

Projects versus processes

A project is a temporary activity, having a defined beginning and end undertaken to bring unique results, usually to bring about beneficial change or added value.

The temporary nature of projects stands in contrast to business processes as usual, which are repetitive, permanent or semi-permanent functional work to produce products or services. Distinction those two types of works is not always easy and requires some experiences and ability to interpret some relations and contexts.

Table 1. Comparison of Processes and Projects features

Tabela 1. Porównanie cech procesów i projektów

PROCESSES	PROJECTS
<ul style="list-style-type: none"> • stability • routine • evolutionary changes • low risk • stable relationships • culture and tradition • weak and sporadic involvement of executives 	<ul style="list-style-type: none"> • focus on changes • uniqueness • radical changes • high risk • strong and frequent conflicts • innovativeness • strong and continuous involvement of executives

Source: P. Stępień, www.skutecznyprojekt.pl, (12.01.2011).

Źródło: P. Stępień, www.skutecznyprojekt.pl, (12.01.2011).

In practice, the management of these two systems is often found to be quite different, and as such requires the development of distinct technical skills and the adoption of separate management.

Typical organizations operating primarily in a mode of processes are: banks, schools, the majority of manufacturing companies which produce serial products, most administration offices and authorities. Their work consists primarily of regular repetition of determined procedures. In these kind of organizations projects are rarely executed and become a serious problem.

Typical organizations primarily in mode of projects are: consultancy firms, research institutes, the majority of construction companies, film groups, advertising agencies. Here work is highly differentiated (unique), a small part of the work is operational.

Nevertheless the majority of the organization operates both types, and the differences concern only the ratio between the number and size of processes and projects. Each organization can identify certain areas working in mode of processes (finance department, reception, cleaning, etc.) and some areas working in mode of projects (reorganization, new training, change of location).

Dimensions of Project Management

Every project is implemented under three constraints, scope, costs and schedule. The diagram below shows quality as the fourth constraint or as a result of the three aforementioned constraints.

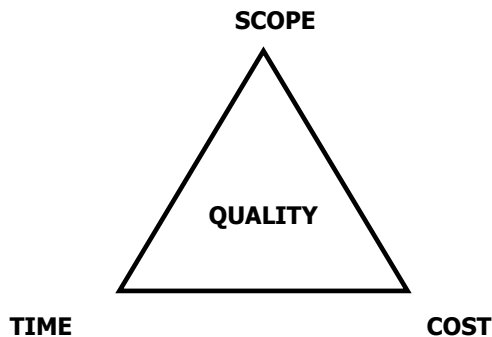


Fig. 1. Constraints of the project
Rys. 1. Ograniczenia projektu

Source: author's elaboration.
Źródło: opracowanie własne.

Between scope, cost and time there are some interaction:

- increasing the scope usually means higher cost and longer time
- cutting the time of the project may necessitate an increase in cost (the need for greater resources) or to reduce the scope (quality).
- decreasing costs usually means reduction the scope (quality) of the project and prolongation of the project.

Projects are usually carried out in order to improve existing processes or create a new process or to resolve specific problems. The aim of any project is always desirable and planned change. The effects of the project are products or services (deliverables), resulting from the project.

Approaches to managing project

There are a number of approaches to managing project activities including phased approaches, agile management, interactive and incremental management.

The traditional approach

A traditional phased approach identifies a sequence of steps to be completed. In the traditional approach, there are 5 distinguished stages (Plus Definition as an option) of a project in the development of a project:

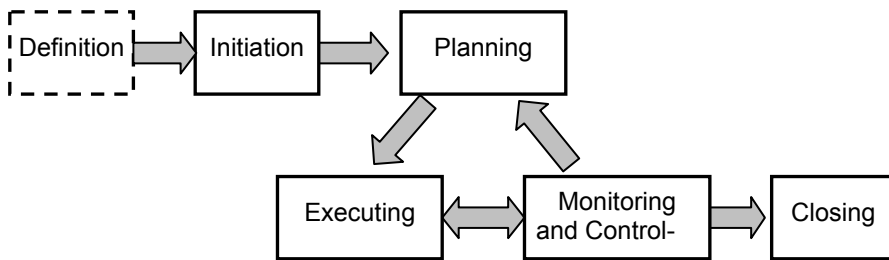


Fig. 2. Stages of a project
Rys. 2. Etapy projektu

Source: author's elaboration.
Źródło: opracowanie własne

Each stage is characterised by a distinct set of activities that take the project from its first idea to its conclusion. Each stage is of equal importance and contributes to the overall success of the project. Typical six development phases of a project are:

- 1) Definition a first stage before a project starts. In this stage project goals, objectives, scope, risks, issues, budget, timescale and approach have to be defined. This must be communicated to all the stakeholders to get their agreement. Any differences of opinion need to be resolved before work starts.
- 2) Initiation - often this stage include the activities from definition stage such as analysis of business requirements, financial analysis and stakeholder analysis. Additionally Initiation is a time spent on planning, refining the business case and communicating the expected benefits. It is tempting to start working quickly, but a poor initiation stage often leads to problems and even failure.
- 3) Planning - the key stage to a successful project. A project plan is the first task the manager should do. Often project planning is ignored in favour of getting on with the work. A failure to adequately plan can greatly reduce the project's chances of its success. Project planning generally consists of: identifying deliverables and the activities needed to complete them; creating the work breakdown structure; estimating the resource, time and costs; developing the budget, schedule and risk plan.
- 4) Execution at Doing the work to deliver the product, service or wanted outcome. Most of the work related to the project is realised at this stage. The process of execution involves coordinating people and resources, as well as integrating and performing the activities of the project.
- 5) Monitoring and controlling systems - The stage consists of observation project execution so that potential problems can be identified on time and corrective action can be taken. This can be achieved by

regular reporting of issues, risks, progress and the constant checking of the business case to ensure that expected benefits will be delivered. Monitoring and controlling includes: measuring the ongoing project activities, monitoring the project variables and identifying corrective actions to address issues and risks properly. In multi-phase projects, the monitoring and control process also provides feedback between project phases, in order to implement preventive or corrective actions.

- 6) Completion - it is important to ensure that a project is closed properly. Many projects never end because there is no formal sign-off. It is important to get the customers agreement that a project has ended and that no more work will be carried out. Administrative activities include the archiving of the files and documenting lessons learned - good and bad points so successes can be repeated and failures avoided.

Not all the projects go through every stage as projects can be terminated before they reach completion. Some projects do not follow a structured planning and/or monitoring stages. Some projects go through steps 2, 3 and 4 multiple times. There are many variations on the project stages. It depends on industry branch. Also names of stages differ from industry to industry.

Critical Chain Project Management

Critical Chain Project Management (CCPM) is a method of planning and managing projects that puts more emphasis on the resources (physical and human) needed in order to execute project tasks. Using this approach to the projects the Theory of Constraints (TOC) is applicable. Critical chain can be used as an alternative to critical path analysis. The main features that distinguish the critical chain from the critical path are:

- 1) The use of resource dependencies. Implicit means that they are not included in the project network but have to be identified by looking at the resource requirements.
- 2) Lack of search for an optimum solution. This means that a "good enough" solution is enough (there is no analytical method of finding an absolute optimum).
- 3) The identification and insertion of buffers: project buffer, feeding buffers and resource buffers.
- 4) Monitoring project progress and health by monitoring the consumption rate of the buffers rather than individual task performance to schedule.

Theory of Constraints is based on the premise that the rate of goal achievement is limited by at least one constraining process. By increasing flow through the constraint process overall throughput can be increased. The steps of applying this theory are:

- Identifying the constraint (the resource or policy that prevents the organization from obtaining more of the goal).
- Deciding how to exploit the constraint (getting the most capacity out of the constrained process).
- Subordinating all other processes to above decision (aligning the whole system or organization to support the decision made above).
- Elevation the constraint (making other major changes needed to break the constraint).

PRINCE2

PRINCE (which stands for Projects in Controlled Environments) was developed by the UK government in 1989 as the standard approach to IT project management. Since then, the method has been enhanced to become a generic, best practice approach suitable for the all types of projects.

It is a project management method designed to provide a clearly defined framework applicable to the wide variety of disciplines within a project. According to PRINCE2 a project it is manageable environment designed to provide one or more business products according to specific business requirements. PRINCE2 describes procedures to coordinate planned activities and people working for the project. The method provides a patterns how to design and supervise the project and also what to do if the project has to be adjusted if it does not develop as planned. According to the method each process is specified with its key inputs and outputs and with specific objectives and activities to be carried out. This proceedings allows project manager automatic control of any deviations from the plan. PRINCE2 enables an efficient control of resources and provides a common language for all project participants. The various management roles and responsibilities involved in a project are fully described and are adaptable to suit the complexity of the project and skills of the organization.

PMBOK

PMBOK (which stands for Project Management Body of Knowledge) is set of standard terminology and guidelines for project management. *A Guide to the Project Management Body of Knowledge* was published by the Project Management Institute (PMI) in 1996 and then followed by the next editions in 2000 and 2003. The guide describes work as being accomplished by processes, which are described in terms of: inputs tools and techniques and outputs. The PMBOK Guide recognizes 42 processes that are typical of almost all projects. The processes are clustered into five groups: initiating, planning, executing, monitoring and controlling and closing and nine knowledge areas which contain the processes that need to be accomplished within its discipline:

- 1) Project Integration Management
- 2) Project Scope Management
- 3) Project Time Management
- 4) Project Cost Management

- 5) Project Quality Management
- 6) Project Human Resource Management
- 7) Project Communications Management
- 8) Project Risk Management
- 9) Project Procurement Management

The PMBOK Guide offer a general guide to manage most projects most of the time. Currently there are two extensions to the PMBOK Guide: the Construction Extension and Government Extension to the PMBOK Guide.

Agile Project Management

Agile Project Management is the approach based on the principles of human interaction management. This contrasts sharply with the traditional approach. In agile project approach, the project is seen as a series of relatively small tasks considered and carried out in an adaptive manner.

Agile techniques is an iterative method of determining requirements for flexible product and for delivering projects in a highly flexible and interactive manner. Agile techniques are best used in small-scale projects of which deliverables are submitted in stages and delivery time is in weeks rather than months.

Stakeholders in the project

The question of who is, and who is not, a stakeholder has long been a point of disputation. There is not simple answer whether stakeholder status should be reserved for constituencies that have a very close relationship with the project?. Or, should stakeholder status be broadly interpreted and take into account all of the groups that can affect, and be affected by, the project? Nevertheless, it can be assumed that project stakeholders are those entities within or outside an organization which have an interest or a gain upon a successful completion of a project and may have a positive or negative influence in the project completion.

Therefore, project stakeholders include individuals, groups, and formal organizations: the customers, the user group, the project manager and project team, suppliers and other contractors etc. In other words, stakeholders include any individuals or groups who is in a situation to gain or loss something as a direct result of the project. Project stakeholders may also exert influence over the project's goals and outcomes.

In order to provide successful project identifying, mapping and prioritizing the relative significance of stakeholders can be not enough. The project team should develop an engagement strategy towards each of key stakeholders in order to understand and manage their expectations and then deliver the outcome to meet these expectations. Successful project also requires the monitoring of stakeholders expectations. The key to forming successful stakeholders relationships is understanding that different stakeholders has different expectations of the project.

The role of project manager

There are many books on project management which hand project manager a set of processes to follow and rules to obey. They are useful but there is no point in having a toolbox full of tools if, when confronted with a problem, a manager doesn't know which one to use for first. From the project management contractor point of view, it is extremely difficult to go into project without any prior knowledge of the organization and the people he will be working with. In such a situation it isn't possible to try to use every single tool. It is important to make an apt judgment about what needs to be in place to give the project the best chance of success.

One of the most difficult situations for a project manager is when resources are scarce. Than the manager have to his best, trying to find people who can complete different tasks, or to find enough money in the budget to pay for vital supplies.

One of the most tough task for the project manager is building a team in a project. In a situation of scarce resources a project manager must be mindful of the needs of the team. For the project success very important is the level of team members' commitment to the project. The manager has to be aware that level of commitment a group of individuals has is much lower than that of a team. A team is working towards a common goal, and feels a duty and responsibility to each other, and to the project. Building a team requires emphasising and promoting the values and goals the members share. The project manager should carefully listen to them and help them all work together. As far as work of building a team is a task for team members themselves, project manager should also facilitate the process and provide an environment which makes it more likely to happen.

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