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701 E. Chocolate Avenue, Hershey PA 17033-1117, USA
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ITB7105

Chapter XVI

Self-Employed and Small-Business Computer Users: Challenges and Directions for Progress

Phil Carter
Auckland University of Technology, New Zealand

INTRODUCTION

The new convergence of computing, communications, and media are enriching people's lives in delightful and diverse ways. Increasing numbers of self-employed people and small businesses are taking up the new applications and opportunities to assist them in their work even though the computer is not the main focus of their business. However, these users face many challenges and difficulties. Most are naive to the use of computers and world of IT and they generally differ from computer users within larger organizations because they face IT on their own with the limited resources they can organize and pay for.

The main aim of this chapter is to describe interventions and perspectives that help self-employed and small-business computer users to use computers to further their life and work purposes. There are also important and useful messages for computer companies, system designers and developers, and computer sales and support people. But the main orientation here is on the users and what they can do to help themselves given the current situation they face and the probability that from their point of view, system usability, information security, and support will not fundamentally change in the near future.

This chapter appears in the book, Social Responsibility in the Information Age: Issues and Controversies by Gurpreet S. Dhillon.

The first section of this chapter looks at why we need to address this problem and suggests how we might do this. The second section presents data from several long-term, in-depth studies done with individuals that illustrates the situation. Interventions that were tried in these studies are also presented. These are discussed in the section following and directions for progress and recommendations are proposed.

BACKGROUND

Self-employed and small-business computer users are often new to the world of computers and IT. They face many challenges, most of them on their own. They have to make decisions about whether to invest in IT or not. They have to decide what hardware and software to buy. They have to decide what to learn and how to learn it. And when things go wrong, they have to either work out how to fix the problem or identify those who could solve it. The more they use and benefit from IT, the more vulnerable they can become.

The situation presents a number of important and obvious messages for computer companies, system designers and developers, and computer sales and support people. More effort is required to make systems as usable as possible. Giving power and control to the end user and aiming for security need to be priorities. Comprehensive support is essential and needs to include a number of approaches such as clear on-screen help facilities and help desks.

However, the end user can not wait for an ideal world to eventuate. If there were no new developments, then usability, security, and support would improve. However, computer designers and developers surge excitedly ahead developing new applications and devices. Complexity increases (Norman, 1997) and it becomes hard to imagine usability, security, and support suddenly improving (Druffel, 1997). From the users' perspective then, what can be realistically done with immediate benefits? One approach is to look at what users can do to help themselves which is the main focus of this chapter. However, whatever the approach, clarity around what occurs when people use or think about computer systems will be beneficial (computer behaviour).

Studies of Computer Behaviour

There have been different approaches to the study of human behaviour with computers. Survey instruments have been popular. These typically ask respondents to rate the degree of fit of statements such as, "I enjoy computer work" and "I'll need computers for my future work" (Gardner, Discenza & Dukes, 1993; Woodrow, 1991). These studies often make the assumption that the computer is one "discrete" thing to which there is one clear attitude. However, computers are no longer monolithic systems. There are many different applications, such as word processers, email and browser applications, accounting packages, and multimedia applications that users can have quite different experiences of and attitudes toward.