

FINANCIAL MODELLING

Background and prerequisites

Effective business planning requires a structured quantitative approach as described in our companion brochure Business Planning. A central part of such an approach is the financial model used to explore the potentials and sensitivities of the business case. In many cases considerable effort is expended building the financial model from scratch and often insufficient testing results in errors that may go undetected.

How Intercai can help

Intercai has developed a financial-modelling template that is flexible and adaptable to customer needs. Following initial setting up and testing by Intercai it can be taken over and used by the customer to assess the impact of different management actions.

Intercai has used the template to model many different businesses and has developed a framework approach that has been used successfully for a variety of clients. The characteristics of the model have been developed to give the customer a clear picture of how money is moving within their business, on a line item basis.

The model will provide a complete analysis of the customer's revenues, costs, capital expenditure and operating expenses. It supports scenario generation and can show the sensitivity of the business case to different environments.

Intercai's approach

Intercai has developed its business-modelling template in order to enable a business modeller to concentrate on the client's business itself rather than on the process of producing the model. The tool has proved its worth in many different applications. It covers a ten-year period with a resolution of one month. This level of detail is supported so that issues of relative timing between revenues and costs can be modelled accurately. This enables an accurate assessment of working capital to be made. The template includes Change and Version Control capability and all of the print formats necessary to ensure a consistently high standard of presentation. Macros are provided to automate many of the repetitive chores of producing and operating the model and both full and summary printouts can be obtained from it.

- **Revenues**
 - Breakdown by business/product
 - Drivers
 - Assumed market share
 - Volume/tariff trends
 - Benchmarking
- **Direct Costs**
 - Equipment costs
 - Third party costs
 - Price trends
- **Operating Expenses and Capital Expenditure**
 - Development costs
 - Staff costs
 - Infrastructure costs
 - Start up costs
 - Running Costs
- **Risk analysis**
 - Scenarios
 - Price and cost environment
 - Sensitivity

The principal characteristics of Intercai's model are:

➤ **Structure**

The model is built around a set of modules that hold specific types of information. The relationships between the modules are formal and quite rigid. Control parameters are also grouped together in one area. This approach provides a very clear and understandable model, which customer staff will find easy to pick up and operate.

➤ **Change Control**

Business models operate in a very complex environment. They serve the interests of many groups of staff and inputs and requirements are received from a wide variety of sources. Intercai has found that in this environment it is all too easy to lose control of the model and for inputs to be lost or actions taken which have already been embodied in the model. Equally, as the development of the model proceeds, users wish to revisit earlier scenarios to refresh their memory of their status. Intercai, therefore, takes a rigid approach to change control and records as part of the model the changes that have been embodied in it. The model also provides a mechanism whereby specific points in the development can be declared as Baselines from which 'what if' excursions can be recorded.

➤ **Resolution**

Intercai understands the impact on financial performance of delay between cost and revenue. It believes firmly that a business model should model on a monthly basis rather than quarterly or annually. Without this resolution, some factors such as the need for working capital can be heavily distorted. Intercai recognises that a business plan presented on a monthly basis can be difficult to read and so all of the output reports can be in year-end summary form, but the underlying information is at the monthly level and can be examined in this level of detail if necessary.

➤ **Reports**

The purpose of a model is to enable comparisons to be made between different scenarios or courses of action. It is important, therefore, that reports should be consistent and in a common format so that these comparisons can be made. All the reports produced by Intercai's models are pre-programmed and automatically include the Change Control record so that comparisons can be made in a clearly understood and defined environment.

➤ **Flexibility**

Intercai recognises that each business is unique. Its approach, therefore, although within a rigid and structured framework, allows for the definition of different service types, different technical structures, different operating approaches and so on. Because these areas of flexibility are contained within the overall structured framework, they do not affect the structure of the model and the benefits of the approach are not lost. Intercai has found that this method allows changes to be introduced more easily into the model at a later stage of development than would be the case with a more tightly integrated model.

➤ **Ease of Use**

Although a model represents only a single path through the development of a company, its real value lies in its being developed along with the company and remaining current through changes of structure and strategy. This is best achieved by staff who work within the changing environment keeping the model up to date. Intercai would always seek to train in-house staff in the use of the model so that the maximum long-term benefits can be derived from it.

Financial Modelling

Much of the standard linkage between the elements of a business is already built into the model. This is shown in outline in figure 1 below.

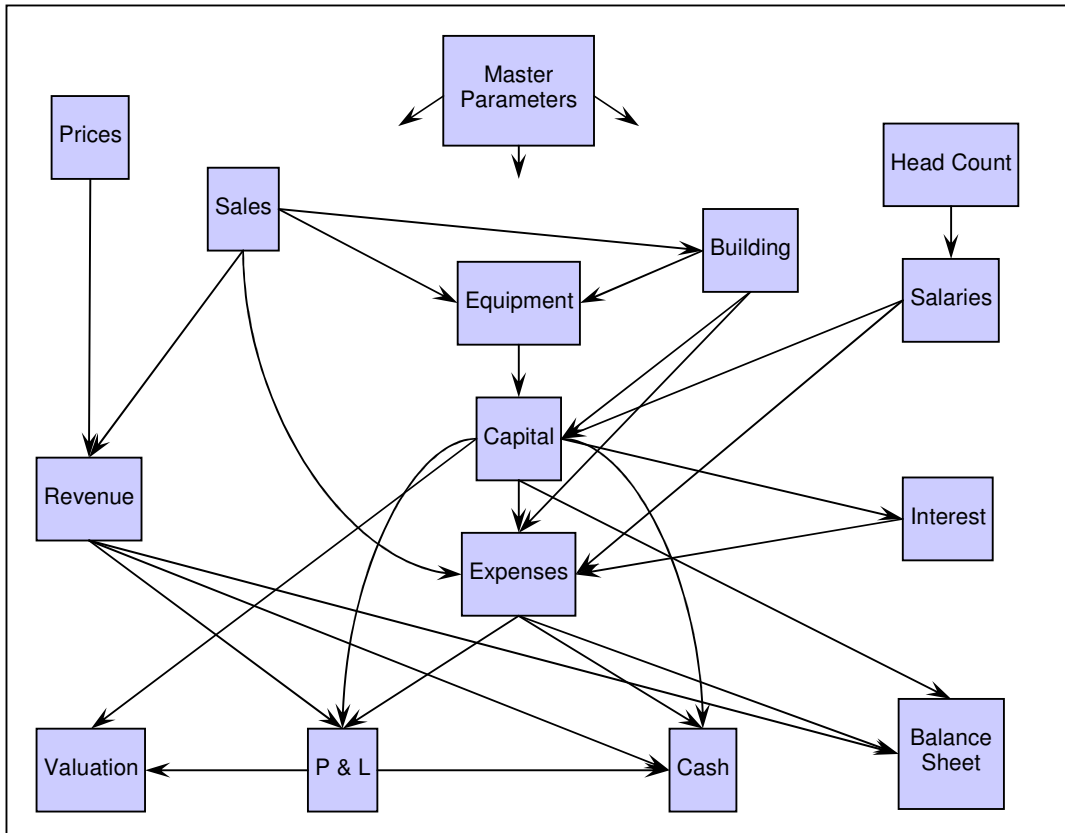


Figure 1 Business plan block diagram

Once the model is complete, it is a large piece of software and maintaining many copies to cover different business scenarios is not generally practical. The model has, therefore, a parallel spreadsheet in which summary information from individual cases can be stored economically. Macros extract the required data from the master spreadsheet and generate charts showing standard performance parameters.

The amount of revenue produced by each service can be presented in a standard report as shown in figure 2 and it is easy for the customer to determine the contribution for each service/product to the total of the revenues

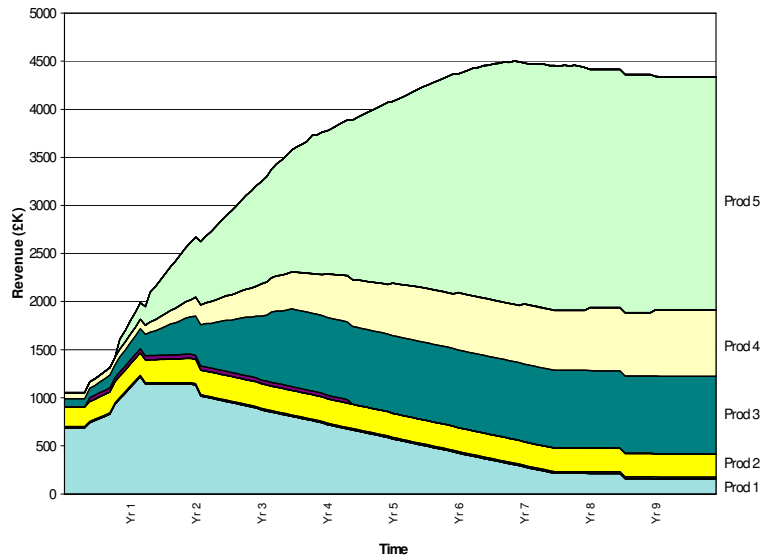


Figure 2 Example of Revenue source chart

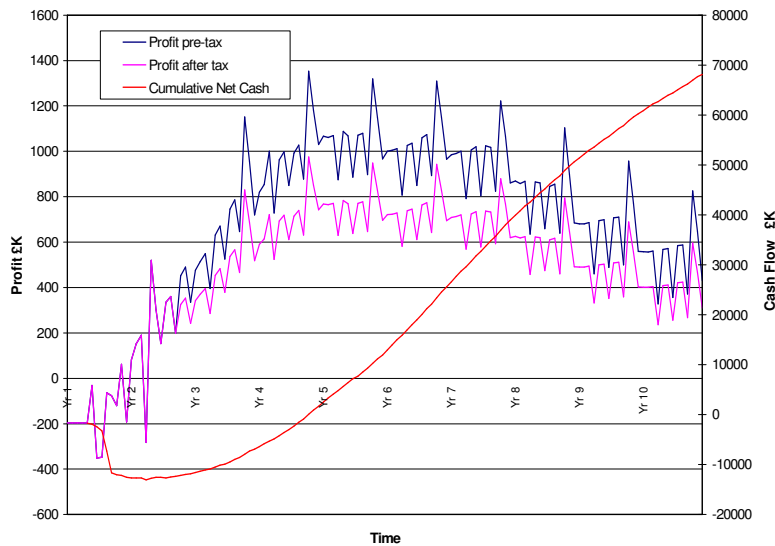


Figure 3 Example of financial performance chart

To establish the underlying performance of the business being modelled figure 3 gives an example of standard financial performance parameters. The model produces the standard financial assessments of cash-flow, profit and loss and balance sheet. It also provides a module in which valuation of the business can be carried out in accordance with a defined algorithm. Decisions can be taken here that allow for investments to be put into the plan and for different amounts of equity to be allocated in return. Exit values can be calculated and then valuations based on a range of different algorithms accommodated.

What Intercai will deliver

In a typical assignment, Intercai will sit with a client's staff and populate the model with existing information, where it is known. Projections for future change can then be entered into the model to establish future performance. Intercai will, typically, deliver a populated model, together with an agreed number of scenarios. It will train the client's staff in the use of the model and provide telephone support for the users.

Recent assignments

Intercai has used the model in a range of different types of assignment. These include

- Mobile operators
- Carriers' Carriers
- Internet Service Providers
- New Entrant Carriers
- Government Organisations
- Large Corporate clients
- Cable Companies
- Teleport Operators