11 Practical aspects of investment appraisal

About this chapter

The purpose of this chapter is to consider how capital investment appraisal techniques can actually be put in to practice as part of the process for evaluating strategic options. A range of important issues are to be considered including the practicalities for:

- ☐ Forecasting accurate cash flows
- ☐ Assessing the life span of project
- ☐ Calculating the residual value
- ☐ Allowing for working capital requirements
- ☐ Taxation and inflation effects
- ☐ Measuring risk.

Learning objectives

On completion of this chapter, you should be able to:

- ☐ Understand how to forecast accurate cash flows
- ☐ Appreciate the factors to consider when assessing the life span of project
- ☐ Understand the significance of working capital in investment appraisal
- ☐ Appreciate the impact of taxation and inflation effects
- ☐ Apply techniques for measuring risk.

Introduction

Several writers have commented on the misuse of capital investment appraisal techniques for assessing the viability of projects, with the effect that companies are under-investing because they misapply or misinterpret discounted cash flow techniques. Surveys have indicated that companies are regularly underestimating cash flow forecasts and using excessive discount rates to evaluate projects, resulting in projects that would be viable being rejected.

Appraising capital investment

A number of factors need to be taken into account to when appraising capital investment, particularly for those investments focusing on the construction of long term assets such as hotels and resorts. Increasingly sustainability is becoming more important and can deliver commercial value to capital projects.

- ☐ Material costs savings can be achieved.
- ☐ Capital projects can be made more resilient, or future-proofed, against emerging sustainability risks.
- ☐ The costs of inaction are potentially material.
- ☐ Taking into account sustainability drives innovation in your supply chain.
- ☐ Demonstrating your sustainability commitment can build trust and reinforce or enhance your licence to operate.
- ☐ Adopting sustainability practices can help to reduce financing costs and increase access to capital.

Source: Adapted from The A4S Essential Guide to Capex.pdf.downloadasset.pdf (accountingforsustainability.org)

Which capital investment methods are preferred?

Several studies on the use of capital investment appraisal methods in organisations from the manufacturing sector conclude that the most frequently used method is payback although this is often used alongside other methods. In the hospitality, tourism and leisure sectors, capital projects are often evaluated using the IRR method to give a percentage value for comparison to cost of capital for example. The rate of return is also often used despite the problems associated with this method. Many organisations attempt to formally analyse risk through the sensitivity analysis and incorporate estimates for inflation into the calculation.

In view of the arguments against the use of IRR described in the previous chapter, it is perhaps surprising that the use of the method is so widespread. This may be due to the fact that the workings provide a percentage result which is easier to interpret than the NPV result, and IRR provides a ranking of projects of different size and timescales without the need for a predetermined discount rate, as is required by NPV. IRR is also very easily calculated using spreadsheets.

The value of accurate forecasting

For capital investment appraisal to be successfully carried out, it is essential that the forecast data be as accurate possible. In practice this means reliance on management experience and standard relationships unique to the hospitality industry.

The information required to prepare a forecast includes:

- ☐ The scale of the initial investment
- ☐ Sales growth rate and operating profit margins
- ☐ The timings associated with the projected earnings

- The working capital requirements
- The residual capital value
- The magnitude of recurring levels of maintenance, capital expenditure and any additional investment required
- The cost of capital.

Many feasibilities are built using recognised industry metrics, such as the investment per bedroom for hotels and the estimated yield using the 'Rule of Thumb method' discussed in Chapter 1. Margins and costs are often based on industry averages, however, care should be taken to test all the of the assumptions made.

It should be noted that capital investment techniques assume that cash flows will occur at the year end for discounting purposes. Discount tables can be produced on a month-by-month basis but the use of these would considerably increase the nature of the workings. As a result the year end assumption means that cash flows are marginally over-discounted and are, therefore, included in the calculation at a slightly lower value than would be the case in reality. The effect of this is to marginally increase the payback period and to understate the net present value and internal rate of return.

Feasibility studies

To arrive at a set of accurate cash flows, a feasibility study is required. This may be carried out by the investing organisation or an independent consultant. The aim is to ensure that all possible aspects of the suggested project have been considered and that the forecasts for sales, volumes and costs are as accurate as can be possible. The typical steps in a feasibility study are illustrated in Figure 11.1

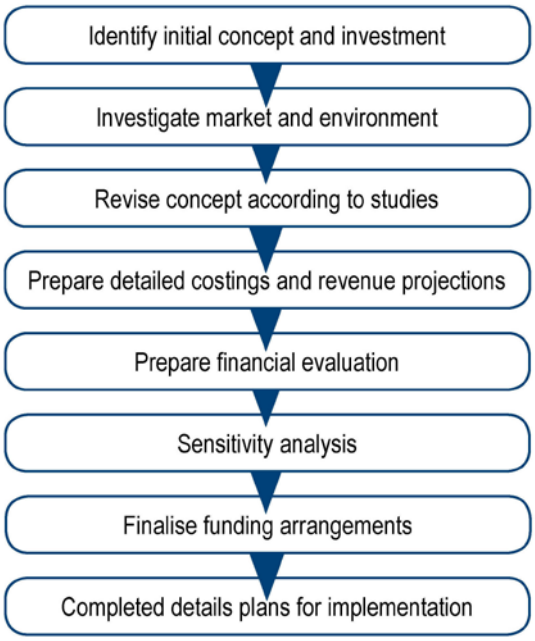

Figure 11.1: Typical stages in a feasibility study