Chapter 1

Project Management Maturity and Associated Modeling: A Historic, Process–Oriented View

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ABSTRACT

A universal definition—much less an understanding—of project management maturity and its achievement does not exist. The issue raises many questions, and a review reveals inconsistencies. One is the disconnect between the use of prescriptive models relying on highly defined processes to measure capabilities that manage projects with undefined elements. Universities represent an organizational model on their own unique path toward project management maturity. Over the last decade, they have—as part of a larger trend where specialized management techniques are being adopted (such as strategic planning and business process re-engineering)—embraced project management practices in an attempt to apply a greater degree of planning and coordination to teaching and learning strategies. The management of e-learning projects has been directly affected by such developments and is presented here as representative of a reliable project management capability using non-process factors. This chapter explores these issues.

INTRODUCTION

The primary focus of this chapter is to examine the limitations of project management maturity and associated models, in which process control is a fundamental component. This examination begins with a review of areas of relevant literature: process and process control, process control research in project management literature, project management maturity, and project management maturity models.

Beginning with a discussion of process control and its historical context, this concept will be situated in the project management literature to illustrate several specific interpretations. The review will continue by examining how process control has served as the backbone to project management maturity and the current generation of project management maturity models. The chapter will end with a reconciliation of project management maturity against a typological framework to reveal inherent inconsistencies.

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BACKGROUND

The Academic Press Dictionary of Science and Technology (Morris 1992, p. 58) defines a process as: “a systematic procedure designed to perform some action, engineering a continuous or periodic series of actions organized and conducted to achieve an end result such.”. Within the quality management literature, the definition of process emphasizes different elements of this detailed interpretation. Camp (1995b) defines process as ‘a series of work steps,’ and Kinlaw (1992) describes it as ‘a sequence of steps by which work or a task is accomplished.’ While consistent, one definition emphasizes steps while the other focuses on outputs. Both are situated within a product-generating or manufacturing context. Reflecting the demands of such an environment, Kinlaw (1992) further argues for the existence of processes “in every enterprise or business...[where] all products are manufactured by means of processes...[and] all services are delivered by means of processes.”.

Two institutional—and very consistent—definitions of process should also be mentioned. The Project Management Institute defines process as “...a set of interrelated actions and activities performed to achieve a specified set of products, results or services.” The Software Engineering Institute (of Carnegie Mellon University), offers something similar: a process is “a set of interrelated activities, which transforms inputs into outputs, to achieve a given purpose” (SEI, 2010).

Joseph Juran (1988), a pioneer in the field of quality management, defines process as “a systematic series of actions directed toward the achievement of a goal.”. He describes the role of humans in the management of processes as important, explaining that processes occur within all functions to include the human forces as well as physical facilities. Other definitions of process including Kinlaw (1992) and Camp (1995) are less clear on the point of human involvement. It is the Juranian definition of process—one that must include human actors—that will be addressed here.

PROCESS CONTROL

Process management practices are grounded in three traditions: general management, information technology, and quality control. Quality management literature often positions process control in the context of the Total Quality Management (TQM) movement of the 1950s. It was the earlier works of Frederick Winslow Taylor (1913) and Walter Shewhart (1931), however, that laid the theoretical foundation for current views and methods concerning process management.

Taylorism

Taylor (1913) advocated the idea that control systems should be used to measure and reward worker outputs. He argued that “the greatest prosperity can only exist when the individual workers have reached their highest state of efficiency, a state which can be measured by their daily output.”. Ensuring the achievement of these ‘first-class men’ was the object of a good system. The backbone of such a system was to found in systematic management characterized by: science (not rule of thumb); harmony (not discord); cooperation (not individualism); maximum output, in place of restricted output; and the development of each man to his greatest efficiency and prosperity.