

FINANCIAL FORECASTING



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The very nature of forecasting, i.e capturing our expectation of the uncertain future, makes the task difficult. As the famous song goes 'Que sera sera', "what ever will be will be, the future's not ours to see". From an enterprise perspective, however, the fact that the future is uncertain, is no excuse to avoid business forecasting altogether. This article takes stock of the challenges of Financial Forecasting in today's highly competitive era.

As an important requirement for a variety of purposes, the financial forecasting is under new focus these days. Be it for the preparation of a project report or a business plan, a budgeting exercise, corporate valuation and sometimes just for planning for the future, the Financial Forecasting is a must. Business forecasting summarises future expectations of the business strategy and the accounting and financial analysis. It projects future expected scenario, keeping the past in view. It is like driving a car—we look at the road ahead, keeping the reflection of the road behind in our line of sight. While we do not drive keeping our eyes on the rearview mirror alone, we do occasionally look at it while proceeding ahead.

The very nature of forecasting, i.e. capturing our expectation of the uncertain future, makes the task difficult. The very process of forecasting for the firm makes one alert to the possible

consequences of actions taken or not taken, decisions made or not made. We cannot afford to neglect planning for the future in a business environment.

It is the very uncertainty that exists that makes forecasting a challenging task. Forecasting is not just about putting some numbers in place. Rather it is about having a believable story about the company, translated into numbers. These numbers should reflect the strategy of the company and its position compared to its peers and competition.



Kinds of forecast statements

A well-done forecast will have all three financial statements, the balance sheet, the profit and loss account and the cash flow statement. It will also provide for different scenarios, by way of sensitivity analysis. The periodicity of the financial statements depends on the size and complexity of the organisation and the requirement of the management. Some organisations prepare these on a monthly basis, others on a quarterly basis; some on an annual basis. In some organisations, there are different kinds of forecasts with different timeframes for different purposes. To take an example, the 2003-04 Annual Report of Infosys Technologies Limited makes mention of three horizons of planning – a five year model, a three year business plan and an yearly budgeting plan which is prepared on a rolling 4-quarter basis.

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The report highlights the different needs served by these three, the five year plan is for long term impact analysis, the three year plan is to ensure the preservation of the strategic intent and the yearly rolling plan is to ensure the predictability of the short term.

A business needs to plan for short term, as well as for long term. The short term has more predictability as compared to the long term. It is easy to lose sight of the long term potential or constraint in trying to manage short-term issues. One can, with some effort, have a reasonable prediction of sales in the next three months. One would have some idea of existing orders and expected orders from existing customers and possible new orders from new customers. It is much more difficult to predict where a firm will be getting orders from five years in the future. So the forecast for revenue five years later, will draw from items such as expected market position in five years, growth target of the company and expected market share. In such cases, one must develop a forward-looking approach. It is not uncommon to find persons expecting the future to be a continuation of the present. Insufficient thought given to anticipate the future can lead to some costly mistakes. To give an example, an entrepreneur decided to develop a product, based on existing IT technology. Two years down the road, the entrepreneur had a trial product ready, but found to his dismay, that the requirements of the users of the technology, ie his potential customers, had totally changed.

Working with spreadsheets

The spreadsheet is a very popular tool for preparation of financial forecasts. The spreadsheets are used intelligently, with links being



created and features used – not just simple features like additions, subtractions and summations but also others such as percentages and growth numbers.

Simple links that are widely known, include addition and subtraction, for example PAT (profit after tax) is arrived at by deducting tax from PBT (profit before tax). In forecasts, links are also used between different sheets. To illustrate, let us take a case where the average period for collection from the sundry debtors is one month and the sale in January is Rs. 20 million. In the spreadsheet, the profit and loss account will show revenues of Rs. 20 million in January. The balance sheet will be linked to the profit and loss account and will show Rs. 20 million under sundry debtors for the month of January. This will be the corresponding balance sheet amount, automatically picked up from the profit and loss account. Of course in this scenario, no provision has been made for bad debts. In a business situation, one will have to consider such a provision. Links can also be gainfully used for consolidation. If there are two units, forecasts would initially be prepared at the unit level and then summed at the enterprise level. Sometimes, changes may be made in one of the units. If the spreadsheets used are designed well and linked, the enter-

prise forecast can get automatically updated with the changed numbers from the unit level forecasts.

Spreadsheets are useful, if one uses the formulas and features to automatically add, subtract etc. as required and links sheets, wherever possible. It is important however to remember that spreadsheets, which can be intelligent in their own fashion, can also not completely replace human intelligence or common sense. Incorrect inputs can give incorrect outputs. In one case, a wrong number keyed in by oversight at one place, increased forecast revenues by 20%. This error had been overlooked by the person preparing the spreadsheet, as well as the person reviewing it. The forecast statement was used as an input for a corporate valuation exercise and the error in the forecast impacted the value estimated.

It is not uncommon to find multiple copies of forecast statements. Such multiple documents can lead to confusion as changes made in one version may be overlooked in the next version. Of course this is not limited to spreadsheets alone, such problems can arise with any document in the organization, from a word document, to financial statements.

Consolidation may be difficult if different units have different formats, making it difficult to build links in the spreadsheet. These differing formats will require manual consolidation, and increase the scope for errors.

Often it is assumed, that when spreadsheets are used, errors are reduced. Numbers can get keyed in incorrectly and keyed in the wrong place. This might get lost under the maze of numbers and links in the spreadsheet.

Errors can be minimized only if spreadsheets are used intelligently, with attention paid to the details - in

preparation as well as in review. Due care is to be taken while structuring the working spreadsheet. The review should not be cursory and the reviewer should pay attention to the finer points. The business should set standard formats and processes in place for the forecasting. Versions could be serially numbered and indicate the date and time as reference. There may also be a reference to the originating unit or the person preparing the statement and the reviewer. Spreadsheets may be write protected with restricted access to minimize changes by multiple persons. With adequate thought and planning, a good working document will help reduce time spent on calculations and will also reduce the possibility of errors.

Assumptions behind forecast

Fancy spreadsheet generated numbers are of no use if the underlying assumptions behind them have no foundation. Sometimes managers give insufficient thought as to how the sales projected can be generated and also as to whether all elements of cost have been captured. In fact this is the crucial element in forecasting. Managers need to spend time to ensure that, as far as possible, they have captured all revenue and expenditure heads. Numbers can then be plugged in and spreadsheets can generate the final statements.

There should be a believable story about the future performance of the company. For eg. "Sales is expected to grow at more than average industry expected rate of growth in this BPO company. This is because of the quality of the management team, the investors and the past track record of the company in getting and retaining customers."

While the statements would show numbers, explanations for ass-

umptions made, should be separately shown. This could be by way of notes or points. It is useful to have a separate document in which the assumptions made are listed. This will facilitate verification and clarification, if and when required. This also helps whenever some changes in assumptions are to be made and when numbers are to be verified or cross checked with other data and information. The forecasts will also then become self speaking documents. If key persons who have prepared the statements are unavailable, reader friendly spreadsheets and notes can be a substitute.

Wherever possible, one should have historical data and comparable data from other organizations. Some examples would be comparable items of expenditure in the industry such as salary, per diem cost on travel, selling and general administration costs etc. This would help one in arriving at reasonable forecast numbers, which are comparable with those in the industry.

The strategic perspective

The financial forecast statement is a translation of the expectation of the management of the business. Management will have some view of how they would like to see the business progress. This expectation is what is captured in the numbers. In other words, the business forecast statement is all about capturing the strategy of the company in the form of numbers. The person or persons preparing the forecast will benefit from understanding the strategy of the business going forward. The strategic rationale should be based on

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careful understanding of the company, industry and the general economic scenario. Tom Copeland, Tim Koller, Jack Murrin in their book *Valuation: Measuring and Managing the Value of Companies*, have highlighted the need to develop a strategic perspective for business. This means developing a plausible story about the company's future performance.

Analytical frameworks can help one understand the competitive advantages of a business. To illustrate, a commonly used framework is the SWOT analysis (Strength, Weakness, Opportunity, Threat). It forces one to think about where advantages and disadvantages could come from. The analysis can help one try to pinpoint key drivers of value in the business, as well as key constraints. Value in a business is driven by the excess of returns over cost of invested capital. This excess is in turn driven by the quality of products or service, cost controls and utilization of assets.

Putting the numbers in place

Once one gets a fair understanding of the future expectations from the business and the strategy of the key management, one can make a start on the financial forecasts.

Projections typically start with revenues, which can come from a variety of sources, such as from products sold, from services ren-

dered, from license fees etc. In all cases, one should closely examine assumptions for both the volume of sales and the rates, as both will impact the earnings. The assumptions for the target customers (eg. number and details of possible customers) should also be stated in the explanations. Sale contracts on hand, if any, are to be examined to understand if there are any clauses in the contract which may impact expected revenues. Other income, if any, such as dividend income, interest income and income from miscellaneous sale such as scrap sale or sale of by products must also be included.

The business must also try to analyse and understand quality of revenues. For example a software services firm could identify expected sales for onsite and offshore business and revenues in terms of geographies, ie. in USA, in countries in Europe etc. A manufacturing company may perhaps look at the expected product lines, prices and sales in different regions in the country.

Next would follow an analysis of various expenses. The expense heads would vary depending on the nature of business. While a manufacturing company would have raw material cost, a services company may have no inventory costs. The nature of all costs and their drivers must be understood while making the forecasts. Employee costs should be projected keeping in mind the number of employees and their salaries. It is reasonable to expect different salary structures for different offices, India & US, for example. These have to be explained in the assumptions. Care should be taken to include all salary costs, such as those of the key management team, managers, engineers, administration and clerical staff, driver cost if on company rolls etc. In Year 2 and 3, expected salary increment (perhaps

10% or 15%) should be considered in the calculations.

Some other items of cost would be communication costs for connectivity, internet and telephone costs (including rentals, running costs, based on the number of land lines and number of cell phones – and deposits which will appear in the balance sheet), travel (in India, in other countries)—here the number of trips for different employees should be estimated and costs input, based on approximate travel costs and per diem) and rent (the deposits for rent will appear in the balance sheet in India, in other countries etc.). If any service apartments or guest houses are expected to be hired, these costs are to be included. Such costs should be calculated, based on the location and area of the place rented which would again depend on the number of persons expected to utilise these facilities.

It is important to get comparative numbers from other sources, to the extent available. Information is available from a variety of sources, including databases, the internet and networks of colleagues, friends and family members. The reliability of the source is important and the users have to make a judgment call on whether the information is authentic. In some cases data may be accurate, but dated. For example, if a company wants to open an office in Netherlands and cost inputs are obtained from someone who was living in Netherlands two years back, the information may

be accurate and reliable. However, it cannot be directly used, since cost levels are expected to have changed in the past two years.

Other standard expenses in any running organization include postage and courier charges, cost of stationery and other office supplies, books, newspapers, periodicals, professional fees such as consultancy charges, legal charges, tax consultancy charges, audit fees, repairs and maintenance expenses, freight charges, insurance and risk cover, office security charges, finance charges, depreciation and taxes if any. Most organizations also incur expenditure on PR and marketing, rental, lease or hire charges on office equipment, recruitment costs, training charges, food and staff welfare costs, entertainment expenses and other miscellaneous costs.

The balance sheet gives a picture of the shareholders funds and other sources of funds such as loan and advances. The items in the balance sheet are to be input based on the assumptions made in the profit and loss account. Investment in fixed assets such as land and building owned if any, plant and machinery, computers, furniture and fixtures etc. are to be based on requirement projected. For example, capital expenditure (capex) is calculated based on the area of land purchased, plant and machinery requirement, number of workstations, furniture, research tools and equipment etc. which are assumed to be required. Due care should be taken in arriving at the capex as it is closely linked to various phases planned in the project and the numbers must reflect basic assumptions made. For example if 30% of the cost is required to be paid upfront in the form of an advance, this will be reflected as an advance paid in the balance sheet, till such time the

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item is received and commissioned, when it will move to an asset. Here also as far as possible, spreadsheet links should be used.

The cash flow statement should be carefully prepared, based on actual cash received and paid out, from and to various accounts respectively. This is where one really sees the benefit in the links in the spreadsheets. Some of these accounts are creditors for capex and items of revenue expenditure, debtors for advances paid for capex and for income earned but not received till close of the credit period in invoice. Payments for deposits for rent, telephone etc. are also to be input along with other payments for expenses. Receipts from investors and promoters, from sales and other income such as interest earned from bank if any etc. are also to be calculated, based on assumptions.

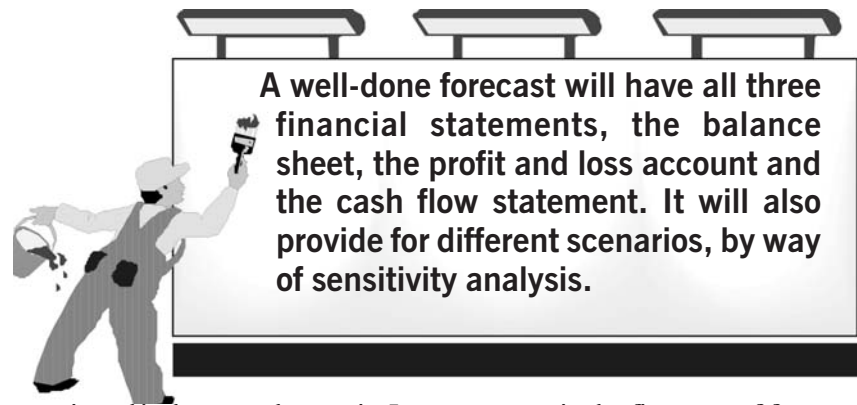
In these times, many firms incur product development costs, research costs and other IP (intellectual property) related costs. Managers must try to quantify such costs to the extent possible.

These heads are illustrative. The key management team in a business should understand the business well and try to convey the company's vision and ideas through the financial forecasts. The managers should be consistent and convincing in what they are putting down.

Factoring in the uncertainties

There are many uncertainties in the business environment. While managers may take due care while making the forecast, it is a fact that they have to make some assumptions, which get reflected in the financial statements.

Once the basic financial statements are prepared, it is advisable to look at other scenarios. In one case, the pessimistic scenario, assume that the company does not perform as well



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as projected in the normal scenario. In another case, the optimistic scenario, assume that the company performs better than expected. In the pessimistic scenario, revenues will be reduced and it is safe to assume that some costs will be cut as the company tries to make ends meet. In the optimistic scenario, both revenues and certain expenses will be on the higher side. Managers should have the financial projections available for these two scenarios. One way of computing these would be by doing a sensitivity analysis. For example one could calculate the impact of a decrease (or increase) in sales of say 10% and some key elements of cost, such as salary costs or marketing expenses. These would again be based on the nature of business and the key value drivers and costs in the industry.

The final steps

Once the financial forecasts statements are prepared, some basic tests are to be carried out. Just as one performs a financial statement analysis with historical data, an analysis can be done with the forecast numbers. This would include a trend analysis as well as ratio analysis. To give some examples of changes observed, the cash balance may be very high in year four of the forecast as compared to the first three years in the forecast and the historical data. Sales and general administration (SGA)

expenses in the first year of forecast may be 23% of sales as compared to an average of 18% in the previous five years. By looking into trends, ratios and comparing actuals with forecast numbers, one can get a good control on the finances of the organization. Unusual patterns and trends could be due to either a change in the business model or due to computational error. This needs to be analysed and either justified or rectified as appropriate.

Forecasting is an ongoing exercise. It is important to regularly compare forecast numbers and situations with actuals. Deviations may be positive, negative or neutral. One needs to look into the reason for the deviation, whether it is due to external factors, not in control of the management of the company or whether it is on account of internal factors, or a combination of the two. Further, when it is due to internal factors some questions are to be answered. Could this have been avoided or anticipated? Have we learnt something from this, which will help us develop a future action plan?

While financial forecasting is a time consuming exercise, the end result of having a robust forecast is worth the trouble. In fact persons who go through this process, get a good understanding of the business and the business environment, which makes them sought after by other professionals. ■