Simulation game for project management training and research

1.Introduction

The promise of simulation games is to engage and motivate players through direct experiences with the game world. To the author’s knowledge, no literature survey on the subject of simulation games in project management was undertaken over the past couple of decades. Hence the subject of this paper is to review and update the literature on issues related to using simulation games in project management education and research. The paper presents a literature

survey that will be discussed in the following sections:

1) general pedagogical views on simulation games as training and educational tool.

2) The reported range of using games in the field of training and research in project management.

2.What it takes to play the game  
The skills required to perform project management can be generally divided into two main categories. 1) Soft skills: answering the when’s and whys in the management context. Topics like leadership, team alignment, negotiation, communication and stakeholders’ management are in the heart of soft skills. The problems lie under this domain is highly ill defined and are strongly dependent on project’s context. The second domain of project management answers mainly the hows. It is concerned with planning and control aspect of management. In the planning and control domain, project managers deal largely with problems related to trade off between time, cost and quality .The two domains are indeed hard to separate since any effort to understand, the more so to plan, organize and control resources in any project must rely upon a realistic description of the dynamics in and around such projects.

3.What can you learn from the game

The exercise was designed as both a training device and also as a management research vehicle. Training objective was to provide a synthetic experience illustrating the types of problems that can come up in an R&D project, what lead time is necessary to make certain that a balanced, coordinated effort is achieved, and how Technical, Cost and Time objectives must be properly coordinated in the planning and control facets of project management. Research opportunities in the exercise were about what information is most useful, what new information and what format would be desirable in the project management operation

4.How the game works

The computer game stresses the importance of financial planning, cash flow management, team organization, procurement and use of information, interaction with competing teams, and analyses of risks and alternatives as guides to decision-making. The player is presented with a sequence of ‘project meetings’ at which he must make certain decisions. The outcome of each decision will affect the total cost of the project. The game focuses on scheduling, resource leveling, risk assessment and response. The simulation is done on weekly bases under the assumption that once a simulation started it can not be stopped.