white paper

forecasting

Regular forecasting is essential for profitability and solvency

This Sage white paper will provide guidance on why forcasting is essential for monitoring the state of your business and making sure it meets its objectives.

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Introduction

Forecasting is essential for monitoring the state of your business and making sure it meets its objectives. In particular, cash flow forecasting is essential for anticipating peaks and troughs in financing requirements, so you can stay solvent and plan the most suitable responses to changing circumstances.

Solvency is the ability of your business to pay its debts as they become due. Many profitable companies have failed by running out of money as they exceeded their overdraft limit and couldn't raise more funds.

Financial forecasts let managers experiment with different business scenarios in a risk-free environment and see how alternative decisions might affect their business. As well as anticipating problems in the marketplace, forecasts can also help you spot and act on new business opportunities.

Any forecast will include uncertainty and will be subject to many variables, such as the economy, changing tastes, new technology and competitive activities. Complete accuracy is not important, as forecasting is about anticipating the trends and recognising the unexpected early and putting in place an effective reaction.

Forecasting is important for every size of business, from the self-employed to the largest multi-national corporation. Fast, efficient and regular forecasts will help to create a more stable and profitable business.

What is a forecast?

Successful companies set realistic long term targets and then manage their affairs on a daily basis to achieve them. Experience has shown the need for three complementary planning exercises - the business plan, the annual budget and short term forecasts. Taken together, they give you control of your destiny and can help convince investors that it is safe to advance new funding.

Business plan

Sets out its strategies for the next three to five years and establishes long term financing requirements. It is broadly based and incorporates income by main business line, derives variable costs and overall the fixed costs of running the business. It is particularly valuable in focusing attention on the long term direction of the business.

Annual budget

Allocates resources for the year ahead and controls costs throughout the year. It is often wrongly made into a bureaucratic exercise carried out in excessive detail, often down to cost centre, which brings little benefit for the amount of management time it consumes.

Short term forecast

Supports tactical decisions and manages cash flows and finance. It can be quarterly for the rest of the financial year; monthly for the next twelve months; or even weekly for the next few weeks then monthly.

Used together, the three documents allow the business to make tactical decisions and manage cash flow in a manner that ensures that it can meet its long term goals.

Online marketing cont.

Forecasts in turn consist of several linked documents:

- Profit and loss account
- Cash flow
- Balance sheet

Profit and loss account forecasts are usually compiled from sales forecasts. Variable costs are derived from these and fixed costs projected. It shows the forecast profit and is valuable for making marketing and cost control decisions.

Cash flow forecasts are often derived from profit and loss account forecasts, by taking into account the timing lags between a sale and clearance by the bank of the associated cheque from customer and credit taken before paying suppliers. It also takes account of non-trading transactions, such as receipt, interest on and repayment of loans, purchase or sale of assets, issue of shares and so on. It shows opening cash balances, receipts and payments, with the result being forecast future cash balances and overdrafts. Cash includes current accounts, short-term deposits, bank overdrafts and short-term loans. It is primarily of value in ensuring that the business is solvent and funded in the most efficient manner.

Balance sheet forecasts are usually derived from the two previous forecasts and are primarily used to manage the levels of raw materials, components, work in progress and finished stocks.

Why forecast?

Profit and loss account forecasting helps the organisation to look at whether current trading conditions and its marketing strategies will enable it to meet its long term growth objectives set out in its plan. If not, it is able to take early corrective action.

The cash flow forecast lets your finance team see peaks and troughs in cash resources in advance. The forecast will show how much of the overdraft facility will be needed and for what and how long to highlight any additional short-term financing requirements. Advance warning allows the business to take steps to reduce the impact of negative cash flows before problems arise. It also shows positive balances that will become available for short or long term investment, or for paying dividends.

Most of all, cash flow forecasts prevent corporate failure caused by over-trading. This occurs when companies that forecast only their sales hit good times and acquire a particularly healthy order book. Without looking at the cash flow impact of sudden expansion, they don't see the need to pay for large amounts of additional raw materials and components, to pay more staff to complete the orders and to buy new plant and machinery to make the goods ordered - all before customers have paid for the first new orders.

As a result, the overdraft hits its limit, creditors demand money and the payroll must be met. Business is booming, but cash has dried up. The solution is to borrow more money at short notice, but nobody wants to bear the risk of lending to such a poorly run company. The only solution is ceding control of the business to insolvency experts or selling the business cheaply to a well-run competitor.

The cash flow forecast enables the business to foresee its funding requirements well in advance. This allows it to put in place the lowest cost and most appropriate form of funding, whether fixed loan, bank overdraft, invoice factoring, leasing or other solution.

Setting up

The main decisions to make depend on the level of detail that is most appropriate for the business. It is a case of balancing the advantages of additional detail with the work required to prepare forecasts.

The first decision is the period to cover. Some of the common approaches are:

- Quarterly for the balance of the financial year
- Monthly for the next three months
- Monthly for the next 12 months
- Weekly for the next x weeks
- Any combination of the above

Banks balance their customers' accounts at the end of each day, so an overdraft could occur in a week or month that has been accurately forecast to end with a positive bank balance. The forecast periods should therefore be as short as possible. Treasury departments in large organisations will forecast cash daily for a week or more ahead.

However, the shorter the time period and the more detailed the forecast, the more time consuming it is to prepare and work with. Conversely, if the forecast is for too long a period, it will fail to take into account fluctuations within the period. Each business must strike an appropriate balance.

The second decision is the detail to use within these time periods. Sales could be total, business unit, product group, product or stock item. Costs could be the full chart of accounts or groups. Remember that it is simple to add numbers together, but difficult to split a single number. Variable costs can be derived from sales.

Inflows are the movement of money into the business and should include:

- Cash from the sale of goods and services to customers
- Payment of sales invoices by customers
- Sale of assets or parts of the business
- New loans received
- Interest or dividends received on investments
- Proceeds from issue of new shares by shareholders in the company
- Grants

Setting up cont.

Outflows include:

- Purchase of finished goods for re-sale
- Purchase of raw materials and components for manufacture of the final product;
- Salaries and wages
- Operating expenses
- Purchase of fixed assets
- Principal repayments and interest on loans
- Taxes, including income tax deducted from payroll, value added tax and corporation tax

Timing differences

Sales forecasts drive the largest element of cash inflows. If all sales are for cash, they will be the same. However, most business sell on credit and even cash businesses accept credit cards, so there will be a delay before the proceeds of a sale or fulfilled order are banked. This represents a considerable investment of cash that delivers no return.

The time lag will be dictated mainly by the organisation's average debtor days. This is current accounts receivable balance, divided by average daily sales, and should automatically be calculated by any good accounting system. A small allowance for unpaid debts and returns may also be needed.

Similarly, the accounting system should also give a figure for the average time taken to pay suppliers' invoices. Large items, such as rent, taxes and lease payments, are usually payable on the effective date, with no credit period involved. Weekly and monthly payrolls must also be paid on fixed dates.

Many cash inflows and outflows will not be included in the profit and loss account. These include grants, loans and repayments, dividends, purchase and sale of fixed assets, such as machinery, computers, company cars and vans.

Spreadsheet forecasts

At first sight, forecasting seems like a natural application for a spreadsheet. Indeed, it can be very quick to set up a simple profit and loss account forecast in whatever format suits the business. Simple reports can be quickly run to impress everybody and early success encourages expansion of the spreadsheets.

However, extending a spreadsheet to create a cash flow forecast that takes into account timing differences and non-trading items introduces considerable complexity, with linked sheets, macros and formulae to calculate timing lags. Loan and overdraft interest and tax payments have to be calculated. More detail makes the system unwieldy, as more sophisticated analysis is required. Then overhead allocation is added and more functionality is needed.

What started out as quick and simple soon becomes cumbersome and complex, with linked cells, macros and constant recalculation. Keeping it up to date and making small changes becomes very complex. There are constant requirements for new departments, cost centres, product groups, plants and sites and then there are re-organisations and acquisitions.

Any forecasting system needs careful scrutiny and one of the best mechanisms available is to build in key performance indicators. These calculations add further complexity.

Much time is lost just keeping the monster running each month. The complexity lies in the head of the person who created the spreadsheet, as there is rarely any form of documentation. If that person leaves nobody really knows how the system works.

Spreadsheets are notoriously prone to error, resulting from complexity, lack of testing and lack of documentation. They can also be very slow to recalculate when changes are made.

Some of these drawbacks have been overcome by using online analytical processing (OLAP) servers. These are multidimensional databases that hold the data, which is linked dynamically to spreadsheets. They combine the performance and robustness of a database with the familiarity and ease of use of a spreadsheet. However, their toolkit approach means that forecasting applications have to be set up from scratch, so users generally prefer the speed and convenience of specialist software.

Whereas planning and forecasting should be all about strategy, business issues, market responses and resource utilisation, it often ends up more of an exercise in designing and administering complex spreadsheets. Accountants who should be helping to create value for their organisation or client, end up spending more time formatting and linking spreadsheets and writing macros!

Specialist software

Forecasting has always lent itself to specialist applications such as **Sage 50 Forecasting**. Their built-in database offers robustness, performance and flexibility. They can accommodate whatever level of detail is required, whether department, cost centre and can allow combinations of weekly and monthly time periods.

The software pre-builds all the calculations for timing differences, assumptions and key performance indicators. It automatically calculates loan and bank interest payable and receivable.

The forecasts can be set up through a series of simple dialogue boxes, detailing time lags, interest rates and other assumptions. Detail, such as charts of accounts and cost centres, can often be set up by importing data from the accounting system. Reports can be customised and key ratios and performance indicators set up.

Business managers can enter a forecast of how much they expect to sell in each period. The computer then translates them into profit and loss account, cash flow and balance sheet forecasts. The software then generates a suite of standard and customised reports, including key performance indicators. Graphs can be very valuable in revealing trends, patterns and step changes. Whenever a change is made to the data the impact will be shown instantly.

The design objective of the software is to remove much of the routine work involved in producing forecasts, leaving users free to concentrate on the business assumptions that are put into it. Specialist software also allows a greater level of detail than spreadsheets, allows changes to be made quickly and figures are recalculated immediately.

Using the forecast

The computer software allows easy review and instant updating of the forecast. For instance, it might reveal that a reduction of one day in the average of outstanding debtors could prevent it exceeding an overdraft limit three months later. Alternatively, it might show that missing sales forecasts by 5% could precipitate a funding crisis in six months.

It is important for both the assumptions built into the software and the sales forecasts to be realistic. Sales margins must be close to actual and debtor payment periods and the level of bad debts must be based on past experience. Sales volumes of new products or new business areas must not be shown to grow unrealistically.

A close review of forecasts against actual results should be carried out each month, to identify sources of variance and improve the accuracy of subsequent forecasts. The figures should be rerun during a month if any significant event occurs, such as loss of a contract or customer, delay in payment, dispute of a particularly large invoice, if a debtor becomes insolvent, a large unexpected increase in a raw material price or an adverse business trend develops.

Indeed, the power of good forecasts supported by good software is that managers can experiment without risk as they see the impact of potential business decisions. They can experiment with different 'What if?' scenarios, without affecting their base forecast data. Exploring scenarios such as the impact of price rises, new ventures, expansion or taking on new staff will instantly show the effect on the profitability and solvency of the business.

Forecasts can be linked to the accounting system, allowing latest actuals to be used as an aid to re forecasting and also allowing the latest forecast to be shown alongside actual reports. They can also be linked to spreadsheets, either by data transfer or dynamic link, so that users can still use them for analysis and reporting. There may also be linkages to the payroll system.

Benefits of forecasting

Profitability

The main benefit of forecasting is the ability to maximise profits. Given that the organisation has set its profit objective when it produced the long term plan, it is important to monitor progress in achieving it. The accounting system is not appropriate, as by the time an event has hit the organisation's books and been reported some time after the end of the accounting period it, is too late to take any corrective action.

The forecast, in particular the sales forecast, forces managers to regularly quantify the future impact of what they can see happening in the marketplace and to spot potential problems. They are then able to take an appropriate corrective response.

Solvency

The cash flow forecast allows the organisation to monitor its future funding requirements. This ensures that it has time to put in place any additional finance to ensure that it remains solvent and always has sufficient funds to pay its bills as they become due. This protects it from insolvency caused by over-trading and from reputational damage from not paying suppliers and partners promptly on the due dates.

Efficient financing

Advance notice of new funding requirements allows the organisation to avoid an expensive and embarrassing unauthorised overdraft and seek the most cost effective financing solution. If the additional funding requirement is long term in nature, then long term financing is appropriate. This may be secured or could be lease finance and should be available at a lower interest rate than short-term funding, such as an overdraft. If the need is caused by late payment of customer invoices, invoice factoring might be the best solution. If the need is short term, caused by a seasonal trend, a sales promotion or new product launch, then an increased overdraft facility might be most appropriate. Banks will always look more positively at organisations that plan well ahead and should reflect the lower risk in a reduced overdraft interest rate.

Sometimes What If? analysis on the cash flow forecast can avoid the need to pay additional interest, by encouraging the organisation to release funds already in the business, by accelerating cash inflows or reducing cash outflows. This could include negotiating extended credit terms from larger suppliers, reducing inventory or selling surplus assets. The forecast may also identify potential future surpluses, allowing the organisation to arrange short-term investment to earn interest.

Forecasts should also be included with the management accounts sent to the bank each month. When the bank learns to trust forecasts it will be more confident that its interest and capital will be repaid promptly. It should therefore be more willing to grant increased facilities at a lower interest margin over base rate.

Benefits of forecasting cont.

Understanding the business

The ability to run a series of 'What If?' scenarios allows managers to get a much better idea of the impact external market changes and their own decisions can have on the business. Such modelling of the business enables the organisation to capitalise on potential opportunities and to avoid potentials pitfalls. Analysing risks will give management more credibility when seeking approval for new investment projects or to raise new funding.

Cash flow forecasts are especially helpful for analysing the impact of major new investments, new projects, development of new markets, introducing new products or even just a major order. Even if they have been financed by a separate loan, they can have an unexpected impact on cash flows.

Stock reduction

Cash flow and balance sheet forecasts show managers clearly the cost of bulging stock-rooms and warehouses. It encourages them to release funds by keeping stock levels to a minimum, through more accurate demand forecasting. It also forms that basis of building closer relationships with suppliers and encouraging them to shorten the time taken to fulfil orders.

Automation

Effective automation of forecasting using specialist software is fast, efficient and error-free, encouraging frequent re-forecasting. Automated reports, including charts and key performance indicators, provide managers with valuable information to support decision-making.

Choose a suitable forecasting tool to maximise the benefits of forecasting

Specialist software handles structure, layout and formulae and is much more suitable then spreadsheets. This leaves user free to concentrate on the quality of the business thinking that goes into the figures, which is what really matters, not producing the numbers.

Regular forecasting and modelling forces managers to think ahead and gives them a much better appreciation of how their business works and how it is affected by changes in the business environment. In this way it becomes closely linked with the plan as a powerful management tool for setting the future direction of the business and then staying on course.