

A Project Management Methodology

Philip G. Moscoso
Jaume Ribera

Project management is as old as the Earth since its genesis may be considered the first project ever. Probably, that is why many people consider project management to be a matter of common sense and experience. However, why then do so many projects fail to comply with their schedules, budgets and objectives? How can we improve the way we manage our next projects to increase their chances of success?

Given this challenge, the main purpose of this technical note is to offer a project management *methodology* that managers can use as a guide. The note therefore aims to be used mainly as a reference document. The methodology we present covers the main phases of the *project life cycle* and has been successfully used in industrial practice. We supplement the methodology with *tools* that can be useful in the various phases of the project life cycle and we offer practical tips for implementing the methodology successfully in companies.

1. Project vs. Process: Key Definitions

Conceptually speaking, the activities that take place in a company can be classified in two fundamental categories: processes and projects. A process can be defined as a sequence of interconnected activities with a repetitive nature and prolonged execution over time—i.e., activities that are performed again and again in the same way for a considerable amount of time. In contrast, we would call it a project if the activities are performed only once in a particular way and, after the project objective has been achieved, the operating system is dismantled.¹

¹ This does not mean that the resources (for example, employees) are no longer operational, but simply that the project team that was responsible for the project no longer maintains the specific configuration that was intended for that specific purpose.

This technical note was prepared by Professors Philip G. Moscoso and Jaume Ribera. October 2013. Revised in November 2015. All of the material contained in this document has been developed by the authors unless otherwise stated. This technical note was written with the support of the Eurest Chair of Excellence in Services, IESE.

Copyright © 2013 IESE. This translation copyright © 2013 IESE. To order copies contact IESE Publishing via www.iesepublishing.com. Alternatively, write to publishing@iese.edu or call +34 932 536 558.

No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet, or transmitted in any form or by any means - electronic, mechanical, photocopying, recording, or otherwise - without the permission of IESE.

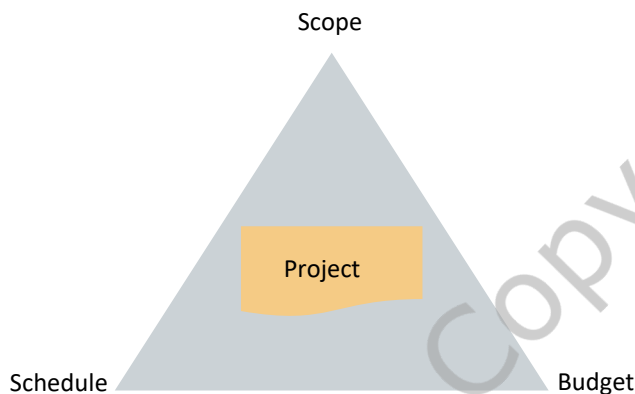
Last edited: 8/6/22

A project is therefore defined as having:

- A specific and unique *objective* or purpose, which the sequence of activities is intended to achieve.
- A fixed *duration*, with planned start and finish dates.
- Limited *resources*, including both material resources and labor or economic resources.

A project has three main aspects: (1) a *scope* (what is included in the project and what is not, as well as its quality and specifications), which should be achieved within (2) a *schedule* (maximum duration) and with (3) a fixed *budget* (execution cost) (see **Figure 1**).

Figure 1
Main Aspects of Project Management



In practice, these three aspects of management tend to be in competition with one another. For example, project execution can be expedited either by reducing the scope or by increasing the budget (more resources). As we shall see later, the project manager's job therefore involves striking the right balance between these three aspects in each case. We shall therefore define project management as follows:

"The application of knowledge, competencies and management techniques to the execution of projects. First, it involves deciding which projects should be carried out (generally, in order to achieve the organization's strategic objectives). Second, it involves organizing and managing resources in such a way that the objectives (scopes) of the selected projects can be reached within the given time and budget constraints."

This definition generally takes for granted that *project management* aims to ensure:

- customer satisfaction and a positive impact on project participants (satisfaction, retention, personal and professional development, etc.);
- positive business results (ROI, growth in market share, profit growth, etc.) or results that will benefit the company's future (development of new technologies and competencies, etc.).



Although every project is different, in **Exhibit 1** we present a number of classifications that we consider to be useful in that they define certain characteristics that have an effect on how projects should be managed. For different types of projects, it may therefore be advisable to assign different manager profiles, to use different types of methodologies, techniques or procedures, or to simply adjust the buffers (time and money), for example.

2. Why Do We Need a Project Management Methodology?

Most managers will have managed projects during their professional career; in fact, some managers spend most of their time managing projects. Yet many people manage projects without being fully aware of it, because, for example, they may not explicitly follow any methodology. In fact, it wasn't until the 1950s that systematic and specific methodologies for managing projects were defined, drawing on existing practices in civil engineering, industry and the military context. As in other areas of management, over time it has come to light that there are strong arguments in favor of using a project management methodology (although, as in other areas of management, there is no consensus as to *which* methodology is best).

As we said earlier, projects are different from processes in some respects, and project management must take these particularities into account. In a project, for example, we are doing things for the first time. Luckily, the fact that each project is unique in its configuration does not mean that there are no similarities among them. The main benefit of using a project management methodology, therefore, is that it focuses on similarities and on finding opportunities for improvement that can be generalized for use in other cases.

The scope of the potential for improvement in project management can already be suspected based on the fact that most projects come to an end without meeting the initial established requirements in terms of scope, schedule and budget. The construction of the Eurotunnel under the English Channel, for instance, was completed two years later than planned and cost \$17.5 billion, whereas the initial budget was \$7.5 billion. As we will show, there are many reasons for such deviations, but very often they are attributable to a lack of methodology and systematization in project management. As we shall explain later, the adoption of a methodical, systematic approach is not necessarily incompatible with the exercise of creativity or autonomy by project participants.

A further argument in favor of following a project management methodology has to do with the way in which many companies are traditionally organized. Whereas companies tend to be divided into functional departments, projects often require cross-functional cooperation and coordination. A clear methodology, backed by management, will usually help overcome this type of barriers.

Another related aspect that benefits from the use of a methodology is the interconnection of activities. This interconnection may be more complex or less well-known than it is in the case of processes; as such, a methodology helps improve planning and the coordination of efforts. Along these lines, good communication—both internal and external—is important in project management, and a methodology can help make it stronger and more systematic. Likewise, a methodology usually also improves the monitoring of how a project is progressing, both for team members and for company management.

A last point in favor of using a methodology has to do with project results. Most projects are meant to bring about a change in the company with, for example, a new product, an upgrade to software applications or a process change. But without a good management methodology that encompasses everything up to a project's successful completion, there is a greater risk that the project will fail to bring about the desired change.