Building enterprise project management capability 8

Programme and portfolio management: Connecting projects to corporate strategy

by **Professor J. Rodney Turner**

In November, I described governance in the project-based organization. I suggested that there are three levels of governance *(Figure 1)*:

1. At the level of corporate governance, where corporate governance supports project, programme and portfolio management and they support corporate governance, and where the right portfolios, programmes and projects are defined to deliver corporate objectives
2. Between corporate governance and the individual project, where appropriate portfolio and programme governance and management structures (including the project office) are put in place to support individual projects, and where competencies are developed to enable projects, programmes and portfolios to thrive
3. At project level, where governance mechanisms are required to ensure the project will deliver the right product and that product will deliver the desired business benefits.

This month I want to describe the middle level of governance in more detail; the level of programme and portfolio management, at which we link what is happening on projects to the governance of the whole corporation *(Figure 2)*. I said last month that the three levels of governance overlap. So I will pick up at where we define programmes and portfolios to deliver corporate objectives and link to where programmes and portfolios support the management of individual projects. In this article I describe:

- definitions of programmes and portfolios
- managing the investment portfolio to link projects, programmes and portfolios to corporate objectives
- portfolio management to coordinate interfaces between projects and prioritise the assignment of resources to projects
- programme management to deliver higher order strategic objectives than can be delivered by individual projects

The role of the project office will be discussed in a later article. I will not refer to developing individual and organisational competence, because that was the subject of the first few articles in this series.

Definitions

In the early days of project management, from the 1950s to the mid-1980s, the focus was very much on large to major projects. Projects were considered to be:

- large unitary endeavours
- isolated from other projects and operations
- with dedicated resources

For instance consider the construction of a large multi-storey building, an office block, hotel or hospital. A fence is built around the construction site. The only links to the outside world are the provision of a few service lines (gas, water, electricity, sewerage). A set of dedicated resources is placed inside the fence, within the control of the project manager. He (or she) may not have all the resources he wants, but those he does have, he controls. That is traditional project management, which most of the books are written about, and which in my view represents about 10% of project activity.

The more normal project scenario is of small to medium-sized projects, which have:

- shared objectives
- links to other projects and operations
- shared resources

This in my view is the more common scenario, representing about 90% of project activity. In this scenario projects:

a. share components and contribute together to higher-order strategic objectives
b. have links and interfaces where projects impact on one another
c. share resources for a common resource pool, meaning the project manager does not always have control over the resources working on his or her projects.

The sharing of resources is a particular problem. Project managers can find their resources come and go as priorities change, and may suddenly find themselves without any. Their projects stop and start. That is very inefficient.

If projects stop and start they consume far more time and resource than if they are allowed to progress smoothly. It can also be inefficient if projects interfere with each other, preventing smooth progression. It is not easy, but organisations must put in place governance mechanisms to manage their programmes and portfolios of projects, to ensure their smooth progression.

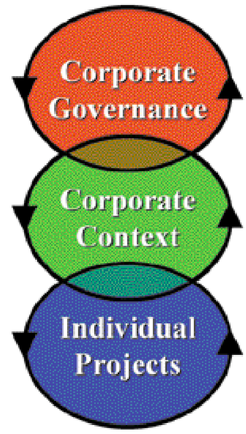

Figure 1: Three levels of the governance of project management (GoPM)

A portfolio is a group of projects managed together for management convenience. They may share a common resource pool, or have other interfaces and so impact on each other in other ways. By managing them together we expect to have more efficient and effective delivery of the individual projects than if they are managed separately. Benefits from managing the projects together can include:

- increased efficiency and effectiveness by avoiding the stop/start of projects
- projects get prioritised giving the best returns on capital expenditure
- projects get finished
- interfaces between projects are risks, and those risks get managed

A programme of projects is a temporary organisation in which a set of projects is managed together to deliver a higher order benefit than can be obtained through anyone of the projects on its own. The benefit of managing the projects together is now all those above, plus:

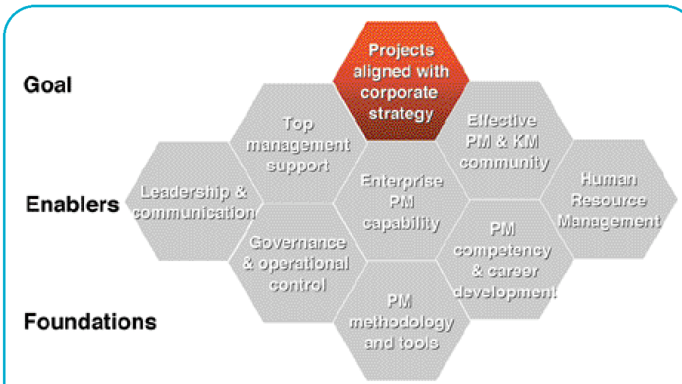

Figure 2: Programmes and portfolios to align projects with corporate strategy

- the higher order, strategic benefits is obtained
- early benefits can be obtained by commissioning selected projects while others are being completed

Is a programme a special case of a portfolio, one in which the projects have a common objective? I think not, because the focus is different. In a portfolio, we start with the common resource pool, and projects come and go. The focus is in using the resource pool to optimum effectiveness. In a programme we start with the higher order strategic objective, and define those projects we need to do to achieve it.

Confusingly, the project management community uses the word 'portfolio' in another related way. The organisation's investment portfolio is the sum total of all its projects, programmes and portfolios, delivering its total investment programme.

The investment portfolio may consist of just one portfolio of projects, or it may consist of several programmes, large projects and portfolios of miscellaneous projects. In the rest of the article I will refer to this as the investment portfolio, and a portfolio of miscellaneous projects as a project portfolio.

Last month I said there were four essential elements of governance:

- managing the relationships between an organization's stakeholders
- defining its objectives
- defining the means of obtaining those objectives
- monitoring performance

To provide the middle level of governance, an organisation needs to do these four things for its programmes, project portfolios and investment portfolio.

Governing the investment portfolio

There are five essential steps in governing the investment portfolio:

Step 1:

Maintain a list of all projects, programmes and portfolios in a project database

Step 2:

Monitor progress on all projects, programmes and portfolios

Step 3:

Plan the resource needs of all projects, programmes and portfolios

Step 4:

Prioritise all projects, programmes and portfolios and assign resources appropriately

Step 5:

Evaluate business benefits post-implementation, to continuously improve selection and management procedures. (I will describe how to manage business benefits in a later article.)

The next section describes how to share resources between the individual projects in a portfolio of individual projects. The same processes can be used to share resources between the large projects, portfolios and portfolios in the investment portfolio.

When I worked as a consultant with Coopers and Lybrand in the late 1980s, many of my clients struggled with the problem of prioritising resources between large, medium and small projects.

The problem is that small projects often tend to be more urgent, but the large projects get greater visibility. Large projects have delivery dates that are months or years away, while small projects have delivery dates in a couple of weeks. The small projects are more urgent, but their resource requirements cannot be seen in the noise of the resource requirements of the large projects.

The only way people have found to solve this problem is by grouping the small to medium sized projects into portfolios, and sharing resources between the large projects and project portfolios at the investment portfolio level and then between the small to medium projects at the project portfolio level.

Other authors also suggest you create portfolios for different types of investment projects:

- strategic projects
- market related and product development projects
- capital expansion projects
- operational projects

The roles required to manage the investment portfolio and the large projects, programmes and project portfolios which it comprises are similar to those for individual projects.

a. In overall charge of the investment portfolio will be an investment portfolio committee, reporting to the board, chaired by the investment portfolio director. They will act as owner for all the large projects, programmes and project portfolios being undertaken by the organisation. They will convert the organisation's strategic development objectives into objectives for large projects, programmes and portfolios, and determine priorities to share resources between them. They act as owner for all the projects, programmes and project portfolios being undertaken by the organisation, and are accountable to the board for overall achievement of the development objectives.

b. Each large project, programme or project portfolio will have a sponsor (broker or director) responsible to the investment portfolio committee for delivery of the required benefit from the project, programme or portfolio. They will work with the project, programme or portfolio manager to define how those benefits will be delivered.

c. The individual project, programme or portfolio manager, monitors performance by receiving progress reports from the individual sub-projects and compiling them into higher level reports.

The investment portfolio committee will meet regularly, typically once every three four or six months to consider proposals for new projects, programmes or portfolios. They need some method of prioritising the new proposals, alongside each other and the existing programme. Projects, programmes and portfolios are prioritised using a balanced score-card type approach, based on:

- benefit to the organisation
- benefits to customers
- risk
- process effectiveness
- learning opportunity
- and so on

Governing project portfolios

The two main issues in the governance of project portfolios are managing the interfaces between projects and sharing resources between them, to enable the projects to progress smoothly, without interruption, in an efficient and effective way. In this way, the benefits suggested above can be achieved.

Coordinating interfaces

Interfaces between projects are a risk, and so coordinating interfaces is a risk management process:

1. Identify the interfaces. This can be done through the project database.
2. Assess the interfaces and prioritise major interfaces for further attention.
3. Group the projects into sub-portfolios, to minimize the number of interfaces between sub-portfolios. In that way reduce the risk.

Sharing resources

The means of sharing resources between projects in a portfolio is now well understood. Up to about ten years ago, the approach people adopted was to maintain a gigantic plan of all their projects in one database. Each project was planned in detail, with their resource requirements, and the plans merged into a single meta-project plan. The computer was then asked to schedule all the project activities subject to the resource constraints. The problem was, you had to give the computer some rule for prioritizing one activity over another when a clash occurred. Having given the computer a rule it would apply the rule absolutely, without question. That led to silly outcomes.

A different approach has been suggested for the past ten years (based on work I did in 1992, see Turner, 1992). There is a four-step process:

1. Each project is planned individually, and its resource requirements calculated.
2. But instead of merging all the project plans into a gigantic meta-plan, a rough-cut capacity plan is maintained instead. This is

called the Master Project Schedule. In that plan, each project appears as a single activity, with a simplified resource requirement. That provides a very rough view (a rough-cut) of the resource requirement.

3. Projects are then moved, extended or deleted in the Master Project Schedule, to smooth out the resource requirements within the resource constraints. This will be done manually, with management control. This produces a rough resource balance, accurate enough for the purpose of deciding which projects can be done, and when they can start and finish. That gives each project a window of when it can start and finish, and its resource availability.
4. Each project is then managed within its start and finish date and resource availability. As long as the project manager can keep to those constraints, there is no need to refer back to the Master Project Schedule. If some disturbance occurs, the project is delayed, or another project requires additional resources, the response can be planned in the Master Project Schedule.

This is not easy, but if you are doing it, you have some semblance of control. If you are not doing it, you are out of control, and have no way of responding to disturbances. You have no way of planning how to respond to unforeseen events. If you are doing it, at least you have some control over how to respond to disturbances. It is not easy, but you have some control.

Programme governance

There are two issues of programme governance, the programme management lifecycle, and the governance roles.

Governance roles

There are four key roles, two at the programme level and two at the project level. As described above, the programme should have a programme director (or sponsor) and a programme manager.

The programme director is responsible for defining the required business benefit from the programme and works with the programme manager to decide how that will be achieved. The programme manager then monitors progress and reports it to the programme director, who is responsible to the investment portfolio committee for achievement of the business benefit.

The programme director is owner of all the projects in the programme. Each project also has a sponsor and a manager. The sponsor of each project is often the programme manager, but may also be an interested business manager, depending on the circumstance. The programme manager, project sponsor and project manager work together to define the project's objectives and how they will be achieved. The project sponsor is responsible to the programme manager for ensuring that project delivers its business benefit, and the project manager monitors and reports progress.

Programme life cycle

I said above that with a programme the higher order strategic objective comes first, and projects are identified to achieve that. This tends to be a cyclic process. Rather than committing to all the projects up front, what tends to happen is a group of projects are identified and implemented to initiate the programme. When those projects are completed, progress is reviewed and another cycle undertaken or the programme dissolved. This gives a five-step process for managing programmes:

Step 1:

Formulation: The programme is started. Options are considered and choices made.

Step 2:

Organisation: A cycle of the programme is started. Projects are planned and selected.

Step 3:

Deployment: Those projects are undertaken.

Step 4:

Appraisal: At the end of the cycle, progress is assessed. Progress towards the overall objective and business benefit is assessed. It is decided either to proceed with another cycle of the programme, or to stop the programme. The programme will be stopped if:

- the desired business benefit has been achieved
- the benefit has been substantially achieved and further work will not be cost effective
- circumstances have changed and the original objectives are no longer worthwhile

Step 5:

Dissolution: If it is decided to stop the programme, the team is disbanded.

Each cycle will deliver some or all of the originally desired benefit. This is very worthwhile, because by following this process, early returns can be obtained.

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