Chapter XIV
How to Align Software Projects with Business Strategy

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ABSTRACT

Small and medium-sized enterprises (SMEs) are facing a great challenge that consists of using all the opportunities technology can offer in order to help improve their productivity, geographical reach, and reinvent or complement their business models. Those companies that are not capable of using technology in order to become more competitive will face new threats because nowadays SME companies need to compete with companies not only in the same geographic area, but also need to compete with new products and services that change business rules faster than ever. The main purpose of this chapter is to provide a methodological framework to promote strategic alignment and improve execution through a better communication and understanding about IT projects that will help entrepreneurs and managers to make better IT investment decisions in order to offer a competitive edge to their companies through a better management of the strategic IT portfolio.

INTRODUCTION

Small and medium-sized enterprises (SMEs) are facing a great challenge nowadays because of all the great and new opportunities they have to use technology to improve their productivity, geographical reach, and reinvent or complement their business models. It is also true that there are also new threats because nowadays SME companies need to compete with companies not only in the same geographic area, but also need to compete with new products and services that change business rules faster than ever; and those companies that are not agile enough to change will face big problems in the long term.

According to Venkatraman and Henderson (1998), the information revolution challenges the traditional business logic in three distinct yet interdependent vectors: (1) the customer interaction vector, which deals with the new challenges and
opportunities for company-to-customer interactions; (2) the asset configuration vector that focuses on firms’ requirements to be virtually integrated in a business network; and (3) the knowledge leverage vector is concerned with the opportunities for leveraging diverse sources of expertise within and across organizational boundaries. Today, e-business enables what could be called virtual organizing, and the consequences are new forms of doing business; those companies that do not consider and understand these proposed vectors will not take full advantage of technology to boost a competitive advantage.

Today, the world is smaller and faster than ever. The small accounting firm in Texas that used to do tax returns for a medium-sized company in Houston might be competing with accounting firms in California, Nevada, or even outside the U.S. This is because many accounting firms are using new technology like Web-based workflow software, voice-over IP communications, or video conferencing to eliminate the geographic barriers, and these companies could be as far away as Bombay, Manila, or Shanghai.

Technology can be a really important business drive and a critical tool (Rathnam, Johnsen, & Wen, 2004) if it is used to leverage the most relevant business opportunities of every company. That is why the topic of software project alignment with business strategy should be a core discussion within all SME executive teams. To lead a better discussion and to standardize the process of software project alignment and prioritization, this chapter will provide a practical framework to identify, rank, and align the projects in order to achieve a greater strategic impact through the selection and execution of appropriate projects.

A challenge facing the SME is the lack of sufficient resources to be able to accept all projects or even to execute some of them simultaneously because of scarce financial, human, or technological resources. SMEs should focus all their efforts on becoming more profitable through operational excellence, superior customer satisfaction, or whatever core competence they count on; but they need to have the clear understanding that IT is a really important tool, and if it is not used correctly, this could cost them an opportunity that the competition might be willing to take advantage of. In simple terms, it means that the SME should have a clear understanding of which project to execute first and what impact it could have on the business if that project fails or is delayed, and which projects to postpone since some companies might want to implement a critical project when there is less business impact due to business cycles. You do not want your point of sales terminals having technical troubles during your peak month of sales. Another case might be when companies modify their business models, for example, changing to a pure e-business strategy for a particular product, and if the people are not trained, the customers are not informed, and the operating procedures are not clear, you might want to postpone the project.

As might be clear to you, there are many factors to consider as to which project to execute first. Managers should not make decisions based only on financial aspects like the project cost or its net present value (NPV), or based only on a strategic reason if the company cannot afford its cost, or if it is not the right time to choose that project. According to the work of Barbara Farbey and colleagues (Farbey, Targett, & Land, 1994), the search for a single technique that can deal with all IT investment projects is fruitless. That is why we provide a framework that includes five different perspectives that will help managers and company owners make better investment decisions regarding IT investments. The decisions about which information systems projects should be implemented are frequently determinant of business performance and are not only able to change the competitive positioning of the companies but also can modify the competitive structure of the industry, especially when a particular industry relied heavily on the use of information systems (Laurindo, 2006). The main objective of this