

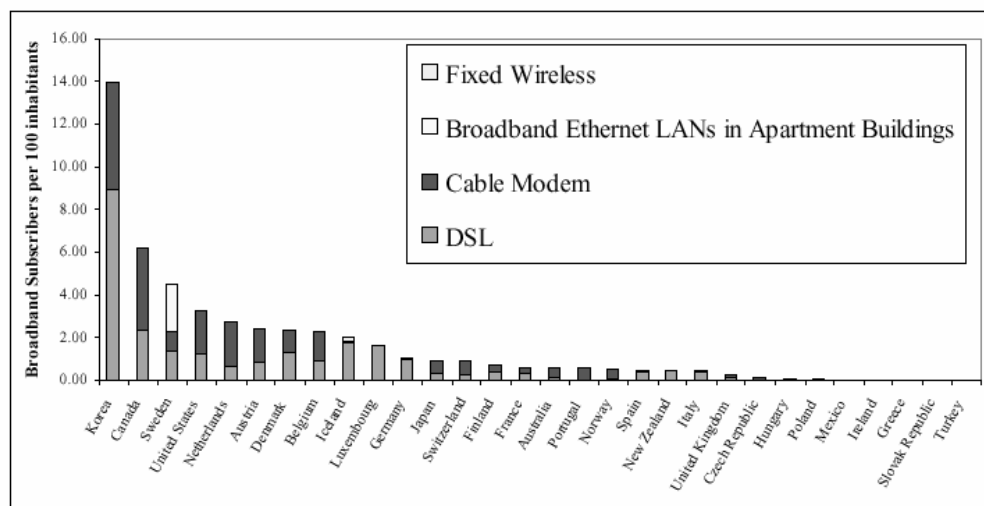
CT a flood with options – but do they increase value?

Stuart Locke comments on the need to ensure that value adding potential is kept as the central concern when considering information communication technology options. Alternatively, they can be accepted as expensive playstations.

Information communication technology (ICT) can be like the ancient mariner's lament, "water, water everywhere but not a drop to drink". There is a large range of products available offering an even grander range potentials - "can do this and can do that". However, matching these capabilities with tasks actually required, in the business or on the property, required is not straightforward. The provision of solutions is what many rural businesses and farmers need. They don't need the flood of unscreened possibilities. Advisors can add significant value through providing tailored solutions. In a similar vein it is important not to catch on to woes like in adequate bandwidth and use this as an excuse for procrastination which may cost real dollars in lost efficiency gains.

It is recognised that by comparison to international standards of developed nations, see Figure 1, that New Zealand is not the best served in terms of rural internet service. The bandwidth is low in many parts. Bandwidth refers to the width of the pipe, just alkathene for water systems, so the bigger the pipe the more capacity it has. You can apply pressure to put more through it but there is a limit to the capacity constrained by the width, that is the diameter. We can wait for improvements, which are in deed occurring all the time, but there is a danger that potential gains presently available are being missed because they are not being looked for.

Broadband penetration in OECD countries, June 2001



Source: OECD

We need to know what it is we want to achieve and then see if it is possible. Rural advisors are well suited to do this for their clients. As a brief illustration recently I decided I wanted to be able to change tv (Sky) stations from the bedroom without having to walk down to the lounge room. It does now happen but I needed to do a lot

of reconfiguring the way things were connected in order to achieve this outcome. In the process much was learned about what the equipment can do, which may be significant if I could ever find a use for it. It was probably just pride that stopped me getting done a lot quicker by asking my daughter to do it. She seems to understand how all those sound system, tv decoders etc work.

Adding value through ICT

Opportunities may exist to use technology to do what is currently being done in a more efficient manner. In general, efficiency gains will enhance productivity thus adding value to the unit. This process of adding value through new technology is a well-trodden path. However, advisors need to be aware that there is the danger that increasing flexibility can actually mean working more rather than more efficiently. Care must be taken to ensure that potential gains are real and this is where the experience judgement of an advisor can make all the difference. Keeping the human element in the frame is important when working through possibilities.

Consider the increased flexibility that online banking can provide. It affords the opportunity to check balances, transfer funds and make payments electronically at a convenient time rather than a trip to the bank during their opening hours. Evenings may well be a good time for doing this. But if the net effect is that the working day has just been extended because the banking excursion saved goes into crutching, then output may grow but the hours worked have also increased. While the moan of never enough hours in the day is common enough it's also very important not to burnout. The law of diminishing marginal returns tends to catch up on us, suggesting extra hours worked may bring a lesser return. The increased flexibility may not equate with increased productivity.

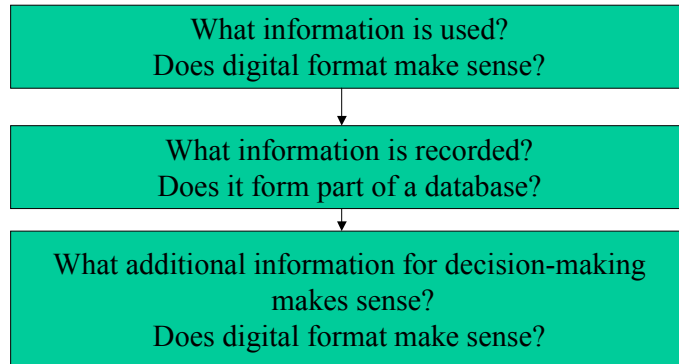
Increase productivity

Nevertheless, there are opportunities to generate real gains through more ICT. RD1 dot com has introduced a new e-mail alert on facial eczema spore counts. Weather information is combined with there available data to generate weekly forecasts which will be emailed. To receive this information may well be useful. Where is it useful? The email could go to the PC in the office, the cellphone or to a palmtop. What sort of information do we require where? The possibilities are expanding rapidly so a global positioning reader on the quadbike is available but does it add value. In some instances it may well but for most activities it is purely a playstation.

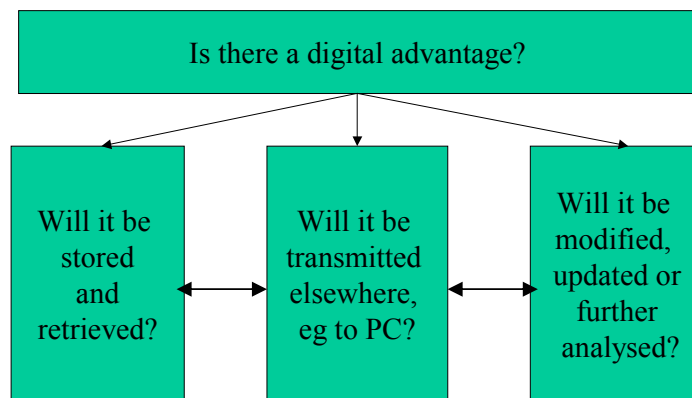
A check procedure that provides a good starting point for matching equipment to needs is shown in Figure 1.

Figure 2 Three step approach to analysing ICT potential

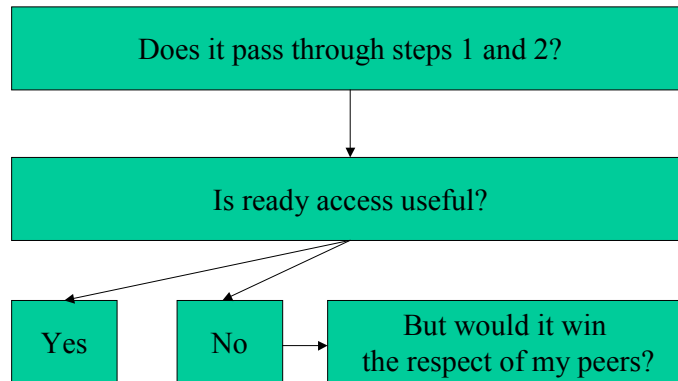
Step 1 – see the possibilities



Step 2 - analyse the possibilities



Step 3 – recommending ICT



Actually making it happen seems to be far more difficult than the manuals would lead you to believe. In the case of my spaghetti junction experience in the lounge room I was strongly motivated not to concede defeat and ask my teenage daughter to sort it out. The pride did have a cost to go with it but after hours of semi comprehending instruction manuals and semi experimentation an operational efficiency was achieved.

It is translating the potential into action that counts. Advisors who can make the equipment do what it is meant to do rather than just give the talk add value. Farmers and business people don't want to become software and hardware experts. What they do need is simply implementable systems that are robust and easy to correct if a mistake is made.

Access to information

The new generation of palmtops, which are hand-held computers, now offer powerful computing capacity in the pocket. The range of programmes that run on these powerful little computers keeps increasing in much the same manner as PCs become faster and more powerful.

The diary, address book, note book, vehicle log book, maintenance and herd records all in the pocket has proved most valuable. The HP Jornada, which is the product I use, links to the office PC and downloading of email and files is very, very quick. This means I can carry with me as much information as I want and importantly to add to it or delete components while I am away from the office. The writing capability with a scrip recogniser which turns my lettering into typing is excellent for keeping appointment notes. The bonus of being able to store music and even whole books, although I limit myself to newspaper articles is a bonus.

The only draw back I have seriously encountered with these mobile devices is the loss of a telephone in the paddock. I had the family up there with their cellphones ringing me to see if we could hear it ring and so locate it. Found it two days later after

cancelling it with Vodaphone in the car. They were very understanding when I rang to reinstate it.

Sources of Value

Rural advisors are well placed to recommend best practice to their clients. Some of this comes from research, some of it comes from nutting a problem out, and some of it comes from seeing a good idea in operation and being able to generalise from it. In the area of ICT the same basic principles hold. The challenge is to be able to translate from the techno guru to the practical usage. This intermediary role is absolutely essential if rural productivity is going to continue to rise. The opportunities are present to do things smarter.

On the palm top the vehicle log book is kept, the Microsoft money programme becomes my cheque stubs and these are downloaded on the office PC when the palmtop is placed in its cradle on the desk. These records are stored on disk and can be emailed to the accountant which get rid of the monthly or six monthly paper chase.

Production figures such as milk, the rainfall gauge data, stock drenched etc can be simply jotted into the electric notebook. This material is conveniently entered into a spreadsheet file so that weekly and monthly graphs can be produced.

The WAP capability of many new cellphones allowing for access to websites and e-mail opens a new dimension to the mobile office. The ability to check whether any emails have arrived since being absent from the office is very helpful. They can be quickly screened for anything important but reading anything more than a few lines becomes tiresome. The new generation palmtops offer communication options through a mobile phone with either an infrared port or “CompactFlash Conneivity Kit”. These are relatively quick and offer rapid access to external information in a much more readable fashion than on a cellphone screen. Similarly, they allow for the sending of written notes where this desirable.

Cell phone Usage

The September quarter IBF Survey of SMEs enquired into the number of businesses which had cell phones, the proportion that had and used text messaging and those which used WAP. The aggregate data are, presented in Table 1 revealing that the majority of businesses do have cell phone technology available but only use it for voice exchange. Just like spaghetti junction in my lounge room with sound system, tv, video etc. For farmers and rural businesses these tools need to be applied to be comparative advantage.

Table 1
Does your business have a cell phone?

Cell phone	Valid Percent
No	19.5%
Yes	80.5%
Text & WAP	2.7%
Text only	14.1%
WAP only	1.3%
Voice only	62.3%
Total	100.0%

A ripple or the turning tide?

Advisors are well positioned to assist clients with these new aids for increased efficiency. The task is not to find an application for a tool but rather to coach users in applying the right tool for the job. The pace of change is going to increase and the competitive edge will increasingly relate to knowledge management. ICT is vital in taking this past the farm gate.

The very real advantage lies in our being able concentrate attention on key performance areas, the data we have on them, and how we organise that aspect of our operations. In some respects this is not dissimilar to the business improvement methodologies that were all the vogue about a decade ago. Now we are in continuing pursuit of productivity gains through ICT solution where these will add value to the operation.

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