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**Software Engineering Project Management Summary**

**Important Points from Article**

* “Project management is a system of management procedures, practices, technologies, skills, and experience necessary to successfully manage an engineering project.” [189]
* “This article describes the management functions that are necessary to plan, organize, staff, direct and control an activity or enterprise.” [189]
* “Over 70% of software development organizations develop their software through ad hoc and unpredictable methods [Zubrow, et al. 1995]. These organizations (consider to be ‘immature’ according to the Software Engineering Institute Capability Maturity Model) do not have an objective basis for determining software cost or schedule, or for judging software quality.” [190]
* “The ‘software crisis’ is characterized by software that is late, over budget, and fails to meet the customer’s system requirements [71].” [190]
* “This article presents a top-down overview of the software engineering project management responsibilities, activities, and tasks that should be undertaken by any manager responsible for a software engineering project.” [191]
* “According to this model, management is partitioned into five separate functions or components: planning, organizing, staffing, directing and controlling (see Table 4.1 for definitions or explanations of these functions).” [191]
* “Planning a software engineering project consists of the management activities that lead to selecting, among alternatives, future courses of action for the project and a program for completing those actions.” [191]
* “Every software engineering project should start with a good plan. Uncertainties and unknowns, both within the software project environment and from external sources, make planning necessary.” [191]
* “It is difficult to prepare software requirements that are correct, complete and clear [20, 29]. As a result, the project may have incorrect or incomplete objectives.” [191]
* “More importantly, planning is often not done or is poorly done. Plans are often neglected and not updated as conditions change. Project plans are usually not deliverable items.” [192]
* “Another planning activity is to develop and document a set of management strategies (sometimes called strategic policies) for a project.” [193]
* “Policies are predetermined management decisions.” [193]
* “Contingency plans specify the actions to be taken should a risk (a potential problem) become a real problem.” [194]
* “The project manager, in consultation with higher-level management, the customer, and other appropriate parties, is responsible for selecting the best course of action for meeting project goals and objectives.” [194]
* “The project manager establishes procedures rules for the project.” [194]
* “Budgeting is the process of placing cost figures on the project plan.” [195]

**Things I Didn't Agree With**

“…when a project manager is asked for the status of a project, he or she will typically look at the resources expended. If three-quarters of project funds have been expended, the project manager will report that the project is three-quarters completed.” [210]

I disagree with this statement because I believe this is not true for all project managers. There will be a few who do this, but those who understand the work that goes behind the project will understand that just because three-quarters of the budget is gone, does not guarantee that three-quarters of the project is done. The project could very well be behind, or if the group is lucky, ahead of schedule.

**Things I Did Not Understand**

I understood the sections of the article we were asked to read.