

System Effects within multiproject environments

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Efficiency and effectiveness in new product development has attracted a lot of attention by the scholars and practitioners recently. Despite all these attentions still management of new product development is a challenge for many organizations. A lot of previous research and publications are focused on the issues and difficulties within single project environments. However most of the organizations run multiple product development projects simultaneously. In many such organizations projects interact and influence each other's performance and even each other's structure. Therefore a realistic analysis of any product development project should take into account possible inter-project interactions and effects which in this paper we refer to them as system effects. Using the system thinking method and concepts, we performed an empirical investigation within several product development projects at a world class manufacturer. The findings indicates that besides good project management in every project, there are many other factors which influence a project success including: the priority of the projects within the company project portfolio, the amount of change requested by the project stakeholders during the project, the organizational complexity, etc. In addition the research identifies some vicious feedback loops which are basically fuelled by the lack of system view to problems in the product development. The findings of this research help to better understand the factors influencing product development performance as well as helping decision making on selection of appropriate improvement strategies. For future research, the system effects investigated in this research can be used to run simulation analysis and test of scenarios which are helpful for management decision making.

Set of questions for interview

1. Do you experience any difficulty regarding approval of your project in the decision body?
2. Do you see any effect of delays in the early stages to the performance of the project?
3. What strategies are usually followed by project teams to rescue a project which is extremely late in schedule?
4. What patterns of change in the scope of projects you have observed in the projects you have been involved?
5. Can you give examples of how the performance of a project has been affected by the issues originating from another project?
6. Do you see any deficiency and productivity matter related to assignment of many projects at the same time to individuals?
7. Do you see any informal strategy regarding the priorities of the projects and resources in the organization?
8. What factors do you think prevents the organization to learn and improve its future performance based on earlier projects?
9. Do you think a holistic view of the how to create a level commitment of the resources to the projects exist in the organization?
10. Did you recognize more stress and work pressure among the project team at the late stages of your project? What do you think are the reasons for it?