

CONCEPTUALIZING PROJECT MANAGEMENT: FROM IMPLEMENTATION TO FINAL INTEGRATION

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Abstract: Success in lowering costs, bringing projects in on time and improving quality is achieved through the proper utilization of project management methodologies. An expert in project management can offer capable solutions in the areas of project management, scheduling, estimating, risk analysis, project management process development and analysis, and integration of your management information systems. The paper highlights the need of a discussion about the following fundamental issues: assumptions, levels of analysis and questions of project management research.

Keywords: project management, project organization methodology, research.

1. PROJECT MANAGEMENT ACTUAL RESEARCH

We have to notice the explosive development of professional organizations, such as the *Project Management Institute* (PMI) and the *International Project Management Association* (IPMA). These associations are not only known as organizers of a number of conferences, but also as promoters of the standardization of project management and certification programs for project managers. The interest in project management showed by professionals is, of course, explained by a general increase in the way of organizing business activities in projects. This has been documented in research into product development (Midler, 1995) and in other industrial sectors (Ekstedt et al, 1999). The basic rationale underlying many of the texts and articles published in journals, such as the *Project Management Journal*, is the adoption of project management as “a method” for solving complex organizational problems. Such a viewpoint treats project management as one of several ways for handling organizational activity.

Along with the development of project management practice, various networks have emerged primarily focusing on the distribution of knowledge and findings stemming from research. One such network is *IRNOP* (International Research Network for Organizing by Projects), founded in 1994. Since its inception, *IRNOP* has arranged four research conferences with nearly one hundred participants at each conference. A number of authors have argued that despite the academic interest in courses and programs, the research is not very well developed. Morris (1994) argues, for example, that the academic awakening of interesting project-based undertakings is too slow.

It is the intention that the mentioned themes of inquiry, and a critical discussion about them, should be beneficial also for identifying opportunities for future research. If we look at the history of project management there are a few important issues that should be taken into account. A number of writers seem to trace the intellectual roots of project management research and knowledge to various types of planning techniques, such as CPM, PERT, and the like. Some even say that the father of project management is probably the well-known Henry Gantt, who invented the Gantt chart, which has become something of a standard model in project management practice. A continuation on these lines would indicate project management as fundamentally oriented towards a specific problem solving method, of delimiting and grouping activities by using various types of techniques and methods.

2. RESEARCHING THE KEY QUESTIONS

The main argument put forward in the present paper is that there are openings for additional perspectives and there are openings for more empirical studies. Still, the field lacks a lot in terms of in-depth case studies, studies of processes, and studies in real time – studies that would be beneficial in creating a theory for understanding fundamental issues of projects and project organizations.

The reasons why projects exist have in most part of project writing mainly been explained by referring to the type of task, most frequently by adopting “transaction cost theory” (e.g. Winch, 1995) or “contingency theory” approaches (e.g. Shenhar & Dvir, 1996). A project would thus be explained by fairly rationalistic arguments, i.e. the reason why project organizations exist is because there is a complex task with certain characteristics to be carried out. However, there are many more explanations that could be given a part from that one. We need to know more about these issues in order to understand the background and reasons for the increased reliance on project-based organization of today (see e.g. Whittington et al, 1999).

3. IMPLEMENTATION PROCESS

The implementation of project management is a very important project in itself. Its success is vital if the organization is to reap the benefits of having an advanced project management system in place.

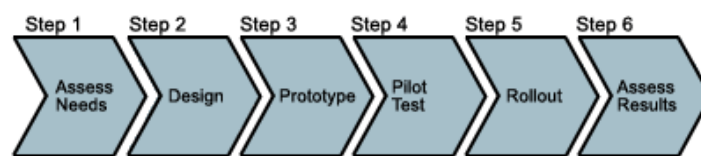


Fig.1. Step in implementation process [2]

Step 1 - Project Management Needs Assessment

The purpose of this step is to establish expectations for the project, as agreed by both parties. Once objectives and expectations are in place a project team needs to be identified and roles assigned to relevant team members for each step of the process.

The needs assessment will enable us to define the following:

- business requirements in line with the areas of the Project Management Body of Knowledge (PMBOK) that it want to implement.
- project management and software training needs.
- project management culture building needs.
- technical system requirements.
- an implementation plan and schedule.

A Needs Assessment report will be produced for client review and approval.

Step 2 – Design

This step involves creating a Standard Project Controls Document that will describe the roles, processes, reports, system configurations and training requirements necessary to support your business needs. A project management system will be designed in conjunction with our consultants. The implementation plan will be updated to reflect any changes identified during the design steps.

Step 3 - Create a Prototype

This step will demonstrate how the project management system can meet the objectives set out previously in Step 1, and allow processes to be refined where necessary. Project Manager will collect information from current client projects and transfer this information into the system. The newly created prototype will run through a typical monthly cycle of transactions including adding and modifying projects, updating targets and simulating data from external sources. Earlier hardware requirements will be reviewed for each user.

Step 4 - Conduct Pilot

Following client approval of the prototype a pilot operation will be prepared which will enable a number of users to work with the new system using familiar data and terminology. This will allow users to be ensured that processes will work adequately. Team members will be required to attend training prior to the pilot, using client-specific data. This training will be based on those roles set out earlier in Step 1. During the pilot processes can be refined to better suit objectives, as real project data will be used. Alterations to process will be documented and implemented before the pilot is completed to ensure they are adequate. At the completion of the pilot the client will be requested to assess the systems performance throughout the pilot period.

Step 5 – Rollout

A rollout schedule will be developed. This will involve training with specifically developed workshops to suit the client's business processes. At the completion of training the rollout will begin. During this time project manager will endeavor to ensure that all processes are functioning as planned.

Step 6 - Assess and Monitor Results

A formal assessment of lessons learned and results achieved will be carried out. Project manager will also provide ongoing support for users at the conclusion of the rollout. A real Project Manager suppose to provide a range of professional project management services to ensure that the project is managed successfully throughout the entire project life cycle.

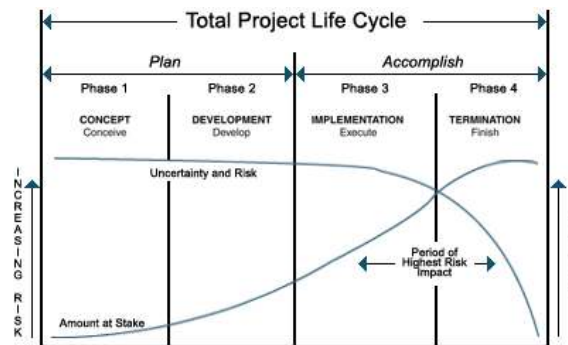


Fig.2. Project Life Cycle Model [1]

4. THE INTEGRATION PROCESS

The integration process consists of six phases:

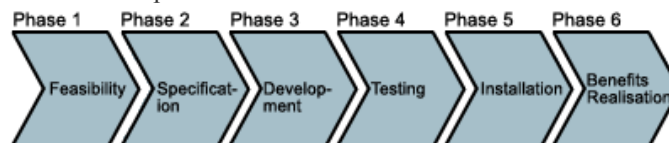


Fig.3. Integration process phases

Phase 1 – Feasibility

The Feasibility phase consists of the following sub-phases:

The management and project manager will discuss the general requirements of the proposed system as well as present environmental, equipment and staffing issues.

Project Manager will develop and define a solution to meet the general requirements. This will include a brief schedule of proposed development activities. There may be more than one solution defined.

Phase 2 – Specification

Project manager will develop a detailed technical specification for the project. This will define the responsibilities of both: the team and project manager, project timeframe and cost, hardware, software, programming and training requirements.

Phase 3 – Development

The Development phase consists of the following sub-phases:

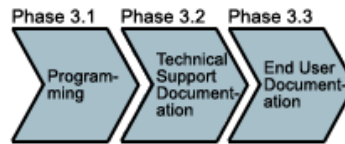


Fig. 4. Development phase

Project manager will develop any required interfaces or stand-alone programs. The coding for these programs will be written in the programming language specified in the Technical Specification. Technical documentation for all programming, hardware and software specifications will be provided. This will allow for any future maintenance or upgrading to be done with minimal downtime.

Phase 4 – Testing

Each individual module of the project will be tested, allowing for all possible errors. All modules will be combined to form the entire system, which will then be tested as a whole. The system will be tested in its proposed environment using actual data provided by the client. Once Project manager has established that the system is working correctly, the client will have an opportunity to fully test the system to prove that it meets the requirements of the Technical Specification.

Phase 5 – Installation

The system will be installed by project manager working alongside a client representative, usually a member of the management department.

Phase 6 - Benefits Realization

Project manager will continue to work with the client to ensure that their project operates as required and that the expected benefits are being realized. These benefits may not be evident for several weeks or months.

5. CONCLUSIONS

Finally, the article pointed out few key questions for project management/organization research. Questions that were considered to be important for the future debate and the development of various perspectives within the field of project management. We need to develop various theories of projects in a similar tradition as it has been done within the broader field of management research. It was stated that questions such as why do projects exist, why do they differ, must not be forgotten in order to further develop research and encourage cross-fertilization among perspectives. A theory of projects cannot be built on merely empirical insights, but has also to be driven by a particular theoretical perspective. It was argued that such perspectives exist in other fields and it should be plausible to try them out also in a project context. However, without forgetting the special traits of projects as empirical entities.

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