Chapter 6
An Investigation into the Success Factors of Small Software Companies

J.J. Reen
National University of Ireland, Galway, Ireland

Michael Lang
National University of Ireland, Galway, Ireland

ABSTRACT

This chapter is concerned with the study of success factors in small software firms. The decision to focus specifically on the software sector, as opposed to high technology firms or the generic small firm, is because the authors believe that there are elements in the operation of a software business that are unique to that domain and do not have equivalents in other industries. Interviews were carried out with six owner/managers of small to medium software firms. The interview data was interpreted using a qualitative analysis approach based on the principles of grounded theory. A number of factors emerged from this analysis, a few of which have parallels in the generic small firm literature (e.g. market positioning, export orientation, distribution channel), as well as a few others which appear to be specific to the software industry (e.g. remote accessibility, ability to demonstrate/trial at global reach with minimal expense, software reuse, etc.).

INTRODUCTION

The high technology industry in general is characterised by certain phenomena which distinguish it from many other fields such as retail, traditional manufacturing, and the services sector. These phenomena include such issues as:

- It is a high-velocity industry characterised by technological disruption;
- Talent can become scarce and prohibitively expensive;
- Low barriers to entry constantly attract competitors;
- Product life cycles are the shortest of all industries (Fine, 1998, p.239).

DOI: 10.4018/978-1-4666-4753-4.ch006

This paper is specifically concerned with the study of success factors in small software firms. It is of course likely that the above factors apply also to software, it being a high-technology enterprise, just as it is likely that the success factors which influence industry in general also apply to software. However, our particular interest was to investigate whether there are any distinct success factors that apply specifically to software firms, or whether there are factors which only have minimal influence on small firms generally but have an exaggerated effect in the world of software.

Factors relating to small firm performance have been the subject of extensive research but the vast majority of the research has related to the generic small firm. Of course there is no reason to suspect that the significant body of theory that has evolved in relation to the generic small firm does not apply to small *software* firms, but our starting premise was that the business of software, being radically different in some regards from traditional business pursuits, may have associated with it at least some theory that either goes beyond or contradicts generic theory. This area has not been well represented in the small business literature, or in the business literature in general, which makes the tacit assumption that the well-established principles that govern business at large apply in equal measure to software. Although there are many professional software magazines and journals dealing with the design of software, by and large they do not concern themselves with software as a *business*. There have been a handful of books published over the last decade which have begun to address this issue but these are based on the individual experiences of well-known industry figures (e.g. Cusumano (1994), McGrath (1994), McHugh (1999)) as opposed to methodical empirically-grounded studies. Our primary research objective was therefore to firstly identify the key success factors of small software companies, and thereafter to investigate the following issues:

1. Whether the identified factors correspond to generic success factors in the general small firm literature?
2. Whether some generic factors have an exaggerated or diminished influence in the software domain?
3. Whether there are certain factors unique to the software domain, over and above generic small firm factors?

Our rationale in deciding to concentrate on small software firms is because of the important contribution that small firms in general make to employment and wealth creation. This contribution has been widely documented; in Ireland for example, employment in small businesses grew by approximately 79% over the ten-year period from 1995 to 2005, making up 54% of private sector non-agricultural employment, with 97% of all businesses employing less than 50 people (Small Business Forum Report, 2006). European data (European Observatory for SMEs, 1997) outlines similar trends in the formation of small-to-medium enterprises (SMEs). It finds that such firms create more jobs than larger enterprises, though the rate of liquidation of SMEs is also high.

Another important aspect of the small business sector is its resilience in the face of economic downturns. Canadian data (Scotia Bank, 2003) points to this and to the counter-cyclical nature of small businesses in the labour market. In the early 1990s, even when key areas of domestic demand such as housing were contracting, employment by small business was resilient. From 1990 to 1993 when private-sector payrolls were shrinking, micro businesses (i.e. enterprises with less than five employees) continued to hire. Among the larger players in the small business sector — those with 5 to 49 staff — job losses were just three-quarters of the employment declines recorded for mid-sized enterprises with 50 to 499 employees. In addition, sustainable employment growth resumed among the bigger small businesses more quickly than it did among larger firms. In Europe,