Chapter XIII

The Financial Appraisal Profile (FAP) Model for Evaluation of Enterprise-Wide Information Technology: A Case Example

Frank Lefley, University of London, UK
Joseph Sarkis, Clark University, USA

Abstract

Enterprise-wide information systems adoption by organizations has become common place. Even with the benefits offered by such systems, there have also been many failures. One of the important reasons for these failures is inappropriate project evaluation and selection. In order to reduce the level of project failures, we introduce an innovative methodology, the financial appraisal profile (FAP) model, which seeks to address some of the issues and limitations posed by standard appraisal and evaluation approaches for strategic technologies and programs. By making the right decision in the first place and involving senior managers in the appraisal process, the organization will be better placed to achieve project success. The adoption of
a management team approach to investment appraisals will not only enhance the information base but will also result in greater managerial commitment to a project. We believe by adopting the FAP model greater awareness to strategic issues and goals will also be achieved, which should lead to a more focused top management team—with all members pulling in the same direction.

Introduction

Over the last two decades, we have seen growth and adoption of enterprise-wide information systems. The benefits of these enterprise integrative systems are likely to be felt by companies with a global outreach and with many business units, causing Fortune 100 firms to invest heavily in these systems with the goal of gaining or maintaining strategic advantage. The market for these systems has started to shift to medium and small-sized organizations. Even though there has been a stabilization of the enterprise information technology market since the bursting of the Internet Bubble, the market within the manufacturing sector is forecasted to rebound through the next few years and grow from $8.9 billion in 2002 to $11.9 billion by 2007 (ARC, 2003). The market for non-manufacturing, service, and government agencies, for these types of systems also represents significant opportunities for growth and investment.

These systems are expensive, with prices ranging from tens of thousands to millions of dollars per implementation. A survey of 63 companies with annual revenues ranging from $12 million to $63 billion indicated that the average implementation cost $10.6 million and took 23 months to complete (Umble & Umble, 2002). Thus, the budgetary pressures on organizations are great when seeking to invest in these technologies. With the many benefits of enterprise information technology, there have also been significant failures (Barker & Frolick, 2003; Brown, 2001; Stedman, 1999). Reasons for failure are manifold, with one of the more important reasons including poor planning and inappropriate selection of vendor and system (Umble & Umble, 2002). Thus, an appropriate approach to appraisal of these systems overall and specific selection should be a strategic exercise involving multiple levels and functions within the organization. Thus, the strategic justification problem is very much relevant, considering the short and long-term sustainability of the organization may be put at jeopardy with inappropriate and detailed evaluation of these systems.

Thus, in this chapter, we expand upon an innovative methodology that seeks to address some of the issues and limitations posed by standard appraisal and evaluation approaches for strategic technologies and programs. The procedure and models are meant to help integrate the organizations disperse decision vectors and influences