Chapter I
Introduction to Very Large IT Projects

ABSTRACT

This chapter classifies the purpose of project management in IT projects as a means of introducing the topics covered in the book and demonstrates how a successful project manager must simultaneously manage these four basic elements of a very large IT project (resources, time, money, and scope). It also explains the impact of very large IT projects on business and the wider society today.

INTRODUCTION

Evidence that the size of an IT project is used to determine the extent to which project management practices are formally applied does not only come from the fact that sizing the project is a ‘best-feel’ technique among practitioners but also that it can be a scientifically derived factor. The size of an IT project guides the project manager through the application of project management practices helpful to that particular project (Reiss, 2007). Thus, embarking on a very large IT project (VLITP) requires that the host organization be aware of its “a priori” chances of success. Statistics of VLITPs failure rate provide a good measure of those chances (Cross, 2005). They are not shown to demoralize executives and to deter them from undertaking VLITP. This book is written to make project managers ponder on how to approach this endeavor so as to maximize their chances of success.
A successful project manager must simultaneously manage the four basic elements of a project: resources, time, money, and most importantly, scope (Archibald, 2003; Brown and Jones, 1998; Mochal and Mochal, 2003). The following elements of VLITP are interrelated and must be managed effectively for success:

- Resources (people, equipment, and material)
- Time (task durations, dependencies, and critical path)
- Money (costs, contingencies, profit)
- Scope (project size, goals, and requirements)

General IT project management literature emphasize the need to manage and balance the first three elements above, but the fourth element (scope) is most important for VLITP—the primary focus of this book (Kerzner, 1989; Patel and Morris, 1999; Webster, 1993; Youker, 1989). All VLITPs are expected to accomplish objectives based on project scope, restricted by the budget—of time and money. It is absolutely imperative that any change to VLITP scope has a matching change in budget, time and resources. Usually, scope changes occur in the form of “scope creep”. Scope creep is the piling up of small changes that in a normal IT projects are manageable, but very significant for VLITPs. Within different stages of a VLITP minor changes can become a major addition without the equivalent adjustment in the overall project budget. Such situation can be best handled in a VLITP by ensuring any requested change—regardless how small—is accompanied by approval for a change in budget, schedule or both. VLITP cannot effectively manage the resources, time and money unless the project scope is actively managed (Bergeron and Bégin, 1989). When the project scope has been clearly identified and associated to the timeline and budget, the management of the project resources can begin. These include the people, equipment, and material needed to complete the project.

CLASSIFICATION OF IT PROJECTS

Project management practices help ensure that projects can be completed in a structured fashion – on time, on budget and producing expected results. Table 1 helps us to understand why one size may not fit all IT projects justifying the need for all IT projects to have a minimum level of project management strategy to ensure its success. The author refers to this classification (see Table 1.1) throughout the book to remind readers that project management process should not overtake the IT project and reiterates that applying the project management practices must consider differences in project size. When applied literally, Table 1.1 provides guidelines on possible roles of various participants in an IT project, dependent on
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Peter Smith and Elayne Coakes (2012). Organizational Learning and Knowledge: Concepts, Methodologies, Tools and Applications (pp. 197-207).
www.igi-global.com/chapter/exploiting-support-innovation-change/58091?camid=4v1a

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