Chapter 6.12
Preventative Actions for Enhancing Online Protection and Privacy

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ABSTRACT

Many citizens rely upon online services, and it is certain that this reliance will increase in the future. However, they frequently lack a solid appreciation of the related safety and security issues, and can be missing out on an essential aspect of awareness in everyday life. Indeed, users are often concerned about online threats, but it would be stretching the point to claim that they are fully aware of the problems. Thus, rather than actually protecting themselves, many will simply accept that they are taking a risk. This paper examines the problem of establishing end-user eSafety awareness, and proposes means by which related issues can be investigated and addressed. Recognising that long-term attitudes and practices will be shaped by early experiences with the technology, it is particularly important to address the issue early and improve awareness amongst young people. However, the problem is unlikely to be addressed via the approaches that would traditionally be applied with adult users. As such, the paper examines information gathering and awareness-raising strategies drawing from qualitative methodologies in the social sciences, whose pluralistic approach can be effectively applied within school contexts.

INTRODUCTION

Many citizens in developed countries are now dependent on online services to some extent. Few individuals in any modern society would be able to 'survive' today without utilizing online services in one or other form on a regular basis. Our personal lives are controlled to a large extent by cellular communication technologies, email, and other Internet services. Few employees in the corporate and business worlds today would not be classified as information workers, meaning that these employees are engaging with online systems to conduct their day-to-day tasks. The fact that

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users often have to manage dozens of user-IDs, passwords and PINs (Ross, 2003) to control access to various types of technology (e.g. websites, mobile devices, bank cards, personal and company PCs) demonstrates that most people today have a strong reliance upon online services.

As more world citizens are making use of online banking, Internet shopping and online social networking, more personal and financial details become accessible. In 2006 it was reported that 178 000 people in Britain alone fell victim to identity theft, with the problem of identity fraud costing in the order of £1.7 billion a year (Macintyre, 2007). These facts make it clear that online safety or eSafety is an international problem. It is not only a workplace problem, but a personal one too. As well as the adult population, children are introduced to online services at a very young age. Many children in the developed world have got a cellular phone and a bank card, with a large proportion also active on online social network sites where lots of information, including personal, is shared and exchanged daily. In addition, young people are more active in peer to peer file sharing than the older generations. If one considers the amount of illegal music and video files that are shared and distributed amongst young people, the situation is definitely of great concern (Mitropoulou & Triantafyllidis, 2008).

It is particularly concerning that the cavalier attitudes established at a young age might engender similar lax practices in later life. Once they develop into the working world, they are dealing with corporate, rather than personal, information, where significantly more is at stake. The corporate world has already reacted, as a study from 2006 pointed out that employers are less likely to hire such risky individuals, indicating that someone with "relaxed attitudes toward illegal downloads could put future job opportunities at risk" (Bush, 2006). Therefore, although more citizens are getting more dependent on online services by the day, ignorance of eSafety and bad online habits can definitely inhibit the proliferation of secure online services and safe information sharing. It is imperative that education and awareness-raising efforts are made to increase the levels of eSafety by improving the behaviour of people using online services and systems. This appropriate behaviour should form part of an eSafe culture being cultivated amongst all online citizens. However, by the time users enter the workplace it may already be too late. Companies have realized that an increase in information security awareness and skills are not addressing the problem satisfactorily. Something is needed to change the behaviour of their future staff at an earlier stage. To quote the 2008 Information Security Breaches Survey from the UK's Department for Business Enterprise and Regulatory Reform: "Only when behaviour changes, do businesses realise the benefits of a security-aware culture" (PriceWaterhouseCoopers, 2008). The question is; *how can this be done effectively?*

PHYSICAL AND FINANCIAL SECURITY – AN ANALOGY

Most people, even children, have developed some customs to protect and secure their personal finances. People realize that money is an asset that needs to be protected. They also realize that many threats are looming that might result in financial harm to an individual. Therefore, most individuals act and behave in a certain manner to ensure their financial assets are properly protected. This secure way of behaviour is taught to youngsters by their parents or guardians from a very young age. Even small children will show some discipline and behave in a relatively secure manner to protect their personal funds. It is fair to suggest that most people have got some form of *financial* security culture. This culture is definitely carried over from one generation to another and normally the same principles that apply at a personal level are also carried over to the workplace and/or social environments. Such a financial security culture also dictates the behaviour and actions of individuals.