Chapter VIII
Enabling Creative Virtual Teams in SMEs

Avril Thomson
University of Strathclyde, Scotland

Angela Stone
University of Strathclyde, Scotland

William Ion
University of Strathclyde, Scotland

ABSTRACT

Many SMEs struggle to support virtual teams effectively within distributed design projects, hindering their creative potential. It is not uncommon for SMEs to have tools and working practice imposed on them by collaborating multinationals to meet the requirements of the multinational. SMEs however, need to develop their own working practices to support effective, virtual team design within their own organisation or extended design team. This chapter describes, through a series of four case studies, how a typical SME achieved successful virtual team working within their organisation. A "strategy for enabling creative virtual teams" encompassing the processes, methods, and tools developed and implemented within the company to achieve this success is presented. Generic and transferable findings drawn from this two year study aimed at helping other SMEs, form the conclusion of this chapter.

INTRODUCTION

This chapter is concerned with supporting creative virtual teams within small and medium sized enterprises (SME). Specifically, it focuses on virtual teams formed to carry out the creative process of design in a distributed manner. Many issues affect creative virtual teams. It is essential that virtual teams within the SME environment overcome these issues and operate efficiently and effectively thus providing the company with a successful, competitive edge. Initially, this chapter

investigates and identifies specific issues facing creative virtual teams within the SME environment. A strategy aimed at overcoming these issues is then described and evaluated.

Readily available and affordable groupware, conferencing tools, and internet technologies such as IP-phones and Skype™ mean that sharing information and data within virtual design teams is simple and affordable. However, many SMEs struggle to support virtual teams effectively within distributed design projects, hindering their creative potential. Furthermore, as part of the extended design team of large multinational companies it is not uncommon for SMEs to have tools and working practice imposed on them to meet the requirements of the multinational. SMEs however, need to develop their own working practices to support effective, virtual team design within their own organisation or extended design team. The success of SME is vital to the European economy as they account for 93% of enterprises in Europe (Observatory of European SMEs, 2002).

This chapter describes, through a series of case studies, how a typical SME achieved successful virtual team working within their organisation. A "strategy for enabling creative virtual teams" encompassing the processes, methods and tools developed and implemented within the company to achieve this success is presented. In total, four live case studies, spanning a 2 year period, are described, two initial studies focus on current virtual design team practice clearly highlighting issues and areas for improvement, leading to the development of processes, methods, and tools which form the support strategy. Its evaluation through two further live industrial case studies is then described.

The case studies themselves together with the processes, methods, and tools developed by this company could be adopted by other SMEs directly, to achieve the same success. Generic and transferable findings drawn from this study aimed at helping other SMEs form the conclusion of this chapter.

BACKGROUND

As companies grow and expand, they may shift from a single office to a multioffice environment, often spread over a wide geographical area. If this happens, it is vital that unity is maintained in the products or services offered. In order for the company to grow in the same direction, knowledge and resources need to be shared throughout the company, rather than being limited to individual offices allowing each office to take on bigger, more complex projects than they might be capable of if limited to local resources. This can be achieved through the formation of virtual teams, allowing key skills and specialisms to be exploited. Benefits often documented by companies adopting virtual working within the design process include (Top Gear, 1996):

- Improvements in the flow of work allowing companies to move and react faster
- Product development lead time, time to market and costs reduced while maintaining or improving quality
- Quality failure costs reduced
- Sharing of information and expertise between organisations/departments improved
- Relationships between manufacturers and suppliers strengthened
- Efficiency of day to day dealing with customers improved

However, the practice of virtual design does not always meet its full potential (MacGregor, Thomson, & Juster, 2002) and more often than not, in virtual design projects, designers do not feel entirely satisfied with the product or service provided. Designers are often discouraged from

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