

13 GOAL DIRECTED PROJECT MANAGEMENT IN A MULTI PROJECT ENVIRONMENT

In the book Goal Directed Project Management¹ we have been primarily concerned with the individual project and focused on how to support working with the project. In this chapter we expand our perspective. Our starting point now is the many types of challenges that a business faces, and the necessity to establish several projects to meet the various challenges (see section 13.1 for further details).

Consequently, the business must not only be able to manage a single project, but also handle a situation with many projects. Even in smaller organisations we see that there often are several projects going on in parallel. We distinguish in our presentation between a project, a project program and a project portfolio (the terms are defined in section 13.2).

Our starting point is that a business can consciously use projects to be better equipped to solve today's problems and meet the future. We show that you can establish project programs, which consist of several projects contributing to the same overall purpose. Leading a project program involves tasks other than those a project manager usually faces (section 13.3).

A modern business may have many projects and project programs. All projects and programs are referred to as the company's project portfolio. A portfolio must also be managed. This is a task within the line and must be placed in the hierarchy according to the functions involved. A particularly important part of this management task is to select which projects and programs to be included in the portfolio, and which ones not to start up (section 13.4). Every proposer "burns" for their project proposal. So does every project manager for their project. Subjectivity and over optimism and pure strength can affect the suggestions. It is important to have formalized procedures and routines for project selection criteria, plans and project approval.

The management of a project portfolio is demanding. How demanding is of course dependent on things such as the company's size, complexity, professionalism etc. There might be

need for a special support function. In enterprises with extensive project activities, it might be appropriate to create a separate body, often called a project office, to assist the business in the work of the projects, project programs and project portfolio (section 13.5). The project office can support the business by arranging training of project staff and supporting the implementation of project standards (procedures and governance for project work). Even if the company does not create a project office, it is still appropriate that someone (CPO Chief Project Officer) should take care of the tasks that would otherwise have taken care of by the project office.

13.1 USE OF PROJECTS TO MEET THE COMPANY'S CHALLENGES

In chapter 2 in the book Goal Directed Project Management we looked at the relationship between the line organization and the project. We repeat some of our arguments here, but now emphasize that the line will be more involved in establishing projects.

Traditionally, management has solved its tasks through the line organization (the base organization). The line organization has many strengths. It implies a clear division of work and responsibility (each employee knows their duties and responsibilities). Its ability to carry out daily tasks has been proven over a long time. It is "tailor made" for the business operations.

But the line organization also has weaknesses. It is divided into functions and is hierarchical. This impedes collaboration between employees who are located in different parts of the organization. It lacks flexibility when emerging challenges arise. The line organization's strength is operation, not development.

Management's task is to ensure efficient operations and development at the same time. This is where the organizing projects come in as

¹ Erling S Andersen, Kristoffer V Grude, Tor Haug; Goal Directed Project Management, Forth Edition 2009

an opportunity. Management gets an extra tool in its "toolbox". Instead of just working through the line organization, management can meet the development challenges the business faces by creating one or more projects as temporary organisations. "Projects are all about change" is a known phrase. In practice it means projects give management an opportunity to respond structurally to the need for development.

By establishing a project, you set up a temporary organization that has the best possible skills to solve the challenge the business faces. You can pick employees from different parts of the line organization and also involve external resources. The temporal organization's strength is precisely that it is "tailor made" to solve the challenge at hand.

This means that today's modern business is not just the line organization but it is complemented by projects.

A company of some size rarely has one project. The business faces many different challenges. Therefore, a project portfolio (a collection of several projects) will be relevant. In this case, the projects will have internal deliveries, that is, they deliver products and services to the line organization that provide the basis for improvements.

The organization chart should not then only show the line organization, but also what projects the business has. Figure 13.1 illustrates this.

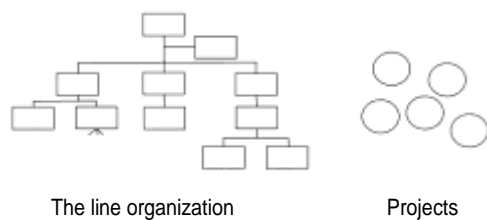


Figure 13.1 Organization in a modern business

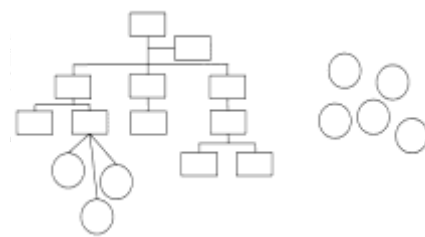
When the business shows us its organization as Figure 13.1 indicates, we get a good picture of how well equipped the business is to meet today's and future challenges. The line organization shows whether the business is organized to handle the operational challenges effectively. What projects the company runs visualizes its readiness to meet future challenges.

When you observe Figure 13.1, you can get the impression that the projects are independent of the line. This is a wrong impression. It is important to emphasize that projects must have an anchorage in the line organization. They are selected through the company's ordinary planning process. The ownership of the individual project should be within the line. This would be done through appointing a single person as project owner within the line responsible for the project meeting user needs. This again provides executive power, especially in resource conflict situations. The project owner will fight for the project's resources.

The line anchorage is also to ensure that the results of the project are used in the line and that the benefits from the project are realized.

We also need to point out that in some businesses, project deliveries are part of the company's business concept. This is the case, for example, in consulting firms and contractors. Some may even be mainly project based and have a minimum of traditional line organisation.

While we above (Figure 13.1) looked at projects that were for internal deliveries, we now have to do projects with external deliveries. In such businesses, project activities are part of the line organization. Responsibility for the projects lies with a specific line unit. Such an organization is shown in Figure 13.2. The business can of course still have projects with internal deliveries.



The line organization with projects of external Deliveries connected to a unit in the line Projects with internal deliveries

Figure 13.2 Organization where a line unit is responsible for the external project activities

13.2 THE TERMS PROJECT, PROJECT PROGRAM AND PROJECT PORTFOLIO

In order to discuss project management in a multi-project environment, we must define the key concepts. We need to know what we mean by project, project program (often just called program) and project portfolio. We will start by repeating what we mean by project. (In the book Goal Directed Project Management this is shown in Figure 2.1 and 2.2) The characteristic features of a project are: one-time assignment, leading to a specific result, requiring different types of resources and limited in time. Further that the project is a new and unknown task, representing change, and considerable risk, meaning also people with different backgrounds and skills working together on a strict deadline.

When we see the project as an alternative to working in the line organization, we need to emphasize the interaction between the line organization and the project. It is then important to make sure that the project carries out the assignment on behalf of the line organization (basic organization) and help the business achieve a desired future situation. It is because that using projects contributes to the value creation of the company, which makes the projects important for the business and the necessity for managing them well.

As mentioned, a business may have many projects. Some of these projects may be linked and have the same overall purpose. We are then talking about a project program. A project program consists of several projects, all of which have the same overall purpose. We emphasize that our definition of program involves something more than just a collection of projects.

All projects in the program are aimed at contributing to the same described desired future situation. For example, this may be to strengthen the company's competitiveness or improve the social climate or develop new products or enter new markets.

Program management is the management of a project program. It involves a coordinated management of all projects in the program.

This perception of a project program is not always the case. In some cases, a program is just a tag that is put on a group of projects without the intention of co-ordinated management of them.

This is not what we call program management. To manage a program is again to manage a collection of projects designated the same common purpose.

The last term we're going to look at is the project portfolio. A project portfolio consists of all projects and project programs belonging to a particular organizational unit. The organizational units can be at different levels within the business. The IT department's project portfolio contains all projects and programs that are associated with the IT department. The Human Resources Project Portfolio reflects all projects and programs that the Human Resources Department has started. The company's project portfolio contains all the projects and programs in the business.

The projects and programs in a portfolio need not have anything else in common other than they are all pitching for the same resources. (They are of course all part of the overall business plan). The management of an organizational unit should be instrumental in setting up the management of the organization's project portfolio. It is through determining which projects and programs the organization should have, that management determines the way forward and how the organization should appear in the longer term. The organizing of portfolio management is often a staff task within the line.

13.3 PROGRAM MANAGEMENT

The establishment of a project program emphasizes that this is a key development area for a business. The program will be led by a program manager. The biggest challenge for the program manager is to determine which projects the program should consist of, when the different projects in the program start, and how they can build on each other.

Which projects should be included in a program depends on the kind of development task you face. The business may wish to start product development, organizational development or it is facing a marketing task.

In many cases it may be sensible to think about pso. It may be appropriate to have one or more projects that are concerned with personal development, corresponding to the technical (systems) development and organizational development. It may also be that the projects are linked to different phases of the development work.

First one might have projects with the objective of finding the best solutions to different problems, and then have projects that deliver implementation to different parts of the organization. Sometimes it might be a good idea to try out the solution in certain departments before it is introduced to others (pilot projects).

Some projects in the program may take place in sequence, others in parallel. A project can start when another is completed, but it may also be that a project can be started when a certain milestone in another project is reached. Therefore, milestone plans are important in a project program. Each project must have a milestone plan that not only facilitates monitoring the individual project, but the co-ordination of projects within the program.

Figure 13.3 illustrates a program with several projects with milestones. Some projects start when another is complete. Other projects start when a particular milestone in another project is reached.

Prosjektprogram: Mange prosjekter, både i parallell og i sekvens
 Prosjekt ———
 Milepæl ⇩

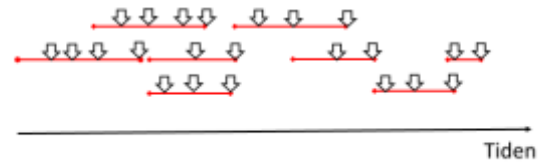


Figure 13.3 Project Program

This may also be illustrated as a Milestone plan. Figure 13.4 is an example constructed on the base of an example from real life.

The creation of such a plan is a bottom up process consolidating important stages of the different projects that have all been milestone planned separately. It is a pitfall to try and create an overall plan first, then try and break it down into several project plans.

Milestoneplan

P: Programplan and monitoring E: Project Execution O: Organization I: Infrastructure					Project nمبر. 13.4 Project Program management Project code Project manager Erling S Andersen Milestoneplan name Program management Responsible Program manager Tor Approved by Managing Director Kristoffer	
Planned	P	E	O	I	Code	Milestone
	P1					Purpose of the program is defined and total execution time and resource consumption approved
	P2					The individual projects are identified, prioritized and their start/finish dates are specified
	P3	E1				Project plans (Mandate, Milestoneplans and responsibility charts) for the first prioritized projects approved
	P4	E2				Guidelines for progress reporting of the projects outlined
	P5	E3				The first project started
	P6			I1		Project plans for the rest of the projects in the program are approved and the overall business plan updated
				O1		The need for infrastructure (technology, facilities, etc) have been specified (according to experience from the first project) and ordered
						Total organizational consequences for the whole program have been specified
	P7	E4	O2	I2		The first project has been completed including the installation of new infrastructure and organizational changes
	P8	E5				Lessons learned from the first project discussed and any correction to be made on the general direction have been agreed
		E6				The last project started
						The last project completed
			O3	I3		All infrastructure implemented and organizational consequences carried out
			O4	I4		Program completed and evaluated according to purpose, resource use and time

Figure 13.4 Project program as a Milestone plan

The benefits of organizing projects into programs are several. A project program provides:

- Increased focus and visibility on a particular change activity. Through the creation of a project program, it is shown that this is a priority area for the business.
- Easier following up of progress and content for the line management (it may relate to the program instead of many individual projects).
- Consistent prioritization of projects within the program, based on the purpose of the program.
- Consistent and efficient use of resources; Easier transfer and sharing of resources between projects in the program.
- Better coordination and planning of projects within the program.
- Better understanding of the relationships and the link between projects in the program

- Good opportunities for sharing learning and skills between the projects in the program.
- Consistent delivery by addressing common topics via horizontal topics/bodies.

Successful change often requires a wide focus and many different efforts. This is feasible to do within a program. A single project is not sufficient and probably be to complicated to oversee. It would be practical split the development initiative into several rounds. You do things gradually, but also in parallel, based on previous results and experiences.

The Norwegian Central Certificates Depository (VPS Verdipapirsentralen) was incorporated in 1985. The development of organisation and systems started in the middle of 1984.

Each area of development was milestone planned. (Systems for shares and bonds, organisation, technical infrastructure, training of brokers and own personnel etc). An overall plan for the program was then made by incorporating the most important development milestones and decision points. This was used for reporting to the board and Parliament.

It is a matter of fact that VPS started its operations on the exact date planned.

Milestoneplan

D: Directives O: Organisation and Personell S: Systems and applications T: Technical infrastructure					Project nmr. Project Norwegian central securities depository CSD Project code Project manager Program manager CSD (VPS) Milestoneplan name Overall Program plan Responsible Kristoffer Approved by Erling	
Planned	D	O	S	T	Code	Milestone
01.07.84	D1					Proposition and stakeholder agreement sufficient to sign contracts for systems and organisational solutions
		O1		T1		O! Key personnel hired and facilities clarified. T1 Hardware and software commissioned.
		O2		T2		O2 Education and training of personnel finished according to plan. T2 Hardware installed and communications plan agreed upon.
	D2					Proposition agreed by Parliament
			S1			System for Shares tested and working on separat computer
			S2			All administrative systems tested and working
			S3			All instructors trained according to plan
		O3				
	D3					User contracts signed
	D4					A limited company and board has been established and regulations and fees have been decided upon.
				T3		Production maschine and system for conversion of stocks and bonds is testyed and working
			S4			Trial conversion of Shares carried out successfully
			S5			Full conversion of Shares carried out successfully
			S6			When system for Bonds tested and working
01.11.86		O4		T4		Full operations

Figure 13.5 Example Program plan

A central theme in program management is about the degree of control by the program management over the individual project in the program. The benefits of key directives are obvious: the same type of plans, the same organization and the same reporting methods facilitate the coordination of the projects. At the same time, strong central management can be perceived as a drag for the individual project and has a negative influence. One of the objectives of splitting in to several projects is to decentralize authority and creativity. Then one should not introduce a control system that provides the opposite. Program management faces the challenge of balancing the project manager's autonomy and overall control. It is always a dilemma for the program management.

The solution for the program management may be that each project makes a milestone plan according to specified guidelines, and then let the individual project use their own approach at the detail level. The task of managing a program is more demanding than a project manager job. It is not easy for a project manager to take on the task as a program manager just like that.

A traditional project manager would usually not have enough background for such a change challenge, and might not be comfortable with situations full of ambiguities and people with multiple agendas. It requires a lot of support and training to obtain the creativity and sensitivity needed to master the job as a program manager. Being a program manager is not all that different from being a line manager. The difference is that your staff (project managers and workers for ongoing projects) changes more frequently than in a line organization.

13.4 PORTFOLIO

13.4.1 THE PORTFOLIO MANAGEMENT'S CHALLENGE

The challenge for a portfolio management is how to prioritize and select the projects and programs for the portfolio. Generally, there are always has more proposals for projects and programs than the company can implement. Management must therefore have a plan how to choose which ones to finance and provide resources for. Portfolio management therefore primarily focuses on these two issues - selection of projects / programs and allocation (allocation) of resources - which are two sides of the same.

Portfolio management is about making strategically important decisions based on uncertain information in a continually changing world. These decisions are some of the most challenging that management in today's businesses face. The decision-making process is characterized by:

- The projects are about future events and opportunities; therefore, much of the information required to take decisions is at best insecure, at worst not to trusted
- The decision situation is dynamic; Project proposals and information about the projects are constantly changing
- The projects in the portfolio are at different stages; the information about the different projects is of a very different quality.
- There is a limit to the resources that can be allocated to the projects; A decision to fund one project leads to less resources for others.

Before starting the actual work on selecting the projects for the portfolio, the business strategy must be determined and communicated to all concerned. The lack of strategic anchoring is one of the biggest problems reported by the companies from their practical work with portfolio management. Without linking the selection to the business strategy, the process becomes random, or even worse by individual self-interest and their strength argumentation. Starting from a strategy, you can create a successful project-oriented business. Then it is possible to decide which development and change tasks need to be prioritized.

Before the business starts the concrete assessment of which projects it will prioritize, it must form a picture of what resources are at its disposal for project work. the resources needed for daily operations must be estimated, and what resources are already pledged through projects that have already begun. In addition to using their own available internal resources, the company may also outsource to external resources. Of course, it is also possible to quit already running projects, if very attractive new project opportunities appear. This is rarely an appealing solution, but sometimes a bare necessity.

There is a "pain limit" to how many projects a business can run at the same time. Any project

implies that personnel resources from the line organization must be made available, either for the actual work in the project or for leveraging the deliveries from the project. If the line organization is already understaffed and overworked, allocating people to projects will be a further stress moment. Every business must have defined selection criteria and procedures for establishing new projects.

13.4.2 SETTING UP A PORTFOLIO

It is recommended that management of the project portfolio follows a standardized process. The work can consist of three steps:

1. Description and evaluation of each project / program proposal
2. The specific selection (selection) of which projects / programs to be included in the portfolio
3. Follow-up of the portfolio

The three steps are closely linked. The description and evaluation of the individual proposal (step 1) must be based on the criteria to be used in the selection process (step 2).

All project proposals must be described in a consistent manner according to standard for the different types of projects (feasibility studies, implementation projects etc.). If not, it is very difficult to do a balanced evaluation of them. It is important to quantify the recourses each project needs. The actual selection can then take place in several iterations, with a rough selection first and then additional refined selections before the final choice. The process then becomes iterative, where the remaining candidates in each round are more thoroughly described and evaluated.

The follow-up (step 3) should be periodic, but may also be triggered by new proposals for projects. The evaluation must, as mentioned, reflect the criteria to be used for the selection. Nevertheless, each proposal must always be considered in relation to the company's strategic plans and goals. One must investigate whether the project fits with the company's strategy. The term strategic fit is used. Projects not supporting the strategy are rejected without further evaluation. When it comes to the selection itself, at least three types of criteria can be used:

- Economic value
- Balance in the portfolio
- Strategic direction

In the first case, a financial assessment is made. It is essential to maximize the economic value of the portfolio. The portfolio must therefore be consolidated so that the economic return is maximized.

Within the resource frame you would usually choose the most profitable projects.

In chapter 9.1 of Goal Directed Project Management it is shown how to do cost / benefit analysis for a project. The problem with this criterion is that it requires information about costs and benefits for each project. Such information may be difficult to obtain and infected with a high degree of uncertainty. Infrastructure projects are typical for this.

Balance in the portfolio means selecting projects that together provide a portfolio that is balanced along several dimensions. According to this criterion, it is desirable to have a portfolio consisting of a combination of short-term and long-term projects, projects with high uncertainty and low uncertainty, projects of different types (organizational change projects, construction projects, IT projects, product development projects and so on).

Strategic direction is a criterion which involves selecting those projects, still within the resource framework, which contributes most to the fulfilment of the company's strategy. It is no longer just a requirement that the projects support the strategy, but a priority of the projects that most fully realize the company's intentions. In practice, we do not look at these criteria as alternatives. They will be combined, with different emphasis. The selection will then be characterized by financial assessments, balanced project mix, as well as strategic considerations.

An important issue in connection with portfolio management is the level at which decisions are to be made. In connection with the definition of the project portfolio, we mentioned that we have portfolios at different levels associated with the various organizational units. The question then arises if decisions about the composition of portfolios are to be made centrally or de-centrally. By a central decision, senior management determines which projects and programs the business will run. It can, of course, obtain views

from the lower levels of business, but the decisions on which programs and projects to be started are at the top management. In a decentralized scheme, the individual organizational unit (for example, IT department and Human Resources Department) determines which projects and programs it should run. The senior management may have decided on the criteria to use, but decisions are made on lower level. The business project portfolio is the result of decentralized decisions.

Middle ground between central and decentralized decisions may be that certain types of decisions lie with senior management, while others are further down in business. Naturally, decisions about projects of strategic importance are taken by senior management, while individual organizational units can launch projects of tactical and operational nature. It is not just the selection of the portfolio that is important for future success.

The way in which the portfolio is monitored is also important. It turns out that some practical procedures give better results than others. Note, however, the reporting and monitoring should be integrated with the business' periodic reporting of operations, and standardised as such.

Avoid the following:

- Using the same people on many projects at the same time. Matrix organization enables a project employee to participate in multiple projects at the same time, but may have a negative effect. (Participation in four simultaneous projects is at least one too much)
- Spreading the financial resources on too many projects
- Changing project manager and key project personnel along the way.

This shows that in order to succeed, you must have concentrated efforts. The project manager, project staff and the basic organization must have a clear focus, and not try to overcome too much, in order to achieve good results.

The most successful portfolios are characterized by:

- More people full time on risky projects. The most uncertain projects in the portfolio have more employees that have the

project as their main task (either as actual full-time employment or at least 50-60% of their time spent on the project)

- Fewer projects in the queue (backlog)
- Some free capacity. Successful portfolios are characterized by the flexibility to act if problems arise.

Focus is important. Employees must be able to focus fully on the tasks they have in projects that require great attention. You should not have to think about what's happening in your daily environment or in other projects that you participate in or should have started. And you should have necessary flexibility when opportunities or problems arise.

13.4.3 REPORTING TO PORTFOLIO MANAGEMENT

There is a need for progress reporting. We will, in the same way as for the overall planning, argue for a uniform arrangement, that is, all projects use the same type of reporting to portfolio management. It is clear that the kind of reporting used in Goal Directed Project Management is also here of great relevance. However, when management is to receive reporting from many projects at once, there is a desire for more compressed reporting.

The simplest form of unified status reporting is what is known as traffic light reporting. Project status is signalled by project management indicating one of three categories:

- **Green:** The project is on the right track; all problems/issues can be addressed by the project itself
- **Yellow:** The project has problems; there may be a need for management involvement to address the issues.
- **Red:** The project has significant problems; there is a need for management intervention.

The colouring can be used to flag each individual milestone status.

This type of reporting is conclusive because of the overview it gives over the situation in the projects. At one glance you get a picture of where the problems are. But we must warn against standing blindly on this.

There are two possible sources of error in this type of reporting. The project manager may have a wrong opinion of the situation or can deliberately report skewed (which means, in essence, that he gives a more favourable picture than is the reality). All in all, this can give a distorted picture of the situation if not used carefully and with consideration.

An addition to portfolio manager receiving reports from many projects and programs is that the manager has a support system that helps to keep track of developments in the portfolio. (Aggregated reports from individual milestone plans) In the next section (section 13.5) we look at the tasks of a support device in a multi-project environment.

Reporting alone has weaknesses as a control mechanism. Then it's important that management feels that it has employees who "play on the same team" and can rely on that everybody thinks the same way about the company's future and development. Socialization activities such as

start-up meetings and regular meetings during the project can contribute to this.

It's important not to bureaucratize the reporting, or to push the issues upward. It is the grip on each project that ensures that you have control of the whole. Control is bottom up and cannot be top down.

«Take care of the pennies and the pounds take care of themselves» as the Scots say.

13.4.4 EXAMPLE OF A PLANNING PROCESS FOR PORTFOLIO SELECTION

We include a small example of how a portfolio management can plan the selection of its projects. The planning process is shown using a milestone plan and a responsibility chart. The planning takes place periodically, for example once a year. But one must be open to review the plans more often if particularly interesting projects should appear or that there is a need for faster start-up of new projects.

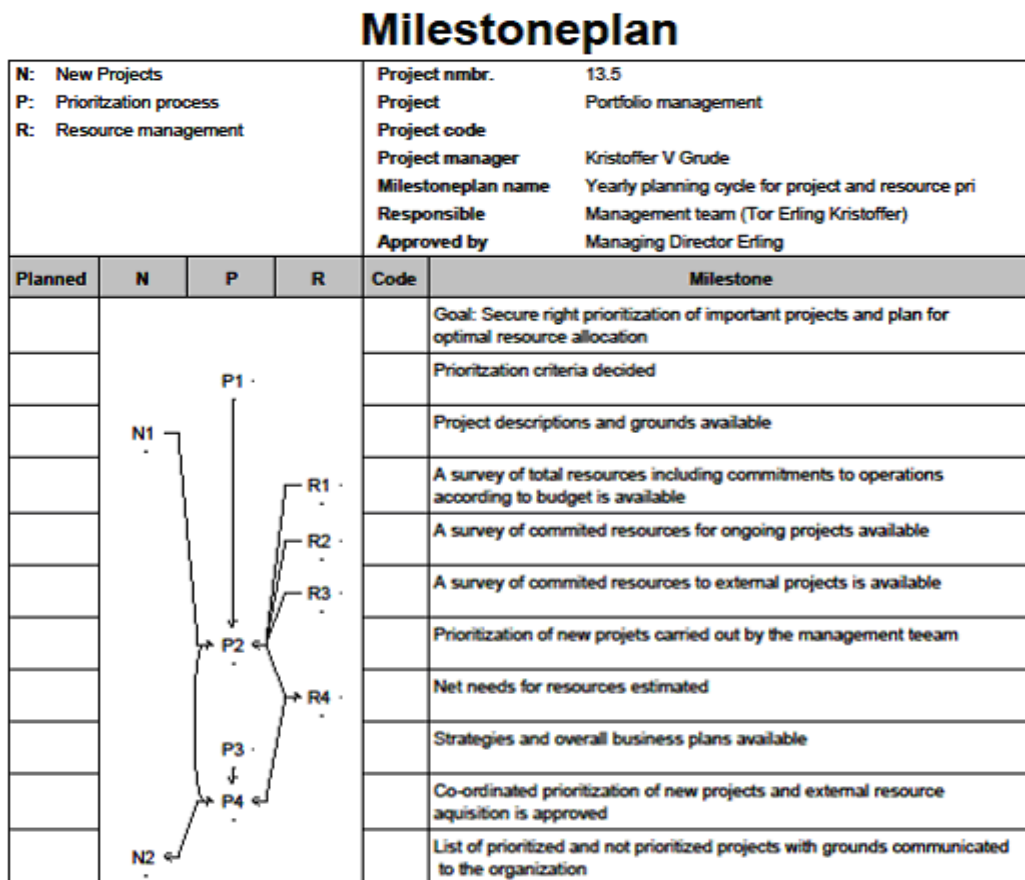


Figure 13.6 Milestone plan shows a process for selecting projects/programs for the project portfolio.

The Milestone Plan shows a business that sets out its prioritization criteria (milestone P1). Proposals for new projects with reasons must be within a announced deadline (N1).

When the priority of professional content of the project proposals is available (P2), the project proposals (N1) have been considered against the resources available to the company and already pledged taken in to consideration (R1, R2, R3).

We see that this business has external projects (i.e. delivery projects to external customers). These projects are part of the business activities

and not included in the project proposals, but they confiscate resources that could have been used for the internal projects.

The priority projects may involve external resources (R4) to be completed. The reason can be both lack of personnel and lack of competence internally.

The final determination of the project portfolio for the coming period (P4) occurs after one has incorporated the business strategy and overall plans (P3) and evaluated the need for hiring externally (R4). The decision implies that some projects will be started, others not (N2).

Responsibility Chart

PLAN				RESPONSIBILITIES							
Project nمبر.	13.4			Board of directors	Managing Director	Project office	Head of finance	Line managers involved	Current co-workers	Project managers	
Project	Portfolio management										
Project code											
Project manager	Kristoffer V Grude										
Milestoneplan name	Yearly planning cycle for project and resource pri										
Responsible	Management team			1	2	3	4	5	6	7	
Approved by	Managing Director										
Estimate	Days		01.okt.2017 - 01.des.2017		X - executes the work T - provides tuition on the job D - takes decision solely C - must be consulted d - takes decision jointly I - must be informed P - manages progress A - available to advise						
Days	Start date	Finish date	No.	Milestone	1	2	3	4	5	6	7
				Goal: Secure right prioritization of important projects and plan for optimal resource allocation							
			P1	Prioritization criteria decided	D	XP		C	C	I	I
			N1	Project descriptions and grounds available				I	d	C	XdP
			R1	A survey of total resources including commitments to operations according to budget is available		I		XP	I		
			R2	A survey of comitted resources for ongoing projects available		I	XP	X	I	C	X
			R3	A survey of comitted resources to external projects is available		I	XP				
			P2	Prioritization of new projets carried out by the management team		d	I	d	d	I	I
			R4	Net needs for resources estimated				XP	X		
			P3	Strategies and overall business plans available		XdP		C	C		
			P4	Co-ordinated prioritization of new projects and external resource aquisition is approved		D	XP	d	d	I	I
			N2	List of prioritized and not prioritized projects with grounds communicated to the organization		I	XP	I	I	I	I
0.0											

Figure 13.7 Responsibility chart associated with planning process for selecting projects for the project portfolio

We see that large parts of the business will be involved in one way or another in the selection of the project portfolio. Priority criteria (P1) has to be decided by the board. The project office (support for project activities, see next section) plays an important role in determining resource utilization for ongoing and external projects. The content priority of new projects (P2) takes place through a decision-making process involving both CEO, line managers and current employees, but the final decision (P4), after the board has adopted strategy and overall plans (P3), is taken By the CEO.

13.5 SUPPORT FOR A MULTI-PROJECT ENVIRONMENT

We have emphasized in Goal Directed Project Management (Chapter 11) the importance of a project developing a good project culture. We reviewed how the different people and bodies should contribute to the most appropriate project culture. When the business has a multi-project environment, it might be appropriate to have a separate support body in the organization for the project activities. The extent of this body depends on the size and importance of the project activities in the organization.

We see that many companies have created what has been called project office in recent years. The names Project Management Office (PMO) and Project Support Office (PSO) are often used. This usually involves a considerable amount of support for project activities. Not all businesses will feel that such a comprehensive venture is needed. Nevertheless, they may have plans covering some of the tasks assigned to the project office. Let's look at the project office and what tasks may be available for such a support.

The project office should be a staff body in the line organization, that is, it has an advisory function. It will assist the line in the use of the project as a working structure. It will support the projects in their endeavours to carry out the missions they have received. Since the project work often affects the management of the line organization, it is appropriate to place the project office in the senior management staff. The head often called CPO (Chief Project Officer). It is important organizationally not to mix decision-making authority and advisory authority. Accordingly, the recommendations presented by the project office must just be considered as good advice. If it is compulsory to follow them,

it must be decided in line by the person who has this kind of authority.

The project office can have many different tasks related to:

- The project portfolio (all ongoing projects)
 - Develop and maintain an overview of the project portfolio
 - - Develop and maintain an overview of the resource needs associated with the project portfolio.
- The company's project standards (the way in which the project work is carried out).
 - Develop and continuously improve the organization's project standards, including methods, templates, forms and IT-based support tools.
 - Provide or disseminate training in the standard and methods. / Tools
- Project resources and project expertise
 - Develop and maintain an overview of potential project managers and special categories of project participants
 - Contribute to the distribution and sharing of experience and learning between projects
 - Develop understanding of project work in business
 - Offer or convey general training in project management
- Support for individual projects
 - Support or advice on project situations where the project office has special expertise (e.g. at project start-up, uncertainty analyzes and stakeholder analyzes)
 - Support or advice on special problems in the project
 - Implementation of project reviews / revisions in the project

It is common that the project office prepares an overview of the projects the company has. This is valuable information for business management planning. The task can be expanded to also keep an overview of the resource requirements for each project and sum up the total resource requirements. It is a much bigger task. If this is to be of any use, it requires the will of the

line (base) organization to use such information to actually coordinate resource use, which involves a conscious allocation of resources between the different projects. It is not the project office's task to prioritize, but to prepare necessary information to do so.

It would be the project office's task to develop an appropriate project standard with methods, templates, forms and IT tools. The standard can be improved on the basis of the experience the projects have with it. It requires the project office to have procedures to collect and take care of the experience of completed projects. We would of course recommend that project standards should be based on the methods we have presented in the book "Goal directed project management".

The project office can help develop project competence in the business. This applies to both

the competence of those who lead and participate in the projects and the competence of those in the line that will make use of the results of the project work. As part of this work, the project office can prepare an overview of the company's project competence and skills.

The project office will eventually become a competence centre with good knowledge of the different methods and techniques that can be used in the project work. Office staff can advise the projects on how to proceed in common and unusual problem situations. Again, it is important to emphasize that the project office's task is advice. The project must ask for assistance. The project office shall not assume responsibility for the implementation of the project. It will only give advice and help and often provide external resources.

Drøbak, October 2017, Kristoffer V. Grude