



Chapter 4

Trends in Information Technology in Small Businesses

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It is widely recognized that IT has made considerable inroads into large organizations, such that the majority now rely on IT for their day-to-day operations. The position regarding small businesses is less clear as they face somewhat different opportunities and constraints. In particular, the approach to the introduction of IT into small firms in less developed national IT environments has received little attention in the literature. This chapter reports on the results of a survey of the approaches adopted by small firms in Greece. The findings are analyzed in terms of previous experience with computers, factors influencing the decision to adopt IT, advice received, staff involvement in IS development, training, and problems encountered and the solutions adopted. The results are compared with a study performed five years earlier in order to identify recent trends.

During the last 20 years, there has been considerable growth in the number and prosperity of small businesses (SBs) throughout Western economies, including Europe (Sengenberger, Loveman and Piore, 1991). This has been noticeable regardless of the political complexion of the national government. This growth, which is in line with the teachings of management theorists such as Drucker (1989) and Porter (1990), has been seen in both the manufacturing and services sectors. Across Europe, SBs are employing an increasing proportion of the total working population and are becoming increasingly identified with new products and new production processes, thus contributing to exports,

national wealth and competitiveness. Many governments (at national, state and local levels) have recognized the benefits of SB growth and have attempted to provide a relevant support infrastructure in terms of local enterprise agencies or small business development centers (Gibb and Manu, 1990). SBs comprise the vast majority of businesses throughout Europe (taking the widest definition of a business, including all the self-employed), counting for more than 90 percent of businesses in the UK, Italy, Germany, Belgium, Holland and Greece.

Information technology (IT), ranging from mainframe-based transaction processing systems to office information systems based on local area networks, and ranging from computer-integrated manufacturing to communications-based applications such as videoconferencing and electronic mail, has made considerable inroads into large organizations. The majority of such organizations now rely on IT for their day-to-day operations. This diffusion of technology has been credited with significant cost reductions, gains in productivity and organizational effectiveness plus, in some cases, a definite competitive advantage (Earl, 1989). While considerable successes have been achieved, there have also been a number of technical and commercial disasters. Angell and Smithson (1991) argue that IT needs to be viewed in terms of both opportunities and risks, where the risks may outweigh the promised opportunities.

There is no reason to believe that these issues apply any less to small enterprises than to the largest multinational. Meyer and Boone (1987) outline numerous cases where small companies have benefited through the use of external databases, office automation applications (e.g., spreadsheets), and project management software. The general trend away from costly mainframe computing, based on in-house programs, towards cheaper user-friendly microcomputers, with standard software packages, means that sophisticated tools are becoming increasingly available to SBs, without the need for advanced programming skills.

However, it is less clear to what extent these advantages are realized in practice by firms in less developed national IT environments such as Greece, or how such firms approach IT in order to reap the rewards. In this chapter, we report on a survey started in the summer of 1989 that collected information on the introduction and use of microcomputers in Greek SBs. We concentrated on microcomputers since this is the technology that dominates this sector. We wished to 'paint a picture' of the situation confronting SBs, including their previous experience with computers, the factors that influenced their decision to adopt IT, the type of advice they received, the amount of staff involvement in IS development, and the type of problems they frequently encountered.

In order to identify recent trends, the results are compared with an earlier study which surveyed SBs in Greece, Denmark and Ireland in 1984 (CEC 1985). This latter study examined the approaches taken to the adoption of IT by 50 companies in each country.

Although our study uses different firms, we carefully selected the firms and designed the interview questionnaire in such a way as to render the studies as comparable as possible.

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Concerning the use of IT, Heikkila, Saarinen and Saaksjarvi (1991) propose three major differences between SBs and large organizations:

- SBs tend to use computers more as tools and less as a communications medium;
- the few stakeholders involved in SBs mean that there are likely to be fewer problems in terms of organizational politics;

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