

## First Principles of Project Management – Part 1

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### Editor's note:

This paper sets out a philosophical discussion of the fundamentals of project management and earlier versions of this paper generated some vigorous discussion eight years ago. Unfortunately, some of these concepts that emerged appear to have got lost in the mists of time since then. So, we feel it is time to bring the paper back out into the open, dust it off so to speak, bring it up to date, and re-expose *The First Principles of Project Management*.

### Introduction

"Principles that are established should be viewed as flexible, capable of adaptation to every need. It is the manager's job to know how to make use of them, which is a difficult art requiring intelligence, experience, decisiveness and, most important, a sense of proportion."  
Henri Fayol, General & Industrial Management

Project management is a complex activity with multiple dimensions. Depending on the type and class of project this management activity can be very complex, not least because the typical project environment echoes the "fractal"<sup>ii</sup> form of the common garden snail's shell, see Figures 1 and 2. That is to say, the same approach can be applied at every level of the process hierarchy and only the size and branch of the activity changes.



Figure 1: Sea shell<sup>iii</sup>

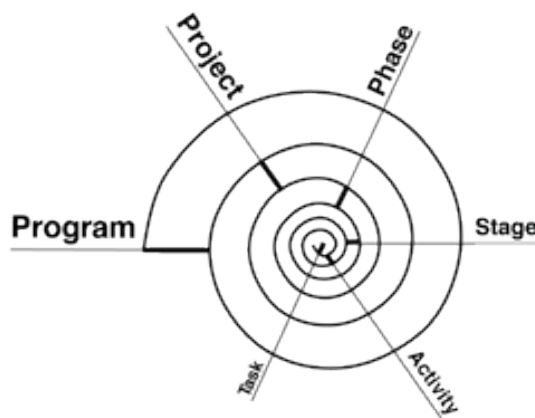


Figure 2: Project management<sup>iii</sup>

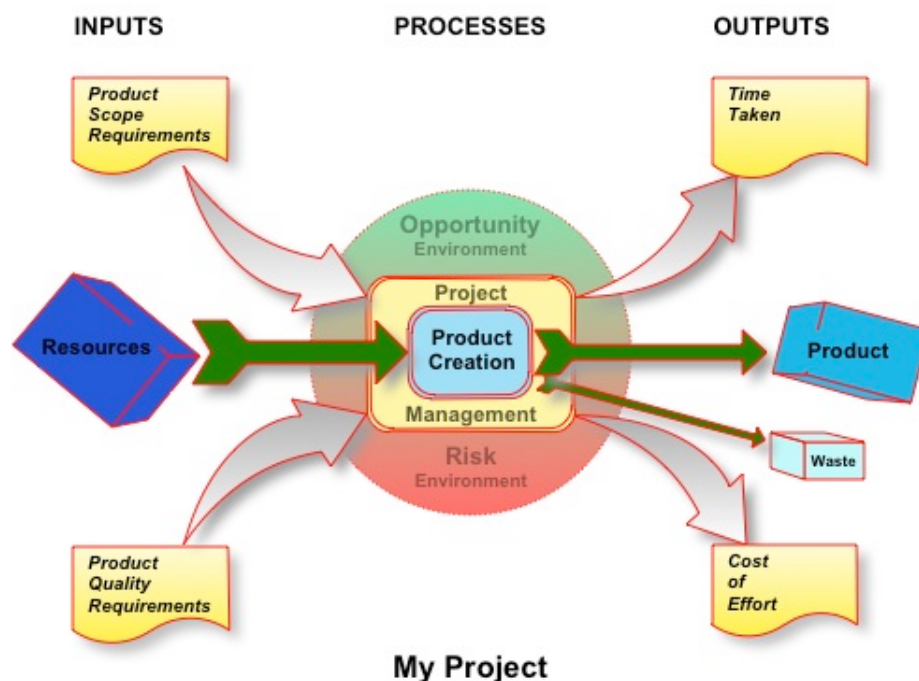
For example, a "very large project" may well be subdivided into 'sub-projects' each of which is managed as a project in its own right. Such a project may be identified as a *program* (of projects), in which case the distinction is clear, but the fractal analogy is not limited to large projects. The elements of any sized project that are parceled out to separate areas of responsibility can be considered, from the point of view of each area, as an obligation that is separately owned and managed as a project. Under these conditions, it is not too difficult to see that the problem of different agendas can arise and, as a result, the true objectives of the project can become obscured.

In the literature, there is a wealth of information describing projects in all areas of application, what was achieved, how it was achieved and how successful were the results. Similarly, there is a wealth of literature providing advice on how to do project management – and presumably do it better. Based on this experiential material, various attempts have been made to assemble *bodies of knowledge* and thereby articulate the role and content of project management.<sup>iv, v, vi</sup> Such documents have been used in several countries for the development of individual certification and competence testing, and/or by enterprises for establishing corporate standards of practice.

In explaining "project management", the term *principle*<sup>vii</sup> is sometimes bandied about, but there appears to be very little content establishing *fundamental* principles with corresponding theories to support them. This absence suggests that the building of a project management discipline is presently based only on experiential records and opinion and not on any reasonably logical or theoretical foundation. Ideally, what is needed is a generally agreed and testable set of *elemental principles* of project management that provide a universal reference basis for a set of 'generally acceptable practices'.

### Meaning of project management

In order to discuss *fundamental principles* of project management, we need to be clear on what we mean by *project management* – not in terms of the traditional definitions<sup>viii</sup> but in terms of the scope and limitations of this management activity. So, for purposes of this examination of principles, it is useful to draw a distinction between *management of the project* and *management of the primary technology* required to produce the product of the project. That is, a distinction between *project management* and *technology management*. This idea of separation is illustrated graphically in Figure 3.



**Figure 3: Separation of project management from product creation**

Of course, while we may draw this distinction, in the real world the two must be fully integrated and the balance in the combination of the two varies between different project management application areas. But with this distinction, we see that the management of the technology obviously varies considerably

according to the type of product. However, project management on its own is relatively stable and uniform across all types of projects. This enables the identification of a number of common principles of project management across the majority of project management application areas and throughout the project life span.

**\*\*\*\*\* TO BE CONTINUED \*\*\*\*\***

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<sup>i</sup> See the definition in the Wideman Comparative Glossary of Project Management Terms:  
<http://www.maxwideman.com/pmglossary/index.htm>

<sup>ii</sup> Wideman, R. M., *A Management Framework for Project, Program and Portfolio Integration*, Trafford, Figure 5-4: Sea shell showing fractal geometry, p52

<sup>iii</sup> Ibid, Figure 5-3: The fractal nature of project management, p52

<sup>iv</sup> CRMP Guide to the Project Management Body of Knowledge, Centre for Research in the Management of Projects, University of Manchester, 1999.

<sup>v</sup> A Guide to the Project Management Body of Knowledge, Project Management Institute, USA, 2008

<sup>vi</sup> IPMA Competence Baseline, International Project Management Association, Germany, 1998.

<sup>vii</sup> See the Wideman Comparative Glossary of Project Management Terms:  
<http://www.maxwideman.com/pmglossary/index.htm>

<sup>viii</sup> See the Wideman Comparative Glossary of Common Project Management Terms:  
<http://www.maxwideman.com/pmglossary/index.htm>