

Ethics and the Challenge of ICT: Advisory Note for Users and IT Professionals

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Abstract

This paper has attempted to provide advice to IT Professionals and Users on the professional ethical behaviours in the IT industry. It is an advisory note to guide professionals and users to provide a guide on best practices in the areas of software licensing and application, misuse of IT resources and the need to comply with corporate IT polices particularly on securities and the need to avoid creative accounting

Introduction

What is ethics? What is ICT? Ethics is *a set of principles by which people live*. ICT (short for Information communications technology) can be described as *all matters concerned with the furtherance of computer science and technology and with the design, development, installation, and implementation of information systems and applications [1] [3] [4]*. This definition can be further expanded to include the technology architecture which is an integrated framework for acquiring and evolving IT to achieve strategic goals. It has both logical and technical components. The communications [C] component deals with the transmission of electronic signals via specified media channels for extended diffusion of information services across very wide spectrum [.

Ethics and ICT is a new field. The Internet has been a force for bad as well as for good and has generated w whole new set of issues. It is rarely clear what is “right” and what is “wrong” and we should not let issues of personal taste cloud our judgment. Few of the

items to be discussed here include Software Licensing, Pornography, misuse of resources by employees

2.0 Software licences

Is all your software appropriately licenced? Do you have a licence for every PC running Windows and Office? Not sure? Ensure you pay for your

software! If you have an unlicenced copy of computer software you can buy the licence or stop using it and move onto free and open source software.

The most common issue arising from an IT audit in a small organisation is that there are often more copies of a particular piece of software (MS Office is a good example) installed on the computers than there are legitimate licenses. This puts IT professionals and circuit riders in a difficult position. Yes, we can advise you to purchase more but do we follow it up? Do we say “you should” but whisper off the record “but we know you don’t have the funds so it’s OK to wait a bit”? Do we steer you in the direction of open source alternatives (Open Office – free to download and use for example)? Or do we simply forget about it? Ethics deman that you purchase a software on license because software is an intellectual property. Clean and guilt-free living makes you happier!.

3.0 The importance of policies and procedures

Where does HR end and ICT begin? You wouldn’t tolerate someone looking at porn magazines in your office so why should you tolerate someone looking at porn on a computer screen in the furthest corner of the office? Does it do any harm if you don’t know about it? What is porn anyway? What if you access a website and get a dodgy popup (probably means your security software isn’t doing its job either)?

All organizations should have an acceptable use policy and a process for referring and managing issues as they arise. This would also cover abuse of resources (using too much bandwidth for internet radio, spending

too much time booking holidays or concert tickets, accessing inappropriate material).

4.0 Multimedia nightmares – misuse of resources

I once worked in an office where someone sent a copy of a Star War movie trailer (all 25MB of it down a 56k line. It delayed all the emails for a couple of hours but the Managing Director didn't know any different until a client started nagging down the phone (good job they had more than one line). No one got hurt although the ears of the employee took a verbal bashing.

Lots of us enjoy internet radio or video at home. It's great entertainment, relaxing and surely no harm to use as 'background noise' in a busy office. However, if you think what's its doing to your broadband costs (not to mention squeezing bandwidth and slowing down emails and web traffic), is it still acceptable? The implications of file-sharing media (often illegal anyway) and internet media can have significant negative impacts on how effectively your ICT system works and how productive your staff are.

5.0 Creative accounting

Do not you love the first three months of the year? Money to spend quickly and easily. Few IT professionals or providers have been immune to being asked for products and services in a hurry. Even better is the creative accounting 'can you charge me for X now and provide me with Y later'. Yes, it happens. Organizations know, further know, consultants/suppliers know. It always will whilst the ridiculous restrictions on end of year spending continue – spend it now or give it back. Hmm... Do we 'go with the flow' or say no, you can only spend your money appropriately and you'll have to give back what we can't spend sensibly this month?

6.0 The ethical dilemma

If, as your ICT adviser, I keep nagging you as a small, underfunded organisation to buy licences for those 'extra' copies of Microsoft Office on your computers, how long before you get fed up and start working with someone else? Does it change the nature of our relationship? Do I have a moral duty to report you for copyright theft? In the eyes of the law, you are a thief. Should I turn a blind eye and say "I shouldn't really but I will install this copy onto another three PCs"?

Should you let your staff use their internet connection in their breaks to book holidays, order goods online, read the news etc.? Why not? Who is it harming as long as the material isn't offensive and resources aren't being used for harm? What's the balance between a member of staff spending 20% of their day on personal activities and being 20% more effective the rest of the time they're in the office?

7.0 Advice for IT professionals (with some thoughts for senior management)

This is a developing issue and there is no clear guidance available but here are a few guiding thoughts:

1. Remember your first duty is to inform and educate and help organisations make an informed choice and take ownership of decisions. (As a senior manager you need to make that choice/decision.)
2. You should always promote good practice and act in the best interests of the organisation and its mission so highlighting misuse of resources to senior management is sensible.
3. Ask yourself if it's any of your business or whether you're being driven by nosiness rather than a desire to help the organization (your client) or their clients.
4. Ensure you have a clear contract and description of your responsibilities (as a senior manager of a voluntary organisation, just what do you expect from your IT staff?)
5. Ensure you're clear what your legal responsibilities are (you might want to take formal advice on this) and what process you will follow. This would include reporting illegal pornography, money laundering, hacking and evidence or terrorism or bomb-making instructions. You would almost certainly report these issues to the client first. Senior managers would typically dismiss the employee concerned but would be unwise to do so without legal advice.
6. Be aware of privacy implications (and the individuals right to privacy). How hard do you want to dig? Finding an image of someone in a bikini in a web cache does not make the user a pervert.
7. Be careful about making false accusations without any evidence. What if the material reached the system accidentally (a dodgy link on a webpage, a virus, a pop up).
8. If you find material which is distasteful (but not illegal), check the internet use policy. You might just have to accept it's none of your business.
9. Document what happened and cover yourself in writing

10. Respect confidentiality but escalate to your manager (or a trusted colleague if you don't have a manager)

11. Having a good relationship with your client is a big help – discussing concerns informally is much easier than having to commit to writing in first instance (you should commit to writing at some stage)

As IT professionals, we need to be clearly informed what we can and can't do and where to go for help. This article is a step in that process to highlighting the legal ramifications and developing support networks.

As managers in voluntary organisations, we need to be clear what we do and why and where the limits of our responsibilities lie.

8.0 Some things to watch out for

1. Your computers or servers are working very slowly – it could be a number of things but too much internet radio or video is a possible cause (old, badly maintained computers is another one!)

2. You've been hit by a significant viral outbreak but all your emails are screened – has one of your members of staff been surfing where they shouldn't?

3. You (or someone else) finds porn on your computer – are you covered for this? Is it in your acceptable use policy? Do you even have a policy? Now's the time to check...

Someone in your office always has their screen turned away and has a habit of closing down browsers/applications or turning their screen off when someone approaches

9.0 Organizational Concerns

Given the central and essential role of Information and Communication Technologies (ICT) in organisations, Simon Rogerson (1998) has posited that ethical sensitivity percolates decisions and activities related to ICT. In particular organisations need to consider:

- how to set up a strategic framework for ICT that recognises personal and corporate ethical issues;
- how the methods for systems development balance ethical, economic and technological considerations;
- the intellectual property issues surrounding software and data;
- the way information has become a key resource for organisations and how to safeguard the integrity of this information;

- the increasing organisational responsibility to ensure that privacy rights are not violated as more information about individuals is held electronically;
- the growing opportunity to misuse ICT given the increasing dependence of organisations on it and the organisational duty to minimise this opportunity whilst accepting individuals have a responsibility to resist it;
- the way advances in ICT can cause organisations to change their form - the full impact of such change needs to be considered and, if possible, in advance, and the way the advent of the global information society raises new issues for organisations in how they operate, compete, co-operate and obey legislation; and
- how to cope with the enormous and rapid change in ICT, and how to recognise and address the ethical issues that each advance brings.

Thus there is an ethical agenda associated with the use of ICT in organisations. This agenda combines issues common to many professions and issues that are specific to ICT. New advances in ICT and new applications may change the agenda. If organisations wish to secure benefits to their business in the long term and enhance their reputation they have to address a comprehensive agenda. The following steps provide a way in which organisations can establish such an agenda and address the ethical issues arising in the field of ICT.

1. Decide the organisation's policy, in broad terms, in relation to ICT. This should:

- take account of the overall objectives of the organisation, drawing from such existing sources as the organisational plan or mission statement;
- use the organisation's established values, possibly set out in its code of practice, for guidance in determining how to resolve ethical issues;
- set the scope of policy in terms of matters to be covered.

2. Form a statement of principles related to ICT that would probably include:

- respect for privacy and confidentiality;
- avoid ICT misuse;
- avoid ambiguity regarding ICT status, use and capability;
- be committed to transparency of actions and decisions related to ICT;
- adhere to relevant laws and observe the spirit of such laws;
- support and promote the definition of standards in, for example, development, documentation and training; and
- abide by relevant professional codes.

3. Identify the key areas where ethical issues may arise for the organisation, such as:

- ownership of software and data;
 - integrity of data;
 - preservation of privacy;
 - prevention of fraud and computer misuse;
 - the creation and retention of documentation;
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- the effect of change on people both employees and others; and

- global ICT.

4. Consider the application of policy and determine in detail the approach to each area of sensitivity that has been identified.

5. Communicate practical guidance to all employees, covering:

- the clear definition and assignment of responsibilities;
 - awareness training on ethical sensitivities;
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- the legal position regarding intellectual property, data protection and privacy;
- the explicit consideration of social cost and benefit of ICT application;
- the testing of systems (including risk assessment where public health, safety and welfare, or environmental concerns arise);
- documentation standards; and
- security and data protection

6. Whilst organisations have a responsibility to act ethically in the use of ICT so to do individual employees. Those involved in providing ICT facilities should support the ethical agenda of the organisation and in the course of their work should:

- consider broadly who is affected by their work;
- examine if others are being treated with respect;
- consider how the public would view their decisions and actions;
- analyse how the least empowered will be affected by their decisions and actions; and consider if their decisions and acts are worthy of the model ICT professional

References

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