

Early days

Chapter 2

This chapter examines what has to happen before a project gets underway. As a project manager, you may only become involved at the end of this stage. You may simply be presented with the Terms of Reference which are drawn up at the end of this phase and be asked to prepare a plan to put the project into action.

It is always an advantage if the project manager who will be responsible for carrying out a project is consulted during the preliminary discussions. If you are involved, you can use your previous experience to advise on whether the proposed working methods, resource levels and staffing arrangements are likely to be effective – and argue for what you believe is necessary. You should also be able to provide guidance on whether the scope of the project is too ambitious, or not ambitious enough.

It is also important for project managers to understand the past history of the projects on which they are working. Why is this project so important to the organisation? How does it relate to their overall strategy? Why was this project selected instead of another one? The answers to questions like these will help you to appreciate the priorities and concerns of your clients. This understanding can be of immense assistance during the implementation phase of the project, when it is essential for you to retain the confidence and support of the people who are paying the bills.

This chapter begins by considering the different ways in which projects can arise. Some are designed in response to an identified need, while in other circumstances the idea for the project precedes the perceived need. In either set of circumstances, the objectives of the project must be matched to those of the organisation which is investing in it. There are also other considerations which are taken into account when an idea for a project is evaluated. The financial viability of the project will invariably be considered. Most organisations will only give their support to projects which are in harmony with their own values and culture. And early consideration must also be given to the risks which are involved in a project.

This chapter also describes the process of issuing and responding to an Invitation to Tender – and looks at issues to consider when preparing a proposal. It goes on to examine the principles of negotiation and what you can do to reach a settlement which will enhance, and not damage, your relations with the people you will be working with on the project. It ends by describing the contents of the Terms of Reference document.

Where do projects come from?

Projects do not arise spontaneously. They are pulled or pushed into existence. A ‘pulled’ project is one which is commissioned by a sponsor in response to a perceived need. A ‘pushed’ project is one where the initial impetus comes from an organisation or an individual who wants the project to happen, but does not have the resources to sponsor it.

‘Pulled’ projects

In the first situation, the need precedes the project. The main priority is to establish that:

1. The project will achieve what it is intended to do.
2. It will do this better than any other proposed investment of time, cash and other resources.

It is usual for several alternative projects to be considered and evaluated – before the one which will meet the sponsor’s objectives most effectively and efficiently is selected. The project manager may well be involved at this early stage and may help the sponsor to gather and evaluate this information.

When an organisation commissions a project, it is usually because:

- It has a problem, *or*
- It sees an opportunity it wants to exploit.

The problem or opportunity will, or at least should be, be directly related to the overall business strategy which the organisation is pursuing. There are five basic types of strategy which organisations can adopt:

- Maintaining or increasing sales of an existing product or service in an existing market
- Developing a new product or service for an existing market
- Taking an existing product or service to a new market
- Developing a new product or service for a new market
- Retrenchment.

Each one of these strategies can give rise to projects. Here are some examples of ways in which organisations have used projects:

Consolidating an existing market: *'Sales were falling and we were gradually losing our market share. We decided that we had to reduce our prices, which we could only achieve by making savings within the company. We commissioned a project to design a new information system which would enable us to increase efficiency and reduce staffing levels.'*

Developing a new product for an existing market: *'We set up a special team to design a new range of swimwear to complement the clothing we were already making for the 11-16 market.'*

Taking an existing product or service to a new market: *'We wanted to expand our operation by opening a chain of retail outlets in the major cities of Europe. We began by setting up a project team to come up with a concept which would be attractive to customers in Paris, Rome and Dublin.'*

Diversifying into a new market with a new product: *'We have an established business producing computer games for the leisure market. We decided to diversify into educational software and set up a project to*

design and develop a series of programs based on the National Curriculum for use in primary schools.'

Retrenchment: *'We recently had to make over two hundred people redundant in one of our regional centres. We knew that the process would be extremely difficult for local management and brought in a specialised team of consultants to organise things and provide career counselling for those members of staff that wanted it.'*

Some shifts in strategy can be dealt with within the ordinary operational structure of an organisation. However, the more change that a strategy involves, the more likely an organisation is to set up a project.

Projects allow organisations to:

- Make changes without disturbing the underlying operation
- Bring in, or develop, new kinds of expertise
- Increase their capacity on a temporary basis.

'Pushed' projects

'Pushed' projects are frequently dreamed up by a single, innovative (and sometimes charismatic) individual. People like this often have a vision of something they would like to see happen in the future, but lack the resources to make it happen. Artistic projects, such as films and plays, major public events and construction projects, such as those planned to celebrate the Millennium, are all examples of 'pushed' projects. They can also arise inside organisations. You may know colleagues within your own organisation who are constantly trying to obtain backing for their projects. (You may even be one of these innovative individuals yourself.)

When someone has an idea for a project of this kind, the first priority is to identify potential sponsors and persuade them that the project is worth doing. This usually involves identifying an organisation with objectives which will be met by the project. For example, if you had an idea for a new product which could be made by people with the minimum of training and equipment and would

produce a respectable profit, you might look for an organisation which was interested in supporting employment opportunities in an economically deprived area of the country. You could also approach a company which was already making a related product and which was interested in expanding its operations without investing vast sums in new machinery.

You need to start by doing some research. This may simply consist of some informal networking, or involve a series of more formal approaches to likely organisations or individuals. If a project is likely to result in financial gain, it is prudent not to give too many details away until you are convinced that the potential sponsor is seriously interested. In some circumstances, you may have to protect yourself by obtaining patents or by registering the copyright of your idea before approaching potential backers.

Useful questions to consider in relation to a potential sponsor:

- *What resources does this sponsor have at its disposal?*
- *What kind of projects has this sponsor sponsored in the past?*
- *What other demands does this sponsor have on its resources?*
- *What is the current policy of the sponsor towards investment?*
- *What conditions is this sponsor likely to attach to sponsorship?*

Action Checklist



Once you had identified a potential sponsor, you would have to demonstrate that your project would meet their objectives. You might also find that you were having to compete for funds against people who were pushing other projects.

The initial dynamics of these two situations are different. In the first case, the existence of the need for a project has already been accepted. The key decision is whether a particular project is the one that should go ahead. In the second situation, it is necessary to identify potential sponsors and to persuade them that the project is worth doing.

Evaluating a project

We will now consider the criteria which sponsors use when deciding whether to invest in a project. To begin with, a sponsoring organisation is only likely to look seriously at a project which is consistent with its overall strategy, values and culture. Here are some examples of projects which failed to pass these first hurdles:

‘Someone came up with a proposal to increase turnover by refurbishing all the outlets in the south west region. However, it ran counter to our policy of gradually phasing out our operations in that part of the country. The project never stood a chance of acceptance.’

‘We have a certain amount of money which we make available to local groups for projects which will improve the quality of urban life. We recently received a proposal from an organisation which wanted to establish a drop-in centre for people who work in the sex industry. In the projects we support, we try to emphasise the importance of family values and felt that this proposal was not consistent with what we were trying to achieve.’

‘We asked several design companies to put in tenders for a project to produce a new look for our retail outlets. One idea involved going over to self service. Since we pride ourselves on the high level of individual attention we give to our customers, many of whom are very traditional in their outlook, we felt that this idea was inappropriate.’

In some situations, a particularly innovative and exciting project proposal may succeed in changing the sponsor’s underlying strategy, values or culture, but this does not happen very often. Decisions about the general direction in which the sponsoring organisation is heading are usually taken before it considers proposals for projects and are difficult to reverse.

Assessing the financial viability of a project

Before committing itself to a project, an organisation needs to be confident that it is making a wise financial decision. If the project is designed to produce income

in the future, the amount and timing of this revenue will need to be calculated. These figures may need to be prepared and presented by someone with specialised financial training. The costs of a project also need to be calculated.

Once an organisation knows how much a project is likely to cost, and how much money it is likely to bring in, it can compare these figures with those for other competing investments, or with a benchmark. There are several techniques which organisations use to evaluate investments:

- Pay-back
- Discounted pay-back
- Accounting rate of return
- Net present value
- Internal rate of return.

We will give an outline of each of these methods. In practice, the calculations are likely to be done by financial specialists. However, it is extremely useful to understand the basis on which a project will be evaluated by potential investors.

Pay-back

The simplest way to evaluate an investment is to look at the time it will take to pay for itself. A project which costs £1,000,000 and which will generate income of £100,000 in the first year, £400,000 in the second year and £500,000 in the third year has a pay-back period of three years. Another project which costs £1,000,000 and which will bring in £200,000 a year for the foreseeable future has a pay-back period of five years.

If the two investments were equally attractive in other ways, an organisation using the pay-back method would select the one which has the shorter pay-back period. Other organisations set a limit, of for example three years, and do not consider investments with a longer pay-back period.

The advantage of the pay-back method is that it is easy to understand. There are also some major disadvantages to this method of evaluation. In the first

place, it takes no account of what happens after the pay-back period. Common sense tells us that it is better to choose an investment which will continue to produce income for a longer period. Another significant difficulty is that this method takes no account of when income is due to come in.

Discounted pay-back

In business, money has a time value. Any funds which an organisation holds are not left to sit idly in a safe, but are put to work. This means that £1 which you have now is worth more than £1 which will arrive at some date in the future. Let's suppose that you invest your money in an enterprise which will bring in 10 per cent interest a year. At the end of 12 months, £1 has become £1.10.

$$£1.00 \times \frac{110}{100} = £1.10$$

You can also do this calculation backwards and work out that £1.10 which you receive in a year's time is only worth £1 which you have now.

$$£1.10 \times \frac{100}{110} = £1.00$$

Taking the same rate of interest of 10 per cent, you can look at any amount which you will receive in the future and calculate its equivalent value in money which you have today:

$$£1,000 \times \frac{100}{110} = £909$$

£1,000 which you receive in a year's time is only worth £909 at present value, assuming an interest rate of 10 per cent.

If cash is invested for a longer period of time, its present value is even smaller:

$$£1,000 \times \frac{100}{110} \times \frac{100}{110} = £826$$

The discounted pay-back method reduces the money which will come in from an investment to its present value. It takes account of the fact that £1,000 which

arrives in two years' time is worth less than £1,000 which arrives in one year's time. This gives a much better indication of the value of an investment. However, this method still does not take into account any income after the pay-back period is over.

Accounting rate of return

This method involves taking the average profits of the investment and dividing them by the average book value. The 'average book value' is a piece of accounting terminology. It means the figure which is obtained by deducting depreciation from the initial cost of an investment.

Although many organisations use this method to evaluate investments, it has certain significant disadvantages. Firstly, it requires some knowledge of how financial statements are prepared. Secondly, like the pay-back method, it does not take into account the time value of money. Profits are averaged out over several years, so projects which would produce profits more quickly than others are not given priority. Thirdly, this method is based on figures for profit, not cash flow. In a situation where there is a long delay between issuing an invoice and receiving payment, the impression created by this method of evaluation could be very misleading.

Net Present Value

This method of evaluation is similar to the discounted pay-back method. It looks at the opportunity costs of the capital involved. These are equal to the market interest rate for investments which carry a similar risk. The Net Present Value method works by comparing cash outflow today with cash inflows in the future which are discounted at a rate equivalent to the opportunity costs. For example, if shareholders could expect a 10 per cent return on their money if they invested it on the open market, future inflows of cash would be discounted at 10 per cent per annum.

Unlike discounted pay-back, this method takes into account cash inflows over the whole life of the investment, not just the pay-back period. It also brings into the equation the terminal value of a project – any cash that can be realised by selling off equipment, premises or other assets when the project is over. Net

Present Value has many advantages. It is not significantly more complicated to calculate than discounted pay-back and it produces much more useful results.

Internal rate of return

You may also come across organisations which use this method of evaluating investments. It involves comparing the present cash outflows and the future cash inflows of a project and working out what the rate of return would have to be in order for these figures to be equal. (You can perform this calculation using a computer spreadsheet.) The rate of return will appear as a percentage, which can then be compared with a pre-determined 'hurdle' which the organisation has set for all its investments, or with the rate of return promised by another project. The higher the rate of return, the more profitable an investment is likely to be. The disadvantage of this method is that it gives a percentage figure, not an absolute amount. This can distort decision-making. For example, there are circumstances where it would be better to invest in a large project with a slightly lower rate of return than in a smaller, more limited project, with a higher rate.

As a project manager, you probably will not be involved in evaluating the viability of investments. You should, however, be aware of the facts that the sponsors have taken into account when making their decision to invest. This could be important if you have to negotiate changes to the budget, schedule or scope of the project once it is underway.

What's the risk?

The sponsors of a project need to know the level of risk that they are taking. As the individual in charge of a project, you also need to know which elements of it are most critical to its success. One way to consider risk is to perform a sensitivity analysis.

A sensitivity analysis is a method of looking at the components of a budget forecast and calculating the percentage by which they would have to change to make the project unprofitable.

Key Management Concept



When you produce the budget for a project, you will estimate figures for the various costs involved. These may include:

- Purchase of equipment
- Hire of premises
- Salaries and wages
- Raw materials.

If your project is designed to generate income, you will also need to calculate how much cash you expect to come in, and when it will arrive. These figures will be based on the volume of sales you expect to make, and the price at which goods or services will be sold.

In an ideal world, your actual costs and income will match your estimates exactly. In the real world, things will probably work out slightly differently. If you run into difficulties and the project takes longer to complete than you expected, you may have to pay more in labour costs. If the service you are offering turns out not to be as popular with customers as you had hoped, your income will be lower than estimated.

A sensitivity analysis takes each item on a budget forecast and calculates the percentage by which that figure would have to change to make the total discounted cash inflow from the project less than the cash outflow. In so doing, it highlights the critical figures on the budget forecast.

For example, let us suppose that you are working on a two year project which will derive its income from the sales of specialised multimedia CDs to businesses. In the first year you aim to produce five CDs, the sales of which will finance the second year of development. The marketing research has suggested that you could sell 100 copies each of these five CDs, at a unit price of £200. You expect to make these sales during the second year of the project. There are several things which could go wrong with this plan:

- You might produce fewer than five CDs in your first year
- You might sell fewer copies than you expected

- It might take longer for the CDs to sell
- The people you have employed to work on the CDs might not be as skilled as you expected – you might have to replace them with more expensive staff
- Your premises might be burgled repeatedly – you might have to pay more for insurance or pay for extra security
- A competitor might bring out a similar product at a lower price.

Some of these things could have a disastrous effect on your project, while others would not be so serious. A sensitivity analysis might show you that you could afford to increase your security costs by 150 per cent without endangering the profitability of the project. On the other hand, if your wage bill forms a large part of your budget, you may only be able to pay 5 per cent more on this item. The lower the percentage figure, the more crucial this item is to the success of the project.

This information will be of use to the potential sponsors. If it appears that there are items on the budget which are critical to the success of the project and which are also likely to change, they will be unwilling to invest. A sensitivity analysis will also help you, as the project manager, to decide which areas of the budget you need to protect. It will also help you to think about your priorities if you have to modify your plans when the project is underway.

There are, of course, several methods of dealing with risk. These need to be considered and costed in the early stages of a project, before the budget is agreed. In essence, you can:

- Take action in advance to avoid the risk, *or*
- Take action in advance to mitigate the effects of the risk, *or*
- Wait until a problem happens, and then take action to mitigate its effects, *or*
- Transfer the risk to another party, such as an insurance company or a sub-contractor.

We can apply these approaches to the situation described in the previous example. Imagine that you, in your role as multimedia producer, realise that it is crucial to the success of your project that the expected sales revenue is received early in the second year. If this cash does not arrive, funds will not be able to finance the second stage of development. There are several ways you could approach this risk.

- You could **take action in advance to avoid the risk** by funding a major marketing campaign. This could involve arranging pre-payment by customers at a discount. Alternatively, you could obtain funding for the full length of the project.
- You could **take action in advance to mitigate the effects of the risk** by employing staff on short contracts. If the hoped-for sales do not happen, the second development phase can be put on hold. In doing this, you would be laying yourself open to another risk. If you do not employ staff for the full length of the project, you may find it difficult to retain, or re-employ, key members of your team for the second phase.
- You **could wait until a problem happens, and then take action to mitigate its effects**, by doing nothing about the risk at the start of the project. If sales do not meet your expectations, you will then have to find a method of increasing revenue or lowering costs. This would be an unwise path to follow unless you have some evidence which suggests that the risk is very unlikely to happen.
- You could **transfer the risk to another party** by making a deal with a distribution company, selling your entire output (or a large proportion of it) in advance at a lower price.

Almost all ways of managing risk cost money and must be budgeted for at the start of the project. Even if you decide to do nothing in advance to protect yourself against a risk – which is a viable alternative if the risk is unlikely to happen – you must have some money in your budget to cover contingencies.

How much of the success of a project is due to good luck? And how much is due to good risk management?

Key Question



Invitation to Tender

When an organisation has a project which it wants to place with an outside contractor, it will often send out an Invitation to Tender (ITT). This is a document which asks interested suppliers to show that they can meet the requirements of the sponsoring organisation.

Before it issues an ITT, an organisation needs to do some preparatory work. It must consider:

- How the project will further the strategy of the organisation
- The project objectives – exactly what it wants to achieve by the project
- The financial and other resource implications of the project
- The timescale for the project
- The criteria it will use for selecting a contractor.

If the project is on a relatively small scale, or is very similar to an earlier project which the organisation has commissioned, it may be possible for senior management to settle these issues amongst themselves. If the project contains some new elements, the organisation will need expert advice on what is practicable. They may consult independent authorities at this point, or approach potential suppliers for this advice. And if the project involves a major investment in a new area, the organisation may set up a full-blown feasibility study.

An organisation may make informal enquiries to find out who is likely to be able to take on a project and then approach only these companies or individuals. Alternatively, it may choose to advertise its intentions in the press. Where public money is involved, there is sometimes a duty to open the tendering process to anyone who is interested.

An Invitation to Tender should contain this information:

- The objectives for the project
- Background information on the commissioning organisation
- Criteria for selection
- An outline of the project deliverables which are required
- A detailed timescale for the tendering process (issue of ITT, preliminary discussions, receipt of proposals, associated presentation of proposals, evaluation, award of contract)
- A timescale for the project itself
- The information required from the tendering organisation
- Format of the proposal.

The more details the organisation which issues the ITT can give about what it wants to know and how it wants this information presented, the easier it will find it to compare the proposals it receives.

Proposals

At the beginning of this chapter we said there were two kinds of projects: ‘pulled’ projects, which arise in response to a need recognised by the sponsors, and ‘pushed’ projects, where the original idea and impetus comes from a source other than the sponsor. There are certain differences in the way that proposals for these two types of project are prepared. However, there are also some important similarities, which we will look at first.

Whatever type of project is being proposed, it is essential to show that it is designed to produce outcomes which are in line with the objectives laid down by the sponsor. In the case of a commissioned project, detailed objectives may