some simple guidelines to follow. The newest and best equipment will cost half what it costs now in a years (or sometimes less) time. Buying from a local shop may appear to give you good backup, but have they got the capacity, staff and technical skills? Good national companies simply replace stuff that isn't working rather than take it away for weeks at a time. Warranty is rarely worth it unless it is very expensive (as the equipment halves in value every year, it can be cheaper just to buy replacement parts). Warranty often implies interruption of access to your computer (if it has to go away, do not let it out of your sight until you have backed up anything of importance). Laptops are harder to repair and so might benefit from warranty.

The cost of purchasing a computer is estimated at one third of the cost of running that machine for three years. Installation, software, upgrades and the inevitable contribution to technical support costs make up the rest.

Having purchased a computer, never leave it in the box unnecessarily. Firstly because it makes it very attractive to steal and secondly, if it has a fault, you want to find it straight away. This 'out of box' failure means that the supplier has an obligation to replace the faulty product rather than repair it. If you leave it a while, the supplier can claim that the product was OK when it was supplied. Always log serial numbers etc. when unpacking.

If you are buying a printer, consider its purpose and then examine the total cost of ownership including paper and cartridges etc. If you go to www.ameiva.co.uk they give you a price per page specification for most of the printers they sell. If a printer is broken, consider whether wasting time and money on repairs is cheaper than buying a new machine. Colour laser printers are much cheaper now and in an office environment, it may work out cheaper to install a network and have a central shared laser printer (especially if it is a photocopier as well).

In making decisions about networking, the cost is not really about installation, it is more about its purpose and its support. To run a network to centralise file storage, improve security and share printing requires a server, but it does not require much overhead to support the server. Putting internet access and email on top does require further support and there are many options and costs to consider. The most important aspect here is the

maintenance of your system. You have to be confident and know how much it is going to cost. There will be associated software costs and other security aspects as the machines are all connected together. Remote sites can also be connected (virtual private networking – approx £1200 to set up). This is where expert advice is required. Make sure you have defined what you want before calling it in. Network cabling should only cost around £30 - £50 per point, a server £1000 - £2,500, routers and switches are virtually free (see CISCO offer for charities) as is the software (if using Microsoft software).

When deciding what software to purchase, consider the very low cost of Microsoft products for charities and the requirement to produce documents/material compatible to the majority of people. Open source operating systems (Linux etc) and software are becoming increasingly popular and may be acceptable, but check to see if they can be supported locally before committing staff time to learning a new product. After all your system is fine if your staff are fully trained, but if they leave it makes your organisation vulnerable unless those skills are easily available in your area.

When making decisions about the internet, really there are only three options:

- 1 - don't have it,
- 2 - have dial up,
- 3 - have broadband.

Having decided that you want it based on your requirement list, you really only need to consider 'dial-up' if you are in an area without broadband or you have a mobile unit which will have to connect from different locations. Consider whether it might be better for your staff to work 'offline' until they come back to the office. Mission critical units may want to have mobile phone internet connectivity, but this is very expensive. If you have decided that broadband is the option for you then you need to consider how much and which provider to use. Whatever you choose people will always want more so look at it from a budgetary point of view. What can you afford? Take advice from the providers, but bear in mind that they will be thinking that every one of your machines will be online all the time. This is often not the case and so you will not need as much as they are suggesting. Again put down your requirements and then check it out. 2Mb might be adequate for 100 computers or 5 computers, depending on what they are using the bandwidth for. An expert will be able to easily advise you. Try your spec on a few. When it comes to the internet provider, it is advisable to go for one which is very reliable, has been going for a while in your area and is used by lots of people. If they are offering complex packages of services, be wary and take advice as sometimes these are not expected to be used fully. Some services (which are not the cheapest) such as Pipex and Demon have been around for a long time and are good for service and reliability comparison. The phone co-op is another good starting point.

Decisions on websites are covered separately, but as with everything that has been mentioned here, start with writing down your business or organisational objective and then let the technical people argue their solution to you. Don't worry about what technology can or can't do, define your purpose and let the technology fit. Currently there are very few actions which can't be covered by technology solutions (but some have a high cost)

Finally, **Virtual Riders** can help. Firstly by providing technical solution options based on your requirements and secondly by signposting you to various specialists and suppliers whom you can negotiate with directly. Virtual Riders can also sit in on meetings and act as an independent advisor when you are dealing with suppliers. Please check the Virtual Riders services web page.