Chapter V

Using Spreadsheets as a Decision Support Tool: An Application for Small Businesses

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ABSTRACT

This chapter discusses a model that has been set up to assist small businesses in the decision-making processes associated with setting up a Web site by which they can interact with their customers. Specifically, the chapter addresses the use of a spreadsheet to support decision-making processes in relation to the level of capital needed to devote to the Web site and who should be used to develop it. The chapter describes the process followed, from the initial SWOT analysis used to collect information about the business to the decision-making process modelled in the spreadsheet.
INTRODUCTION

Spreadsheets have been used as a decision support tool to assist businesses. This chapter discusses a model that has been set up to assist small businesses in the decision-making processes associated with setting up a Web site by which they can interact with their customers. A particular aspect of the model, the decision processes needed to determine the cost of the Web site and the skills needed to implement it, are described here.

A Model for Small Businesses to Interact with Customers Using the Internet

Burgess and Schauder (2000a) identified a number of steps that are common to models that can be used to assist firms in identifying strategic IT ideas (such as Porter and Millar, 1985; Barton and Peters, 1990; Osterle, 1991) and/or e-commerce opportunities (Marchese, 1998; Al Moumem and Sommerville, 1999). These steps included a need for a thorough business investigation. This is typically the first step in any model and needs to occur to increase the likelihood that decisions to be made later in regards to Web design and content are based upon a sound knowledge of the firm. Typical analysis tools used at this stage are Critical Success Factors (CSFs) and strengths, weaknesses, opportunities and threats (SWOT) Analysis.

The SWOT analysis has been traditionally used in the marketing or economics areas of the business. An analysis is performed on the various areas of the organisation to identify current or potential strengths and weaknesses when compared with other competitive forces. From this analysis, the organisation identifies actual or potential opportunities to gain strategic advantage or threats to the organisation’s well being. Actions taken by the organisation to take advantage of an opportunity are proactive. Actions taken by the organisation to combat a threat are reactive (Kotler et al., 1989).

E-commerce is seen as a way in which small businesses can compete with large businesses (DIST, 1998; Penhune, 1998), but small businesses have little time or resources to address potential changes to their current activities. Many lack the availability of technical expertise and avoid proper planning techniques to help them take advantage of opportunities that may present themselves (DIST, 1998; Engler, 1999; Conhaim, 1999; Conroy, 1999). A number of attempts have been made to set up models to assist small businesses in the adoption and use of electronic commerce, but many of them lack sufficient detail to explain how they operate and how each step of the model links with the next to provide a complete solution. In fact, small business owners find themselves confronted with information from many
ERP + E-Business = A New Vision of Enterprise System
Betty Wang and Fui Hoon (Fiona) Nah (2001). Managing Internet and Intranet Technologies in Organizations: Challenges and Opportunities (pp. 147-164).
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