

Multi-Project Management in Organization

Lecture Topics

- Organization of projects in multi-project environment
- Problems and challenges in managing of multiple projects
- Framework and competency model of effectiveness in managing of project groups

Organization of Projects

A System Model of the Multi-Project Environment is presented on the following figure:

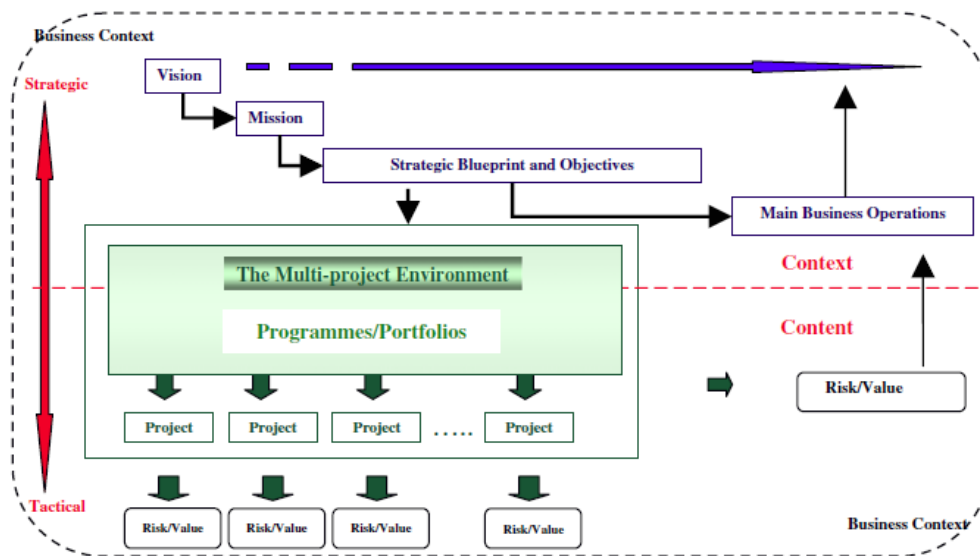


Fig. 2. A systems model of the multi-project environment.

Figure 1. A Systems Model of the Multi-Project Environment

The model recognises that multi-projects are executed as a means of attaining some business objective and/or hybrid business and project objective as a means to enhance main business operations or service provision. This business project is undertaken as part of an open system and as such is influenced by the external business climate. The key features of the model highlight the distinction between the overall strategic issues which shape the organisation's business context and tactical project issues. Ideally the contextual issues provide a basis for deriving the content of each project in a way that fulfils strategic objectives. Multi-project management attempts to bridge the gap between context and content and aligning projects to the overall strategy of the organisation.

Projects can be organized in different ways:

- As project chain
- As projects portfolio
- As projects network

Pictorially presented on the next figure:

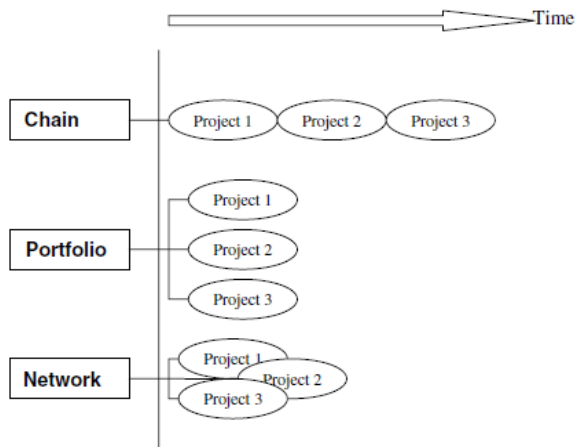


Fig. 2. Organisation of projects in programmes.

Figure 2. Projects organization I

Or like this:

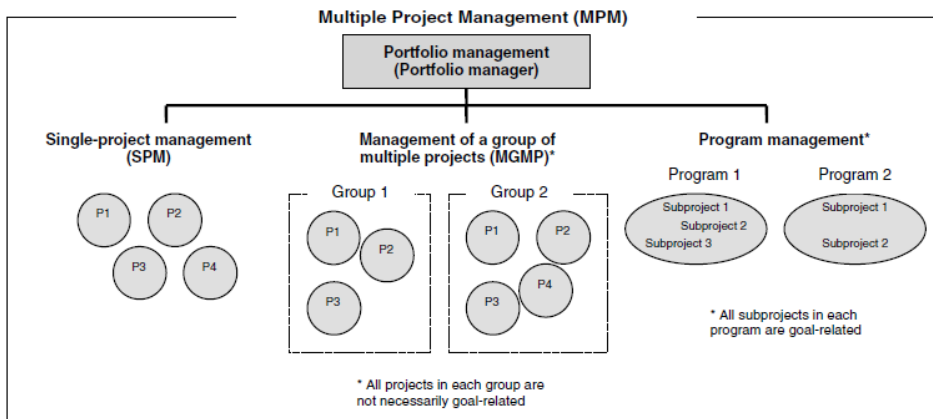


Figure 3. Projects organization II

Or like this:

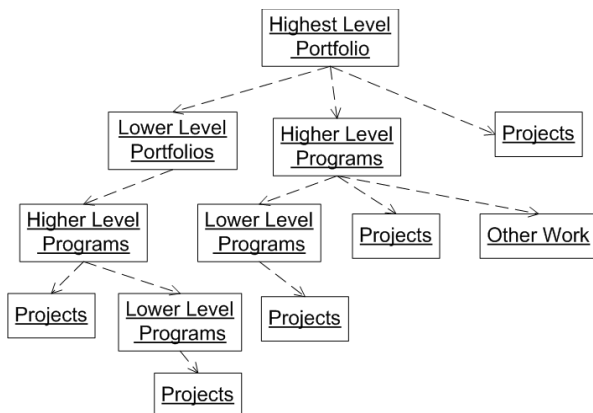


Figure 4. Projects organization III

Project Portfolio

A Portfolio is a collection of programs and/or projects and other work that are grouped together to facilitate effective management of that work to meet strategic business objectives. Unlike a program itself, the projects or programs of the portfolio may not necessarily be interdependent or directly related. A portfolio may also be defined to contain support, operations, non-labor expenses, although those types of work do not have to be included if there are good reasons not to do so. The portfolio allows you to optimize investment decisions by prioritizing and balancing all work within the portfolio. For maximum effectiveness, a portfolio should encompass all of the work that draws on common resources such as that contained within an entire Business Unit or department. Work is not done at the portfolio level. Instead, the work is done through the projects, support teams and operational teams that are working within the portfolio

Project Program

A program is a group of related projects managed in a coordinated way to facilitate a level of management and control that is not available from managing the projects individually. Programs may include elements of related work outside of the scope of the discrete projects in the program. A program often implies that one or more projects are running in parallel with others. Thus, all of the projects in the program are related and all are set up to deliver portions of a very large deliverable or set of deliverables. Programs typically do not contain operations or "other work". If they do, it is only for a finite period of time when some deliverables need to be supported and run, while other projects are still working on other aspects of the final solution. A program could be contained within a portfolio, although the reverse would not likely be true

„Other Work“

Support work is work of an on-going service nature such as recovering from a service failure, fixing errors, answering questions from your internal users, researching questions and so on. Unlike a project, the work does not result in an obvious or manageable deliverable. Rather, it is a matter of some urgency requiring immediate attention, yet delivers value to the organization. Alternatively, the work may produce a stream of deliverables of such a minor nature that individually each does not warrant treatment as a project. The need to include this kind of work under the umbrella of a portfolio may be because the availability of the necessary technical skills is limited and must be drawn from resources otherwise available for the projects in the portfolio. Only in this way can the total capacity of the resources for the portfolio be estimated and managed.

Problems in Managing Multi-project Environments

- Project level activities - improper implementation of the pre-project phase; project progress monitoring is infrequent; too long projects
- Management of project-oriented business - project work is given a second priority and not rewarded systematically; no defined owner, business or personnel strategy for portfolio; rapid and recurring changes in roles, responsibilities or organization structure; many bodies are entitled to set up a project; "own" objectives of a unit

- Commitment, roles and responsibilities - unclear roles and responsibilities btw portfolio decision makers and the other parts of the organization; management does not seem to support project work; unclear roles and responsibilities at the project level
- Portfolio level activities - overlapping and non-integrated projects and tasks within one portfolio and btw portfolios; weak Go decisions: resources, value, and priority not considered properly; the roles and the responsibilities of a portfolio manager are not clear or digested; no feedback given to the project level; projects are not killed
- Information management - lack of information on projects. inadequate flow of information across organization; information flow from projects to other parts of the organization, and vice versa, is not defined; no common database of projects;
- Resources, competencies and methods - methods and guidelines for portfolio evaluation, and project planning and management are inadequate; human resource shortage, a lack of commitment and inadequate competencies at the project level; too extensive composition of a steering committee and a project team

The Challenges of Managing Multiple Projects

- Not enough visibility on the detail being performed by project teams (i.e., developers, testers, etc.).
- Not enough time to attend to meetings and still track tasks and milestones (i.e., tight deadlines).
- Managing multiple risks and resolving multiple issues.
- Lack of experience in juggling multiple tasks and meetings (e.g., gets too crazy).
- Limited resources within the resource pool.
- Conflicting priorities among projects.
- Integration of all projects and their target dates not always clear.
- Communications among too many people affecting performance.

As Solution

- Project Portfolio Management Methodologies
 - The Standard for Portfolio Management (PMI)
 - PortfolioStep (TenStep)
 - EUP portfelli juhtimise distsipliin
 - The Portfolio Management Discipline in EUP
- A framework of effectiveness in the management of a group of multiple projects

Framework of Effectiveness in the Management of a Group of Multiple Projects

Framework authors Peerasit Patanakul and Dragan Milosevic. Statements about this framework are as follows:

- Multiple project management as an organizational-level environment in which multiple projects are managed concurrently
- Projects are arranged to groups - management of a group of multiple projects (MGMP)
- Projects in the group are not mutually dependent in terms of objectives and goals but rather grouped for the sake of efficiency and better management in a project manager level, leading to interdependencies among these projects as they are managed by the same project manager.

- Key reason that an organization implements MGMP is to achieve better efficiency and management of projects
- The expected outcome is the effective use of organizational resources

This framework is presented on the next figure:

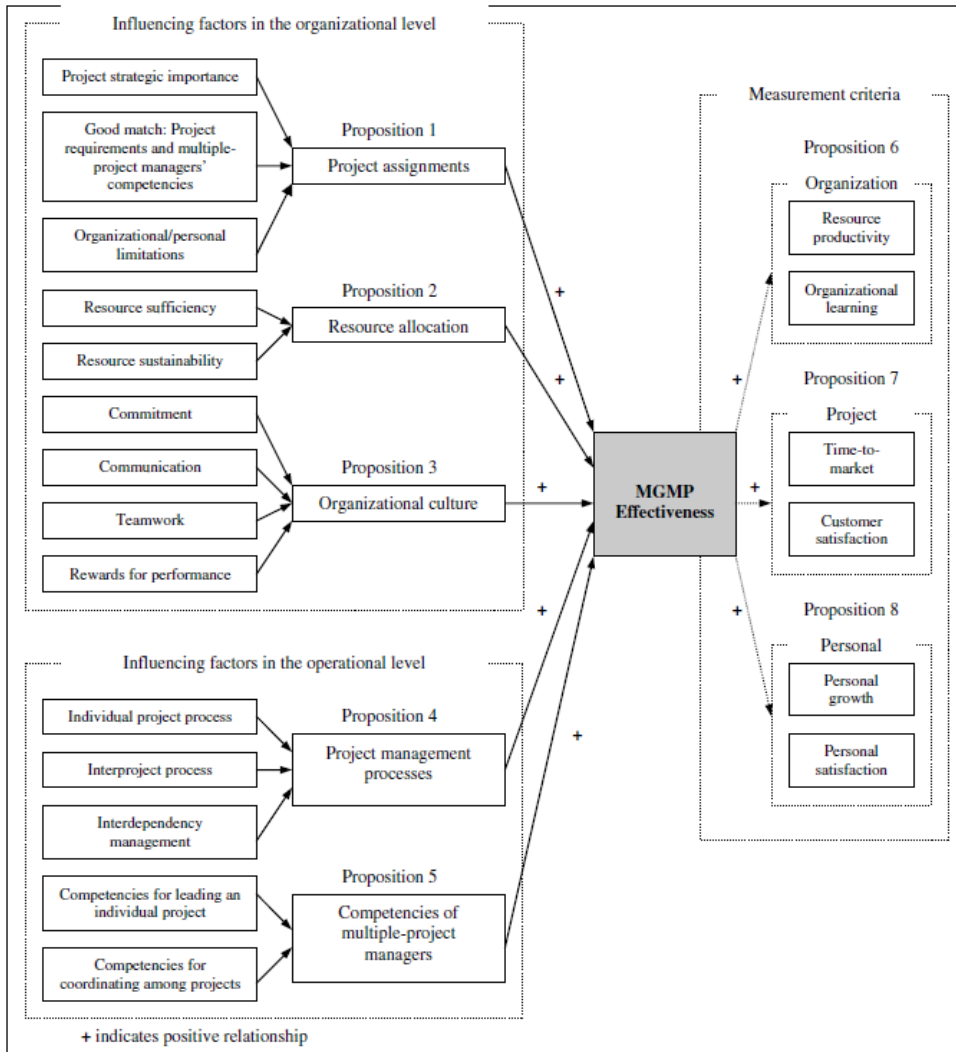


Figure 5. Framework of Effectiveness in the Management of a Group of Multiple Projects

Factors influencing Effectiveness in Managing a Group of Multiple Projects (MGMP) in the organizational-level

- Project assignments. The greater the consideration of project strategic importance, the good match between project requirements and competencies of multiple-project managers, and the organizational/personal limitations during project assignments, the greater the effectiveness in MGMP
- Resource allocation. The greater the resource sufficiency and sustainability, the greater the effectiveness in MGMP
- Organizational culture. The greater the organizational culture cultivates commitment, communication, teamwork, and rewards for performance, the greater the effectiveness in MGMP will be

Factors influencing Effectiveness in MGMP in the operational-level

- Project management processes
- The greater the systematic management of individual project process, interproject process, and project interdependency, the greater the effectiveness in MGMP
- Competencies of multiple-project managers
- The greater the multi-project manager's ability to lead each individual project and to coordinate among projects, the greater the effectiveness on MGMP

The Measurement Criteria for measuring effectiveness in MGMP

Measurement criteria are expected outcomes of MGMP - the criteria the organizations can use to judge the effectiveness of MGMP

- Criteria from organizational perspective – the greater the effectiveness in MGMP, the greater the resource productivity and organizational learning. The expectation is that, as the nature of MGMP, the assignment of more than one project to a project manager will lead to the effective use of project manager's resource and the better management of projects. In addition, the resources in the project team level are also shared to increase resource productivity
- Criteria from project perspective – the greater the effectiveness in MGMP, the greater the achievement of time-to-market and customer satisfaction. Tradeoffs among project schedule, cost, and product performance depend on what customers see as priorities, which can be changed over the course of the project
- Criteria from personal perspective – the greater the effectiveness in MGMP, the greater the personal growth and satisfaction

Competency Model for Effectiveness in Managing Multiple Projects

A Competency Model for Effectiveness in Managing Multiple Projects authors are also Peerasit Patanakul and Dragan Milosevic. This model is presented on the next figure.

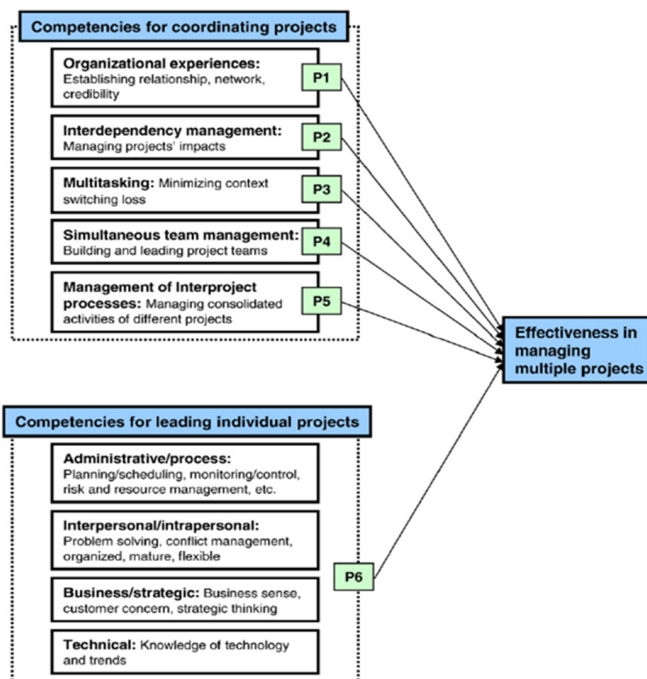


Figure 6. Competencies for Effectiveness in Managing Multiple Projects

Used Literature

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- Peerasit Patanakul, Dragan Milosevic, “The effectiveness in managing a group of multiple projects: Factors of influence and measurement criteria”, <http://www.sciencedirect.com/science/article/pii/S0263786308000392>
- Peerasit Patanakul, Dragan Milosevic, „A competency model for effectiveness in managing multiple projects“; <http://www.sciencedirect.com/science/article/pii/S1047831007000302>