# Chapter 2

# Project evaluation and programme management

## Further exercises: pointers

1. *Identify the major risks that could affect the success of the Brightmouth College payroll project and try to rank them in order of importance.*

   This exercise is similar to Exercise 7.1 in the chapter on risk, so a glance at the pointers for that exercise would be worthwhile. There is however a crucial difference in emphasis of the two chapters. In this chapter the emphasis is on *business* risk. There are events which could damage the business case for a project. Many of these will related to developments that could occur after the ICT application has been delivered by the project.

   'Business' risks in the case of the Brightmouth College payroll project would include

   - The suppliers of the payroll package cease to trade so that there is no ongoing support for the application;
   - The government makes statutory changes to changes to the way that payroll applications are operated – this could well be the case in relation to taxation – making the acquired payroll software redundant;
   - The structure of further education is modified so that, while Brightmouth College still exists as a physical entity, its is merged with other local college for administrative purposes, including the payment of wages: the Brightmouth College payroll system therefore becomes redundant
   - It is difficult to retain capable administrative staff to run payroll – this leads to additional costs in recruitment and increased salaries to retain staff.

   The 'project' risks which are the concern of Chapter 7 could also be business risks, particularly if they could increase development costs.

2. *Explain why discounted cash flow techniques provide better criteria for project selection than net profit or return on investment.*

   Among the points that could be discussed are:

   - DCF takes more account of the possibility that investment might more profitably be placed elsewhere than on the proposed project;
   - Projects where the major benefits are only experienced after several years are not favoured. There is more uncertainty about estimates of income and costs the further into the future that you gaze.
   - NPV values can be calculated for a number of different feasible interest

rates – different projects might be favoured as a result.

3. *An insurance company has examined the way that it settles house insurance claims. It decides to introduce a new computer-based claims settlement system which will reduce the time taken to settle claims. This reduction in effort is partly achieved by enabling the claims clerk to obtain the information needed directly, rather than having to go through other departments. Also, as part of the new process, new repair work will be allocated by the insurance company to authorised builders, decorators, plumbers etc., rather than the claimant having to make arrangements to get estimates and so on.*

*a) Explain the possible benefits and disbenefits that might be generated by this application. Note that the benefits could come under the following headings:*

*Mandatory compliance;*
*Quality of service;*
*Productivity;*
*More motivated workforce;*
*Internal management benefits;*
*Risk reduction;*
*Economy;*
*Revenue enhancement/acceleration;*
*Strategic fit.*

*How could the actual benefit be assessed in each case?*

*b) When the application is implemented, some of the claims staff at the insurance company complain about the additional stress dealing with irate customers grumbling about tradespeople being slow to do repair work or about poor quality workmanship. Also, in some places there are shortages of qualified repair people leading to delays in getting work done.*

*Which projected benefits are being affected by these developments?*

*How would you deal with these problems?*

*How would you assess your success in dealing with these problems?*

a) **Mandatory compliance** Insurance companies are subject to FSA (Financial Services Agency) regulation. The new system might allow FSA requirements to be better satisfied, but I do not think that this would be the main driver for the development. Some knowledgeable/bright students may think of other valid compliance angles!

**Quality of service.** This could be an important driver for the project. The settling of claims ought to be speeded up and the possible inconvenience of having to deal with tradespeople would be reduced for customers. In business terms customer value would be enhanced. The customers' perception of quality of

service could be measured by feedback questionnaires. Note that comparisons with past customer perceptions may not be valid as some dissatisfaction previously directed at builders may now be transferred to the insurance company.

**Productivity.** This *might* be enhanced. A key point is that shortening the time that a customer transaction takes does not necessarily decrease overall effort. Also additional effort is needed to make arrangements with trades people. Some measurement of claims processed divided by overall staff effort could indicate productivity.

**More motivated workforce.** We will see in Chapter 11 that where staff are involved in more stages of a process, and the results of their work is more tangible, they are likely to find a job more meaningful and satisfying – but see (b) below. In the short term, employee questionnaires may provide an indication of staff morale. In the longer term, measurements of absenteeism and staff turnover would be relevant.

**Internal management benefits.** This usually relates to better management information which supports more informed decision-making. This could be the case here. This is very difficult to measure objectively.

**Risk reduction.** Note that this relates to the risks and uncertainties in the operation of the new system. For example, it could be the risk of fraudulent claims might be reduced by the new system. (It will be seen below that the new system acquires a range of new risks as well). Measurements would have to relate to specific risks e.g. cost of bad debts.

**Economy.** This is essentially cutting costs. For example, the insurance company may be able to negotiate bulk discounts with the builders and other service providers. Cost data is usually one of the more straightforward things to collect.

**Revenue enhancement/acceleration.** There is no direct revenue enhancement, but hopefully a better service might encourage more people to buy their insurance from the company. The faster settling of claims might actually be to the detriment of the company financially.

**Strategic fit.** This could be where the project on its own does not generate benefits but contributes to a broader programme which does. It is not clear that this is the case here.

b) The impacts of later developments include:

Motivation of workforce – reduced by stress

Productivity reduced – as staff are dealing with complaints

Quality of service – reduced because of additional work of dealing with complaints

Economies – addition of the cost of remedial work

Risk reduction – uncertainties increased because of addition of a broader range of responsibilities.

Remedial/mitigating actions might include:

- Employment of dedicated trouble-shooters/ progress chasers
- Incentives for builders and others (many of these are already standard practice), for example, retention of part of payment for a period of time to see if faults in work appear.
- Shortage of trades people: where there is a temporary local spike in demand for work (for example, as the result of local flooding), the insurance company could draft builders etc from other parts of the country ( or from abroad).

*4. Suppose Brightmouth college has the option of either buying a payroll software off-the-shelf at £50,000 or employing a programmer for 6 months at a salary of £5000 to develop the software. Perform cost-benefit analysis for the two options. You can make suitable assumptions regarding any of the factors not stated in this problem statement.*

The cost-benefit analysis would involve quantifying the following benefits:

- Ownership of software, including source code, and possibilities of reusing the software for other applications, sale of the software to other parties etc.
- Experience of developing the software, that can be beneficial to develop other types of software.
- Ease and cost-effectiveness of tailoring the developed software for specific changes that may be desired later on.

The other factors that must be weighed are:

- The risk of delay and the risk of realizing a bad quality software
- The delay in implementing the developed software compared to implementing a purchased software.
- The risk of finding suitable personnel to develop the software

**5.**

i. **c**
ii. **a**
iii. **d**
iv. **b**
v. **c**
vi. **c**
vii. **a**
viii. **c**
ix. **b**
x. **b**
xi. **c**
xii. **b**